

Dr C, Medical Officer
Dr D, General Practitioner
Ms E, Emergency Nurse
Public Hospital

A Report by the
Health and Disability Commissioner

(Case 04HDC00658)



Health and Disability Commissioner
Te Toihea Hauora, Hauātanga

Parties involved

Mr A	Consumer (deceased)
Mrs A	Complainant/Consumer's wife
Mr B	Complainant/Consumer's son
Dr C	Medical Officer/Provider
Dr D	General Practitioner/Provider
Ms E	Emergency Nurse/Provider
Public Hospital	Community Hospital/Provider
Licensee of the Public Hospital	Licensee of the Public Hospital/Employer
Ambulance service	

Complaint

On 15 January 2004 the Commissioner received a complaint from Mrs A and Mr B about the standard of the care provided to Mr A. The following issues were identified for investigation:

Dr C

Whether Dr C appropriately assessed and treated Mr A during his presentation to the Emergency Department at the Public Hospital in 2003.

Dr D

Whether Dr D provided services to Mr A in 2003 with reasonable care and skill. In particular:

- whether his assessment of Mr A at approximately 9pm was appropriate*
- whether his decision to release the ambulance at approximately 9.12pm was appropriate.*

Ms E

Whether Ms E, in her role as a triage nurse in the Emergency Department at the Public Hospital, appropriately managed a phone call in 2003 from an ambulance officer concerning Mr A's condition.

Public Hospital

Whether the Public Hospital provided services to Mr A in 2003 with reasonable care and skill. In particular:

- the assessment and treatment of Mr A following his admission at approximately 2pm*
- the assessment and treatment of Mr A following his admission at approximately 5pm*
- the advice provided to the Ambulance Service, at approximately 8.42pm, not to transport Mr A but instead to call the urgent doctor.*

An investigation concerning the actions of the Public Hospital and Dr D was commenced on 7 April 2004. In light of the information obtained, the Commissioner extended the investigation to include the actions of Dr C on 6 August 2004 and Ms E on 7 October 2004.

Information reviewed

Information was obtained from Mrs A, Mr B, Dr C, Dr D, Ms E, the Licencee of the Public Hospital, ACC, and the Ambulance Service.

Independent expert advice was obtained from Dr Chip Jaffurs, an emergency medicine specialist, Dr Jim Vause, a general practitioner in rural practice, and Ms Jane MacGeorge, a nurse with expertise in emergency nursing.

Information gathered during investigation

Background

Mr A, aged 69, had a history of ischaemic heart disease, chronic obstructive pulmonary disease (COPD), hypertension, emphysema and non-insulin-dependent diabetes.

Mr A was visited by his general practitioner at home on 3 December 2002. He had ankle oedema, which had been present for three days, and persistent shortness of breath with minimal exertion (since contracting influenza). Mr A's condition had deteriorated after his prednisone (a steroid) was stopped seven days previously, and he had used his nebuliser for six days after having shortness of breath while lying down. Mr A also had occasional dizziness and had experienced angina more frequently two to three times a day, which settled well with Glytrin spray.

Mr A's blood pressure was 142/72, pulse 92 beats per minute and irregular, and he had reduced breath sounds in every area of his lungs with some crepitations (crackling) in his right lower lung. Mr A's GP prescribed prednisone 10mg for seven days, then 5mg for another week (after which the medication would cease). She also recorded "try Mylanta prn [as required] for chest pain".

Mr A re-presented to his GP on 30 December 2002 with deteriorating shortness of breath and having used his nebuliser for six days in the past week. Mr A had yellow-green sputum. Mr A's GP prescribed Augmentin (an antibiotic) one tablet three times a day and instructed Mr A to take prednisone for a week.

2003 — initial referral

Mrs A contacted the Ambulance Service because her husband was unwell and had chest pain.

First ambulance attendance

The Ambulance Service advised that it was contacted by Mrs A through her Lifelink monitor device. She explained that her husband required oxygen and requested an ambulance.

The ambulance crew arrived at 4.33pm. The ambulance officer recorded that Mr A had been short of breath for two weeks and was last assessed by his GP before Christmas. Mr A was currently prescribed medication for his heart, respiratory condition and emphysema. He had no pain in his chest but had a productive cough with pale green sputum. Mr A had used his Ventolin nebuliser eight times during the afternoon. He was sitting on a chair and breathing rapidly, and was very anxious and incontinent of urine. Mr A's pulse at 4.35pm was 118, blood pressure 190/80, respiratory rate 48 breaths per minute and oxygen saturation level 93%. The cardiac monitor was recorded as indicating sinus tachycardia.

Mr A was administered oxygen. His pulse at 5.00pm was 112, respiratory rate 48 and oxygen saturation level 98%. The ambulance crew transported Mr A to the Public Hospital, arriving at 5.04pm.

Presentation to the Emergency Department

The Emergency Department (ED) at the Public Hospital is a basic trauma service that provides resuscitation and stabilisation of severe to moderate accident or medical trauma. Twenty-four-hour nursing and on-call medical officer coverage is provided. Patients who are medically stable and are not triage Code 2 (as assessed by the ED nurse) are referred to their GP or to an after hours medical practice. The after hours medical practice is a group of local GPs who provide clinics from 10.00am to 6.30pm on weekends and public holidays at a suite in the Public Hospital (although they are independent from the Licensee of the Public Hospital) and undertake home visits.

Mr A was assessed by ED registered nurse Ms E. She recorded that Mr A was triage code 3 (requiring urgent treatment) and his pulse was 91, blood pressure 211/111, respiratory rate 28 and oxygen saturation level 98%. Ms E also recorded that Mr A was currently prescribed Cardizem (for hypertension), Cartia (for thinning blood), prednisone and Glytrin Spray. He was also prescribed Flixotide, Serevent and Ventolin (to assist his breathing). Mr A's medical history was recorded as chronic obstructive respiratory disease.

Dr C assessed Mr A. He was the sole medical officer on duty at the ED and was also responsible for inpatients. No back-up on-call medical officer was available to support Dr C, although he could request GP assistance with inpatients if necessary (for example, if he was required to accompany a patient to another hospital). Dr C recorded that Mr A had been dyspnoeic (had had laboured breathing) for two weeks but was now worse and had a non-productive cough. He noted Mr A's history of chronic obstructive respiratory disease and

that Mr A was assessed for acute exacerbation of this condition at the ED on 10 November 2002. Dr C also noted that Mr A was assessed by his GP on 24 December 2002. Dr C recorded that Mr A's chest was clear, his temperature was 37.5°C, he had good colour, poor air entry on both sides of his chest and no dullness or hyper-resonance.

Dr C prescribed Rulide 300mg daily (an antibiotic) and Duro-Tuss 15ml four times daily (to assist with breathing).

Mr A was administered nebulised Ventolin 5mg and Atrovent 0.5mg (to assist with breathing) and prednisone 40mg orally at 5.10pm. At 5.40pm Mr A's blood pressure was 189/98, respiratory rate 24, pulse 90 and oxygen saturation levels 96-98%.

Mr A was discharged home.

Dr C's account

Dr C advised, in response to the complaint, that he took into account the ambulance record when assessing Mr A, although he does not recall the monitor strip. Nonetheless, he was aware that Mr A was in rate-controlled atrial fibrillation (which the strip suggests) because he had an irregularly regular pulse. He was also aware that Mr A had a long history of paroxysmal atrial fibrillation and well-controlled ischaemic heart disease with no recent exacerbation of his angina.

Dr C explained that his record of the consultation was not complete because he did not record a diagnosis or sign the medical record, because the record was filed before he could complete it. However, Dr C recalled the consultation well and said that he undertook a full cardiac examination (which is also not recorded) because he was fully aware that the two commonest causes of dyspnoea in a man of Mr A's age (69) are infection and cardiac failure. Mr A's irregular pulse was strong at about 70 beats per minute, he had normal but indistinct heart sounds, no jugular venous pulse and no pedal oedema. Because Mr A improved markedly on a single nebulised dose of Ventolin and Atrovent, Dr C did not think it likely that he had a pulmonary embolism. Mr A also did not have chest pain and orthopnoea (breathlessness that prevents a patient lying down). Dr C briefly examined Mr A's abdomen (which is also not recorded) but found no guarding, hepatosplenomegaly (enlargement of the liver and spleen) or gross abnormalities.

In light of the incident, Dr C states that he now fully investigates all patients with dyspnoea, regardless of the time of day and how comfortable he is with his diagnosis.

Ms E's account

Ms E recalled that she was setting up the ECG when Dr C arrived to assess Mr A. However, Dr C decided not to take an ECG. Ms E further recalled that, after the consultation with Dr C, Mr A was short of breath on exertion but was able to speak in short sentences and was calmer and seemed content to return home. Ms E informed Mr A and his family about the prescribed medications, the correct use of the air nebuliser unit he had at home and breathing techniques to allow his lungs to empty and keep his breathing calm.

Ms E further advised that after the consultation she was “dressed down” by Dr C because she should have referred Mr A to the after hours medical practice for assessment. Dr C does not recall making this comment in relation to Mr A but admits that he may have made this comment about several other patients with minor injuries who were in the ED at the same time as Mr A.

Subsequent events

Second ambulance attendance

Soon after arriving home from the ED Mr A began to experience chest pain again. Mrs A again contacted the Ambulance Service through her Lifelink monitor device.

At 6.19pm the Ambulance Service arrived at Mr A’s home. A second ambulance officer recorded that Mr A had panicked about his condition after his return from the Public Hospital but calmed down with reassurance. His “chief complaint” was shortness of breath. Mr A’s skin was normal and moist, his pulse was recorded at 6.25pm as 110, blood pressure 190/80, respiratory rate 46 and oxygen saturation level 94%. The second ambulance officer also recorded that Mr A’s medical history was chronic obstructive respiratory disease, chest infection and cardiac and respiratory conditions. Mr A was receiving nebulised Ventolin and felt well enough to remain at home. The ambulance departed at 6.36pm.

The Ambulance Service advised that the ambulance crew considered that Mr A was no longer short of breath, did not have chest pain and could talk in complete sentences. The crew advised Mr A’s family that he should use his nebuliser only as prescribed (rather than continuously) and that the prescription obtained at the Public Hospital (Rulide and Duro-Tuss) should be filled. The family should also contact an ambulance again if they became worried about his condition.

Mr A’s son recalled that his father found it difficult to walk from the car to his house after returning from the Public Hospital because of difficulties with breathing. While waiting for the ambulance, the family cooled Mr A with a fan and he calmed down. Mr A was quite “perky” when the ambulance arrived, his breathing had improved and he told the ambulance officers that he was sorry for panicking.

Third ambulance attendance

The Ambulance Service responded again to Mrs A’s Lifelink monitor device approximately two hours later. An ambulance arrived at Mr and Mrs A’s home at 8.42pm. A third ambulance officer recorded that Mr A had a cardiac condition and emphysema and was prescribed Glytrin, Romicin (an antibiotic) and Cartia. The third ambulance officer also recorded that Mr A had been assessed at the Public Hospital and now complained of shortness of breath and required reassurance “+++”. He had self-administered 11 ampoules of Ventolin since 5.00pm. Mr A’s skin was moist and flushed and his temperature was 37.5°C. At 8.50pm (the time was incorrectly recorded as 9.50pm) his pulse was 148, blood pressure 186/135, respiratory rate 35 and oxygen saturation level 97%. Mr A’s heart was monitored but there is no record of this.

Mr A was administered oxygen. A summary by the Ambulance Service of the radiotelephone call from the third ambulance officer to the station at 8.48pm stated that the third ambulance officer “will try to calm [Mr A] down and transport to [the Public Hospital] for some education on salbutamol and help him with his breathing”.

Telephone conversation between the third ambulance officer and Ms E

Before transporting Mr A, the third ambulance officer contacted the Public Hospital by telephone about Mr A’s condition and Ms E (who took the call) “refused to see pt [patient] and told we had to ring [the after hours medical doctor] on call”.

The Ambulance Service advised that the third ambulance officer provided Ms E with full information about Mr A’s condition, including his vital signs and frequent use of salbutamol. Ms E informed the third ambulance officer that she was aware of Mr A’s salbutamol use in light of his earlier ED presentation and advised that he should be assessed by the after hours medical practice. The third ambulance officer informed Ms E again of Mr A’s condition, including his vital signs, but Ms E repeated that Mr A required assessment by the after hours medical practice and not the ED doctor. Ms E explained to the third ambulance officer that she was aware of Mr A’s condition because of his presentation to the ED earlier in the day. The third ambulance officer was given the after hours medical practice’s phone number.

The Ambulance Service explained that the ambulance crews usually contact the hospital by radiotelephone. Occasionally calls are made by landline but usually to request advice or provide the hospital with additional information about patients prior to their arrival. In this case the third ambulance officer contacted the Public Hospital by landline to explain Mr A’s condition and vital signs and to discuss the need for possible further education about the proper use of his salbutamol. He also wanted to inform the hospital there would be a delay in transporting Mr A while the family “got organised”. The third ambulance officer used the telephone (rather than the radiotelephone) for reasons of confidentiality.

Ms E’s account

Ms E advised, in response to the complaint, that she thought the purpose of the third ambulance officer’s call was to seek “an option as to what to do” about Mr A’s condition. He did not inform her that he intended to transport Mr A to hospital and there was no urgency or panic in his tone. Further, ambulance control (not the ambulance crew) generally informed nursing staff by radiotelephone (not a landline) that a patient was being transported to hospital for assessment.

Ms E informed the third ambulance officer that the ED was busy, and as Mr A required “urgent medical attention” she suggested he request the after hours medical practice to assess him at home. She denies saying that he could not bring Mr A to hospital and states that she requested information about Mr A’s respiratory rate.

