Ambulance Officer

Ambulance Service

A Report by the

Health and Disability Commissioner

(Case 03HDC00153)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Parties involved

Ms A	Complainant / Consumer's wife
Mr A	Consumer
Mr B	Ambulance Officer / Provider
Mr C	Chief Executive Officer, Ambulance Service

Complaint

On 6 January 2003 the Commissioner received a complaint from Ms A concerning the services provided to her husband, Mr A, by Mr B, ambulance officer, and an Ambulance Service. The complaint was summarised as follows:

- *On 9 January 2002, Mr B did not appropriately review and assess Mr A*

An investigation was commenced on 18 March 2003.

Information reviewed

- Complaint from Ms A
- Responses from Mr B
- Medical records provided by a Public Hospital
- Ambulance Service policies and procedures
- New Zealand Ambulance Education Council's 'Authorised Patient Care Procedures'
- Independent expert advice from Ms Marie Long, ambulance officer

Information gathered during investigation

At approximately 2am on 9 January 2002 Mr A, aged 55 years, woke with pain in his chest and stomach area. The pain increased and by around 3am Mr A was becoming quite distressed. His wife, Ms A, called 111, and an ambulance crewed by Mr B, team leader, and a volunteer ambulance officer, was dispatched at 3.23am.

The ambulance arrived at Mr A's house at 3.29am. Mr B found Mr A seated on his couch in a distressed state and reported that he appeared to be hyperventilating. Mr B asked Mr A where he felt sore. Mr B recalled that Mr A indicated that he was experiencing tingling and cramping of his hands, arms and fingers. Ms A stated that her husband (who is French)

responded to this question by pointing to his lower torso and chest, and saying he was feeling "pics", which Ms A explained meant "pins and needles", in his hands, arms and fingers. Neither she nor her husband mentioned cramping. While this discussion occurred, the volunteer ambulance officer placed a pulse oximeter probe on Mr A's finger and took a reading of 98%. Mr B took Mr A's radial pulse and found this to be 80 and regular. On the basis of this result Mr B decided that there was no point in taking Mr A's blood pressure.

Mr B recalled that he calmed Mr A and showed him how to slow his breathing. Following this, Mr A became less anxious and Mr B was able to assess him more easily. Ms A said that Mr A informed Mr B that he felt better, and Mr B responded by saying, "Huh! My third panic attack tonight." Mr B denies making this statement.

Mr B said that by this time Mr A's anxiety had resolved completely. Mr B then took a more thorough history and found that Mr A was suffering a burning feeling in his abdomen. Ms A said she cannot remember the word "burning" ever being used to describe Mr A's pain. Mr B said Mr A pointed to his mid upper quadrant or epigastric region to indicate where he felt the pain. Mr B recalled that Mr A said he had experienced these feelings before and that they had been occurring more often recently. Mr A said that he usually treated himself with Gaviscon and bicarbonate of soda with good effect. Ms A stated that Mr B did not ask about Mr A's previous history and that her husband did not say he had experienced these feelings before. Ms A said that as far as she was aware he had never previously experienced such symptoms.

Mr B recalled that he asked Mr A whether he had experienced any chest pain or shortness of breath lately. Mr A said no. Mr B asked whether he had experienced any chest pain, nausea or shortness of breath that night. Mr A again said no. Ms A denied that this line of questioning was followed; the only additional questions asked by Mr B were whether Mr A had taken any drugs and whether he had any trouble getting up and down stairs.

Mr B made a diagnosis of unrelieved reflux exacerbated by hyperventilation. He said that he gave Mr A and Ms A the option of going to hospital, but Mr A was reluctant, so Mr B instead advised that he try a hot Milo to settle his stomach and consult his general practitioner to investigate the cause of his reflux. Having given this advice, Mr B and the volunteer ambulance officer departed. Ms A cannot recall the possibility of hospital admission being raised and is adamant that she would have remembered if it had been. She was left with an overwhelming impression that Mr A's pain was not serious and that he was just having a panic attack.

