Scottish Parliament Region: Highlands and Islands

Case 201103076: Western Isles NHS Board

Summary of Investigation

Category

Health: Hospitals - general medical; clinical treatment; diagnosis

Overview

The complainant (Ms C) complained on the behalf of the aggrieved (Mr and Mrs A) about the care and treatment received by Mrs A from Western Isles NHS Board (the Board) in December 2010. Mrs A was taken to Uist and Barra Hospital (the Hospital) with abdominal pains. Two days later Mr A was advised Mrs A was suffering from acute renal failure, was dying and no further treatment could be provided for her. However, Mrs A was subsequently able to be airlifted to the mainland for treatment. She went on to make a full recovery.

Specific complaint and conclusion

The complaint which has been investigated is that the Board did not provide reasonable care and treatment to Mrs A between 5 and 9 December 2010 (*upheld*).

Redress and recommendations

The Ombudsman recommends that the Board:	*Completion date*
(i) provide an updated version of the action plan to evidence that all of the identified actions have been implemented;	19 September 2012
(ii) provide further details about planned training for medical staff at the Hospital, which should include refresher training on the causes of opiate toxicity and enhanced training in relation to venous access;	19 September 2012
(iii) conduct a random case note review at the Hospital; and	19 September 2012
(iv) provide a full apology to Mr and Mrs A for the failings identified in this report.	5 September 2012

Main Investigation Report

Introduction

1. Mrs A became ill on the evening of 4 December 2010 with chronic abdominal pain. The following morning her husband (Mr A) called NHS 24 and a GP (Doctor 1) attended at their house; Mrs A was administered morphine, and Doctor 1 advised her to make contact with NHS 24 again if the pain did not ease. It did not, and Mrs A was admitted to Uist and Barra Hospital (the Hospital) that afternoon.

2. Mrs A remained in the Hospital for the next three nights. Blood and urine samples were taken on the day of admission, but these were not analysed until 7 December 2010. Mrs A continued to be administered with opiates for pain relief, and her condition deteriorated. The Hospital is manned with nursing staff, with on-call GPs providing medical care when required. On the evening of 7 December 2010, a GP (Doctor 2) was called to attend. Doctor 2 spoke with the EMRS (Emergency Medical Retrieval Service) who advised that they would not be able to travel to the island due to the weather conditions. Doctor 2 advised Mr A that Mrs A was unlikely to survive the night due to her rapidly deteriorating condition.

3. However, Mrs A did survive the night. The EMRS telephoned the Hospital the following morning to get an update on Mrs A's condition. A nurse advised that Mrs A remained much the same. Another on-call GP (Doctor 3) then assessed that Mrs A appeared to be improving. He contacted the EMRS team who were able to travel to the Hospital as the weather had improved. On arrival, they administered Mrs A with a large dose of an opiate antidote, naloxone. Mrs A improved further, rapidly, and was transferred to Crosshouse Hospital in Kilmarnock with acute renal failure. She received treatment there for several weeks before returning home.

4. Mr A complained to Western Isles NHS Board (the Board) on 21 January 2011. He received a response on 25 May 2011. Mr A remained dissatisfied with this response, and wrote a letter detailing further concerns to the Board on 26 May 2011. Thereafter the Board referred matters to their Central Legal Office in relation to a claim for compensation. On 1 November 2011, Ms C brought Mr and Mrs A's complaint to my office on their behalf.

5. Ms C explained that Mr and Mrs A wanted a full investigation of Mrs A's care, for the Board to apologise to them, and for their procedures to be reviewed and changed to ensure that a similar situation did not occur in the future.

6. The complaint from Ms C which I have investigated is that the Board did not provide reasonable care and treatment to Mrs A between 5 and 9 December 2010.

Investigation

7. In order to investigate Ms C's complaint, my complaints reviewer considered the complaints correspondence between Mr A and the Board. She considered Mrs A's medical records for the period, and obtained clinical advice from one of my advisers, a General Practitioner (the Adviser). She also made further enquiries of the Board and received the report of a review of Mrs A's case which had been undertaken by the Board in May 2011, and an action plan that had been implemented as a result of that review.

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

Complaint: The Board did not provide reasonable care and treatment to Mrs A between 5 and 9 December 2010

9. Mrs A began suffering chronic abdominal pain on the evening of 4 December 2010. Mr A contacted NHS 24 at 07:30 on 5 December 2010. Doctor 1 attended at Mr and Mrs A's home. Doctor 1 noted that Mrs A had had several similar episodes of pain previously. She administered a morphine injection and advised Mr and Mrs A to contact NHS 24 again if the pain had not eased. They did so later that afternoon, and Mrs A was transferred to the Hospital by ambulance.