Ms E assessed Mr A’s problem as increased acute anxiety over his shortness of breath. This did not warrant a hospital assessment because the third ambulance officer informed her that, although Mr A was anxious, he could speak in short sentences. Further, the third ambulance

officer did not mention peripheral or central cyanosis and, although Ms E cannot remember the specific information given about his oxygen saturation levels, she recalls that they were in his normal range (taking into account Mr A's COPD). Furthermore, at the earlier ED presentation Dr C considered that Mr A's breathing difficulties could have been exacerbated by an infection and prescribed Rulide in addition to the antibiotic prescribed by his GP. The third ambulance officer told Ms E that the prescription for Rulide had not been filled. Ms E was not informed that Mr A had chest pain, although she did not specifically ask the third ambulance officer about this. She thought that Mr A's sinus tachycardia (indicated by the ambulance ECG at his presentation to the ED) was consistent with high doses of Ventolin rather than cardiac causes.

Ms E explained that telephone calls about a patient's condition are documented in the telephone triage book. She did not document her telephone conversation with the third ambulance officer because she received his call in the main ward at the Public Hospital where she had gone to confirm the death of a patient. Ms E could not reach the telephone triage book without putting the telephone down and so intended to document the call after she had informed a medical officer of the patient's death. She did not do so because of a second death in the ward. It was very busy in the ED because it was a statutory holiday (Ms E did not leave the hospital until well after 11.45pm). Ms E did not document her telephone conversation with the third ambulance officer the following day because she was even busier.

Ms E further explained that she did not document the call because she had "underestimated" the significance of a landline call from an ambulance officer which was outside her experience.

Ms E informed Dr C at 9.30pm that she had referred Mr A to the after hours medical practice for assessment.

The Chief Executive Officer (CEO) of the licensee of the Public Hospital advised that it is very unusual for ambulance personnel to contact the hospital by landline, so it is reasonable to assume that the third ambulance officer was requesting advice from Ms E about whether to transport Mr A to hospital. It was therefore reasonable for Ms E to refer the ambulance personnel to the after hours medical practice, taking into account the information that she was given about Mr A's condition. Nonetheless, Ms E should have documented the telephone call from the third ambulance officer in the triage book.

Dr D's assessment

At approximately 9.00pm Dr D, who was on call at the after hours medical practice, received a telephone call from the ambulance crew to attend Mr A urgently at home. The Ambulance Service records indicate that Dr D arrived at 9.06pm.

The record of the consultation stated that the ambulance crew was visiting Mr A for the "3rd/4th time". The crew advised Dr D that Mr A complained of shortness of breath and was frequently using his nebulised Ventolin and Atrovent. Mr A was sitting in bed, had an increased respiratory rate and was on the ambulance portable oxygen supply with a mask. Mr A's pulse was 140, blood pressure 130/70 and temperature 37.8°C.

Dr D advised, in response to the complaint, that he attended Mr A in a confined double bedroom with at least six other persons present, including the ambulance crew. He does not recall whether he was aware of Mr A's cardiac history but he took into account the ambulance crew's assessment report (including Mr A's frequent use of salbutamol) and a cardiac monitor strip (which is no longer available) that indicated only a slightly increased heart rate. Dr D was informed by Mr A's family that he had been prescribed prednisone and antibiotics by his GP for shortness of breath. Dr D was also told that Mr A had been assessed and treated at the ED in the Public Hospital earlier in the day. Mr A indicated that he had been using his nebuliser without good relief.

Dr D recalled that apart from the other symptoms recorded, Mr A also had reduced breath sounds with scattered crackles. He later stated that Mr A was not agitated, coughing or producing frothy sputum and did not have lung crepitations. Dr D could not recall whether Mr A had chest pain, but Mr A's main symptom was shortness of breath. At this point Dr D considered a differential diagnosis of a further exacerbation of Mr A's severe chronic obstructive airways disease or possibly that his increasing heart rate resulted from the use of his nebulised medications. In his "personal notes", which Dr D made later that night, he recorded that Mr A did not have any overt signs of congestive cardiac failure.

Dr D decided to move Mr A into a semi-recumbent position on his bed to assess his venous pressure. At 9.09pm the ambulance crew received an emergency call to attend another patient who had had a seizure. Dr D recalled:

"My advice [to the ambulance crew] was that while I was still not sure of the clinical status of [Mr A] he would require transport to hospital, if not immediately. I also indicated that a supply of oxygen to hand was required. At this point the family advised us that [Mr A] had his own independent oxygen supply. [[Dr D] recorded in his personal notes that the oxygen supply the family referred to was [Mr A's] air compressor unit for his nebuliser.] In these circumstances I acceded to the ambulance priority with a back-up ambulance available."

The Ambulance Service advised me that the above statement made by Dr D was "within reason an accurate summation", although the crew recall Dr D said "I might need an ambulance here." Dr D also appeared "reasonably happy" about the ambulance leaving after the crew explained that they had received an emergency call for a patient who was unconscious. Dr D was advised that if he required an ambulance he could call "in the normal manner". The Ambulance Service had three ambulances in service but the other two were not "immediately crewed".

Mrs A and Mr B dispute that Dr D was informed that Mr A had his own oxygen supply. Mr B states that his father's general practitioner would not permit an independent oxygen supply in the house because the family smoked. Mr B further states that he told the ambulance officers and Dr D that his father had chest pain. Dr D explained that this was because of his cough.

The ambulance crew took Mr A off the portable oxygen supply, connected his nebuliser and left at 9.12pm to attend the other patient emergency.

Dr D advised that during his preliminary assessment Mr A did not receive oxygen for a few minutes under direct observation and was not receiving oxygen when the ambulance crew received the other call-out.

Events subsequent to departure of ambulance

At the same time as the above discussion with the ambulance crew, Dr D received on his cellphone an acute after-hours call from a patient who lived outside the region. He took the call, which lasted no longer than two or three minutes, in the passageway because of the confined nature of Mr A's bedroom. Mr B states that his family are particularly concerned Dr D answered his cellphone as his primary focus should have been Mr A's condition.

When Dr D returned to the bedroom, Mr A was not breathing freely, required assistance to maintain his airway and his level of consciousness had deteriorated. At this point Dr D discovered that Mr A did not have an independent oxygen supply but only an air compressor. Dr D asked the family to urgently call an ambulance, which they did at 9.21pm.

While waiting for the ambulance Dr D inserted an oral airway and administered adrenaline and oxygen via the air compressor, but Mr A's condition declined. Dr D commenced cardiopulmonary resuscitation, which was unsuccessful. Mr B advised that a friend who was present also administered cardiopulmonary resuscitation.

After receiving Dr D's call, the Ambulance Service arranged a second ambulance crew. One crew member was on duty at the ambulance station but the other crew member was contacted at his home and directed to Mr A's house. The crew member at the ambulance station drove the ambulance to Mr A's house alone. The ambulance crew recorded they arrived at the house at 9.36pm while Dr D was attempting to revive Mr A.

The crew recorded that at 9.38pm Mr A was not breathing, had no pulse and was unresponsive. His initial cardiac rhythm was asystole (a heart beat could not be detected). Dr D declared Mr A dead at approximately 10.10pm. Dr D recorded that Mr A died from cardio-respiratory failure.

A post-mortem indicated that Mr A died of severe cardiopulmonary disease with increasing shortness of breath secondary to pulmonary oedema and subsequent arrest. This was complicated by severe arteriosclerotic cardiovascular disease.

Other information

Subsequent events

In a letter to the consumer's relative, the CEO of the licensee of the Public Hospital stated that since this incident:

- “• I liaised with [the Ambulance Service] to review the case and discussed ambulance transport procedures. We are in agreement that if the Ambulance Service ambulance

crews believe a patient should be transported to the Hospital, the Ambulance Service will do that [they do not require permission].

- If [the Ambulance Service] transports a patient to the Hospital, a determination will be made by the triage nurse whether it is [an after hours medical practice] or A&E case and the appropriate doctor will be called.
- If the ambulance crews call in for advice about whether to transport a patient, advice will be given according to medical standards and logged in by our telephone triage reporting system. (The telephone triage policy is attached as Appendix 1.)
- The above procedures are the ones that are and were in effect at the time of the incident.
- A meeting has been arranged between GP's, Hospital Staff and [the Ambulance Service's staff] to review this case and ensure that each knows the boundaries and responsibilities of service regarding ambulance transport."

The CEO of the licensee of the Public Hospital explained that the "medical standards" referred to in bullet point three refer to the telephone triage policy protocols concerning the clinical management of various conditions. A copy of the breathing difficulties protocol is attached as Appendix 2.

On 9 September 2003 the licensee of the Public Hospital implemented a new telephone triage policy.

Ms E advised that she was not aware at the time of the incident of any specific reference in the licensee of the Public Hospital's policy to the provision of telephone triage nursing advice to ambulance crews. Ms E also stated that nursing diagnosis and triage standards are based on the medical standards, although parts of the standards relate to tests requested and diagnosis by medical officers.

Licensee of the Public Hospital

The licensee of the Public Hospital provided protocols for clinically managing dyspnoea in the elderly, acute left ventricular failure and exacerbation of chronic obstructive respiratory disease. These protocols are intended to guide medical officers and identify Dr C as the author. They are marked "approved by CEO", although there is no date of issue. If a patient presents with dyspnoea or with an exacerbation of chronic obstructive respiratory disease, a history should include onset, descriptive qualities, frequency and intensity, and the patient's respiratory and cardiac systems should be examined. Investigations for both conditions should include a Troponin blood test (if chest pain), an ECG and chest X-ray.

Telephone triage education was also undertaken by all nursing staff at the Public Hospital regularly from September 2001.

The CEO of the licensee of the Public Hospital advised that the telephone triage policy (which is attached as Appendix 1) was in draft form for staff comment one month prior to 30 April 2002, when it was put in place. It is mandatory for staff to read the final document.

Prior to commencing employment at the Public Hospital in May 1999, Ms E had five years' experience with the relevant training in an emergency setting. Ms E attended a compulsory education day in July 2002, which included assessment and management of airways and breathing, and she has updated this training every year. Ms E passed the National Triage Certification in November 2002. She also attended a triage course organised by another Public Hospital, which included the basics of telephone triage.

ACC

In January 2004 Mr B submitted a claim to the Medical Misadventure Unit of ACC.

In a letter to the CEO of the licensee of the Public Hospital dated 7 January 2004 (in respect of the ACC claim), Dr C stated that he was aware at the time of the consultation that Mr A had non-insulin-dependent diabetes and confirmed that his diagnosis was a mild infective exacerbation of Mr A's obstructive lung disease. Dr C acknowledged that he did not record information about the absence of chest pain and orthopnoea, but it was his usual practice to request this information.

Dr C also informed the CEO of the licensee of the Public Hospital that he did not consider it necessary to request an ECG or cardiac enzymes blood test in the absence of symptoms and signs indicating cardiac causes (chest pain, tachycardia and basal crepitations) and given the clear signs of chest infection (elevated temperature and the information from the ambulance crew that Mr A had a productive cough). Dr C also noted that Mr A was very anxious at the consultation.

Ms E advised ACC that medical officer Dr C and a doctor from the after hours medical practice were the only practitioners on duty in the area because it was a statutory holiday.

Ms E further advised ACC that the workload in ED during the afternoon when Mr A presented to the ED was busy and there was pressure on her to triage patients appropriately. In light of Mr A's normal vital observations she would usually have assessed him as triage code (4) (requiring semi-urgent treatment) and contacted the after hours medical practice to assess him at home. However, she requested Dr C to assess Mr A because of the latter's anxiety and the overuse of the Ventolin nebuliser. Ms E also advised ACC (in addition to other information she provided about her telephone conversation with the third ambulance officer) that she had informed the third ambulance officer that Dr C considered Mr A should have been assessed by the after hours medical practice at his earlier presentation to the ED.

ACC obtained expert advice from a registered nurse with expertise in emergency nursing. The registered nurse noted in relation to the telephone conversation between the third ambulance officer and Ms E that telephone triage is difficult because advice is dependent on the information provided. The third ambulance officer informed Ms E that Mr A required education about the appropriate use of his nebuliser. Ms E correctly advised the third ambulance officer to contact the after hours medical practice. However, Mr A's vital signs suggested Mr A required hospital treatment but it was "unclear if this information was provided by the ambulance crew or sought by the nurse".

ACC also obtained advice from an emergency medicine specialist. The emergency medicine specialist advised ACC that there were two likely causes for Mr A's shortness of breath in light of his age, COPD, angina and hypertension: an exacerbation of his COPD (usually from a chest infection) or heart failure. Dr C did not adequately exclude cardiac causes for Mr A's condition at his presentation to the ED on that day because he did not examine Mr A's pulse, heart sounds, neck veins and legs for signs of heart failure or pulmonary embolism. He also did not conduct an abdominal examination to explore Mr A's causes of his breathlessness. Dr C should also have requested an ECG, particularly because the single-lead trace conducted by the ambulance crew revealed clear abnormalities, and a chest X-ray. A Troponin blood test to investigate myocardial infarction should also have been requested in light of Mr A's shortness of breath and abnormal ambulance ECG trace.

Dr C responded that he did not agree with the emergency medicine specialist's conclusion because it was based on the assumption that he did not fully examine Mr A, presumably because he was unable to complete his notes. Dr C maintained that he undertook cardiac and abdominal examinations. Dr C explained that he would usually have requested routine blood tests, an ECG or a chest X-ray (but not arterial blood gas). However, Ms E, who also was responsible for conducting ECGs in the ED after-hours, was extremely busy. On-site radiology services were not available because it was a public holiday and the on-call radiographer lived 30 minutes' drive from the hospital. A delay of one to two hours in conducting these investigations was not warranted because Mr A markedly improved on the nebulised medications, had a clear diagnosis, wanted to return home, and was advised to return for assessment if his condition deteriorated.

ACC initially found that medical error occurred in respect of Dr C's treatment of Mr A at the ED in the public hospital. In October 2004 ACC revoked its finding of medical error after a review of the file on the grounds that causation was not established:

“In this case, there was no injury caused at the time of treatment. Rather, [the emergency medicine specialist] advises that the ultimate injury is death, but this event occurred in the community after treatment. However, [the emergency medicine specialist] advises in his conclusion that cardiac arrest would probably [have] occurred even if there was an admission to hospital. This advice shows that the claimant's [Mr A's] pre-existing medical conditions are responsible for the ultimate injury of death, irrespective of treatment from a registered health professional.”

