Scottish Parliament Region: North East Scotland

Case 200500782: Tayside NHS Board

Summary of Investigation

Category

Health: Hospital; Accident and Emergency

Overview

The complainant (Mrs C) raised a number of concerns about the way her late mother, Mrs A, had been assessed and treated on three occasions at the Accident and Emergency Department (the Department) at Ninewells Hospital in March and April 2004.

Specific complaint and conclusion

The complaint which has been investigated is that Mrs A was inadequately assessed and had been inappropriately discharged from the Department on three occasions (*upheld*).

Redress and recommendations

The Ombudsman recommends that, as a matter of urgency, the Board undertake an audit of all of the Departmental nursing documentation including observation charts in use in the Department and conduct a review of the chest pain protocol and advise her of the outcome.

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 Mrs C about the way her late mother, Mrs A, had been assessed and treated on three occasions at the Accident and Emergency Department (the Department) at Ninewells Hospital in March and April 2004. Mrs C complained to Tayside NHS Board (the Board) and attended a meeting with clinicians but remained dissatisfied with their responses and subsequently complained to the Ombudsman.

2. The complaint from Mrs C which I have investigated is that Mrs A was inadequately assessed and had been inappropriately discharged from the Department on three occasions.

Investigation

3. In writing this report I have had access to Mrs A's clinical records and the complaints correspondence from the Board. I made a written enquiry of the Board. I also obtained advice from the Ombudsman's professional medical and nursing advisers (Adviser 1 and Adviser 2) regarding the clinical aspects of the complaint.

4. I have not included in this report every detail investigated but I am satisfied that no matter of significance has been overlooked. An explanation of the abbreviations used in this report is contained in Annex 1. A glossary of the medical terms used in this report can be found at Annex 2. Mrs C and the Board were given an opportunity to comment on the draft of this report.

Clinical background

5. Mrs A, who was 65 years of age, lived alone but was the main carer for her husband. She had a long history of pulmonary airway disease for which her General Practitioner (GP) treated her with steroids. Mrs A first attended the Department on 26 March 2004, when she complained of back, hip and leg pain. She was discharged home with a diagnosis of a possible small lumbar spine fracture (subsequently discounted on the basis of a radiology report). Mrs A re-attended the Department the following day (27 March 2004) with increased and continuing pain in her back and she had difficulty in weight bearing. She was given an injection of morphine, which appeared to ease her pain, and was discharged home with a diagnosis of sciatica. On 13 April 2004, Mrs A was

again taken to the Department by ambulance with reported difficulty in breathing. Following an assessment by a Senior House Officer (SHO), she was discharged home with a further course of steroids for a suspected exacerbation of her existing pulmonary disease. Mrs A was brought back to the Department as an emergency on 14 April 2004 with extreme difficulty in breathing and chest tightness. A diagnosis of myocardial infarction was made and Mrs A was admitted to the Coronary Care Unit (CCU) where she sadly died on 15 April 2004.

Complaint: Mrs A was inadequately assessed and had been inappropriately discharged from the Department on three occasions

6. Mrs C complained to the Board that on the first admission to the Department (26 March 2004) Mrs A was discharged with no analgesia. Mrs A's condition deteriorated and she returned the next day where she received IV morphine and was sent home with Tramadol. Mrs C felt that following that date Mrs A did not keep well, due to the pain. On 13 April 2004 Mrs C was contacted by staff from the Department and when she visited Mrs A she noticed that the monitor readings indicated Mrs A was hypotensive and her oxygen saturation levels were below acceptable levels. Mrs A appeared to be puffy, slightly cyanosed and had ankle oedema. Mrs C said the SHO asked Mrs A if she felt well enough to go home and she shrugged her shoulders. Mrs C pointed out that Mrs A would be on her own much of the time and that she had been prescribed MST for her back pain. Mrs C also explained that Mrs A was not eating; her mobility was poor; and she was hypotensive (low blood pressure) whereas she was normally hypertensive (high blood pressure). Mrs C said the SHO left without saying what the plans were. A nurse later contacted the SHO to explain that Mrs A's saturation levels were low and the SHO said her levels were 93% and that Mrs A had said she was well enough to go home. Mrs C said this was not the case and at no time had Mrs A's saturation levels risen above 88%. Mrs C knew Mrs A would not want to challenge the SHO so she took her home on a high dose steroid and with the knowledge that the GP would visit that afternoon.