Approximately ten minutes later Mr A collapsed. Ms A again called 111 and the ambulance carrying Mr B and the volunteer ambulance officer returned soon after. Mr B immediately commenced CPR and defibrillation and Mr A was subsequently transferred to the Public Hospital.

Mr A remained in a coma for 36 hours and suffered damage to the brain, which has left him severely impaired.

Independent advice to Commissioner

The following expert advice was obtained from Ms Marie Long, an independent ambulance officer:

> "I reviewed a wide range of documents as presented. The documents relevant to the specific incident are listed below although unfortunately some are undated and unsigned.
>
> - H&D Medical/Professional Advice File, 3 June 2003
> - Letter from [Ms A], 3 January 2003
> - […] Ambulance [Service]
>   - Patient **Report form, Case 9, 9 January 2002**
>   - Patient Report form, Case 10, 9 January 2002
> - Paper titled Case No 009, Undated
> - […] ambulance Agency Incident Report
>   - Incident 090102-0001101, 14 January 2002
>   - Incident 090102-0001104, 14 January 2002
> - Diary Note Case 9 and 11
>   - interview with [Mr B], 22 January 2002
> - Letter to Commissioner from [Mr B], 27 March 2003
> - Incident report of [the volunteer ambulance officer], 27 March 2003
> - Paper titled Case No 011, Unsigned and not dated
> - Response to concerns raised by Ms [A], Unsigned and not dated
> - DRAFT response from […] [the Ambulance Service], 10 April 2002 Unsigned with handwritten comment from Service Medical Advisor
> - Summary, Unsigned and not dated
> - [Public] Hospital notes from 9/2/2001
> - ACC letter to [Mr C, Chief Executive Officer, Ambulance Service], 25 March 2002 with ACC 45 and Medical Misadventure Unit paper
> - [Lawyers] Schedule to ACC, Unsigned and not dated
> - Action sheet, 5 June 2003
>
> The documents listed below were reviewed as background and support for the officer involved rather than specific to the incident.
>
> […] Ambulance Position Description, November 2001
>
> Summary of Ambulance Career – [Mr B], Undated, including qualification certificates. Student assessment forms and record of learning NZQA and [the Ambulance Service] Report of revalidations 2001, May 2001
>
> Revalidation Assessment 2002, Undated
>
> Continuing Education Points 2002 memo and points register, 5 April 2003

Letter to Commissioner from [professional associate of Mr B], 13 April 2003

Paper titled Investigation, Unsigned and not dated

Paper on Hyperventilation, Unsigned and not dated

Statistical Analysis [the Ambulance Service], Undated

Action [note] – Investigation Officer, 27 March 2003

In order to provide a response to the questions asked of me, I considered the care as documented

- At 3.19 a.m. on 9th January 2002, Ms [A] of [an address] rang 111 to request an ambulance for her husband. The Incident Report submitted by the Communications Centre (i.e., people who answer the 111 calls and dispatch ambulance crews) records the problem as Chest Pain. An ambulance crew was dispatched at 3.23 a.m.

  There appears to be confusion on what the original call requested help for;

  e.g. [Mr B] (one officer in the responding crew) states they were dispatched by the Communications Officer to a patient with arm/leg pain

  the second officer in the crew […] states they were sent priority 1 (urgently) to a patient complaining of stomach pain

  As part of a quality assurance procedure [the Ambulance Service] investigate cases where the Ambulance Service returns to a patient within 12 hours of not having been transported in the first instance. [The] Shift Manager documents in a diary note dated 22 January that [Mr B] was sent priority 1 to a person with chest pain.

A transcript of the 111 calls may have been useful to determine the nature of case as requested by Ms [A][1].

- The ambulance crew located within 10 minutes from the time Ms [A] made the 111 call at 3.19 a.m. The ambulance crew called 'located' at the home of Mr [A] at 3.29 a.m. which was eight minutes after they were dispatched to the incident.

  The national ambulance sector standard for 'locating time' is 8 minutes for 50% of cases and 14 minutes for 95% of cases. Without specific data for that day, it can be assumed that this case was within accepted standards.