Independent advice to Commissioner

Emergency medicine advice

The following expert advice was obtained from Dr Chip Jaffurs, an emergency medicine specialist:

“I will answer your questions regarding this patient’s treatment at [the Public Hospital’s] Emergency Department [in] 2003.

I am an Emergency Medicine Specialist with fellowships in the Australasian College of Emergency Medicine and the American College of Emergency Physicians. I am currently the Director for Emergency Medicine for Whangarei Hospital. I have read your ‘Guidelines for Independent Advisors’ and agree to follow them.

I have carefully reviewed the extensive documents pertaining to all phases of this patient’s care that you sent me. I will briefly summarise the case to begin with, noting that there are several recorded versions of what happened.

[Mr A] is 69 years old with a history of chronic lung disease, type II diabetes mellitus and angina. He has visited his General Practitioner twice and perhaps a third time in December with increasing shortness of breath, worse on exertion, ankle swelling, productive cough, chest pain episodes thought to be angina. The last visit occurred 4 days prior to his visit to the Emergency Department. He was treated with antibiotics and prednisone.

[In] 2003 he apparently developed increased shortness of breath and anxiety. An ambulance was called. Ambulance found him tachycardic, hypertensive, tachypneic and incontinent of urine. The ambulance record specifically states ‘No chest pain’. His cardiac rhythm strip suggests atrial fibrillation.

The Emergency Department record shows he arrived at 1717 hours. He was triage category 3, hypertensive, less tachypneic with respirations of 28, possibly febrile with a temperature of 37.5°C, and less tachycardic with a pulse of 91. His only complaints were shortness of breath getting worse and a productive cough. His chest examination showed only decreased air entry. Thirty minutes after nebulisation his pulse is 90, respirations 24, oxygen saturation presumably on oxygen 98%. He was by several accounts improved and wanted to go home. He was discharged 1 hour later with instructions and a prescription. Apparently he was still only able to speak short sentences, and dyspneic on exertion.

Later that evening the ambulance is called repeatedly, a Doctor makes a home visit during which [Mr A] has a respiratory arrest, subsequently a cardiac arrest and dies.

Questions:

- 1. Did [Dr C] appropriately assess and treat [Mr A’s] condition? In particular:**
 - a) Should [Dr C] have requested an ECG and Chest X-ray?**

Yes to both ECG and Chest X-ray. These are essential to the evaluation of dyspnea in such a patient. Ischaemic myocardium, dysrhythmia and pulmonary infiltrate are common findings responsible for decompensation in such patients. These conditions are not reliably excluded by physical examination.

b) Should [Dr C] have requested any laboratory tests?

Arterial blood gas determination if available helps determine need for intervention. This should be ordered in a patient not responding to initial medication who may need admission. As [Mr A] seemed to be improving this test was not required. Troponin testing for cardiac damage would have been logical to request for a diabetic patient with worsening shortness of breath. Coronary ischemia can be silent in such patients. Troponin increases within several hours and stays elevated for weeks, therefore could have helped cover the possibility of heart disease as an explanation for his symptoms.

c) Were [Dr C's] differential diagnoses reasonable?

Based on the medical record and [Dr C's] letter to ACC and the Health and Disability Commissioner, I am not convinced that an adequate differential diagnosis was considered in the Emergency Department. This should have included pneumonia in the presence of even slightly elevated body temperature at 37.5°, pneumothorax which is found in deteriorating lung disease, malignancy with or without pleural effusion, silent ischemic heart disease in a diabetic, including congestive heart failure, dysrhythmia which was apparently missed since an available rhythm strip shows atrial fibrillation, and pulmonary emboli.

I appreciate [Mr A's] presentation seemed straight forward and that he was improved 1 hour after nebulisation and steroids. But his history is one of slow but sure deterioration. The ambulance initially found him in an extreme state. The medical record is brief and incomplete not supporting an adequate evaluation.

d) Did [Dr C] adequately rule out cardiac causes of [Mr A's] condition?

No. The basics are an ECG and comment on cardiac rhythm, following a cardiac examination and history including pertinent negatives. Not all of these things were done.

e) Should [Mr A] have been admitted to Hospital?

At the very least [Mr A] should have been observed in the Emergency Department for several more hours. Prednisone generally begins to work in 4–6 hours after administration. Salbutamol works best from 20–60 minutes after administration then wears off. Discharge from the Emergency Department was premature.

f) Are [Dr C's] notes adequate and appropriate?

The medical record entries are appropriate. The record is incomplete as far as pertinent details for the course of the illness, pertinent negatives such as chest pain, past medical history such as diabetes and atrial fibrillation, cardiac risk factors, and a cardiac exam. Some statement indicating response to therapy or condition on discharge is needed. The medical record as written is not adequate.

g) Were the medications that [Dr C] prescribed to [Mr A] appropriate?

Yes, according to his working diagnosis. Additional medications for congestive heart failure would have been required if this diagnosis was recognised.

h) Was examination of [Mr A's] abdomen, pulse, heart sounds, JVP and possible oedema necessary in the circumstances?

Yes. These examinations are important for determining the true diagnosis from the listed differential diagnoses. These specific items are necessary for congestive heart failure, pulmonary embolus and dysrhythmia.

i) How should such examinations have been recorded?

Details for these examinations generally appear in at least a brief form on the medical record.

j) What difference, if any, would it make to your advice if [Mr A] had informed [Dr C] he had chest pain?

A history of chest pain would have more strongly suggested cardiac disease as a factor in [Mr A's] worsening illness. As a diabetic, the absence of chest pain should not reassure one that cardiac cause is absent. The presence of increasing anginal type chest pain would surely have resulted in Hospital admission.

2. Had ED nurse [Ms E] informed [Dr C] of her phone call with [the third ambulance officer] at approximately 9.00pm, what action, if any, should [Dr C] have taken?

What was said during this telephone call is at best unclear. Telephone advice from the Emergency Department is fraught with danger leading some Emergency Departments to decline to give it.

The safest course is if the patient is not well, come to the Emergency Department. A patient who is unwell who has recently been in the Emergency Department is recognised to be at higher risk of significant illness if they return to the Emergency Department a second time of their own volition. Calling the Ambulance is essentially representing for the same problem. In this hypothetical, an experienced Emergency Physician would have said 'Come to the Emergency Department now'.

3. If, in answering any of the above questions, you believe that [Dr C] did not provide an appropriate standard of care, please indicate the severity of his departure from that standard.

Despite subsequent letters and explanations, I think [Dr C] discharged [Mr A] too quickly from the Emergency Department. In doing so, he missed an opportunity to treat a serious illness that is chronic lung disease complicated by congestive heart failure and infectious exacerbation.

The medical record supports a rapid assessment and appropriate intervention. A second set of vital signs supports slight improvement. What is missing is the balance of a thorough evaluation and follow through. Discharge instructions written out for the patient suggesting serious symptoms, when to return and when to see the Doctor are standard for many base Hospital Emergency Departments now, and might have helped here even if done in brief.

One must ask if the eventual outcome would have been much improved by hospitalization. The post mortem examination suggests advanced coronary disease. In the presence of diabetes and advanced lung disease, this man may have well died in Hospital. He would not have been ventilated in our Intensive Care Unit when he decompensated. He may or may not have responded to drug treatment alone for his congestive heart failure and lung disease. I suspect he would have not survived in any case.

All things considered, I believe [Dr C's] care in this case constituted a moderate departure from the standard of care.

4. Are there any aspects of the care provided by [Dr C] that you consider warrant additional comment?

This case highlights several issues not readily apparent in the investigator's questions. The Doctor involved is presumably not an Emergency Medicine Specialist, as is the case in many base Hospital Emergency Departments. Oversight by Specialists can help although treatment protocols 'do not specialists make'. The error made in this case is classic for a non-Specialist working in an overburdened Emergency Department without laboratory or xray on a holiday in a Hospital with no inpatient beds available. The pressure to quickly 'Treat and Street' is tremendous in this environment.

Although the care delivered to [Mr A] has several important omissions and is far too brief, these extenuating circumstances are taken into account in my determination of moderate departure from a generally accepted standard of care."

Nursing advice

The following expert advice was obtained from Ms Jane MacGeorge, a registered nurse with expertise in emergency nursing:

"10th February 2005

Independent Advisor Report: Jane MacGeorge

Complaint: [Mr A]

Reference: 04/00658

Purpose:

To provide independent expert advice about whether Emergency Department Nurse [Ms E] provided an appropriate standard of care to [Mr A] [in] 2003.

I have been asked to provide an opinion to the Commissioner on case number 04/00658, and I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

Qualifications:

I qualified as a Registered General and Obstetric Nurse in 1980 at Cook Hospital, Gisborne. I hold a BA (Social Science) and MA (Applied) degrees. I have also completed a Certificate in Intensive Care Nursing. I have worked in a Tertiary Emergency Service since 1992 in Educator and Nurse Consultant positions. I developed and coordinate the Postgraduate Certificate in Trauma and Emergency that is offered at VUW. I have held a Lecturer's position at Victoria University in Wellington since 2000, teaching in postgraduate education.

Supporting Information

1. Letter of complaint and attachments (pages 1–6)
2. Notification letters (pages 7–15)
3. Information from [Mr B] (pages 16–19)
4. Additional information from [Mrs A] (page 20)
5. Information from Coroner (pages 21–27)
6. Information from [Dr C] (pages 28–29)
7. Information from [Ms E] (pages 30–33)
8. Information from [the Licensee of the Public Hospital] (pages 34–101)
9. Information from [Dr D] (pages 102–113)
10. Information from [the Ambulance Service] (pages 114–134)
11. Information from ACC (pages 135–271)
12. Additional information from [Dr D] (page 272)

Background***Introduction***

[Mr A], aged [69], had a history of ischemic heart disease, chronic obstructive pulmonary disease and emphysema. He presented to his general practitioner (GP) on 4 December 2002 with ankle oedema, which had been present for three days, and persistent shortness of breath with minimal exertion, and while lying down, (consequent to contracting influenza). [Mr A's] condition had deteriorated after his prednisone was stopped seven days previously and he had used his nebuliser for six days. [Mr A] also had occasional dizziness and had experienced angina more frequently in the last two to three days, which settled well with Glytrin spray.

[Mr A's] GP recorded that his blood pressure was 142/72, pulse 92 and irregular and he had reduced breath sounds in every area of his lungs with some crepitations in his right

lower lung. The GP prescribed prednisone 10mg for seven days then 5mg for another week (after which the medication would cease). The GP also prescribed Mylanta as required for chest pain.

[Mr A] returned to his GP on 30 December 2002 with deteriorating shortness of breath and having used his nebuliser for six days. [Mr A] had yellow green sputum. The GP prescribed Augmentin one tablet three times a day and instructed [Mr A] to take prednisone for a week.

[...] 2003

[Mr A] was unwell and had chest pains. [Mrs A] contacted [the Ambulance Service].

4.23pm

[The Ambulance Service] advised that it was contacted by [Mrs A] through her Lifelink monitor device. She explained that her husband required oxygen and requested an ambulance. The ambulance crew arrived at 4.33pm. [The first ambulance officer] recorded that [Mr A] had been short of breath for two weeks and was last assessed by his GP before Christmas. He reported no pain in his chest but had a productive cough with pale green sputum. Mr A had used his Ventolin nebuliser eight times during the afternoon. He was breathing rapidly, was very anxious and incontinent of urine. [Mr A's] pulse at 4.35pm was 118 beats per minute, blood pressure 190/80, respiratory rate 48 breaths per minute and oxygen saturation level 93%.

[Mr A] was administered eight litres of oxygen. His pulse at 5.00pm was 112, respiratory rate 48 and oxygen saturation level 98%. The ambulance crew transported [Mr A] to [the Public Hospital] arriving at 5.04pm.

[Mr A] was assessed by ED nurse [Ms E]. She recorded that [Mr A] was triage code 3 and his pulse was 91, blood pressure 211/111, respiratory rate 28 and oxygen saturation level 98%.

[Mr A] could speak in short sentences, although was breathless. [Ms E] contacted ED medical officer [Dr C], the sole ED doctor on duty, to assess [Mr A] because he was anxious and had over-used his Ventolin nebuliser.

[Dr C] assessed [Mr A] and recorded that he had been dyspnoeic for two weeks but was now worse and had a non-productive cough. He also had a history of chronic obstructive pulmonary disease and had been last assessed for acute exacerbation of this condition at the ED on 10 November 2002. [Dr C] recorded that [Mr A's] chest was clear, his temperature was 37.5°C, he had good colour, poor air entry on both sides of his chest and no dullness or hyper resonance.

[Mr A] was administered nebulised Ventolin 5mg and Atrovent 0.5mg and prednisone 40mg orally at 5.10pm.

The triage nurse recorded that at 5.40pm [Mr A's] blood pressure was 189/98, respiratory rate 24, pulse 90 and oxygen saturation levels 98–96%.

[Dr C] did not record a diagnosis or sign the medical record but subsequently advised that his diagnosis had been a mild infective exacerbation of his obstructive lung disease.

[Dr C] prescribed Rulide 300mg daily and Duro-Tuss 15ml four times daily. He discharged [Mr A] and advised him to complete his course of antibiotics and return to hospital if his condition deteriorated. [Dr C] also advised him to see his GP in two to three days.

[Ms E] informed [Mr A] and his family about the prescribed medications, the correct use of the air nebuliser unit he had at home and breathing techniques. [Mr A] remained short of breath on exertion and able to speak in short sentences only but was calmer, and returned home.

6.19pm

[The Ambulance Service] responded a second time to [Mrs A's] Lifelink monitor device. [The second ambulance officer] recorded that [Mr A] had panicked about his condition after his return from [the Public Hospital] but calmed down with reassurance. At 6.25pm [Mr A's] skin was normal and moist, his pulse was recorded as 110, blood pressure 190/80, respiratory rate 46 and oxygen saturation level 94%. [The second ambulance officer] also recorded that [Mr A's] medical history was CORD, a chest infection and cardiac and respiratory conditions. [Mr A] was receiving nebulised Ventolin and felt well enough to remain at home. The crew advised [Mr A's] family that he should only use his nebuliser as prescribed (rather than continuously) and that the prescription obtained at [the Public Hospital] (Rulide and Duro-Tuss) should be filled. They should also contact an ambulance again if they became worried about his condition. The ambulance departed at 6.36pm.

