Emergency Department Doctors, Dr B / Dr D / Medical Registrar, Dr C / A Public Hospital

A Report by the

Health and Disability Commissioner

(Case 00HDC10145)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Parties involved

Mrs A (deceased)	Consumer
Mr A	Complainant / Consumer's husband
Dr B	Provider / Emergency Department doctor
Dr C	Provider / Medical Registrar
Dr D	Provider / Emergency Department doctor
Dr E	Cardiologist at the public Hospital
Dr F	General Practitioner

Independent expert advice was obtained from emergency medicine specialist Dr Geoff Hughes.

Complaint

On 29 September 2000 the Commissioner received a complaint from Mr A about the circumstances surrounding the death of his wife, Mrs A. The complaint is summarised as follows:

- *On 10 August 2000 Dr B after assessment in the Emergency Department of a public hospital of Mrs A, did not admit her or arrange appropriate monitoring, despite her recent history of cardiac surgery, high blood pressure and episodes of sudden collapse.*

- *On 10 August 2000 as the Emergency Department [medical] registrar, Dr C without personally examining Mrs A or communicating with her husband, did not admit Mrs A to the public hospital. Dr C also did not arrange for appropriate monitoring, despite Mrs A's recent history of cardiac surgery, high blood pressure and episodes of sudden collapse.*

- *On 12 August 2000 Dr D after assessment in the Emergency Department of the public hospital of Mrs A, did not admit her or arrange appropriate monitoring, despite a recent history of cardiac surgery, high blood pressure and several episodes of sudden collapse since 10 August 2000.*

An investigation was commenced on 21 November 2000.

Information reviewed

- Clinical notes from the public hospital including an internal report of Dr E, cardiologist at the public hospital
- Clinical notes supplied by general practitioner Dr F including correspondence from Dr … and post-cardiac surgery discharge summary from a different public hospital for January 2000
- Post-mortem report
- Responses from Drs B, D and C
- Response from the public hospital
- Information from Mr A, Mr and Mrs A's daughter and the Emergency Department nurses at the public hospital
- Independent medical advice from an emergency medicine specialist, Dr Geoff Hughes

Information gathered during investigation

Background
Mrs A was a 60-year-old woman with a known cardiac history, hypertension and insulin dependent diabetes. In January 2000 she underwent a coronary artery bypass graft and a prosthetic aortic valve replacement. Mrs A had a subsequent pleural effusion tapped in March 2000 and was discharged from the post-operative follow-up cardiothoracic clinic on 17 July 2000.

First visit to Emergency Department
On Thursday 10 August 2000 Mrs A collapsed unconscious on the kitchen floor of the home she shared with her husband, Mr A. Mr A is an amputee and it took him some moments to reach her. Mrs A recovered consciousness some 30 to 45 seconds later and Mr A called an ambulance. Mrs A arrived at the public hospital's Emergency Department at approximately 7.25pm and was seen by Medical Officer of Special Scale (MOSS) Dr B.

Dr B noted:

> "… [collapse] witnessed by husband … very pale, shook legs slightly but no fitting. On awaking felt very well, alert, ready to get up and recommence activity. Has felt well since then. No palpitations, no chest pain/tightness at any point. Nil other symptoms. Over the last week has had three other episodes, not losing consciousness but developing sudden onset of faintness. These have occurred once whilst bending down and twice while sitting resting. Have not been following or during any particular activity. Is IDDM [insulin dependent diabetic] and BM's [blood sugars] normal each time. Has had slight occipital headache for past week also, no thunderclap headache …"

Dr B examined Mrs A and ordered an electrocardiogram, chest x-ray and blood tests. His recorded impression was that Mrs A may have been experiencing arrhythmias or possible heart valve problems. Dr B telephoned Dr C, the medical registrar on call. He then wrote in the notes:

> "D/W [discussed with Dr C], med reg: able to go home. Urgent echo report faxed. If any problems meantime then to GP or here for review. Explained to patient, happy to manage at home."