[1] A transcript of the calls was obtained and provided to Ms Long (see page 9).

The long term goal of 75% of calls to have an ambulance on scene within 8 minutes from the time of call may well have been achieved.

- The first informative to the Communications Centre (documented on the Communications Incident Report) was 5 minutes after the crew had arrived on scene. This is standard operational procedure and accepted practice.

  At 3.24 a.m. the crew advised the Communications Centre that they were 'not transporting – will clear shortly' and 'patient status 4 – minor'. Both statements are common operational phrases.

  Within those five minutes, it is assumed that the ambulance crew have had time to determine

  : the seriousness of the patient's condition (and assign a status code)

  : if there is a need for definitive care – at an Emergency Department, Medical Centre or by a General Practitioner (then or at a later time).

- It was necessary for the initial treatment to address the anxiety of Mr [A] in order to conduct a sound and thorough patient assessment.

  Helping him to calm down and control his respiratory rate as documented on the Patient Report *relaxed the patient* and *decreased 'the tingling to hands'*.

- The Patient Report Form recorded the Provisional Diagnosis as Reflux and the chief complaint as epigastric reflux – this may have been more accurately recorded as epigastric pain, e.g. the complaint was the pain not the condition.

  Despite references to 'tetany', 'carpopedal spasms' (contraction of fingers/ hands), 'painful tingling and cramping of both arms, hands and fingers' in subsequent narrative papers, there was no documented reference to these symptoms on the patient report form written on the date of the incident.

  The reference to hyperventilation on the patient report form was

  Tonight ↑ *in discomfort* ⟶ *hyperventilation*

- It is normal practice to document when a patient declines an Ambulance Officer's advice to be transported to an appropriate medical facility.

  There is no documentation to support comments that Mr [A] was:

: *'Given the opportunity to go to hospital, however, the patient seemed reluctant to go'* – [volunteer ambulance officer] Incident Report of 14 April 2003 e-mailed to [Mr B] on 27 March 2003

: ‘we then gave them the option to go to hospital, however he was reluctant to do so at this stage, so I suggested that he try a hot milo to settle his stomach’ – ? [Mr B] from paper titled Case No 009 undated and unsigned

- It is generally accepted that 20 minutes is an appropriate ‘scene time’ as stipulated in ACC contracts prior to 2002 i.e., time to approach the patient, assess them, begin treatment, and move to the ambulance for transport.

  On this occasion it is difficult to accurately measure how long the ambulance crew spent with the patient as there is no ‘departed’ time, because the crew did not transport the patient.

  The case was, however, signed off 3.43 a.m. – 14 minutes after they had arrived at Mr [A’s] home.

- The second request for assistance to Mr [A] (Case 11) was dispatched to the same crew at 3.51 a.m. – 3 minutes after the 111 call was picked up in the Communications Centre

  It was logged as Medical Aid – serious problem collapse (unknown) by the Communications Centre.

  Mr [B] reports that on receiving that call he advised his double-crew [the volunteer ambulance officer] ‘that Mr [A] now wanted to go to hospital’. He also states that en route to the address ‘we were given an update that this may be a possible cardiac arrest’. ‘On entering the premises we found Ms [A] performing CPR on Mr [A].’

  There is no doubt that the reverting of Mr [A] from his cardiac arrest was the result of prompt locating times by the ambulance crews and an aggressive, committed resuscitation attempt by the ambulance officers and they deserve to be commended.

  The decisions I was asked to make were:

1: Should Mr [B] have taken any additional steps to confirm his diagnosis?

It is impossible to establish trends in a patient’s condition without a range of vital signs. It is acknowledged how difficult this is when only a short period is spent with the patient. However, it would be expected that respiratory efforts of a hyperventilating patient would be recorded before and after treatment especially when a major component of that patient’s care had been to coach the patient’s respiratory effort.

A thorough understanding as to why the patient felt the need to seek acute medical assistance on this occasion or why this particular episode led to hyperventilation needed to be established and I can find no documented evidence that this occurred.