8.40pm

[The Ambulance Service] responded a third time to [Mrs A's] Lifelink monitor device. [The third ambulance officer] recorded that [Mr A] had a chest infection, complained of shortness of breath and required reassurance “+++”. He had self administered 11 ampoules of Ventolin since 5.00pm. [Mr A's] skin was moist and flushed and his temperature was 37.5°C. At 8.50pm (the time was incorrectly recorded as 9.50pm) his pulse was 148, blood pressure 186/135, respiratory rate 35 and oxygen saturation level 97%. [Mr A's] heart was monitored but there is no record of this.

[Mr A] was administered eight litres of oxygen. [The third ambulance officer] contacted [the Public Hospital] and spoke to [Ms E] about [Mr A's] condition. [Ms E] advised [the third ambulance officer] that [Mr A] required assessment by the urgent doctor service. [The third ambulance officer] contacted [the after hours medical practice], and spoke to [Dr D], who was on-call. [Dr D] attended [Mr A] at home at approximately 9pm.

[Dr D] was shown the ambulance assessment report. [The third ambulance officer] advised [Dr D] that [Mr A] was frequently using his nebulised Ventolin and Atrovent.

[Dr D] recorded that [Mr A] was sitting in bed, had an increased respiratory rate and was on the ambulance oxygen supply. [Mr A's] pulse was 140, blood pressure 130/70 and temperature 37.8°C. [Dr D] was not told of [Mr A's] cardiac history.

[Dr D] noted that [Mr A] had reduced breath sounds with scattered crackles, was not agitated, coughing or producing frothy sputum. [Dr D] considered a differential diagnosis of a further exacerbation of [Mr A's] severe chronic obstructive airways disease or possibly that his increasing heart rate resulted from the use of his nebulised medications. In his 'personal notes' [Dr D] recorded that [Mr A] did not have any overt signs of congestive cardiac failure. [Dr D] decided to move [Mr A] into a semi-recumbent position on his bed to assess his venous pressure.

The ambulance crew received an urgent call to attend another patient. [Dr D] advised the ambulance crew that, although he was unsure of [Mr A's] clinical status, he would require transport to hospital and that a 'supply of oxygen to hand was required'. [Mr A's] family told [Dr D] that he had his own oxygen supply at home. On this basis [Dr D] 'acceded to the ambulance priority with a back-up ambulance available'. The ambulance crew took [Mr A] off the ambulance oxygen supply, put him back on his nebuliser and left at 9.12pm to attend the other patient emergency.

At the same time, [Dr D] received an acute after hours call from a patient who lived outside [the region]. He took the call, which lasted no longer than two or three minutes, in the passageway because of the confined nature of [Mr A's] bedroom. When [Dr D] returned to the bedroom [Mr A] was not breathing freely, required assistance to maintain his airway and his level of consciousness had deteriorated. [Dr D] discovered then that [Mr A] did not have an independent oxygen supply in the home, but only an air compressor. He asked the family to request an ambulance urgently.

While waiting for the ambulance [Dr D] inserted an oral airway. [Mr A's] condition declined and [Dr D] administered cardio pulmonary resuscitation, without success. Adrenaline and oxygen were also administered. The ambulance arrived as [Mr A's] heart arrested.

[Dr D] declared [Mr A] dead at 10.10pm.

A post mortem indicated that [Mr A] died of severe cardiopulmonary disease with increasing shortness of breath secondary to pulmonary oedema and subsequent arrest. This was complicated by severe arteriosclerotic cardiovascular disease.

Expert Advice Required

[Ms E]

In relation to the telephone conversation between [the third ambulance officer] and [Ms E] at approximately 9.00pm [in] 2003, please answer the following questions:

1. Please comment on the adequacy of [the licensee of the Public Hospital's] (a) telephone triage policy at the time of the incident and (b) current telephone triage policy.

- (a) The telephone triage policy at the time of the incident was not adequate concerning this specific call. There were no criteria or decision-making protocols for referral of telephone triage calls, specifically from the Ambulance Service, to either the urgent doctor or emergency department. Referral decisions therefore become based on criteria related to other departmental factors, such as workload or individual staff decision-making. This telephone triage policy relates primarily to calls from patients not other healthcare providers seeking assistance.

The policy assessment procedure requires the nurse to ask specific questions of the caller. [Mr A's] cardiac and respiratory history carried significant morbidity that was not recognised in assessments made of his condition. His repeated calls for help should have raised concern from those attending him, recognising his condition was deteriorating. Fixation error can occur with cases such as [Mr A's] where presentations can be perceived as 'simply' exacerbations of existing disease without recognition of other morbid signs. [The licensee of the Public Hospital] does state this as part of the differential in their Medical Manual — Approach to Dyspnoea in the Elderly Policy — Always consider multiple pathologies!

The Breathing difficulties protocol for use in telephone triage is not adequate for an appropriate assessment of a patient's condition by telephone. This should be reviewed using the ACEM (2002) Clinical Descriptors to support clinical decision-making when assessing a caller.

- (b) The revised telephone triage policy is more explicit regarding the experience and competence of staff able to take these calls; however the scope should be the same as for the triage policy with a requirement for completion of a triage course or relevant training prior to giving telephone advice.

The policy should also include triage decision-making protocols and criteria for referral to the urgent doctor or emergency department.

The current telephone triage policy should be reviewed to include the ACEM (2002) Clinical Descriptors and the Nursing Council's Professional Standards for Telenursing Practice, specifically competency one: The Telenurse

demonstrates sound levels of judgement, discretion and decision-making when communicating with each caller (2000). These professional nursing standards present a guide for registered nurses who provide nursing services using telecommunication technology without face-to-face interaction with clients.

The current telephone triage policy should have a statement related to advice calls from other Health Professionals or Health Care providers, specifically ambulance advice calls.

2. Did [the licensee of the Public Hospital] telephone triage policy apply to [the third ambulance officer's] conversation with Ms E?

In part the telephone triage policy applied to this call, the scope states: A means of providing advice to the community by telephone. The Emergency Department Registered Nurse confidently and consistently responds to the caller's needs that seek information ... ([the licensee of the Public Hospital] Telephone Triage Policy, 2002). The Nursing Council of New Zealand defines 'Caller' as: any individual contacting the Telenursing service for health care advice either for themselves or on behalf of others when the caller is not the 'patient' (Nursing Council, 2000, p.22). The ambulance staff were seeking advice on a patient in the community from a health care provider.

Existing medical protocols should have supported telephone advice that was given relating to the clinical signs that were described to [Ms E] by [the third ambulance officer]. The telephone triage policy should also cite the ACEM Clinical Descriptors that support the Australasian Triage Scale when assessing patients. Moderate shortness of breath is classified as potentially life-threatening requiring assessment and treatment within 30 minutes (ACEM, 2002). The following clinical information regarding [Mr A's] condition was available when this call was made from [the third ambulance officer] to [Ms E] — increasing anxiety, increased respiratory rate of 35 breaths per minute, increased blood pressure (186/135), increased heart rate (148), and repeated use of the nebuliser (11 ampoules within a few hours). If [Ms E] was aware of this information then she should have advised [the third ambulance officer] to transport [Mr A] to the Emergency Department for reassessment.

It is unclear why [the third ambulance officer] called the Emergency Department for advice. This decision may have been influenced by [Mr A's] earlier presentation and discharge from [the Public Hospital].

3. What other standards, if any, applied?

Telephone triage is contentious, emergency nurses are divided over the appropriateness of providing information or opinions over the phone. It is agreed, however that documentation of calls, and/or advice given, is time consuming and poses a legal risk to the nurse if something untoward should happen to the patient if documentation is not completed (Edmonds, 1997). The Emergency Nurses Association of America states for nurses who perform this function without an established telephone triage program and

without appropriate education in the speciality area, the consequences can be devastating (ENA, 2001).

The development of telephone triage protocols has also been contentious as triage is usually performed by experienced nurses who do not rely on protocols to determine assessment and prioritisation of patients. This is based on the premise that it is difficult to conceive how a protocol alone would be able to account for all possibilities that exist within a crisis situation (Edmonds, 1997). Less experienced nurses rely more on protocols to guide their practice and clinical decision-making.

The ACEM (2002) Clinical Descriptors that support clinical decision-making and triage scoring would apply to the telephone advice policy. These clinical descriptors identify the most urgent clinical feature determining the ATS category. The clinical feature 'Moderate shortness of breath' is described as potentially life threatening.

As recommended in question one, The Nursing Council Professional Standards for Telenursing Practice, specifically competency one: The Telenurse demonstrates sound levels of judgement, discretion and decision-making when communicating with each caller (2000). These professional nursing standards present a guide for registered nurses who provide nursing services using telecommunication technology without face-to-face interaction with clients.

The Manchester Triage Group (1997) also define Clinical Descriptors that support triage clinical decision-making protocols.

4. What information should [Ms E] have obtained from [the third ambulance officer] about [Mr A's] condition during their telephone conversation?

It is unclear what information was exchanged during this telephone conversation between [Ms E] and [the third ambulance officer]. [Mr A's] vital signs recorded on the ambulance triage form at 2040 indicate that his condition was continuing to deteriorate. [Ms E's] statement (15 January 2004, pg 78) indicates that she was looking for latent signs of respiratory failure (lowered O₂ saturations, peripheral or central cyanosis or irregular observations) instead of being alerted to the emergent signs of respiratory distress that were being presented to her. This information and [Mr A's] family's repeated calls to the Ambulance Service should have been sufficient for review of his condition in the Emergency Department.

The procedure outlined in the telephone triage policy regarding assessment was not followed in this case. Many factors contribute to this oversight that include: pressures on rural ED nursing staff to manage a multitude of roles and tasks due to the small size of the hospital, no dedicated triage nurse in the ED to respond to all triage calls, inability in a general ward setting to take an appropriate assessment from the caller and no access immediately to the policy and protocols on the general ward.

5. Had [Ms E] received full information from [the third ambulance officer] about [Mr A's] condition, vital signs and frequent use of salbutamol, what action should she have taken?

If [Ms E] had known this information she should have advised the Ambulance staff to transport [Mr A] to the ED for further assessment and treatment.

6. Was [Ms E's] suggestion that [the third ambulance officer] contact the [after hours medical practice] appropriate? If not, why not and what should she have advised?

[Ms E's] suggestion to contact the after hours medical practice was not appropriate in this case. A system of referring to either the urgent doctor or on duty MOSS carries risk when advice is given via telephone without adequate information or assessment. It can also cause treatment delays for the seriously ill. [Mr A's] presenting clinical signs and worsening condition when assessed at 2040 by ambulance staff warranted [Ms E] to advise [the third ambulance officer] to transport him to the emergency department for further review. [Mr A's] increasing anxiety, abnormal vital signs and repeated use of the nebuliser without clinical improvement should have alerted [Ms E] to signs of further respiratory distress requiring urgent hospital care.

It is possible that [Ms E's] judgement and advice to [the third ambulance officer] may have been influenced by her attendance of [Mr A] earlier in the ED and the comments made to her by the on-duty [medical officer] regarding the appropriateness of her referral.

7. [Ms E] was in the general ward (not ED) when [the third ambulance officer] rang and did not have access to the telephone triage book when [the third ambulance officer] called her. Was it appropriate for [Ms E] to have taken the call and advised [the third ambulance officer] in these circumstances?

[Ms E] was probably the only RN competent to take telephone triage calls that shift. It was appropriate she take the call, but the setting was not appropriate regarding lack of access to policies, protocols and documentation. The problem with taking the call in the general ward relates to inadequate assessment and documentation of the call due to the other tasks and responsibilities [Ms E] was dealing with at the time. It was also unusual for ambulance officers to call via the land line so this may have influenced how [Ms E] managed this call.

In larger EDs there is a dedicated triage nurse who takes telephone advice calls. Edmonds' (1997) review of 5 years of telephone triage experience, reports advice should be given from an appropriate source such as the triage position, as this is always staffed by a senior experienced nurse who ha[s] undergone formal training and supervised experience in the triage role. The triage desk was the most obvious location to receive all calls as the switchboard can transfer calls to just one extension. The telephone logbook is also easier to maintain if located in one position. Edmonds recommends documentation is

kept to a minimum because if too much is required the procedure becomes cumbersome and unworkable.

Due to the size of [the Public Hospital] it would be difficult to resource a dedicated triage position; however it places additional pressure on nurses working in rural settings to manage a multitude of tasks in less controlled environments.

8. Should [Ms E] have documented the telephone conversation with [the third ambulance officer]? If so, how?

Yes, documentation should have been completed regarding the call as stated by the telephone triage policy. It is not clear what information was shared during the call but advice was sought from the ED nurse. The telephone triage policy consultation documentation form was appropriate for documenting this information.

Unfortunately documentation is not always a priority in acute hospital settings due to conflicting demands on staff time. It is not unusual for nursing documentation to be omitted regarding telephone advice calls in other emergency departments when it is busy. Crouch et al (1996) noted that not all calls to their ED were documented on the telephone consultation record, as calls were not always put through to the right extension where forms were available to nurses. There was also reluctance to document calls when nurses were busy.

9. Should [Ms E] have discussed this conversation with an ED doctor or other hospital staff?

The information stated [by the Ambulance Service] in [a] statement (number 9, pg 2) that was given to [Ms E] by [the third ambulance officer] was sufficient clinical information for a nurse to make an independent telephone triage decision. Medical advice is sought if ambulance staff require medication orders or need further treatment advice. However, it would have been helpful to discuss this case with the on duty [medical officer] considering both staff had attended [Mr A] previously that day.

It is unclear what advice was being sought but knowledge of [Mr A's] clinical condition warranted transportation to the emergency department for further review. [Mr A's] abnormal vital signs, worsening breathing and continued use of his nebuliser should have raised concerns for [Ms E] of [Mr A's] deteriorating condition.