There is a conflict of evidence about the scope and content of the consultation between Dr B and Dr C. Dr B stated: "I discussed the case in detail with the medical registrar on call, [Dr C], and it was deemed safe for the patient to be discharged home with a request for an urgent echocardiogram." Dr C on the other hand does not recall being given detailed information during a "brief conversation on the telephone" with Dr B and is "quite certain" that he did not mention that she could be managed at home. He also stated: "The attending doctor was quite satisfied that Mrs A might have had a vasovagal collapse (common faint) …" Dr B did not ask Dr C to examine Mrs A. Dr C recalled Dr B being satisfied that the episode had been a common faint and, because Mrs A had a heart valve replacement, "wondered if an echo could be done to assess the functioning of the prosthetic valve".

Dr C advised me that, as the medical registrar on call, he was responsible for managing all internal medicine patients. Emergency Department doctors also consulted with him. He advised me that it was "normal practice" for the on-call medical registrar to "address the specific questions or concerns raised by the Emergency Department doctor". Dr C's perception of Dr B's telephone call was that it was a "just to let you know" call, rather than a discussion about Dr B's intended management of Mrs A. Dr C "fully accepts" that it was open to him to question Dr B's plans, and wishes that he had. Dr C advised me: "Had I known the facts as summarised in your report I would have challenged [Dr B's] management plan, in particular the decision that [Mrs A] should go home." Dr C further advised me that he did not regard Dr B as a junior doctor. Dr B was a MOSS from overseas who had greater experience than a house surgeon, and Dr C's degree of supervision was "tailored to that".

Mr A states that he was not happy for his wife to be managed at home. He "protested if this happened again and [he] was not wearing [his] leg [he] could not help her". His daughter also protested when Dr B asked Mrs A if she could manage at home. She advised that "Mum being Mum felt fine (at that time) and probably felt like she was making a fuss for nothing, so she would have said 'yes'". Mr A also explained that they lived 25 miles away, a 40-minute drive from the public hospital. Mr A also asked Dr B if his wife was not being admitted to hospital because of the strike he understood to be commencing that weekend. Mr A said he received the reply, "Oh, we won't go there." Dr B later advised that at no time was he instructed to limit admissions to wards.

Mrs A was not admitted to hospital.

Second visit to Emergency Department
On Saturday 12 August 2000 Mrs A again collapsed at home and Mr A himself drove her to the public hospital's Emergency Department where Dr D, a MOSS, saw her at approximately 10.30am.

Dr D recorded in the clinical notes that this was Mrs A's second episode of sudden collapse and loss of consciousness in three days. He recorded in the clinical notes:

> "2nd episode in 3 days of sudden collapse and LOC [loss of consciousness]. This time this lady had a short walk around the garden and returned to the kitchen which was warm. Today is also warm. She felt light-headedness only and then woke up on the floor. She sustained no injury today and was immediately orientated on waking.
>
> She experienced no chest pain, palpitations at any time. Now feels normal except for a mild occipital headache. She has suffered headaches in the past in this area which are sometimes preceded by sparkling colours and zigzag lines in her vision …"

Dr D noted Mrs A was "neurologically intact" and recorded his impression as "syncopal episode. Plan continue with current plan for echo on 25/8/00."

Dr D later advised that:

> "… from the information available [which included the clinical notes of Dr B] the two blackouts were unlikely to have a sinister cause. I noted that [Dr B] had already consulted a medical registrar who had advised that this lady was to go home and that an urgent echocardiogram be ordered as an outpatient. It is unclear from [Dr B's] notes as to whether the medical registrar saw the patient."

The staff nurse attending Mrs A confirmed Mr A was anxious and concerned about how he would look after his wife if she collapsed again. She informed Dr D and requested he talk to Mr A.

Dr D recalled:

> "I recall [Mr A] becoming very irate when I suggested that we continue with the plan already in place. I explained that, as it was a Saturday, the secretary who dealt with echocardiogram bookings was not available by telephone and that as the original request was marked 'urgent' that bringing the appointment forward might not be possible. We discussed a private appointment for this examination and I advised [Mrs A] to see her GP on the following Monday if they decided to do this.
>
> [Mrs A] appeared happy with situation however [Mr A] became angry and abusive."