10. On arrival at the Hospital, Mrs A was examined by Doctor 1. Blood samples were taken and an ultrasound scan was ordered. These samples were not sent for analysis until 7 December 2010. The scan was cancelled due to the severe weather. Further morphine was administered. Overnight it was noted that Mrs A had not passed urine. Medical care was overtaken by Doctor 3 on the morning of 6 December 2010. Oxygen saturation levels were

monitored. Mrs A was noted to be feeling weak and to have diarrhoea. She was catheterised as she had still not passed urine since admission. She was administered dihydrocodeine for pain relief.

11. On the morning of 7 December 2010 the catheter was removed on the advice of Doctor 3; Mrs A had still not passed urine. She was administered more dihydrocodeine and had an oxygen mask placed to increase her oxygen saturation levels.

12. On the evening of 7 December 2010, Mrs A's condition was noted to be deteriorating. She was diagnosed as having acute renal failure and to be hypoxic. She had a Standardised Early Warning Score (SEWS) of 10, was noted to be unresponsive, had low oxygen saturation, no urine output and was dehydrated with hypotension. At this time, Doctor 2 was on call and attended at the Hospital having been contacted by the nursing staff. Weather conditions on that evening were extremely poor. Doctor 2 contacted the EMRS to discuss Mrs A's case with the on-call specialist and to try to arrange a transfer to the mainland for specialist treatment. Doctor 2 was advised that the EMRS were not able to initiate a transfer that evening due to the weather, and the helicopter crash team being engaged elsewhere. Doctor 2 assessed that it was unlikely Mrs A would survive the night. Mr and Mrs A were informed of this; Mr A contacted immediate family members who travelled to the Hospital. A priest also attended and administered the last rites. Overnight, Mrs A was administered with morphine twice in order to relieve distress and was noted to be struggling to breathe.

13. On the morning of 8 December 2010, Doctor 3 was on duty and attended at the Hospital. Mrs A had survived the night, however Doctor 3 assessed that she was likely to die within the next 48 hours. During the afternoon of 8 December 2010, Mrs A was moved into another room and showed sudden improvement by waking up. Doctor 3 contacted the EMRS and discussed Mrs A's condition and latest examination readings. The EMRS were able to travel to the island due to improved weather conditions. On arrival, they administered Mrs A with a dose of naloxone, upon which she showed immediate improvement. Mrs A was transferred to the mainland and received treatment at the High Dependency Renal Unit at Crosshouse Hospital in Kilmarnock for several weeks for acute renal failure. Mrs A was released home towards the end of January 2011 having made a full recovery.

14. Mr A complained to the Board on 21 January 2011. He had a number of concerns about the treatment Mrs A had received during December 2010. He noted first that during his initial contact with NHS 24 on 5 December 2010 he was advised that an on-call doctor would attend within two hours. Mr A complained that the on-call doctor (Doctor 1) did not attend until 10:00, contact having been made at 07:30. He said that upon arrival at the Hospital, no investigative procedures such as scans or x-rays were carried out upon Mrs A, and there was no mention at this time of a transfer to the mainland.

15. Mr A said that by the morning of 7 December 2010, it was unclear to the family what was happening with Mrs A; no clear diagnosis had been relayed to them. He understood she had been on a waiting list for the air ambulance but that the severe weather was impacting upon this service. He advised that on that evening he was told to contact immediate family to advise them to travel to the Hospital if possible. Mr A said that Doctor 2 did not arrive at the Hospital until after 21:30, and he asked why he had not attended sooner given Mrs A's serious condition. He said Doctor 2 performed a 'brief check' on Mrs A, and informed him that Mrs A had a matter of hours to live and there was nothing further they could do for her except administer morphine for pain relief. Mr A said Doctor 2 also advised Mrs A's breathing was failing and that she was 'probably too fragile' to survive the journey by air ambulance.

16. Mr A said that on the following morning, Mrs A woke up and was responding to everyone. He said that Doctor 3, now on duty, appeared 'shocked' at this development, and put Mrs A on an antibiotic drip. Mr A asked why this had not happened sooner. He asked why Mrs A was not diagnosed with renal failure earlier in her admission. He asked why Doctor 2 had reached the conclusion that nothing further could be done for Mrs A. Mr A said he had since been told that the EMRS had contacted the Hospital on the morning of 8 December 2010 and had spoken with Doctor 2 who had advised that Mrs A remained much the same, and on this basis the EMRS had advised they would not travel to collect Mrs A.