7. Mrs C said that it was the same SHO who saw Mrs A on 26 March 2004 and 13 April 2004 and that she felt his assessment and treatment of Mrs A was inadequate. She thought that, had Mrs A's chest problem been addressed on 13 April 2004, the strain on her heart would have been lessened and the tragic outcome of 15 April 2004 may have been different.

8. The Board's Chief Executive, Acute Services Division, (the Chief Executive) responded that on 26 March 2004 Mrs A was given IV morphine to address her back pain and that the SHO was aware of her lengthy past medical history and x-rays were ordered. The x-rays were assessed by the SHO and a radiologist. It was noted that Mrs A was taking Tylex, therefore, no additional analgesia was prescribed and as Mrs A was mobilising quite well she was discharged with advice to contact her GP should further analgesia be required. When Mrs A attended the Department the following day she was again assessed and given an intravenous dose of morphine but she declined oral medication at that time. Mrs A's pain score was assessed as six out of ten and she was discharged with Tramadol to address her pain.

9. The Chief Executive continued that on 13 April 2004 Mrs A attended the Department suffering from breathlessness. On arrival, Mrs A was fully conscious and alert and her blood pressure, respiratory and oxygen saturation levels were recorded. Mrs A was assessed by the SHO who took a history and noted the oxygen saturation levels were 93%. Mrs A was given a seven day course of oral steroids and a chest x-ray was taken to rule out any degree of heart failure. The SHO discussed Mrs A's condition with a more senior doctor and it was felt that Mrs A could be discharged home. The Chief Executive said in view of the complaint an Accident and Emergency Consultant reviewed Mrs A's clinical records and noted saturation levels of 98% on admission, then as 95% and 97% on two other occasions. Although Mrs A's blood pressure did fall during the stay in the Department it was stable prior to discharge. The Chief Executive said the notes relating to this admission were comprehensive and there was no indication of clinical cyanosis or heart failure, which was confirmed on x-ray. The Chief Executive said Mrs A's condition changed the following day and she suffered a myocardial infarction which she did not survive. He said that, unfortunately, the staff could not have predicted the course of events as patients with a medical history such as Mrs A can develop acute cardiac problems.

10. Adviser 2 told me that on arrival at the Department on 26 March 2004 Mrs A received an appropriate triage assessment within a reasonable time and that the triage nurse assigned her a pain score of eight severity (scale of one to ten, where one is least pain). Adviser 2 was unable to see from the nursing records any evidence of full handwritten nursing and evaluation notes. Adviser 2 noted a Discharge Profile form was started for Mrs A, however, it was minimally completed and consisted of an illegible signature, no date and the

word 'home' at the bottom. Adviser 2 was surprised that Mrs A was discharged so soon after a powerful painkiller (see paragraph 8), one which she would not have been used to and that she was not offered further pain relief to take in addition to her Tylex. Adviser 2 would also have expected Mrs A's pain score to be repeated before discharge, given that it was high on arrival. Adviser 2 felt the Discharge Profile form did not provide a reasonable record of whether Mrs A would cope at home, particularly in light of her role in caring for her sick husband.

11. Adviser 2 said that on 27 March 2004 Mrs A returned to the Department complaining of continuing pain in her right hip and thigh, with difficulty weight-bearing. Again, she was assessed by the triage nurse within a reasonable time, the written assessment showing that, although her pain was less severe than the previous day, that it remained high on the analogue scale (at six). Adviser 2 noted the nursing records for this attendance were limited, in that a full nursing assessment had not been documented and later entries are also un-timed. The records show that Mrs A was discharged on this occasion with further pain relief (Tramadol) and that dispensary advice was given to her son, who collected the prescription. Adviser 2 continued that again, the Discharge Profile form was poorly completed, with no patient name and no discharge assessment. This is not good practice and offers little information as to Mrs A's status when she left the hospital. Adviser 2 felt that although the treatment provided to Mrs A on this occasion appeared to have been reasonable, nursing records were limited and do not offer evidence of a full and relevant assessment having been carried out.