Mr A does not deny he felt angry about his wife not being admitted to hospital. He believes his anger was justified given the circumstances of his wife's condition and their situation. He stated that his wife had collapsed "several times". Dr D, however, later advised he was not made aware of Mrs A experiencing "several collapses".

Before finalising my opinion on this investigation, I sent Mr A a summary of the facts I had gathered and asked for his comments. In his response, Mr A disputed that Dr D was not aware of the number of times Mrs A had collapsed. He stated that Dr D "was told that my wife had collapsed a total of seven times between the 10–12 August".

Mr A stated that he was told that admitting Mrs A to hospital "would serve no purpose as due to the doctors' strike the hospital would be understaffed". However, Dr D also stated that he had never been instructed to limit the admission of patients to the ward.

Mr A claimed that hospital staff subsequently told him that there had been a memo to limit admissions to only the critically ill in the week prior to the strike.

The public hospital responded:

> "… [Mrs A] did not attend the Emergency Department at [the public hospital] during the doctors' strike. The strike took place between […]. Therefore the junior doctors' strike had nothing to do with the events of 10 and 12 August 2000.
>
> …
>
> While contingency planning was commenced on receipt of the strike action, patient services were not affected until the middle of the second week of the notice period, i.e. 15/16 August. At that time we commenced postponing outpatient clinics and limiting elective surgery cases to day cases. [The public hospital] was fully functional in terms of patient services at the time [Mrs A] presented to the Emergency Department. If staff mentioned the strike to [Mr A] and/or [Mrs A] then that is unfortunate. They were certainly not acting under instructions from [the public hospital]. [The public hospital] continued to admit acutely unwell patients up to and during the strike. We had plans in place to transfer patients to other Hospitals if necessary."

Echocardiogram

On Monday 14 August 2000 Mrs A consulted her general practitioner, Dr F, who began to arrange a mobile heart monitor and referred her for a private echocardiogram, which was performed the next day. The echocardiogram showed "satisfactory functioning of the aortic prosthesis with no increase in gradient suggesting thrombosis of the valve, and poor left ventricular function". An echocardiogram is an investigative or diagnostic procedure for heart conditions and not a therapeutic measure.

Mrs A collapsed and died at home on 16 August 2000.

Post-mortem report

The post-mortem report recorded that "the coronary arteries showed patchy degenerative changes and marked constriction of the left anterior descending and a major branch of this vessel". There was evidence of a previous myocardial infarction and the prosthetic valve was satisfactory. The cause of death was found by the pathologist as "coronary artery insufficiency".

Review by the public hospital
Following Mrs A's death, the public hospital arranged for cardiologist Dr E to undertake an internal review of Mrs A's management by the public hospital. The report notes Mrs A's medical history, post-operative surgical follow-up and cardiology follow-up. In addition, presentations with syncope, the echocardiogram, cause of death and adequacy of medical management are discussed. The report concludes with overall findings and recommendations. The relevant findings in the report are summarised as follows:

> "During [Mrs A's] final illness neither public nor private cardiology services were consulted about [Mrs A]. [Dr c] the on-call medical registrar when contacted by [Dr B] did not advise that arrangements be made for cardiology review. [Dr D] also did not discuss [Mrs A] with the on call physicians."

The cause of death as "coronary artery insufficiency" on the basis of the presence of atheroma, and previous infarction is questioned and the view expressed by the cardiologist reviewer:

> "The mode of death following recurrent cardiac syncope in the presence of a satisfactorily functioning valve prosthesis and an impaired ventricle makes an arrhythmic death much more likely.
>
> Adequacy of Medical Management
>
> [Mrs A] had a serious cardiac condition and had clinical features indicating high risk of further cardiac events: poor left ventricular function at operation and on echocardiography, evidence of heart failure and recurrent symptoms of cardiac sounding syncope. She was at risk both of bradyarrhythmias [abnormal slow heart beats] related to aortic valve disease and surgery, both of which put at risk the normal cardiac conduction system potentially causing heart block and possible syncopal attacks. Further patients with poor left ventricular function are at risk of sudden cardiac death related to malignant ventricular arrhythmias. Syncope may also suggest intermittent sticking of the prosthetic valve in the closed position, though this would be unusual.
>
> At presentation to the ED she was appropriately examined and investigated and correctly referred on the first occasion to the on-call Internal Medicine team. On the second occasion that referral was not made, presumably following the previous advice and reassured by the knowledge that an echo was in hand. However, it is my opinion that the medical advice given was insufficiently aggressive. Had I been consulted I would have advised admission to CCU [Coronary Care Unit] or the cardiology ward for continuous ECG monitoring for arrhythmias, cardiology review and urgent inpatient echo. There is no guarantee that a diagnosis would have been made nor that intervention would have prevented her death, but the frequency of her symptoms makes it quite possible that we could have picked up a ventricular arrhythmia and treated it, perhaps with success. Her admissions to the ED were well documented.