17. The Board responded to Mr A's complaint on 25 May 2011. They had instructed an independent review of Mrs A's case and the findings of this review were reported by another doctor, Doctor 4, on 12 May 2011. The Board acknowledged that the care received by Mrs A had been below a standard that was expected, and apologised for this. They stated that the routine blood tests carried out had not been passed to the lab in Stornoway due to the weather.

They stated that the samples had thereafter been analysed within the Hospital's mini-lab on 7 December 2010, and agreed that this could have been done earlier, which could have given those caring for Mrs A a clearer idea of the underlying condition of her kidneys and could have affected her management. The Board accepted this meant Mrs A's renal failure was not diagnosed until 7 December 2010. They also accepted that the symptom of low urine output, apparent from the time of Mrs A's admission, should have indicated to the medical staff Mrs A's renal failure, and that this was not acted upon 'as quickly as would have been hoped'. The Board noted that chest x-rays and electrocardiogram (ECG) tests were carried out on both 7 and 8 December 2010, and that there was no indication at an earlier stage that an antibiotic drip was required.

18. The Board said that the response of Doctor 1 to the house call had been within the two hour response time. They explained that on the evening of 7 December 2010, Doctor 2 had travelled to the Hospital as quickly as possible. They explained the severe weather that evening had made driving very hazardous. Doctor 2 had had to travel from North Uist to Benbecula, and had done so as quickly and safely as he could do so under the conditions.

19. In relation to Doctor 2's decision making on the evening of 7 December 2010, the Board explained that the medical and nursing team were of the view based upon blood tests and observations that Mrs A was suffering renal failure and that she was deteriorating. Doctor 2 had contacted the on-call specialist at the EMRS and had discussed Mrs A's kidney function and her vital signs including oxygen and conscious levels. The view of the on-call specialist was that Mrs A's condition was very serious, they were unable to initiate a transfer, there was no possibility of life saving treatment and that Mrs A should be made comfortable. The Board noted this was a very difficult situation for everybody concerned, but that Doctor 2 had made the decision in consultation with specialist advice and had taken a significant amount of time to discuss the situation with Mrs A's family.

20. The Board explained that when the EMRS had contacted the Hospital on the morning of 8 December 2010, they had not spoken with Doctor 2 as he had finished his overnight shift at 08:00 and had passed care to the GPs at a local practice which provided daytime care. The EMRS had in fact spoken with a nurse who had advised that Mrs A had not improved, and on the basis of that

and the information provided the previous evening, they decided not to initiate transfer at that time.

21. Mr A wrote again to the Board on 26 May 2011 as he had additional and remaining concerns about Mrs A's treatment. He reiterated that Doctor 1 had taken 2.5 hours to attend at their home and not within the two hour response time as stated by the Board. He reiterated it was of concern that the Hospital took two days to diagnose renal failure, when timeous analysis of the blood and urine samples could have detected this much sooner. He asked why the mini-lab was not utilised for this purpose and what had been happening with the samples taken on 5 December 2010 throughout the rest of that day and 6 December 2010. He also highlighted that the weather conditions did not become adverse until 7 December 2010.

22. Mr A contested the Board's position that Doctor 2 had spent a significant amount of time with him and the rest of Mrs A's family. He said Doctor 2's examination of Mrs A and subsequent discussion with him had taken no more than 30 to 45 minutes in total. He explained the family had been in shock and distressed, and had felt there was not enough time to ask further questions before Doctor 2 left the Hospital.

23. Mr A also explained he was gravely concerned that a nurse had passed on information about Mrs A's condition to the EMRS. He said the family felt like Mrs A had been 'given up on' and that the nurse who had given an opinion about Mrs A's condition had in fact spent very little time with her. Mr A said he thought it would only be appropriate for a member of the medical staff to give such an opinion.

24. Given Mr A had raised the issue of compensation in his second letter, the Board subsequently passed his complaint to their Central Legal Office to respond to. Mr A thereafter sought the assistance of Ms C, who brought Mr and Mrs A's complaint to my office on 1 November 2011. Mr and Mrs A explained how Mrs A's experience had been 'the most distressing and upsetting event of their lives,' and that it was difficult to articulate exactly how profound an effect it had had on them. Mr A explained he had a heart condition, and that the experience had put great strain upon him. Mrs A further explained that there had been a deep psychological impact upon both her and her family, who had believed she was close to death. Mrs A explained she had difficulty sleeping and felt extremely vulnerable as a result of what had happened.