2: Should Mr [B] have arranged hospital admission or taken any other action at the time he first saw Mr [A]?

I thoroughly endorse a patient's right to make an informed decision based on the information provided to them. It is also reasonable to assume that a patient who has called the ambulance service anticipates transport to a medical facility.

It is not surprising that any patient given the 'option' of transport decline especially when the ambulance crew have spent time explaining the condition, how it can be managed, have not advised that there should be immediate follow up with other health care providers or prepared to transport.

The practice of advising patients to consult their GP and/or call an ambulance again should their condition deteriorate is standard acceptable practice.

The risk for the attending ambulance crew if they decide not to transport the patient is that [they] have made the right diagnosis and that the information they provide to the patient is accurate and understood.

3: Are there any aspects of the care provided by the ambulance staff which you consider warrant either further exploration or additional comment?

a) The need to accurately document comprehensive details pertinent to patient care on the patient report form at the time of the incident cannot be overstated. Narratives provided after the event (often many months later) can be affected by perceptions and hindsight.

b) I have concerns with the content and accuracy of some of the evidence produced including the fact that much of the material was undated and unsigned.

While not affecting the patient's outcome it does question our ability (as a sector) to provide auditable, unbiased, transparent evidence;

i.e. (1) The Incident Report generated by the Communications Centre on 14 January 2002 records that at 04.19 under comment for Case 009 '*not transported pt just anxious re crew*' yet the case had been signed off at 03.39 a.m.

In effect at 04.19 the crew were on case 11 – transporting Mr [A] to [the Public] Hospital after he had arrested.

(2) The Diary note from [the Shift Manager] (22 January 2002) states '*that the patient was sent through to CCU at [the Public] Hospital where he has made a steady but full recovery. [Mr B] has visited the patient to follow his progress and both [Mr B] and the patient have had several positive discussions about the case*'.

The ACC report dated 12 February 2002 signed by [the] House Surgeon at [the Public] Hospital on 12 February 2002 under Injury diagnosis says – *myocardial infarction and cardiac arrest. Subsequent anoxic brain injury.*

Ms [A] states (3 January 2003) that [Mr A] *has almost no short term memory, so he does not recall from one day to the next that any of his friends has visited him, and does not even always realise that I am his wife although I visit him every day.*

4: In my opinion, given Mr [A's] presentation when Mr [B] and [the volunteer ambulance officer] arrived at 3.29 on 9 January 2003, was Mr [B's] diagnosis appropriate?

It would not be deemed unreasonable to diagnosis 'reflux' from the information written on the patient report form.

My concern is that Mr [A's] 'reflux' had been self diagnosed and was getting more frequent. The patient was self medicating and there was only a '*moderate effect'* from the Gaviscon and bicarbonate of soda when the condition *usually settled with a drink of hot milo?*

The significance of hyperventilation symptoms which do not appear to have occurred during past episodes of pain needed consideration as it is unlikely Mr [A] would suddenly get anxious about a condition he had had for some time.

The importance of why Ms [A] and Mr [A] felt the need to seek medical assistance (a GP and/or ambulance) for this episode (i.e., what had changed?) is not documented.

In my opinion, it would have been appropriate for Mr [A] to have been transported to Hospital for investigation of his symptoms.

I do believe, however, that the decision to transport would have had little impact on the likelihood of Mr [A] suffering an acute myocardial infarction."

Supplementary advice
Ms Long submitted the following supplementary independent expert advice on 20 January 2004:

"Question 1: Should Mr [B] have taken a blood pressure reading and an ECG before reaching a diagnosis?

Yes – a blood pressure is one measure of a patient's vital signs required to form a *provisional* diagnosis. While it is an acceptable and valuable practice to take a radial pulse to establish cardiac output, it does not determine blood pressure. Using radial pulses to estimate perfusion is common in trauma cases, but should be followed by consecutive blood pressure readings rather than one isolated measurement.