Overall findings

1. [Mrs A] had features of a high-risk cardiac patient.

2. She had been inappropriately lost to follow-up in the cardiology clinic, having cancelled her appointment herself.

3. In my opinion, she should have been admitted after presenting with cardiac type syncope for urgent investigation and management.

4. She may still have died despite best management, as sudden death in those with impaired ventricles is very difficult to prevent.

Recommendations

1. If a patient cancels a clinic appointment without requesting a substitute, the referral letter and notes should be reviewed by the clinician and if a further appointment is not made the GP to be alerted.

2. Further education of ED staff and medical registrars must be undertaken to try to ensure identification and aggressive management of high-risk patients."

The report notes that since Mrs A's death a lecture has been delivered to the Postgraduate Meeting on the management of syncope. The public hospital advised me that the "recommendations have been carried out and implemented".

In his response to the summary of facts gathered during the course of my investigation, Mr A commented on the aspect of Dr E's report referring to Mrs A having cancelled an appointment with the cardiology clinic:

> "[Mrs A] received an appointment for the cardiology clinic, but at the same time also received an appointment to see the cardiovascular surgeon the following day. She rang the cardiology clinic to see they were aware that she had this other appointment the following day. She was told as this was the case she should see the cardiovascular surgeon and not bother about the clinic. The surgeon subsequently removed approximately one litre of fluid from her lung."

Dr B and Dr D have now both left New Zealand to return home.

Independent advice to Commissioner

The following independent expert advice was obtained from emergency medicine specialist Dr Geoff Hughes:

"I, Dr Geoffrey Hughes am employed as a consultant and specialist in emergency medicine at Wellington Hospital, Capital and Coast Health District Health Board. I have been asked by the Health and Disability Commissioner (HDC) to provide a report on this case.

An up to date copy of my curriculum vitae is held in his office.

Purpose Of This Report

To provide an independent response to a complaint sent to the HDC and give him advice. The complaint is from [Mr A] and concerns the treatment given to his wife in August 2000 when she attended [the public hospital] on two separate occasions, two days apart. In particular I have been asked to comment on whether the standard of care given by [Dr B], [Dr D] and [Dr C] was appropriate.

Clinical Events

The sequence of clinical events is well documented in the various papers that I have been sent. I do not feel I need to repeat them all verbatim. They are summarised below. However I will refer to them as I go through the points put to me by the HDC. In addition to answering his specific questions I will add my own comments as appropriate.

Supporting Papers and Information

- Letter of complaint dated 25 September 2000 marked 'A'
- Summary of complaint in letters to [Mr A] and [Dr C] dated 21 November and 6 December 2000 respectively, marked 'B'
- Response from [Dr B] dated 8 January 2001 marked 'C'
- Response from [Dr D] dated 12 February 2001 marked 'D'
- Response from [Dr C] dated 15 December 2000 marked 'E'
- Clinical notes from [the public hospital] marked 'F'
- Internal Report of [Dr E], Cardiologist [at the public hospital] marked 'G'
- Post Mortem Report supplied by [Dr F] marked 'H'.

Background To The Complaint

[Mrs A] was a sixty-year-old woman with a known cardiac history, hypertension and insulin dependent diabetes. In January 2000 she underwent a CA8G (coronary artery bypass graft) x 1 and an aortic valve replacement.