Review and action plan by the Board

25. Doctor 4 undertook a review of the care and treatment provided to Mrs A, and produced a report and action plan in May 2011. He was critical of the nursing care provided; he said that SEWS scores were recorded inaccurately which led to 'gross underestimation of the illness' of Mrs A, and if they had been recorded properly, more timely review by medical staff would have been prompted. He said that in any event, routine review should ideally take place earlier in the day, to afford the opportunity for changes in medical management of patients to take place earlier. Doctor 4 also noted that during a medical review on 6 December 2010, Doctor 3 made no reference to the absence of urine output or the low oxygen saturation. He noted that the British National Formulary states under renal impairment in relation to opioid use that:

> 'the effects of opioid analgesia are increased and prolonged and there is increased cerebral sensitivity when patients with renal impairment are treated with opioid analgesics; avoid use or reduce dose.'

26. Doctor 4 noted that venous access appeared to be a major problem for some of the doctors, and that only one method of vein cannulation was attempted with no other routes given consideration. Doctor 4 commented on the quality of the nursing notes, describing these as 'very poor'; he also commented that Mrs A's fluid balance charts had not been maintained. In conclusion, Doctor 4 made a number of recommendations for the Board to consider as a result of Mrs A's care and treatment.

27. The Board provided my office with an action plan developed as a result of Doctor 4's recommendations. This explained that a series of meetings had been held with the staff involved in Mrs A's care to discuss learning outcomes, that senior nursing staff had reviewed the completion of SEWS forms and formal training in this regard was planned following the appointment of a Practice Education Facilitator, that the Hospital's Clinical Management Team had reviewed handover arrangements and that the Situation, Background, Assessment, Recommendation (SBAR) tool was to be used to pass on essential information about vulnerable patients – and there was to be an audit of this in May 2012. The action plan also noted that the staff involved would discuss Mrs A's case as part of their annual appraisal, and that learning outcomes such as training in relation to the recognition of renal failure would be incorporated into their personal development plan for the coming year. Training was also due to be provided in relation to interosseous needles. Further actions

were identified in relation to documentation and record-keeping, that the need for routine medical review to take place earlier in the day would be addressed by the annual re-negotiation of the Local Enhanced Service, that the Winter Planning and Business Continuity arrangements would address service provision during periods of adverse weather, and that a specific Business Continuity Plan for the Hospital was under development.

Advice obtained

28. My complaints reviewer asked the Adviser to comment on all aspects of the care and treatment Mrs A had received. First, the Adviser commented that the time delay referred to by Mr A in Doctor 1 attending at the house was not clinically significant and would have had no bearing on the subsequent course of events. He noted that he found Doctor 1's assessment and treatment of Mrs A at that time to be appropriate.

29. The Adviser said that the results of the tests taken on 5 December 2010 were significantly abnormal. He said it was clear that the mini-lab could have been used to determine the results on either 5 or 6 December 2010, and no clear explanation had been given for why this had not been done. The Adviser also noted, as the Board did in their response, that if the results had been known this could have altered Mrs A's management plan. The Adviser concluded that, in his view, the doctors looking after Mrs A should have taken steps to obtain the results of the tests at an earlier stage, as this would most certainly have allowed the diagnosis of renal failure to be established earlier. He also noted that, given Mrs A's presentation on 7 December 2010, management would have been aided by the estimation of arterial blood gases, although he was not aware if that facility was available at the Hospital. Following receipt of comments on this report, the Adviser further explained that Doctor 4's report on this case made reference to a femoral arterial stab being carried out and the results of blood gas analysis being available. The Adviser stated that this meant he continued to hold the view that estimation of arterial blood gases would have been useful for Mrs A's care.

30. The Adviser commented that Doctor 2 was in a very difficult position on 7 December 2010. Mrs A had deteriorated significantly and was acutely unwell. Doctor 2 was delayed by weather conditions and the Adviser noted he had made attempts to advise the nursing staff and to have contact made with the EMRS. He had also attempted to contact a colleague who lived closer to the Hospital. The Adviser said all of these actions were reasonable. The Adviser

considered the notes of Mrs A's assessment by Doctor 2 when he arrived at the Hospital, which he described as extensive, and noted Mrs A was described as unconscious with a Glasgow Coma Scale (GCS) reading of 3 (indicating deep unconsciousness, although no further examination for focal neurological signs were recorded), that oxygen saturations were low and breathing was 'laboured'. The Adviser said given the recent doses of opiates (ie morphine and dihydrocodeine) Mrs A had been receiving, there was a clear possibility that the symptoms could have been related to opiate toxicity. However, the Adviser found that there was no apparent consideration of this within Mrs A's medical records, and the opiate medications were continued.