An ECG recording is another measure that should be used – especially if a cardiac related problem is suspected. It would appear that Mr [B] was not concerned about a cardiac related condition.

Note: even had these two vital signs been recorded, it may not have given significant cause to change Mr [B's] diagnosis and/or treatment.

Question 2: Was the diagnosis of reflux with associated hyperventilation a reasonable one in the circumstances or should Mr [B] have acquired further information before making this diagnosis?

Any diagnosis needs to be made with caution after all other causes are excluded. In my opinion, a diagnosis of reflux with associated hyperventilation is most unusual.

Question 3: Based on the information available at the time, should Mr [B] have also considered the possibility that Mr [A] was in fact suffering from a cardiac related condition?

Yes – It is not uncommon for a cardiac patient to describe their chest pain as burning nor is it unreasonable to assume that if epigastric pain has persisted for more than 20 minutes there is a high likelihood of myocardial infarction.

The transcript of the 111 call and history relayed through Ms [A] when requesting an ambulance was very specific and the crew were informed that the patient had chest pain. Mr [B] took the telephone call from the Control Centre.

There is no documented evidence, on the patient report form Mr [B] presented, that identifies consideration of a cardiac condition.

Question 4: On the information available to him, was Mr [B] reasonably able to exclude the possibility that Mr [A] was suffering from a cardiac related condition?

No – Not without additional investigation of 12 lead ECGs and blood tests.

Question 5: In light of the above matters, should Mr [A] have been transported to hospital for further investigation of his condition?

Yes, I believe he should have been encouraged to do so.

Documents reviewed:

- […] Ambulance Education Service – National Certificate in Ambulance material including Hyperventilation Syndrome

- Medical-Surgical Nursing 6th Edition
  - Joyce Black, Jane Hokanson Hawks, Annabelle"

Response to Provisional Opinion

In response to my provisional opinion, Mr B and Ms A both provided further information. I have incorporated relevant comments made in the submissions of Ms A and Mr B into the section of this report headed "information gathered during the investigation". Mr B made additional submissions on the matters of taking blood pressure and an ECG, and on the standard of his documentation, as follows:

"• Blood pressure – While Ms Long states 'while it is acceptable and valuable practice to take a radial pulse to establish cardiac output, it does not determine blood pressure.' This statement is quite incorrect. Blood pressure in major arteries i.e. the aorta has a systolic pressure of 120mm Hg as the arteries decrease in size the systemic arterial pressure is quite low however the resistance increases. The radial pulse is considered a small artery and has a mean arterial pressure of 85mm Hg. This provides the paramedic an indication of perfusion and given the patient in this case had a radial pulse of 80 and not tachycardic shows that cardiac output was adequate and there is no evidence of compensative tachycardia or bradycardia.

- ECG – Within the ambulance sector patients who present with hyperventilation do not have routine ECGs performed unless the paramedic suspects an underlying event that requires this procedure. In this case there was no evidence to suspect a cardiac event, the only underlying conditions that were complained of were tetany and reflux and epigastric burning. Reflux by definition is: a backward or return flow, reflux of the stomach contents into the esophagus. The stomach lining has orifices of gastric glands that produce gastric enzymes, Hydrochloric acid is produced as well as pepsinogen stomach gastrin. Gastric contents have a pH value of 1.2-3.0, which is a high acid content. I believe that the burning condition that the patient described was the reflux of the stomach contents. I came to this conclusion because the patient had gained relief by the use of gaviscon, soda bicarbonate and milky drinks. These products have a higher alkalinity and are used to relieve acid stomach. Cardiac chest pain will not be relieved by any of the above remedies indeed the patient at no time complained of chest pain of any description.

- Documentation – I have to admit that this was not an acceptable standard of patient report writing and that a clear picture of events does not show through and that a clearer report would have shown wider aspects of this case. The patient was given the option of GP consult or transport, only patients that refuse advice of treatment and or transport are encouraged to sign off a disclaimer. This patient chose to seek his GP advice as advised. Under the Code of Health and Disability Services Consumers' Rights; right seven states 'You may change to another provider where it is practicable to do so' in choosing to seek advice from his GP the patient has made his choice."