On 10 August 2000 [Mrs A] collapsed at home and her husband [Mr A] called an ambulance. She was taken to [the public hospital's] ED. She saw [Dr B]. He concluded

from his examination and Investigations that [Mrs A] may have been experiencing arrhythmias or possible heart valve problems but after discussion with the medical registrar on call [Dr C], it was deemed safe for her to be discharged home. He made an urgent referral for an echocardiogram.

[Dr C] states he was the medical registrar on call on 10 August 2000 and not the emergency registrar on call. He does not recall being given detailed information during a brief telephone call from [Dr B] or being requested to examine [Mrs A]. He recalls [Dr B] was satisfied the episode had been a common faint and 'wondered if an echo could be done to assess the functioning of the prosthetic valve'. He states that he did not mention [Mrs A] could be managed at home and did not fax off the request for the urgent echocardiogram.

On Saturday 12 August 2000 [Mrs A] again collapsed and [Mr A] took her to [the public hospital's] ED where [Dr D] saw her. [Dr D] recorded in the clinical notes that this was [Mrs A's] second episode of sudden collapse and LOC in three days. [Mr A] states that his wife had collapsed several times. [Dr D] concluded from the information available to him that [Mrs A's] two blackouts were unlikely to have a sinister cause and to pursue the plan put in place by [Dr B] for an urgent echocardiogram. [Mrs A] was not admitted to hospital.

On 14 August 2000 [Mrs A] was referred by her general practitioner [Dr F] for a private echocardiogram which was performed the next day on 15 August 2000.

[Mrs A] collapsed and died at home on the morning of 16 August 2000.

Complaint

[Mr A's] complaint is detailed in his letter to the Commissioner dated 25 September 2000. The essence of it is that [Mrs A] should have been admitted to [the public hospital] and appropriate monitoring of her condition arranged on either the 10 August 2000 and/or 12 August 2000. [Mr A] has also complained that [Dr C] made a decision not to admit [Mrs A] on 10 August 2000 when he had not personally examined her.

Expert Advice Required

To advise the Commissioner whether in my opinion:

- **[Dr B], [Dr D] and [Dr C] provided [Mrs A] with services with reasonable care and skill?**

In addition to comment:

- **On the role of [Dr C] in relation to the call from [Dr B] in the Emergency Department (ED)**

- **Whether in my opinion [Mrs A] should have been admitted to [the public hospital] for further observation and investigation of the cause of her sudden collapses on either 10 or 12 August 2000**

- **What specific professional and other relevant standards apply in this case and did [Dr D], [Dr B] and [Dr C] meet those standards?**

- **Any other relevant matter.**

Cause of Death

A post mortem report (post mortem performed by [Dr …]) reports the cause of death as coronary artery insufficiency. An internal report by [Dr E] (cardiologist at [the public hospital]) casts doubt on this. She justifies this by saying in her report that no mention is made of the internal mammary artery graft (from the CABG operation performed in January 2000), no fresh thrombus in the vessel and no new infarction being present. She continues by saying that an arrhythmic death (in this particular context) is more likely.

I am neither a cardiologist nor pathologist and so cannot comment as an expert on this matter. However as an experienced emergency physician I am of the opinion that an arrhythmia as a cause of death is possible. I will return to this later when looking at the presentations to ED on the 10th and 12th August 2000.

Opinion

Did [Dr B], [Dr D] and [Dr C] provide [Mrs A] with services with reasonable care and skill?

I will start with [Dr B]. The short answer to this is that yes he did.

A reasonably good indicator of the standard of care provided by an individual is the quality of medical records. Those of [Drs B and D] are typed into the clinical record, rather than hand written.

[Dr B's] notes follow a standard medical format of history, examination and special investigations. His notes are in my opinion thorough and of a high quality. The special investigations are appropriate to the presentation. His listed differential diagnosis is either an arrhythmia or a valve problem. This is good and appropriate thinking. This differential diagnosis is consistent with the likely cause of death mentioned earlier by [Dr E] in her internal report.

He discussed the patient with the duty medical registrar, [Dr C].