10. If, in answering any of the above questions, you believe that [Ms E] did not provide an appropriate standard of care, please indicate the severity of her departure from that standard. To assist you on this last point, I note that some experts approach the question by considering whether the providers' peers would view the conduct with mild, moderate, or severe disapproval.

[Ms E] did not provide an appropriate standard of care to [Mr A] when giving advice to [the third ambulance officer] regarding referral options to the [after hours medical

practice] or the Emergency Department [in] 2003. Peers would view this advice and subsequent lack of documentation with moderate disapproval.

Despite other clinical pressures faced by [Ms E] on that shift and her feelings of intimidation by the [medical officer] on duty regarding the appropriateness of [Mr A's] presentation to the emergency department, his abnormal vital signs, repeated calls to the Ambulance Service and deteriorating condition should have raised concerns.

11. Are there any aspects of the care provided by [Ms E] that you consider warrant additional comment?

[Ms E's] statement highlights the difficulties nurses face when working in rural hospitals with emergency department services. They are required to perform various tasks and roles internal and external to the immediate emergency setting but judged by emergency medicine and nursing standards. Larger emergency departments have dedicated roles, such as triage, that are supported by appropriate resources, systems, training and supervision that smaller hospitals cannot always provide. It is important that the licensee of the Public Hospital provides appropriate resources and training to ensure staff provide an acceptable standard of care to the community it serves.

References

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2. ACEM. (2002). *Guidelines for implementation of the Australasian Triage Scale in Emergency Departments*. Retrieved: 26th November 2004.
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4. Edmonds, E. (1997). Telephone triage: 5 years' experience. *Accident and Emergency Nursing*. 5, 8–13.
5. Manchester Triage Group. (1997). *Emergency Triage*. London. British Medical Journal Publishing Group.
6. Nursing Council of New Zealand (2000). Professional Standards for Telenursing Practice. Standards New Zealand."

General practitioner advice

The following expert advice was obtained from Dr Jim Vause, a general practitioner in rural practice:

“Thank you for your request for an Independent Advisors report on the complaint concerning [Mr A] (deceased), your reference 04/00658.

I have read and agree to follow the H&DC Appendix H: Guidelines for Independent Advisors.

I am a vocational registered general practitioner, having graduated MBChB from Otago University in 1976. I have practised as a GP since 1979, firstly as a rural practitioner in Cromwell for 6 years and then in Blenheim. I gained Membership of the Royal New Zealand College of General Practitioners in 1989. In 2001, I received a Diploma of General Practice from Otago University. Currently I work 6/10ths as a GP in a 4 doctor provincial practice.

Concerning possible conflicts of interest, I do not know [Dr D] personally nor do I know any of the other persons referred to in the case notes.

I have perused the following supporting information supplied by you in relation to this enquiry.

1. Letter of complaint and attachments (pages 1–6)
2. Notification letters (pages 7–15)
3. Information from [Mr B] (pages 16–19)
4. Additional information from [Mrs A] (page 20)
5. Information from Coroner (pages 21–27)
6. Information from [Dr C] (pages 28–29)
7. Information from [Ms E] (pages 30–33)
8. Information from [the licensee of the Public Hospital] (pages 34–101)
9. Information from [Dr D] (pages 102–113)
10. Information from [the Ambulance Service] (pages 114–134)
11. Information from ACC (pages 135–271)
12. Additional information from [Dr D] (page 272)

Summary of the case

The questions posed focus on the performance of [Dr D]. I present this summary as [Dr D] encountered [Mr A's] clinical case in order that judgement of his actions and decisions accurately reflect the circumstances.

[In] 2003, [on] a public holiday, [Dr D] is the on-call general practitioner in [the region]. At about 9pm, he is called by [the third ambulance officer] to attend [Mr A]. The ambulance is in attendance of [Mr A] at [his home address], wishing to transport [Mr A] to [the Public Hospital]. However they had been advised by the hospital, which had already assessed [Mr A] that afternoon, to ring the on-call GP, [Dr D].

[Dr D] arrives sometime shortly after 9.02pm. He encounters [Mr A] sitting on the side of the bed in a 'confined double bedroom'. [Mr A] is in respiratory distress. There are at least six other people in the room including two ambulance officers. [Dr D] describes the room as having a 'very restricted space'.

[Dr D] is aware that [Mr A] had been assessed in [the Public Hospital] earlier that afternoon, that he had subsequently received a second ambulance visit and had settled with oxygen, plus [Dr D] was aware of the medications [Mr A's] regular GP had prescribed a few days earlier, medications indicative of an exacerbation of chronic obstructive pulmonary disease.

He is told that [Mr A] has used his nebuliser many times in the evening, and is presented with a heart monitor rhythm strip.

[Dr D] completes a preliminary examination of [Mr A] and finds he has a fast heart rate, a fast breathing rate, a slight temperature and on listening to his chest, signs of reduced air entry into his lungs.

The family enquires as to what was wrong with [Mr A]. [Dr D] was, at that time, considering a diagnosis of an exacerbation of chronic obstructive pulmonary disease and an associated overuse of Ventolin by nebuliser.

[Dr D] decides to get [Mr A] lying down on the bed in order to examine him further.

At this time, about 9.10pm, the ambulance crew receive a call to attend [...], a few miles to the south, a patient who is unconscious following seizure.

There is discussion between [Dr D] and the ambulance crew concerning this dilemma. [Dr D] expresses a need for [Mr A] to be transferred to hospital but accepts the ambulance need to depart.

[Mr A] is taken off the ambulance oxygen and placed onto his nebuliser. [Dr D] believes mistakenly, through family reassurance, that [Mr A] has an available supply of oxygen.

At 9.12pm, the ambulance crew leaves for the other call. At this point [Dr D] has been present no more than 10 minutes, probably about 7 [...].

As the ambulance crew leaves, [Dr D] receives cell phone call from a patient seeking urgent care or advice and leaves the room to talk on the cell phone. This lasts 2–3 minutes (pg 107).

[Mr A] deteriorates and his family calls [Dr D] back in. [Dr D] initiates resuscitation measures.

At 9.21[pm] the family calls for an ambulance. [Dr D] answers an ambulance station call back. At this point [Mr A] is unconscious. [Dr D] iterates a need for oxygen.

Resuscitation attempts are made with ambulance help, without success. [Mr A] is pronounced dead at 10.10pm.

Timeline from ambulance station records pg 125

8.32 Lifelink activation from [Mr and Mrs A's address].

8.42 1st Ambulance crew arrives at scene. Ambulance crew examines [Mr A], initiate[s] respirator care and cardiac monitor, discuss[es] [Mr A's] case with [the Public Hospital] and then rings [Dr D].

9.02 Ambulance crew informs the ambulance station they are waiting for the doctor to arrive.

9.09 Ambulance station receives a 111 call to [another address].

9.12 Ambulance crew at [Mr and Mrs A's address] leave for [the other address].

9.21 Lifelink activation from [Mr and Mrs A's address]. [Mr A] has collapsed.

9.23 2nd ambulance crew phones in.

9.44 Ambulance crew (single officer) calls station from [Mr and Mrs A's address].

10.05 Ambulance crew informs station the patient is dead.

Questions asked by H&DC Officer.

1. Was [Dr D's] assessment of [Mr A's] condition appropriate? If not, what should he have done?

[Dr D] assessment was appropriate given the situation. He did not have time for full assessment of [Mr A] for this was interrupted by the ambulance call to an unconscious patient [at another address] and the phone call. He had less than 10 minutes, probably about 7 minutes, for this assessment.

Clearly from his written observations as per page 112, he indicates that he managed to examine [Mr A's] chest and vital signs. He was then in the process of carrying out a more extensive examination when he was interrupted.

With respect to eliciting [Mr A's] symptoms, I cannot assess this, as [Dr D's] clinical records do not contain significant information on [Mr A's] symptoms. With respect to [Mr A's] past medical history, [Dr D] has not documented this and [Dr D] further states (pg 102) that he was not aware of [Mr A's] cardiac history. I suspect that [Dr D] had performed some preliminary symptoms querying which he has not documented in his records (this is suggested by the comments concerning [Mr A's] chest pain in the telephone interview between [HDC] and [Mr B] on page 19).

Given the short time frame and the urgency, [Dr D's] actions with respect to this part of assessment are entirely consistent with the realities of an after hours call out to a patient with an exacerbation of chronic obstructive pulmonary disease.

There are two areas of concern with [Dr D's] assessment that I can establish from the information presented.

One is [Dr D's] reading of the rhythm strip handed to him by ambulance officers (pg 113 and pg 102). There is no copy of this strip available, however [Mr A's] heart had been in atrial fibrillation (a rhythm characterised by an irregularly irregular pulse rate) earlier in the day as indicated by Dr C (pg 28) and the rhythm strip referred to in [ACC's emergency medicine specialist's report] (pg 171 9.2)

'an undated and untimed single lead ECG Trace reveals atrial fibrillation and variable QRS-wave morphology'.

It is highly unlikely that [Mr A's] heart had reverted to a normal rhythm in the intervening time period, thus it appears [Dr D] failed to identify this electrical abnormality.

There can be problems with interpretation of rhythm strips such as electrical interference or patient tremor which makes it difficult to detect a condition such as atrial fibrillation especially if the patient's heart rate is fast, as was [Mr A's]. In addition, [Mr A's] overuse of Ventolin via the nebuliser could contribute electrical interference due to muscle tremor from the medication. As there is no copy of the actual strip, I cannot further evaluate this error, although the strip in [the emergency medicine specialist's] report clearly identifies atrial fibrillation, a reading taken, I suspect earlier in the evening.

The other is a minor disconcerting inconsistency in [Dr D's] account. On page 102, in Q6 he states

'... and did not have any lung crepitations'

whereas on page 107, paragraph 8,

'Examination..... — reduced breath sounds with scattered crackles'.

Crepitations and crackles are essentially the same clinical sign, referring to sounds heard on listening to a patient's chest while the patient breathes. They can indicate fluid or mucus build up in the lungs. However they are not a particularly specific clinical sign.

Page 107 was written on 20 April 2004. Page 102 was written on 8 October 2004.

I cannot find any recording of these clinical features of lung examination on the notes written closer to the event, namely the computer generated notes (pg 112) apparently recorded [in] 2003 and [Dr D's] hand written report (pg 110-111) written about the same time.

I suspect this reflects the problem of [Dr D's] late recall, rather than of the assessment.

2. Should [Dr D] have suspected a cardiac cause for [Mr A's] symptoms?

Yes. In such circumstance, a general practitioner must consider the common likely causes of a patient's presentation. The problem in answering this question is that unless [Dr D] documented this suspicion, it is next to impossible to ascertain for a general practitioner cannot record every thought and consideration he might make during an urgent house call.

With respect to knowledge of [Mr A's] cardiac history (as opposed to suspecting), [Dr D] indicates that he was not aware of this (pg 102 Q5). The ambulance crew appears to know of [Mr A's] cardiac history, and had [Dr D] enquired further about [Mr A's] medications he would have identified [Mr A] had such a condition.

Page 272 contains further information:

'[Dr D] advised [HDC in a telephone conversation on 21 December 2004] that he could not recall whether he knew [Mr A] had a cardiac history. He acknowledged the ambulance report may have stated this and he may have consciously taken this on board but [Mr A's] main complaint was shortness of breath.'

I closely perused [Dr D's] documentation of the event, namely the computer notes recorded on 3-1-03 (pg 112) and the other notes he wrote shortly after the event (pg 103-104, 110-111). There is an undated handwritten record (pg 110-111) which on page 110 states

'no overt signs of CCF'

thus indicating that [Dr D] had examined [Mr A] for overt signs of cardiac failure (CCF = congestive cardiac failure), the most likely cardiac condition that could have caused the pulmonary oedema identified in the pathologist's report as one of the causes of [Mr A's] death. (pg 22 and 25)

While this entry refers to 'overt signs', it indicates that [Dr D] suspected a cardiac cause. However he would have needed to seek further clinical signs to prove or disprove cardiac disease and to this end, [Dr D], in his account, indicates he was about to further examine [Mr A], when he was interrupted by the ambulance 111 call.

Thus, [Dr D] should have suspected a cardiac condition and clearly he did so.

3. What difference, if any, would it make to your advice if [Dr D] was aware that [Mr A] had a cardiac history?

It may have increased his suspicion of underlying cardiac disorder and thus may have increased his determination for more urgent admission for [Mr A]. However mitigating against this is the fact that [Dr D] was aware that [Mr A] had already been assessed

earlier that evening at [the Public Hospital], and a GP in this circumstance would presume, without accurate information on the investigation performed at [the Public Hospital] that some other objective assessments e.g. ECG and /or Chest X-ray would have been performed by the hospital A&E.

Obviously [Dr D] should have contacted the hospital A&E for further information, but the rapidity of events precluded his doing this.

4. What difference, if any, would it make to your advice if [Dr D] had been advised that [Mr A] had chest pain?

This would depend on the nature of the chest pain.

I note that in the earlier description (Ambulance report pg 129) of [Mr A's] symptoms, there is a comment

'No chest pain'.

Similarly on page 32 there is a report from the A&E nurse indicating the same.

There is a comment on pg 19, attributed to [Mr B], that his father informed the ambulance drivers and [Dr D] of chest pain and that [Dr D] advised this was because of the coughing.

Under ideal circumstances it would have been appropriate for [Dr D] to explore [Mr A's] symptoms however the circumstances were by no means ideal for such exploration, especially with the short time available, the decision making concerning the 111 ambulance call, the family questions and the cell phone call from another patient.

5. Should [Dr D] have agreed to the ambulance leaving [Mr A's] house?

Yes. The ambulance officers were being called to a seizure patient who was unconscious. Such circumstances are by no means uncommon especially in a rural town with only one ambulance immediately available. [Mr A] at this stage was fully conscious, in some respiratory distress but sitting up in bed. By contrast the 111 call was to an unconscious patient.

The comments recorded on pg 117 give a good outline of the problems confronting the ambulance staff and [Dr D] on this matter. With respect to [Dr D's] considerations, he recognised the need for an ambulance as per his comments recorded in pg 117

'I might need an ambulance here'

but was forced to balance this against the need for the ambulance to attend a collapsed patient.