Additional expert advice

Ms Long submitted further independent expert advice after reviewing the responses of Mr B and Ms A to my provisional opinion:

> "The Ambulance Authorised Patient Care Procedures list pulse and blood pressure as separate vital signs.
>
> Clinical definitions are quite specific –
> a) the alternate expansion and elastic recoil of an artery with each SYSTOLE of the left ventricle felt in any artery that lies near the surface of the body and over a bone or other firm tissue is a pulse.
>
> I agree that the pulse rate is the same as the heart rate so tachycardic or bradycardic rates can be determined as can irregularities in strength and beat.
>
> b) a systolic blood pressure indicates the force of the left ventricular contraction while diastolic pressure provides information about the resistance of blood vessels. The difference between the two readings is the pulse pressure which provides information about the condition of the arteries.
>
> In clinical use, the term blood pressure refers to the pressure in arteries exerted by the left ventricle when it undergoes SYSTOLE AND the pressure remaining in the arteries when the ventricle is in DIASTOLE.
>
> The average blood pressure of a young adult is about 120 mm HG systolic and 80 mm HG diastolic expressed as 120/80.
>
> I re-iterate the importance of taking a range of vital signs which should be re-recorded at regular intervals and any changes noted.
>
> Mr [B] still appears confident with his diagnosis despite Mr [A's] subsequent arrest and as per protocol, saw no reason to run an ECG strip as a diagnostic tool appropriate to the patient's presenting symptoms.
>
> An ECG recording may have shown a conduction defect, insufficient oxygen in the heart muscle by a depressed S-T segment, an elevated S-T segment showing myocardial infarction or simply show a normal strip.
>
> In my opinion, running an ECG strip would have had little impact on the outcome.
>
> I have no additional comment to make on Mr [B's] approach to Mr [A's] care.
>
> Reference: Principles of Anatomy and Physiology – Tortora and Anagnostakos"

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 standards

Section 1.4 of the New Zealand Ambulance Education Council's 'Authorised Patient Care Procedures' (2000) states in relation to documentation:

"*Vital signs*
Following secondary survey record and document patient's vital signs to include:
- *Level of consciousness/GCS*
- *Pulse*
- *Respiration rate*
- *Blood pressure*
- *Skin colour and condition*
- *Blood glucose measurement (if appropriate)*
- *ECG (if appropriate)*
- *Pulse oximetry (if appropriate)*

These should be re-recorded at regular intervals and any changes noted.

During the secondary survey appropriate history gathering is completed. This may include:
- *Mechanics of injury*
- *Prior events*
- *Medical history*
- *SAMPLE* [signs and symptoms, allergies, medication, previous history, last meal, events prior]
- *PQRST* [provoke, quality (type of pain, eg stabbing), region, severity (on a scale of 1-10), timing]"

Section 2.1 of the same document states:

"***2.1 Dyspnoea***
Main causes

1. *Respiratory*
   - *a) Upper airway* – *Foreign body obstruction*
   - *a) Upper airway* – *Croup or epiglottitis*
   - *b) Lower airway* – *Asthma*
   - *b) Lower airway* – *Bronchiolitis*
   - *c) Lung tissue* – *Pneumonia*
   - *c) Lung tissue* – *Pulmonary embolism*
   - *c) Lung tissue* – *COAD [chronic obstructive airway disease]*
   - *c) Lung tissue* – *Lung contusion*
   - *d) Pulmonary cavity* – *Pneumothorax*
   - *d) Pulmonary cavity* – *Haemothorax*
   - *d) Pulmonary cavity* – *Pleural effusion*
   - *e) Chest wall* – *Rib fractures*
   - *e) Chest wall* – *Flail chest*

2. *Cardiac*
   Congestive heart failure with pulmonary oedema. Severe infarction from any cause.

3. *Psychogenic*
   Hyperventilation of psychogenic or emotional origin.