12. Adviser 2 said that Mrs A attended the Department for the third time on 13 April 2007 with a recent history of increased difficulty in breathing. The triage assessment records show that she was assessed quickly after arrival and that an appropriate triage category (to assess priority to medical treatment) was allocated to her. Adviser 2 thought the nursing assessment on this occasion was reasonable, showing that Mrs A had some degree of shortness of breath when she arrived. Oxygen saturation levels measured on Mrs A's arrival were documented by nursing staff as 98%. However, it is not clear whether this measurement was taken when Mrs A was breathing oxygen via a mask, or whether it was on normal air. Adviser 2 said 98% is an acceptable oxygen saturation level, however, she would expect to see both measurements recorded, in order to ascertain whether the level dropped significantly when the oxygen mask was removed, which would suggest that Mrs A's respiratory problem had worsened for some reason. Adviser 2 said there is no further

nursing evaluation present in the records, until such time as it is documented that Mrs A was discharged home with her daughter and that her discharge medication had been explained and reassurance given by the doctor. Adviser 2 said that the fact that the triage nurse recorded that Mrs A was short of breath on arrival, she would have expected Mrs A's physiological observations (pulse, blood pressure, respiratory rate and oxygen saturation) to have been reviewed at least once following the initial set. The period of time between Mrs A's arrival and discharge home was just under one hour, which Adviser 2 thought was somewhat hasty, and she was also surprised that the Registrar with whom the SHO discussed Mrs A's case did not even briefly examine her, which would have been good practice as, according to the records, the Registrar had confirmed that it would be acceptable to discharge her home.

13. Adviser 2 said the Discharge Profile is again limited, and stated that Mrs A lived with her husband, which was wrong. In summary, Adviser 2 had some concerns about this attendance, in that regular monitoring of Mrs A's observations did not appear to have taken place, and that her discharge occurred within a relatively short time frame. Adviser 2 would have expected a full re-evaluation of what was initially a reasonable first assessment, which would have provided some evidence of Mrs A's condition when she was deemed fit to go home.

14. Adviser 2 reviewed information provided by the Board regarding audits of nursing documentation for the Department. It was noted that, in recognition of poor nursing documentation in 2002, a training programme and audits were carried out in 2003 which showed some improvement by the end of that year. However, as the events complained of occurred in 2004, Adviser 2 said there was no evidence that any improvement had occurred and she recommended that an audit be carried out now which would highlight whether improvements had now been achieved.

15. Adviser 1 said that the medical assessments for 26 and 27 March 2004 seemed reasonable but the lack of proper assessment for discharge was very poor practice and the available standardised documentation, which is designed to assist this, had been neglected. However, Adviser 1 felt there was nothing to suggest that these attendances were in any way linked to Mrs A's illness in April 2004. With regard to the 13 April 2004 attendance, Adviser 1 said the ambulance records recorded that Mrs A gave a history of being unable to sleep the night before because of shortness of breath and had been feeling like that

on and off for a couple of days. Mrs A was known to suffer from COPD. The crew noted that, when they attended Mrs A, she was short of breath with an increased respiratory rate; she was sweaty and cyanosed; but her pulse rate was normal.

16. Adviser 1 said the triage category revealed that Mrs A was brought in by ambulance at 09:22. At triage she was assessed to be suffering from 'shortness of breath and cardiac pain'. A pain score of two was given and a triage category of two was allocated (very urgent but not immediately life threatening) which seemed appropriate. Basic observations initially revealed an oxygen saturation of '98%' (normal) but it was not recorded whether this was on or off supplemental oxygen. Adviser 1 continued that the observation chart showed four sets of observations. The timing of these is difficult to determine but they showed that Mrs A's blood pressure fell from '120/70' on admission to '<100/<50', which was worrying. Two oxygen saturations levels were recorded: '95%' on arrival and '97%' (time unknown) but there was also, recorded in close proximity to the other 'SATS' readings, a value of '88' which, though on the line below, was not labelled to be any other parameter. Adviser 1 thought it could be an oxygen saturation or a pulse rate. Adviser 1 explained that a saturation of 88% is low, worryingly so if on supplemental oxygen, and if in fact this was a recorded saturations reading, it was in agreement with Mrs C's recollection of the saturation levels. In the absence of properly documented evidence to the contrary, Adviser 1 concluded that this could have been an oxygen saturation reading. She added that none of the readings were annotated as to whether Mrs A was on or off oxygen supplements, and this is a critical factor.