In his own report pg 107 [Dr D] iterates that his words were

'he ([Mr A]) would require transport to the hospital, if not immediately'.

On the basis of the clinical situation, I feel this statement of [Dr D] is consistent with a GP clinical assessment. Considering [Mr A's] state of respiratory distress and not responding to the ventolin nebuliser, it would be highly unlikely that a GP could deliver appropriate care for [Mr A] in his home. Therefore hospital admission would have to be the prime care step. The matter was how soon could the ambulance deliver him to hospital.

This type of decision re ambulance transportation is not uncommon for a GP to be forced to make, especially in a rural town, and circumstances I have good personal experience of from my own time in rural practice. I have also discussed this scenario with a senior [...] ambulance officer of 30 years' experience in a similar sized town whose outline of dealing with this dilemma is consistent with [these] events. To reach a conclusion that [Dr D's] judgement was wrong would require a lot more information of the event and knowledge of the [region's] environment than is available. I would have to respect [Dr D's] judgement.

6. Should [Dr D] have checked that [Mr A] had his own oxygen supply before the ambulance left?

Yes, if time was available. With an ambulance being called out to another urgent call, specifically an unconscious patient, time was of essence.

Clearly the oxygen in [Mr A's] case was of some import. Whether its continued administration could have prevented his death is unprovable. However its removal was probably a factor in hastening his death.

[Dr D] clearly identified that [Mr A] required oxygen. He quotes receiving family assurance that [Mr A] had his own oxygen supply (pg 107).

It is common for chronic obstructive pulmonary disease patients to have their own oxygen supply usually via an oxygen-generating machine. They are often located remotely from the patient's room (as they are noisy) and the oxygen supply to the patient comes by way of a long plastic tube. Such machines however do not provide a flow rate and concentration of oxygen suitable for emergency situations.

The other possibility which could have fulfilled [Dr D's] concern re oxygen, was that [Mr A] had an oxygen cylinder and regulator which is less common but not unusual.

In the heat of the moment, the question put raises the following issues:

- How much should [Dr D] have relied upon the family members' statement on the oxygen supply in an urgent situation?
- Should the ambulance officers have checked on the oxygen supply?

- Could they have attended the second emergency without portable oxygen and relied upon the internal oxygen within the ambulance?

As I do not have an accurate recording of the exact terms and words used during the exchange, any judgement on [Dr D's] performance in this regard can only have a very low index of certainty.

Consideration needs to be made of the ambulance officers/GP interactions. On being called out to another call while using a portable oxygen giving set for [Mr A], the decision on the oxygen provision becomes a joint one between ambulance officer and GP, with the GP usually holding greater power in decision. Countering this, an ambulance officer would be very uncomfortable attending an emergency callout without portable oxygen.

Ambulances also have oxygen available internally, plumbed into the ambulance. However this is not portable and an unconscious patient can usually not be easily and rapidly moved to a waiting ambulance.

The ambulance report on page pg 119 states:

'They took the O₂ off the patient and put him back on his own nebuliser. (the doctor was in attendance and accepted this).'

This indicates that the ambulance crew were aware that [Mr A] was now without oxygen and suggests they accepted this reduction in care with the doctor also accepting this. Thus the decision was by consensus of the three care people present. I have no information on the experience of the Ambulance officers in this typically difficult circumstance.

Thus, in evaluating [Dr D's] judgement in retrospect, in other circumstances, he should not have accepted the removal of oxygen from [Mr A]. However, the following factors make his lack of verification acceptable

- The lack of clear information on the second 111 call
- The urgency imposed by this second 111 call
- The family reassurance on oxygen supply
- The ambulance officer's willingness to depart the scene with the portable oxygen.

This would be a situation no doctor would like to face and I cannot be critical of [Dr D's] decision.

7. Should [Dr D] have answered the 'acute after-hours telephone call' and left [Mr A] unattended?

Yes.

In consideration of patient privacy, to take the call from another patient in front of [Mr A] and family would be inappropriate. [Dr D] would have to make a decision as to the immediacy of the need to observe [Mr A] versus the possible and unknown urgency of the phone call. At this stage [Mr A] was in a condition which was sufficiently good for the ambulance crew to leave and his family was present in the room.

When on call a GP is usually the first line of call for a patient in need and has to deal with any call he receives. Thus, in answering his cell phone [Dr D] would have to evaluate the calling patient's need and preferably private from listeners.

I believe [Dr D's] judgement in this matter was appropriate as he had already made a preliminary assessment of [Mr A] who was fully conscious at this time.

8. If, in answering any of the above questions, you believe that [Dr D] did not provide an appropriate standard of care, please indicate the severity of his departure from that standard.

I believe from the limited evidence given and in consideration of the difficult circumstances, the care is what could be expected of a reasonable GP, with qualifications indicated below in 10.

9. To assist you on this last point, I note that some experts approach the question by considering whether the provider's peers would view the conduct with mild, moderate, or severe disapproval.

I have sought the opinions of my colleagues on the executive of the Royal New Zealand College of General Practitioners on this case, using a non-identifiable outline of the circumstances and posing questions focused on the areas of judgement, which could be regarded as contentious. All replies produced similar opinions and further debate along the lines I have presented. None of this group felt that the actions of the doctor in this case were unreasonable. Similarly with respect to the standard of competency as indicated below on the reading of an ECG and insertion of an intravenous (i.v.) line, executive members flagged the same qualifications as I have indicated.

10. Are there any aspects of the care provided by [Dr D] that you consider warrant additional comment?

I note the comment in the ambulance report pg 132 that [Dr D] could

'not put line in'.

Also [Dr D] appears to have failed to identify atrial fibrillation in the rhythm strip as discussed in answer to question 1.

Insertion of an intravenous line can be difficult, especially in a confined room with a patient in cardiopulmonary arrest. Similarly rhythm strips can provide poor printouts which are difficult to read, exemplified by the ambulance crew reporting an earlier

rhythm strip as showing sinus tachycardia (pg 129) when in reality, the strip as presented in the records (pg 171) demonstrates atrial fibrillation.

While this is not proof of lack of competency in ECG reading or in resuscitation, [Dr D] should produce evidence of competency in these important areas of assessment.

The minimum standard of resuscitation expected of a general practitioner is of an ability to perform resuscitation to level 5 of the NZ Resuscitation Council, [Dr D] is a rural general practitioner¹ and [his ability] would be expected to be higher to level 7. To this end, it should be established as to whether [Dr D] has passed his minimum requirements for resuscitation skills.

In considering the need for a rural GP's skill levels to be higher, [Dr D] should have completed a recent PRIME course, training focused on the skill set a rural GP needs in emergency circumstances. Should this not be the case, then he should be encouraged to do so, with due consideration of the current problems that exist for rural GPs to attend such courses.

Summary

[Mr A's] case was typical of a patient of his age with an exacerbation of chronic obstructive pulmonary disease. [Dr D] was working after hours, in a difficult environment, with significant time constraints and resource limitation. I believe his actions are those of a reasonable GP, but suggest his competency level in two key areas as per question 10 be established.”

Responses to provisional opinion

Dr C

Dr C disagreed with my provisional findings that he did not appropriately assess Mr A in the ED at the Public Hospital. Dr C explained that in rural medicine it is necessary to use clinical judgement as much as possible because ordering investigations can take a great deal of time and resources. Therefore, a clinician is required to weigh up whether the information likely to be produced justifies such investigations. Dr C did not request a chest X-ray, ECG and laboratory tests because of Mr A's likely diagnosis of infective exacerbation of COPD, the relative unavailability of a radiographer, and the fact that Ms E (who could assist with an ECG) was the sole nurse on duty. Furthermore, Mr A reported feeling better on a single nebulisation (although his observations showed little change this is common with patients with COPD). Dr C's decision not to request the above investigations was not due to his busy workload and he would not have discharged Mr A without the above investigations if the incident had taken place in “a large, well-equipped ED”.

¹ [The region] is classified as a rural general practice, scoring 50 on the rural ranking scale.

Dr C emphasised that, despite the lack of documentary evidence, he did in fact explore cardiac causes (by physical examination) for Mr A's shortness of breath, as would be expected given his 20 years' experience in hospitals and EDs.

Dr C submitted that his omission to fully record the consultation was excusable because the notes were removed from the ED before he could complete them. Dr C attempted to review the notes the following morning. This was his usual practice in the case of an unexpected outcome (Mr A's death). However, the notes had been taken and photocopied by his manager "which made it impossible" for Dr C to add to his written notes. As a result, Dr C recorded his recollection of the consultation on his personal computer the next day at 3.30pm as follows:

"Consultation with [Mr A], [...] 2003

Called to see patient at about 1715. Consultation lasted until about 1745.

History

Originally saw GP on 24th December 2002 for cough. Treated with antibiotics. Has a two week history of gradual increase in dyspnoea and a non-productive cough. Has been feeling more dyspnoeic today. History of IHD [ischaemic heart disease], Chronic AF [atrial fibrillation], COD with frequent minor exacerbations.

No chest pain, No orthopnoea or PND [paroxysmal nocturnal dyspnoea] but does sleep on three or four pillows normally.

No haemoptysis [coughing blood]. No sudden increase in dyspnoea. Used Ventolin 8 times this afternoon. Has not required GTN.

Medications: Cardizem 120mg daily, Cartia 100mg daily, GTN 2 sprays PRN, Flixotide, Serevent and Ventolin inhalers.

Examination

Pulse 91, irregular (known AF), BP 211/111 but quite anxious, RR [respiratory rate] 28/min, Temperature 37.5 and Sats[oxygen saturation levels] 98% on room air.

Good colour.

Chest — Clear, poor air-entry, no dullness, no hyperresonance.

CVS [cardiovascular system] — S1 and S2 OK, no S3/4, JVP=0cm, no pedal oedema, no murmurs/bruits.

Abdo[men] — Soft, non-tender, no masses, bowel sounds normal

CNS [central nervous system] — grossly intact

Treatment

Given Ventolin 5mg and Atrovent 500mcg in nebuliser. Also stat dose of prednisone. Patient improved markedly in himself and was keen to go home. Discharged with script for Rulide and Durotuss (latter because patient felt he was 'getting blocked' with inspissated sputum). Also give instructions to take own stock of prednisone and see GP the next day if no better. Also instructed to re-present if worse/further exacerbation.

Comment

Nurse not in attendance entire consultation as very busy with minor GP-type cases. Due to this and fact that patient improved, further investigation considered unwarranted.

Typed [...] 2003 at 15:30'

The licensee of the Public Hospital

The licensee of the Public Hospital disputed that it was responsible for Dr C's failure to assess Mr A appropriately, because it provided adequate systems to support his clinical duties. The licensee of the Public Hospital explained that it was appropriate that Dr C was the sole medical officer on duty in the ED in light of the size of the facility. Furthermore, Dr C's workload was reasonable because on [that day] only 17 patients presented to the ED and there were only 8 hospital inpatients (leaving 8 vacant beds) over a 24-hour period. It was also reasonable, in light of the size of the ED, that only one registered nurse (Ms E) was on duty to assist Dr C and three additional nurses were available on call to respond to any crisis or increase in workload (although their assistance was not requested).

The licensee of the Public Hospital further advised that it had a fixed-price contract at the time of the incident with a radiology service to provide on-call services after hours (which included public holidays). Dr C requested radiology services on two occasions that day prior to the consultation with Mr A.

The licensee of the Public Hospital explained that a laboratory facility provides services on site during normal weekday working hours. Nursing and medical staff have been trained to perform simple diagnostic testing after hours using the laboratory facilities. A qualitative Troponin T "spot" blood test is available in the ED. This test is taken by ED staff to evaluate whether a patient has evidence of cardiac damage and is available 15 minutes after applying a blood sample to a rapid test kit. Requests for laboratory tests which could not be performed after hours by nursing and medical staff are couriered to the nearest laboratory facility. If immediate or significant testing was required, Dr C could have transferred Mr A to another Public Hospital or a hospital in another region.

The licensee of the Public Hospital responded that it was also not responsible for Ms E's substandard telephone advice to the third ambulance officer to request the after hours medical practice to assess Mr A, rather than advising him to transport Mr A immediately to hospital. The licensee of the Public Hospital advised that its telephone triage policy and protocol on breathing difficulties were properly researched and developed by a nurse

employee as part of her study at a University Centre for Postgraduate Nursing Studies. These documents were appropriate in light of current knowledge at the time of the incident. Nonetheless, the licensee of the Public Hospital has reviewed and drafted changes to its telephone triage policy and protocols for employee consultation in light of the comments of my nursing advisor and of an emergency medicine specialist (see below).

The licensee of the Public Hospital submitted a report commissioned from the emergency medicine specialist who practises in a rural setting. The emergency medicine specialist agreed with the advice of my expert in emergency medicine, Dr Jaffurs, that Dr C did not adequately record the consultation with Mr A and should have observed him for at least four hours after the consultation. Dr C was also obliged to consider cardiac causes for Mr A's symptoms because cardiac failure may present as exacerbation of COPD with no other signs.

Nonetheless, in the emergency medicine specialist's view, the care provided by Dr C to Mr A was of an acceptable standard. Dr C's diagnosis of infective exacerbation of COPD was the most likely diagnosis at the time of the consultation, based on Mr A's coloured sputum which was increasing, low fever and increasing shortness of breath (in fact the emergency medicine specialist's "strong belief" was that Mr A's cardiac failure occurred after he was discharged from the ED due to the overuse of his ventolin nebuliser).

Furthermore, the emergency medicine specialist advised that, although it is highly desirable to obtain a semi-urgent chest X-ray in exacerbations of COPD to exclude cardiac failure and other serious conditions, this was not always practical because rural hospitals are not funded to provide 24-hour on-site radiology services. This situation is reflected by the normal and accepted practice in rural New Zealand not to request an acute after-hours X-ray to explore cardiac causes of breathlessness when a patient (such as Mr A) is responsive to beta agonist therapy, for example Ventolin which was prescribed by Dr C. The emergency medicine specialist explained that breathlessness caused by cardiac failure "classically" does not respond or responds only minimally to this type of medication. An ECG is not warranted unless the patient is poorly or unresponsive to treatment or has other clinical indicators of cardiac failure or acute cardiac disease. "No such indicators" were recorded in relation to Mr A (including an examination by the urgent doctor).