Management

1. *Attempt to establish the cause of the dyspnoea and reassure the patient.*
2. *Manage specific problems that you are able to diagnose.*
3. *Where no specific management is described then reassure the patient.*
4. *Provide oxygen appropriate to their level of illness or pulse oximetry.*

Commentary – Dyspnoea
Shortness of breath or difficulty breathing is one of the commonest reasons that people call the ambulance service. For many older patients it is for a worsening of their heart failure or chronic airway disease, and may or may not be associated with chest pain.

The primary aim of ambulance management is to oxygenate the patient to allow them to get to hospital. For many patients it will not be possible to determine the cause of their shortness of breath without additional investigations such as chest x-ray, ECG and blood tests.

On rare occasions a patient may be hyperventilating. This indicates that the patient is breathing more than they need to. This can produce symptoms of dizziness as well as tingling in the fingers and lips. These patients should be given lots of reassurance. This assessment needs to be made with caution after life-threatening conditions are excluded."

Opinion: Breach – Mr B

Diagnosis
There is some disagreement about the actions taken by Mr B the first time he visited Mr A's house. Despite the disagreement, it is clear that Mr B calmed Mr A, advised him how to slow his breathing, obtained an oxygen saturation level, asked him where he felt sore and took his radial pulse. Having taken these steps, Mr B formed the view that Mr A had suffered an anxiety attack and that it had resolved. He *may* have offered hospital admission as an option, although Ms A cannot recall this, and it seems very unlikely that she would have forgotten, particularly in the context of the diagnosis of gastric symptoms and anxiety. It is also telling that the offer and refusal was not documented.

My advisor, Ms Long, informed me that in her opinion the ambulance officer needed to establish a thorough understanding of why the patient felt the need to seek acute medical assistance and why this particular episode led to hyperventilation. Mr B should have been cautious of Mr A's self-diagnosis of reflux given that the patient admitted only moderate effect from Gaviscon and bicarbonate of soda when the condition had previously been settled by a hot Milo. Mr B should also have considered the fact that Mr A had not previously suffered hyperventilation during past episodes of pain and should have asked why Ms A and Mr A felt the need to seek medical assistance. Ms Long advised me that given that Mr A had complained of chest pain, Mr B should have considered the possibility that he was experiencing a cardiac-related problem.

Ms Long advised that it is impossible to establish trends in a patient's condition without a range of vital signs recorded, and that Mr B should have taken a blood pressure reading and an ECG before reaching a diagnosis – even if the results may not have given sufficient cause to change the diagnosis and treatment.

Ms Long stated that it would have been appropriate to transport Mr A to hospital for investigation of his symptoms. A diagnosis of reflux with associated hyperventilation is most unusual and should not have been reached until all other possible causes had been excluded. While Mr B advised me that this option was given to Mr A and his wife, Ms A is adamant that hospital admission was never discussed. If (and I think it unlikely) Mr B did mention the option of hospital admission, he did not do so in a sufficiently strong manner. I note my advisor's comment that Mr A should have been encouraged to accept transport to hospital for further assessment.

In relation to laboured or difficult breathing (dyspnoea), the New Zealand Ambulance Education Council's 'Authorised Patient Care Procedures' (2000) state:

> "The primary aim of ambulance management is to oxygenate the patient to allow them to get to hospital. For many patients it will not be possible to determine the cause of their shortness of breath without additional investigations such as chest x-ray, ECG and blood tests.
>
> On rare occasions a patient may be hyperventilating. This indicates that the patient is breathing more than they need to. This can produce symptoms of dizziness as well as

tingling in the fingers and lips. These patients should be given lots of reassurance. This assessment needs to be made with caution after life-threatening conditions are excluded."

Mr B made an assessment that Mr A was suffering unrelieved reflux exacerbated by hyperventilation, but did not exclude other life-threatening conditions before making this diagnosis. He explained, in response to my provisional opinion, that "[i]n this case there was no evidence to suspect a cardiac event …". However, having reviewed Mr B's response, my advisor reiterated the importance of taking a range of vital signs at regular intervals and noting any changes. Had Mr B performed an ECG and taken regular blood pressure recordings, he may have detected a change in Mr A's condition.