17. Adviser 1 said that, following triage, the assessment by the SHO was prompt (09:35) and recorded a history of shortness of breath since 07:00. Although chest pain was not mentioned, it was stated that 'Chest feels tight anteriorly'. Mrs A had a history of struggling for the last two weeks with reduced appetite and a very occasional productive cough with dirty sputum. It was noted that she had been on reduced steroids because of the suspected wedge fracture of her spine. Examination revealed a blood pressure of 95/55 (low) mild expiratory wheezes in the chest and reduced air entry on the right side at the base of the lung. Oxygen saturation was '93%' (this was a little reduced and lower than charted values but not critical) and again it was not recorded whether this was on or off oxygen. An ECG was recorded to be normal apart from 'left axis deviation' (a non specific sign of heart 'strain'). The diagnosis was: 'Exacerbation of [COPD]'. The case was discussed with the Registrar and he

agreed Mrs A was 'OK for home', although the Registrar did not see the patient (see paragraph 12). The treatment plan was to treat Mrs A with steroids (for COPD) and take a sputum sample (to test for infection). Adviser 1 said both actions were appropriate for an exacerbation of COPD possibly caused by a chest infection.

18. Adviser 1 said that on 13 April 2004 Mrs A attended with shortness of breath and possible cardiac type chest pain as assessed at triage. The ambulance history of shortness of breath, rapid respiration, sweating and cyanosis was consistent with this analysis (though some of these symptoms could also have been caused by her pre-existing pulmonary disease). Adviser 1 said that, although Mrs A had a history of long standing chest disease, it should not have detracted from the possibility that this might be due to a heart condition. The ECG (which had some non-specific abnormalities on it) did not exclude a heart attack or cardiac cause for chest pain, tightness and shortness of breath. Observations over a period of under an hour, including a low blood pressure and variable oxygen saturation (possibly all recorded on oxygen therapy), also do nothing to exclude a diagnosis of acute coronary syndrome/incipient heart attack. Adviser 1 felt Mrs A was, therefore, discharged without positive exclusion of a cardiac cause of her symptoms.

19. Adviser 1 said that it would not be possible to predict the occurrence of an acute myocardial event subsequent to discharge. However, to exclude a cardiac cause for her symptoms on 13 April 2004 as a precursor to her final cardiac episode on the 14 April 2004 would have required more rigorous investigation of her cardiac status. Adviser 1 continued that a normal ECG does not exclude cardiac pain. Until such time that cardiac pain was excluded, it was unreasonable to discharge Mrs A. The suspicion of cardiac pain would necessitate the observation of Mrs A until such time that her cardio-respiratory stability and negative troponin/enzymes and ECG changes reassured staff that cardiac pain (or indeed any other acute cause of deterioration) had been excluded. Adviser 1 said that in the presence of a recorded presenting complaint of 'shortness of breath and cardiac pain' she would have expected a care pathway or management plan directed at the positive exclusion of this diagnosis prior to discharge. This did not happen from either the medical or nursing side of the assessment.

20. Adviser 1 told me that the level of assessment, observation and investigation as recorded on 13 April 2004 fell short of what would be expected.

Mrs A clearly had a myocardial event within 24 hours, which caused her death. Although this could not have been predicted by the documented findings on 13 April 2004, her illness at that time almost certainly contributed to the events of the subsequent 24 hours. The likelihood of Mrs A suffering an acute cardiac event such as this was not properly investigated on 13 April 2004.

21. Adviser 1 continued that the failure to record properly the status of the oxygen saturation recording and the failure of the Registrar to see Mrs A prior to expressing an opinion has been acknowledged by the Board. However, she said the implications have not been fully explored by the Board. It may well be that the Registrar decided that there were no grounds for considering a cardiac cause for Mrs A's symptoms but the documentation of his reasoning for this conclusion was completely absent. Further, even if acute cardiac syndrome was not under consideration, Mrs A's condition at admission would, in Adviser 1's opinion, have necessitated a more prolonged period of observation and detailed assessment prior to discharge, especially in light of social factors, in order to determine her capability and safety to manage at home.

22. Adviser 1 reviewed the Board's acute chest pain protocol and treatment guidelines (thrombolysis). The protocol was dated April 2000 and was in use at the time of the complaint. Adviser 1 felt the protocol was reasonable but it did not specify the criteria for usage other than 'chest pain suggestive of cardiac origin'. In this case, Mrs A was booked in as a cardiac chest pain (without specifying the basis for the diagnosis) and, therefore, should, according to the protocol, have had a repeat ECG as well as appropriate blood tests. The reason why these were not done has not been uncovered. Adviser 1 said that, whilst it would not be unreasonable to make a diagnosis of recurrence of COPD problems with a patient with such a history and no worrying symptoms to suggest any new cardiac problems, the single recording of the item 'cardiac pain' on the front sheet would ideally necessitate at least a justification for this alternative diagnosis in terms of a documented catalogue of negative history pointers.