The emergency medicine specialist accepted that Ms E incorrectly triaged Mr A as category 3 (requiring urgent treatment). However, in his view this was excusable because the issues surrounding the provision of after-hours urgent and emergency care are very contentious and currently under serious discussion and negotiation between the Ministry of Health, the Australasian College for Emergency Medicine (ACEM) and the Royal New Zealand College of General Practitioners. In this respect, the emergency medicine specialist noted that patients in the region presenting with breathing difficulties who are triaged as category 2 (requiring emergency treatment) are assessed in the ED at the Public Hospital. Those triaged as category 3 are assessed by the after hours medical practice. This practice reflects the fact that rural GPs generally wish to maintain care of their patients and do not want the ED to have an open-door policy (which presumably would have significantly increased the chances of Ms E advising the third ambulance officer to transport Mr A directly to hospital).

The emergency medicine specialist also agreed with the comments of my nursing expert about the shortcomings in the telephone triage policy and breathing difficulties protocol. He recommended changes to the protocol, particularly to ensure consistency with ACEM standards and the Trauma Nursing Core Course. The emergency medicine specialist also recommended that nurses performing telephone triage have a minimum of 12 months' postgraduate and six months' emergency experience and have passed the triage training course.

Finally, the emergency medicine specialist submitted that the licensee of the Public Hospital was not responsible for the shortcomings in the services provided to Mr A by Dr C and Ms E because the quality of patient care in EDs is affected when the workload is heavy. EDs are not staffed or funded to cope with "100% of maximum load" and the situation in small rural hospitals is even more restricted, partly because the funding is allocated on a population basis.

Ms E

In her response, Ms E stated that she respected my provisional findings that she breached the Code in respect of the standard of her telephone advice to the third ambulance officer and record-keeping. She also stated:

"Rural health places high demands on a skilled workforce and accountability for behaviour and following of protocols necessitates the identification and subsequent implementation of improved policies and procedures. This has occurred in my workplace significantly reducing further risks and has increased my personal development and reflective practice. I personally account for my actions and consult with a professional supervisor to maintain my practice ethics and development."

Further expert advice

Further expert advice in relation to the responses to my provisional opinion of Dr C and the licensee of the Public Hospital was obtained from emergency medical specialist Dr Jaffurs:

"I will respond to your questions posed in your letter dated 6 July 2005. I have examined the new documentation pertaining to this case.

... I am currently a Consultant Level Specialist Emergency Physician in full time Clinical Practice at Whangarei Base Hospital. Our Emergency Department sees 24,000 patients per annum. We rely on xray via call in of the radiographer after 10.30pm. Similarly laboratory is available only via call in of the laboratory technician after midnight.

Whangarei Emergency Department is approved for 6 months of advanced training by the Australasian College of Emergency Medicine. We are designated as a rural training site, similar to the designation carried by [the Public Hospital].

Our Emergency Department is also responsible for overseeing care delivered at Northland Health's Community Hospitals including Kaitaia, Bay of Islands and Dargaville. These facilities are similar to [the Public Hospital] with respect to staffing and resources. I am aware of the constraints inherent to Emergency Medicine practice in such settings, although I accept [Dr C's] and [the emergency medicine specialist's] criticism that I do not practice primarily in such a setting.

1. Please indicate whether your expert advice in relation to the actions of [Dr C] is unchanged or altered in light of this material, including the degree of any departure from accepted practice.

I have carefully considered the new documents pertaining to this case. I accept [Dr C's] addendum which reflects a thorough examination and his decision making process.

I continue to have concerns regarding the assessment, lack of testing, and short period of observation prior to discharge as previously stated in your published opinion of 19 April 2005. A prudent and thorough practitioner would have at a minimum requested an ECG and a chest X-ray. The patient gave a clear history of gradual deterioration over 2 weeks. The ambulance rhythm strip was abnormal suggesting atrial fibrillation. The patient has a complicated mix of medical problems as described in [Dr C's] notes. In the absence of testing, it would be even more important to retain the patient for a short period of observation in the Emergency Department. These actions were not taken. This constitutes a moderate departure from an acceptable standard of care for an Emergency Department. I will repeat my belief that this patient may well have died in Hospital if admitted.

2. Were adequate X-ray and laboratory resources available to [Dr C] in the Emergency Department at [the Public Hospital] [in] 2003? If not, was this reasonable taking into account the rural setting and available funding?

[The CEO of the licensee of the Public Hospital] indicates that X-ray was available on call. Apparently xray had been requested earlier in the day and obtained using this mechanism. A similar on call mechanism provides adequate access to X-ray in our Hospital. Laboratory access, while available, is limited. In this particular case, laboratory access might only have made a difference if troponin testing was positive suggesting an ischemic coronary syndrome. Troponin point of care tests are commercially available and used in [another region's] peripheral Hospitals. Was a bedside test for troponin available at [the Public Hospital's] Emergency Department? I would not expect arterial blood gas analysis to be available at [the Public Hospital].

3. Was it reasonable that [Dr C] was the sole Medical Officer on duty in the Emergency Department [in] 2003?

[Dr C] states ‘Note that my not doing these investigations was nothing to do with the busyness of the department at the time, but was related to the availability of the tests and the clinical condition of the patient.’ This suggests he was not pressured into an inappropriate decision. [The CEO of the licensee of the Public Hospital] indicates that on [that day] ‘We had 17 presentations to the Emergency Department for the total 24 hour period and we had 8 inpatients’. That works out to a little more than one patient per hour. Although there is little published data on this subject, both Australasian and American Colleges of Emergency Medicine recommend no more than 2.5 patients per hour per Doctor as a safety ceiling. A 24 hour shift is common in peripheral Hospitals and acceptable with such a patient load. A significant risk in this situation is that an unmanageable number of patients may require attention simultaneously. Therefore I think it is reasonable that [Dr C] was the sole Medical Officer on duty in the Emergency Department [that day] as long as an on call list of Doctors is available to assist as needed.

4. Would your expert advice be different if [Dr C] was also responsible for inpatient care at [the Public Hospital] [in] 2003?

No. The rationale for this is given in the response to question 3.

5. Would your advice be different if Dr C had (as [the licensee of the Public Hospital] alleges) requested radiology staff attend the Emergency Department and Hospital patients prior to [Mr A’s] presentation?

No. The rationale for this is given in the response to question 2.”

Code of Health and Disability Services Consumers’ Rights

The following Rights in the Code of Health and Disability Services Consumers’ Rights are applicable to this complaint:

RIGHT 4

Right to Services of an Appropriate Standard

- 1) *Every consumer has the right to have services provided with reasonable care and skill.*
- 2) *Every consumer has the right to have services provided that comply with legal, professional, ethical and other relevant standards.*

Other relevant standards

Medical Council of New Zealand

Medical Council of New Zealand Guidelines for 'The maintenance and retention of patient records' (2001).

1. Maintaining patient records

(a) Records must be legible and should contain all information that is relevant to the patient's care.

Nursing Council of New Zealand

Nursing Council of New Zealand 'Professional Standards for TeleNursing Practice' (2000).

Performance criteria (Competency 1) 1.1.9 states:

[The TeleNurse] documents the call in a comprehensive manner enabling satisfactory retrieval, auditing and referral.

Opinion: Breach — Dr C

Standard of care

In my opinion, Dr C breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code) by failing to properly assess and treat Mr A during his presentation to the ED at the Public Hospital, for the reasons set out below.

Dr C submitted that his assessment of Mr A was adequate, although it was not fully documented because of the unavailability of the file. He recalled that he undertook cardiac and abdominal examinations (which are not recorded) but he did not detect any cardiac causes for Mr A's condition, particularly his breathlessness. Mr A also denied chest pain and orthopnoea. Dr C diagnosed Mr A with a mild infective exacerbation of his obstructive lung disease.

Dr C advised that he would usually have requested routine blood tests, an ECG or a chest X-ray. However, Ms E, who was also responsible for assisting with ECGs in the ED after hours during her shift, was extremely busy. Also, on-site radiology services were not available because it was a public holiday and the on-call radiographer lived 30 minutes' drive from the hospital. A delay of one to two hours in conducting these investigations was not warranted because Mr A markedly improved on the nebulised medications, had a clear diagnosis, wanted to return home and was advised to return for assessment if his condition deteriorated.

The emergency medicine specialist, who provided expert advice on behalf of the licensee of the Public Hospital, was of the view that a chest X-ray and ECG were not warranted because Mr A's breathlessness responded to medication prescribed by Dr C, he was not poorly and there were no other clinical indicators of cardiac failure or acute cardiac disease.

My expert in emergency medicine, Dr Chip Jaffurs, advised that Dr C's assessment of Mr A was not satisfactory and represented a moderate departure from a reasonable standard of care. In particular, Dr Jaffurs commented that "the medical record is brief and incomplete not supporting an adequate evaluation". Dr C should have considered cardiac causes for Mr A's shortness of breath, taken an appropriate cardiac history, conducted a cardiac examination and requested an ECG and chest X-ray (which are essential). Dr Jaffurs also commented that an ECG was basic to investigate the causes of Mr A's shortness of breath. Further, a Troponin blood test was "logical" to exclude cardiac damage in light of Mr A's diabetes, which can make detection of ischaemic heart disease more difficult. These examinations were warranted whether or not Mr A presented with chest pain.

Dr Jaffurs further advised that Mr A's discharge from the ED was premature and at the very least Mr A should have been observed for several more hours to fully assess the effectiveness of prednisone and Ventolin, which initially resulted in a slight improvement in his condition. This extended observation period was warranted because Mr A's clinical picture indicated an overall gradual deterioration and the ambulance crew found him in "an extreme state".

In response to my provisional opinion, Dr C explained that his decision to discharge Mr A was not based on his busy workload and he would not have discharged Mr A without the above investigations if the incident had taken place in "a large, well-equipped ED".

In his further expert advice Dr Jaffurs, after reviewing the responses to my provisional opinion from Dr C and the licensee of the Public Hospital, remained of the view that in light of Mr A's reported gradual deterioration over two weeks, his complex medical problems and the ambulance rhythm strip (which suggested atrial fibrillation), Dr C should have requested as "a minimum" an ECG and chest X-ray and observed Mr A's condition for a short period prior to discharge. Dr Jaffur's further advice also indicates that a qualitative Troponin T "spot" or bedside blood test could have been requested taking into account that on-site laboratory services were not available.

I accept Dr Jaffurs' advice, which takes into account the "extenuating circumstances" of Dr C's work situation (both time and location). A physical examination was insufficient to exclude cardiac causes for Mr A's breathlessness and other symptoms. An ECG and chest X-ray were warranted despite the potential delays and an improvement in his condition shortly after receiving medications at the ED.

I note that the emergency medicine specialist also considered that Mr A should have been observed for at least four hours after the consultation. This was a critical period in this case because it appears that Mr A's breathing deteriorated shortly after returning home, requiring

frequent doses of Ventolin prior to the arrival of a second ambulance at 8.42pm. At that point Mr A's condition was serious enough to require a hospital assessment.

Finally, I also note that Dr Jaffurs' expert advice is consistent with that provided by ACC's emergency medicine specialist.

Taking into account all the extenuating circumstances, and the expert advice, I consider that Dr C did not provide an appropriate standard of care to Mr A, and breached Right 4(1) of the Code.

Record-keeping

In my opinion, Dr C breached Right 4(2) of the Code for the reasons set out below. Dr Jaffurs advised that Dr C's record of the consultation with Mr A was not "adequate". I accept Dr Jaffurs' advice. I note in particular that Dr C did not record the results of his cardiac and abdominal examinations, which were critical information. I acknowledge Dr C's explanation that he did not record these details because Mr A's file was not available throughout the consultation. Nonetheless, Dr C should have located the file and completed his record at the earliest opportunity (making it clear that the additional information was not contemporaneously recorded). It appears in this case that the information about Mr A's cardiac and abdominal examinations was recorded only in Dr C's personal computer, which was suitable only as a temporary expedient.

The documentation of consultations, assessments and plans is important to ensure an accurate record for other health professionals involved in a patient's care and therefore to maintain continuity of care. The continuity of Mr A's care was important in this case because a number of other providers became involved after he was assessed by Dr C.

The relevant professional standard is the Medical Council of New Zealand's guidelines for "The maintenance and retention of patient records" (August 2001). Guideline 1 states that all records must contain "all information that is relevant to the patient's care".

Accordingly, by failing to keep a proper record of Mr A's assessment, Dr C breached Right 4(2) of the Code.

Opinion: Breach — Ms E

Standard of care

In my opinion, Ms E breached Right 4(1) of the Code by failing to respond appropriately to a telephone call from the third ambulance officer about Mr A's condition, for the reasons set out below.

Although it is unclear exactly what was discussed and what information was conveyed during Ms E's telephone conversation with the third ambulance officer, my nursing expert

considered that Mr A required another review as his condition was deteriorating. His increasing respiratory distress, evidenced in part by his reported increased use of the nebuliser, meant that he should have received hospital care. In my advisor's opinion, Ms E had sufficient information to make a decision to review Mr A but was "not alerted to the emergent sign of respiratory distress that was being presented to her". Instead, Ms E referred Mr A to the after hours medical practice.

I accept the advice of my nursing expert. The ambulance officers were sufficiently concerned about Mr A's condition to contact the hospital and in my view would not have done so if they considered it was not necessary. Accordingly, in my opinion Ms E breached Right 4(1) of the Code.

Record-keeping

In my opinion, Ms E breached Right 4(2) of the Code by failing to document her telephone conversation with the third ambulance officer.

The relevant standards are the Nursing Council of New Zealand's Professional Standards for TeleNursing Practice (2000) and the licensee of the Public Hospital's telephone triage policy.