31. The Adviser accepted that Doctor 2 was correct to say that transfer was not possible, and that this was on the advice of the EMRS. However, the Adviser stated that Doctor 2's assessment that nothing further could be done was incorrect. The Adviser said that continuing to administer opiates was incorrect once the diagnosis of renal failure was established; this should have been stopped and an opiate antagonist given. The Adviser said the fact Doctor 2 now knew Mrs A was suffering from renal failure should have prompted a review of her medication. The Adviser said that in his opinion the doses of opiates given were excessive. He explained that the effects of opiate drugs are increased in renal failure, and that depressed consciousness and respiratory depression are more likely. He stated this would result in a lowered GCS reading, decreased respiratory rate, small pupils, low blood pressure and oxygen saturation. The Adviser said it was notable that periods of lucidity were present from Mrs A's records and that this corresponded with the opiate drugs wearing off, and on that basis it was very unfortunate that periods of respiratory distress were treated with further doses of opiates. The Adviser also noted that serial chest x-rays taken showed the development of pulmonary oedema which can occur secondary to pancreatitis but may also occur with the depressive effect of opiates. The Adviser found that the rapid recovery of Mrs A following the administration of naloxone suggested that opiate toxicity was a clear contributory cause of Mrs A's deterioration. The Adviser said that the dose of naloxone given was not clear from the notes but was described as 'massive' by Doctor 3 in a letter to Doctor 1 dated 9 December 2010.

32. The Adviser also commented on a nurse having spoken with the EMRS on the morning of 8 December 2010. He said it appeared that the enquiry from the EMRS was to establish whether there had been a significant change in Mrs A's condition. He said it was generally reasonable for a nurse to report on a

patient's condition, but given the implications of this decision it would have been reasonable for a doctor-to-doctor conversation to have taken place.

33. The Adviser concluded by describing Mrs A's case as 'disturbing'. He noted that no clear diagnosis was established for some time although the possibility of cholecystitis or pancreatitis was raised. Over a period of 48 hours Mrs A was given repeated doses of opiates and, despite being found on 7 December 2010 to have acute renal failure, opiates were continued regardless of Mrs A's decreasing respiratory effort, oxygen saturation and a decreased consciousness level. Weather conditions prevented evacuation and clinical care was hampered by poor intravenous access. In his view, the Adviser said the care of Mrs A was significantly deficient.

34. The Adviser considered the review by Doctor 4 and the action plan produced by the Board as a result. The Adviser said the review was critical of nursing care and data recording, but did not comment on the poor medical examination findings, and did not go so far as to criticise the failure to diagnose opiate toxicity until the arrival of the EMRS team. He noted that at the present time, some actions identified in the action plan remained outstanding. The Adviser said a random case note review given the shortcomings identified in the review report would be beneficial. The Adviser also said that training needs and plans required further definition; for example, it was unclear whether all GPs providing the service had training to insert a central line. Following receipt of comments on this report, the Adviser further added that he understood that such skills would very rarely require to be utilised by GPs providing on-call care, but that he was simply observing that he was unaware whether this technique was required for these posts.

Conclusion

35. Ms C complained on behalf of Mr and Mrs A that the care and treatment received by Mrs A at the Hospital in December 2010 was not reasonable. I conclude from my investigation that a number of aspects of Mrs A's clinical care give cause for serious concern. In particular, I find that it is not acceptable that blood samples waited for two days for analysis; there was no reasonable explanation given for this delay, which prevented a timely diagnosis of Mrs A's renal failure. Furthermore, other symptoms such as Mrs A's lack of urinary output should have prompted earlier consideration of renal failure. I am also concerned by the failure to review Mrs A's medication once renal failure was diagnosed. I do acknowledge that the medical staff at the Hospital had been in

contact with specialists within the EMRS and were receiving advice from them, but I would nevertheless have expected the medical staff at the Hospital to be aware that opiates would have had an increasingly detrimental effect on Mrs A due to her renal failure, as per the guidance of the British National Formulary. I accept that Mrs A presented with acute abdominal pain and acute renal failure, but nevertheless find that the fact that the medical staff failed to realise given Mrs A's continuing symptoms that she was most likely suffering from opiate toxicity as a result of the continued dosages of morphine and dihydrocodeine being administered to be a basic failing in medical care. This could well have led to even more serious repercussions than those already experienced by Mrs A, had the EMRS not been able to attend and administer the opiate antagonist on the morning of 8 December 2010. The impact on Mr and Mrs A and their family upon being advised that nothing further could be done for Mrs A, when that was not in fact the case, cannot be underestimated. There is no doubt that Mrs A's experiences at the Hospital has had a profound and lasting impact upon her and Mr A. In all of the circumstances, I uphold this complaint.