23. Adviser 1 said it was unfortunate that in this case, although the history and examination was otherwise good, there was no mention of the key specific negative factors which might point away from this being cardiac in origin. Adviser 1 was concerned that Mrs A, who was booked in with cardiac chest pain, was not managed according to protocol or reviewed by senior staff. The documentation was inadequate to reassure Adviser 1 that full consideration was

given to Mrs A's cardiac status prior to discharge. Adviser 1 noted the chest pain protocol was due for review in 2004 but there is no record that this had taken place. She recommended that the Board review the chest pain protocol in conjunction with the nursing documentation for patients presenting with chest pain.

Conclusion

24. Mrs C complained that Mrs A was not properly assessed on the three occasions she presented at the Department and that it had been wrong to discharge her on each occasion as staff had not dealt with her reported conditions. I have carefully considered the evidence obtained in this report and I fully accept the advice which has been provided by Adviser 1 and Adviser 2. In doing so, I have concluded that there were major failings in the nursing component of the Department's documentation, which failed to show evidence that full nursing assessments had been carried out. I also take the view from the evidence that staff did not accurately consider fully Mrs A's home circumstances when deciding whether to discharge her from hospital. However, I accept the clinical advice that the medical assessments for 26 and 27 March 2004 were reasonable and that the circumstances of these attendances were not linked to the events in April 2004.

25. I turn now to the attendance on 13 April 2004. Again there are failings in the documentation, particularly in respect of the recording of Mrs A's oxygen saturation levels as to whether the readings were taken at the time Mrs A was receiving oxygen or not. The Advisers have pointed out that it is important to record whether the levels were recorded on or off oxygen, as this would provide important information as to the patient's clinical condition. I am also concerned that staff did not undertake a thorough investigation to exclude a diagnosis that acute heart problems were the cause of Mrs A's symptoms and that she was discharged home without this being actioned. I note that in Adviser 1's opinion staff did not follow the Board's acute chest pain protocol, despite the fact that Mrs A's presenting condition was of shortness of breath and cardiac pain. Accordingly, in view of the failures in documentation relating to all three attendances and the failure to investigate fully Mrs A's symptoms on 13 April 2004, I have concluded that, on the balance of probabilities, Mrs A was inadequately assessed when she presented at the Department and that she was discharged without full consideration being taken of her home circumstances. I have also concluded that on 13 April 2004 staff discharged Mrs A home without conducting a thorough investigation into her presenting

symptoms. Accordingly, I uphold the complaint as put. While I do appreciate that Mrs C believes the tragic outcome on 15 April 2004 may have been different, the advice which I have received is that in light of the inadequate assessment staff could not have predicted Mrs A would suffer a myocardial infarction but it is not possible to say that had staff taken different action then this would have affected the sad final outcome.

Recommendation

26. The Ombudsman recommends that, as a matter of urgency, the Board undertake an audit of all of the Departmental nursing documentation including observation charts in use in the Department and conduct a review of the chest pain protocol and advise her of the outcome.

27. 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.

21 November 2007

Annex 1

Explanation of abbreviations used

Mrs C	The complainant
Mrs A	Mrs C's mother
The Department	Accident and Emergency Department, Ninewells Hospital
The Board	Tayside NHS Board
Adviser 1	Ombudsman's professional medical adviser
Adviser 2	Ombudsman's professional nursing adviser
GP	Mrs A's General Practitioner
SHO	Senior House Officer who attended to Mrs A
CCU	Coronary Care Unit
Chief Executive	Chief Executive, Board Acute Services Division

Annex 2

Glossary of terms

Analgesia	pain relief
Ankle oedema	swollen ankles
COPD	Chronic Obstructive Pulmonary Disease – respiratory disease
Cyanosed	blue tinged skin, caused by lack of oxygen in the blood
ECG	Electrocardiogram – heart tracings
Hypertension	high blood pressure
Hypotensive	low blood pressure
IV Morphine	morphine inserted directly into a vein
MST	morphine slowly released into the body
Myocardial Infarction	heart attack
Oxygen saturation level	measure of oxygen in the red blood cells
Sciatica	pain along sciatic nerve
Steroids	medication to relieve swelling or inflammation
Tramadol	analgesia
Tylex	moderately strong analgesia