Performance criteria 1.1.9 (Competency 1) of the Professional Standards for TeleNursing Practice states that a telephone call must be documented "in a comprehensive manner enabling satisfactory retrieval, auditing and referral". The licensee of the Public Hospital's telephone triage policy dated 30 April 2002 stated that documentation of each call must be "precise" and "focused".

I appreciate that Ms E's workload was heavy that day. Nonetheless, her telephone conversation with the third ambulance officer should have been documented. Documentation is an important and integral part of clinical practice, whatever the setting.

In these circumstances, Ms E breached Right 4(2) of the Code.

Opinion: No breach — Dr D

In my opinion Dr D did not breach Right 4(1) of the Code, for the reasons set out below.

My expert in rural general practice, Dr Jim Vause, advised that overall Dr D provided a reasonable standard of care to Mr A, taking into account Mr A's presentation with an exacerbation of his COPD, and the fact that the consultation was after-hours, the working environment was confined and there were significant time and resource limitations.

Dr Vause advised that in the above circumstances Dr D's assessment of Mr A's condition was appropriate given that he did not have the opportunity to fully explore Mr A's

symptoms, such as chest pain (had it been present). Dr D also appropriately assessed that Mr A's symptoms may have been due to congestive heart failure.

Dr Vause further advised that if Dr D was aware of Mr A's cardiac history he may have arranged a more urgent hospital admission. Nonetheless, a GP in this situation would usually presume, in the absence of evidence to the contrary, that Mr A's condition had been investigated for cardiac causes by chest X-ray or ECG during his earlier presentation to the ED. Dr D did not have the opportunity to check this. It was also appropriate for Dr D to leave Mr A's bedroom to answer the call he received about another patient on his cellphone (as part of his on-call responsibilities for the after hours medical practice) because he had completed a preliminary assessment and Mr A was conscious (although I acknowledge that Mr A's family are unhappy that Dr D took this call).

In addition, Dr D's decision to release the ambulance was reasonable, taking into account the urgency of the call, Mr A's condition and that only one ambulance may have been immediately available. (The Ambulance Service had three ambulances but the other two were not "immediately crewed".)

It is clear that the situation Dr D faced shortly after his arrival to examine Mr A was far from ideal. He was required to decide after three or four minutes whether the ambulance crew should respond to another emergency call, before he had completed a full assessment, even though he recognised that Mr A required treatment in hospital.

Dr D identified that Mr A required oxygen. Dr D should have checked that Mr A had an appropriate oxygen supply before the ambulance departed. However, Dr D's failure to check was reasonable because the ambulance call-out was urgent; the clinical details of the other patient (apart from the fact that he was unconscious) and whether the portable oxygen was necessary were unclear; the family may have reassured Dr D that Mr A had his own oxygen supply; and the ambulance officers agreed to take the portable oxygen supply with them. Dr Vause also advised that it is common for patients with COPD to have their own oxygen supply (although this is not suitable for emergencies).

It is not clear, in light of the conflicting evidence, whether the family did in fact assure Dr D that Mr A had his own oxygen supply. However, even if they did not and Dr D was aware prior to the departure of the ambulance that Mr A did not have his own oxygen supply, Dr D's agreement to the removal of the oxygen by the ambulance crew is excusable, particularly in light of the relatively brief time available to make this very difficult decision. In respect of this issue, my expert commented, "This would be a situation no doctor would like to face."

I accept my expert advice that, in the circumstances, Dr D provided an appropriate standard of care to Mr A. Accordingly, Dr D did not breach Right 4(1) of the Code.

Dr Vause expressed concern that Dr D may have misread the ambulance single lead ECG trace which, although now unavailable, probably indicated that Mr A had atrial fibrillation. Dr D interpreted the trace as indicating Mr A had a slightly increased heart rate. Dr Vause

was also concerned that Dr D had difficulty in inserting an intravenous line while attempting to resuscitate Mr A. I address these matters in my recommendations (below).

Vicarious liability

Under section 72(2) of the Health and Disability Commissioner Act 1994, employers (in this case the licensee of the Public Hospital) are responsible for ensuring that their employees comply with the Code. Under section 72(5), it is a defence for an employing authority to prove that it took such steps as were reasonably practicable to prevent the acts or omissions leading to an employee's breach of the Code.

Dr C

Dr C breached the Code by failing to properly assess Mr A. Dr C's failure to provide an appropriate standard of care to Mr A is, in my opinion, mainly due to his own clinical decision-making. For that his employer cannot be held accountable.

I accept that Dr C was not working in ideal circumstances the day Mr A presented. He was the sole medical officer on duty in the Public Hospital and was responsible for patients presenting to the ED and for inpatients. There was no on-call doctor to assist him in the ED and there was limited on-call assistance available for his inpatient workload. Laboratory and X-ray facilities were relatively limited because it was a public holiday.

Nonetheless, I am satisfied that, overall, the licensee of the Public Hospital provided Dr C with adequate resources to carry out his duties properly. I accept Dr Jaffurs' advice that it was reasonable that Dr C was the sole medical officer on duty in the ED and hospital that day, and that his workload was not excessive (although there should have been another on-call doctor available to assist with his ED duties, if necessary). I also note that, although there were eight patients in the hospital over a 24-hour period, there were eight vacant beds.

Dr Jaffurs advised that, although the X-ray services were not available on-site (but on-call), this was acceptable in a rural setting. An ECG was available in the ED and Ms E had time to assist. Dr C advised me that the busy workload in the ED did not influence his decision not to request a chest X-ray and other investigations. Dr C could also have requested a qualitative Troponin T "spot" blood test to explore cardiac causes for Mr A's breathlessness. This test was available to patients in the ED at the time of the consultation.

On the basis that adequate support services were available, the licensee of the Public Hospital is not vicariously liable for Dr C's breach of the Code.

Dr C also breached the Code in respect of his record-keeping. I appreciate that this may have partly occurred because of the less than ideal environment he was working in. Nonetheless, documentation is a basic part of good clinical practice, whatever the setting, and Dr C is an experienced practitioner. Accordingly, in my view the licensee of the Public

Hospital is not vicariously responsible for Dr C's failure to properly record the care he provided to Mr A.

Ms E

Ms E breached the Code by inappropriately advising the third ambulance officer by telephone to request the after hours medical practice to assess Mr A's condition rather than advising him to transport Mr A immediately to the Public Hospital. The evidence suggests that Ms E was almost certain Mr A's condition was due to an infective exacerbation of his chronic obstructive pulmonary disease rather than cardiac causes.

My nursing expert advised that the licensee of the Public Hospital's telephone triage policy was not adequate because it did not provide guidance on the way that calls from the Ambulance Service were managed. The breathing difficulties protocol was also not adequate for nursing telephone triage because it did not caution that breathing difficulties may be due to cardiac causes.

Despite these shortcomings, Ms E was an experienced emergency nurse and was given sufficient information by the third ambulance officer to make a decision to review Mr A at the Public Hospital (notwithstanding that the protocol was not adequate to guide Ms E about taking into account the possibility of cardiac causes for Mr A's breathing difficulties). I also appreciate that Ms E's workload may have contributed to her decision. However, she could have requested on-call nursing assistance.

In these circumstances, the licensee of the Public Hospital should not be held responsible for Ms E's breach of the Code in referring Mr A to the after hours medical practice for assessment.

Ms E also breached the Code for failing to document her telephone conversation with the third ambulance officer. The telephone triage policy clearly required Ms E to document this call (which in any case is also an integral part of clinical practice) and therefore the licensee of the Public Hospital is not vicariously liable for her failure to do so.

Dr D

Given that I consider Dr D did not breach the Code, no issue of vicarious liability arises with respect to the after hours medical practice.

Actions taken

In response to my provisional opinion, the licensee of the Public Hospital advised that it has reviewed and drafted changes to its telephone triage policy and protocols for employee consultation. I am also satisfied that, taking into account her response to my provisional opinion, Ms E has reviewed her practice in light of the incident.

Recommendations

Dr C

I recommend that Dr C apologise in writing to Mrs A and Mr B.

Ms E

I recommend that Ms E apologise in writing to Mrs A and Mr B.

Follow-up actions

- Copies of this report will be sent to the Medical Council of New Zealand, the Nursing Council of New Zealand and the Public Hospital.
- Copies of this report, with details identifying the parties removed, will be sent to the Royal New Zealand College of General Practitioners, the Rural General Practice Network, and the Australasian College for Emergency Medicine (New Zealand Faculty) and be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.
- Copies of this report, with details identifying the parties removed, will also be sent to the Chief Medical Officers of all District Health Boards.

Appendix 1

CONTROLLED DOCUMENT

Telephone Triage Page 1 of 4

Objective

To conduct a verbal interview to assess a patient's health status in which the nurse makes decisions and offers recommendations for treatment and referral based on critical judgement and guided by Protocols to ensure the safety of the health care advice.

Scope

Means of providing advice to the community by telephone. The Emergency Department Registered Nurse confidently and consistently responds to caller's needs that seek information regarding health care and advising them to seek appropriate medical attention within an appropriate period of time.

References

Wheeler, S.O., & Seibert, B. (1997). Calling all nurses: how to perform telephone triage. *Nursing* 27:27 (7) 37-41.

Procedure

- The nurse who responds to the phone call must be the Emergency Department Registered Nurse. This will ensure consistency in following up of the call by the emergency department, if necessary.
- Before giving any advice the Registered Nurse needs to be competent and confident within their practice. If the Registered Nurse is not confident in giving the advice then the phone call must be referred to a colleague who is.
- The Registered Nurse will ensure that the advice given is knowledge based and given in a legal, ethical and culturally safe manner by working within the Nursing Council and NZNO guidelines. The Privacy Act and the Code of Health and Disability Consumers' Right must be observed at all times.

The Emergency Department Registered Nurse

- Must use the established and approved protocols to provide consistency with an approved standard of care within the community.

Review Date				
Signature				

CONTROLLED DOCUMENT

~~TELEPHONE TRIAGE~~ Page 2 of 4

- Will rely on a mix of empathy, listening and communication skills that are used effectively to assess the needs of the caller and to gather information. The Registered Nurse should establish a rapport with the caller immediately in the conversation.
 - Shall ask open-ended questions to gain relevant information and the staying focused on the call is essential to defuse anxious, angry or hostile callers.
 - Must use permanent algorithmic documentation to collect as much standardised information as possible, for legal protection, accountability and quality assurance.
- Must always be a patient advocate.

~~The Emergency Department Registered Nurse will~~

- Introduce one-self and establish rapport.
- Conduct the interview – assessment. The nurse relies solely on the ability to listen and interpret.
- Make a triage decision using the established protocols.
- Offer predetermined advice by giving clear and simple directions and assures that the caller understands the advice given.
- Offer positive reinforcement to help alleviate apprehension and heighten the callers comfort level.
- Conclude the call and always encourage the caller to call back if anything occurs to enhance their concern.
- Follow up the caller if any advice is given within 24 hours.
- Document the call, using precise information to provide a valuable resource to complete the scenario, using the documentation protocols.

Associated Documents

Documentation policy.
Telephone Triage Consultation Documentation Form

Revised Date					
Signature					

CONTROLLED DOCUMENT

EMERGENCY TELEPHONE TRIAGE Page 3 of 4

Documentation Policy

- Documentation is vital in telephone triage, particularly because the Registered Nurse only has a short time of 5-10 minutes to record concise, concrete data. Remember 'Not documented – Not done'. Registered nurses are accountable for the advice they give and their best protection is in the precise documentation of their actions.
- Once the Registered nurse begins speaking with a caller, they are obligated to either give advice or refer him/her to a health care facility or emergency department. Terminating the call without referral or advice could be considered abandonment and could result in legal action.
- To avoid pitfalls, remain open to information and avoid any judgement of the caller. Reassurance of is an appropriate way to deal with any fears and is an appropriate use of telephone triage.
- Documentation of each call must be precise, focused, and follow policy and protocols which are based on current standards of practice. This will provide protection from legal risk.
- The interview provides data that forms the basis of the assessment. Make sure adequate information is obtained to make a decision. Allow adequate talk time, calls that are too brief can result in poor assessment, inappropriate dispositions and insufficient documentation. Write down the caller's own words whenever possible and noted as such.
- Documentation on the required form is essential.
- The mnemonic SCHOLAB may be useful to trigger words to prompt the Registered Nurse to collect important data.

SYMPTOMS AND ASSOCIATED SYMPTOMS
 CHARACTERISTICS, COURSE OF ILLNESS
 HISTORY OF SYMPTOMS
 ONSET
 LOCATION
 AGGRAVATING FACTORS
 RELIEVING FACTORS

- Weekly audit of documentation of call to assess appropriateness of advice and provide feedback where necessary to the Emergency Department Registered Nurse.

Review Date				
Signature				

CONTROLLED DOCUMENT

TAR: TELEPHONE TRIAGE Page 4 of 4

TELEPHONE TRIAGE CONSULTATION DOCUMENTATION FORM

Name:	Today's date:
Date of Birth:	Time Call Received:
Ph Number:	Time Call Finished:
Own Doctor:	Caller's Name:
Gender:	Relationship:
Address:	
Presenting Symptoms or Concerns:	
Medical History:	
Protocol used for assessment and advice given:	
Advised to call Urgent Doctors Service:	
Advised to come to the Emergency Department:	
Caller Agreement to plan: Yes No	
RN Signature:	RN Name:
Call Back to Review Patient's progress - within 24 hours if appropriate:	

Review Date				
Signature				

Appendix 2

3414208

Breathing Difficulties

Assessment

- ◆ Breathing - If any, noisy, spasmodic, rattling, wheezing, gurgling, choking. Bring to Emergency Department
- ◆ Hyperventilating -rapid, shallow, short of breath, tingling extremities, shaky, muscle spasms – reassure, breath into a paper bag and see GP or Urgent Doctor Service.

Advice

If not breathing – Call Ambulance and commence CPR

Any breathing difficulties are potentially life threatening and should be treated as such

Signs of Critical emergency - Call Ambulance

- ◆ Dusky colour, cyanosed lips and fingernails
- ◆ Unable to Speak
- ◆ Drowsiness
- ◆ Extreme effort needed for breathing