36. I acknowledge that given the location and nature of the Hospital, the care provided there will be limited in comparison to that that can be provided on the mainland. I also acknowledge that hospitals such as the one featured in this report provide a vital service to rural island communities in Scotland, and I note the advice given to me in particular that Doctor 2 was giving care under difficult circumstances on the evening of 7 December 2010. Nonetheless, I find that the care provided at the Hospital was well below a reasonable standard.

37. I note that the Board instructed a review of this case and, as a result, identified a number of improvements which they stated they had been taking steps to implement as per the action plan developed. However, I was very concerned to note on receipt of comments from Doctor 2 in relation to this report, that neither the findings and recommendations of the review of this case, nor the fact that the review had in fact occurred, had been shared with Doctor 2. This is at odds with the information the Board provided to my office, which included a detailed action plan for implementation of recommendations, complete with completion dates. This included stating that all staff involved had been engaged with and the case had been discussed at open meetings, and that training outcomes would be identified as part of annual appraisals. According to comments from Doctor 2, this has not in fact occurred. Furthermore, the Board forwarded these comments on to my office via the Chief

Executive, without any acknowledgment or reference to the concerns raised by Doctor 2. This is a further significant development in this case which gives me serious cause for concern, and I am critical of the Board for this. It raises questions about the accuracy of the action plan provided. I urge them to ensure the review and its findings and recommendations are shared with all the staff concerned in Mrs A's care, as already detailed within the action plan. I also find that there are a number of further issues identifiable for improvement to ensure that care at the Hospital is significantly improved, and to prevent other patients from going through a similarly distressing experience. I have four recommendations to make.

Recommendations

38.	The Ombudsman recommends that the Board:	*Completion date*
(i)	provide an updated version of the action plan to evidence that all of the identified actions have been implemented;	19 September 2012
(ii)	provide further details about planned training for medical staff at the Hospital, which should include refresher training on the causes of opiate toxicity and enhanced training in relation to venous access;	19 September 2012
(iii)	conduct a random case note review at the Hospital; and	19 September 2012
(iv)	provide a full apology to Mr and Mrs A for the failings identified in this report.	5 September 2012

Annex 1

Explanation of abbreviations used

Mr and Mrs A	The aggrieved, husband and wife
Ms C	The complainant, Mr and Mrs A's solicitor
Doctor 1	The on-call GP who treated Mrs A at her home and the Hospital on 5 December 2010. Doctor 1 is also Mrs A's regular GP
The Hospital	Uist and Barra Hospital, a community hospital on the island of Benbecula
Doctor 2	The on-call GP who treated Mrs A in the Hospital on 7 December 2010
EMRS	Emergency Medical Retrieval Service
Doctor 3	The on-call GP who treated Mrs A in the Hospital on 6 and 8 December 2010
The Board	Western Isles NHS Board
Ms C	The complainant, Mr and Mrs A's solicitor
SEWS	Standardised Early Warning Scoring System
The Adviser	The Ombudsman's GP Adviser
Doctor 4	The doctor instructed by the Board to undertake an independent review of Mrs A's care

Annex 2

Glossary of terms

British National Formulary	the definitive guide for medical professionals to the selection and clinical use of medicines
Electrocardiogram (ECG)	a test that measures the electrical activity of the heart
Femoral arterial stab	the process of taking blood from the femoral vessels, which are in the groin area
Glasgow Coma Scale (GCS)	a neurological scale used to record the conscious state of a patient
Hypoxic	to have an inadequate oxygen supply to the body
Interosseous needle	a long needle which allows cannulation of the bone marrow
Naloxone	an opiate antidote
Opiate antagonist	a drug which prevents the body from responding to opiates
Pulmonary oedema	a condition in which fluid accumulates in the lungs, usually because a heart ventricle is not pumping adequately
Situation, Background, Assessment, Recommendation (SBAR)	a structured method for communicating critical information, to ensure patient safety and to enhance handovers between shifts or staff