In response to my provisional opinion, Mr B also stated that in agreeing to seek advice from their general practitioner Mr A and Ms A elected to exercise their right to change providers, with the implication being that Mr A was therefore no longer Mr B's responsibility. I do not accept this argument. Before discussing options such as transfer of care to another provider, Mr B had a responsibility to assess Mr A appropriately. He did not do so.

In my opinion Mr B should have further enquired into Mr A's condition and transported him to hospital so that a full assessment of his condition could be made. By not doing so he failed to provide services with reasonable care and skill and breached Right 4(1) of the Code.

Record-keeping
In relation to record-keeping, the New Zealand Ambulance Education Council's 'Authorised Patient Care Procedures' states:

"Following secondary survey record and document patient's vital signs to include:
- Level of consciousness/GCS
- Pulse
- Respiration rate
- Blood pressure
- Skin colour and condition
- Blood glucose measurement (if appropriate)
- ECG (if appropriate)
- Pulse oximetry (if appropriate)

These should be re-recorded at regular intervals and any changes noted.

During the secondary survey appropriate history gathering is completed. This may include:
- Mechanics of injury
- Prior events
- Medical history
- SAMPLE
- PQRST."

My advisor commented that the need to accurately document comprehensive details pertinent to patient care on the patient report form at the time of the incident cannot be overstated. Narratives provided after the event can be affected by later perceptions and hindsight. The ambulance record serves as the first point of information for Emergency Departments and needs to provide a concise but comprehensive summary of a patient's condition and symptoms. In relation to the records made by Mr B, my advisor noted:

- there was no documented reference to 'tetany', 'carpopedal spasms' (contraction of fingers/ hands), 'painful tingling and cramping of both arms, hands and fingers' on the patient report form written on the date of the incident
- it is normal practice to document when a patient declines an ambulance officer's advice to be transported to an appropriate medical facility.

Mr B did not record blood pressure (which was not taken) or Mr A's respiratory efforts before and after treatment. In addition Mr B said Mr A was suffering from "painful tingling and cramping of both arms, hands and fingers", but did not record this on the patient report form. He did not record the alleged offer and refusal of transport to hospital. Although this information is not specifically required by the Ambulance Education Council's 'Authorised Patient Care Procedures', I consider that it should have been recorded.

In my opinion, by failing to fully document details relevant to the appropriate assessment of Mr A, Mr B failed to comply with professional standards and breached Right 4(2) of the Code.

Additional comment
I also draw Mr B's attention to my advisor's comment that the Patient Report Form should not have recorded his diagnosis of Mr A's condition under the heading "chief complaint". Mr B should instead have recorded the pain Mr A complained of.

Opinion: No breach – Ambulance Service

Employers are vicariously liable under section 72(2) of the Health and Disability Commissioner Act 1994 for ensuring that employees comply with the Code of Health and Disability Services Consumers' Rights. 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 employee from doing or omitting to do the thing that breached the Code.

The Ambulance Service employed Mr B, a trained and experienced ambulance officer and team leader. The ambulance service requires that its staff comply with the requirements of the Ambulance Education Council's 'Authorised Patient Care Procedures' and provides training on these procedures. Mr B also completed an Advanced Life Support course through the ambulance service, which provides training on the assessment, diagnosis and treatment of cardiac patients.

In the circumstances I am satisfied that the Ambulance Service had taken such steps as were reasonably practicable to ensure ambulance officers assessed and responded appropriately to situations where a patient was experiencing breathing problems, and completed patient report forms accurately. Accordingly the Ambulance Service is not vicariously liable for Mr B's breaches of the Code.

Recommendation

I recommend that Mr B review his practice in light of this report.

Follow-up actions

- A copy of this report will be sent to the New Zealand Ambulance Board.
- A copy of this report, with all details identifying the parties removed, will be placed on the Health and Disability Commissioner's website, www.hdc.org.nz, for educational purposes.

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.