It is not recorded exactly what was said in the telephone conversation between the two of them. Did [Dr B] want advice or was he requesting an admission? [Dr B] says in his statement that he discussed the case in detail with [Dr C], but the latter (in his statement) does not recall this. There appears to be a difference of recall between the two of them. However there is an inconsistency. The clinical notes of [Dr B] are quite specific in recording the probable differential diagnosis but [Dr C] says in his statement that 'the attending doctor was quite satisfied that [Mrs A] might have had a vasovagal collapse'. There is no mention of 'vasovagal' in [Dr B's] notes. This is a conflict.

Be that as it may, the result of the conversation between the two of them is that [Mrs A] was sent home. An urgent echocardiogram was to be arranged.

Overall, based upon the notes and his statement (and excluding the problem of the telephone discussion), I am of the opinion that [Dr B] provided a service with reasonable care and skill.

Now on to [Dr D].

As with [Dr B] his notes are good. They are not quite as thorough as those of [Dr B] but they are still to a good and acceptable standard. The initial special investigations he requests are appropriate.

The diagnosis recorded is that of a 'syncopal episode'. No differential is recorded. No second Opinion from a medical registrar is requested. I think [Dr D] has satisfied himself that an acute ischaemic event (angina or myocardial Infarction) was not the cause (EGG, blood tests) but has not thought of other causes.

In his statement [Dr D] says that he 'concluded' 2 blackouts were unlikely to have a sinister cause. I do not agree with him. Hindsight is a wonderful thing and I am aware that I say this with the benefit of hindsight but this is a mistaken view.

In addition there is an area of dispute. He denies being made aware of [Mr A's] comment that she had had seven blackouts, not just the two. [Mr A] in his complaint is very clear about this. Who is correct?

[Dr D] knew what [Dr B] did two days earlier. Did he read the differential diagnosis of [Dr B] (which makes no mention of 'vasovagal' or syncopal episode? The note about the discussion with the medical registrar does not mention these words either).

Now let's look at this from a different angle and ignore my comment about the 'benefit of hindsight'. As there is no mention in [Dr B's] notes of 'vasovagal' or syncopal episode why did he consider it now? Did he consider arrhythmia as a cause? The implication is that he came to his own conclusions in diagnosing a syncopal episode.

Was he influenced to discharge her by the fact that she was not admitted two days earlier? Was he influenced by the fact that the medical registrar did not see her? The implication of the latter is that if the medical registrar did not see her then she cannot have been too ill.

So overall I think [Dr D] has done everything well up until his final deductions.

Now on to [Dr C]. I will comment on this in answering the next question.

On the role of [Dr C] in relation to the call from [Dr B] in the Emergency Department (ED).

I think the key to this is the nature and detail of the conversation between the two of them. There is a conflict between their two statements.

The questions I ask are:

- What did [Dr B] ask for? Admission or advice?
- What information was given to [Dr C]?
- What information did he ask of [Dr B]?
- Did he ask [Dr C] to see her?
- If it was deemed safe to allow [Mrs A] home ([Dr B's] statement) how was it deemed safe? By mutual consent or by one person directing the other?

I can only comment further with clarification of the above.

[Following receipt of Dr Hughes' advice, I wrote to [Dr B] to ask him to clarify the exact nature of his conversation with [Dr C]. [Dr B] has returned to live [overseas] and was unable to be contacted.]

Whether in my opinion [Mrs A] should have been admitted to [the public hospital] for further observation and investigation of the cause of her sudden collapses on either 10 or 12 August 2000.

Yes on both occasions.

The differential diagnosis was uncertain but an arrhythmia is one option (and a very likely one).

Blackouts presenting in a woman of this age and with her cardiac history are unlikely to be benign (despite the comment of [Dr D] in his statement). Arrhythmias (abnormalities of the heart's rhythm) can lead to a drop in the volume of blood squeezed out of the heart and thus a reduction in the amount of blood circulating to the brain (known as a fall in cardiac output). This can happen if the heart beats too quickly or too slowly. Blackouts associated with one specific type of heart block (slowing of the heart) for example, are known as Stokes-Adams attacks. Vasovagal attacks (or simple faints) are an unlikely explanation in a woman with this cardiac history. Simple faints are really a diagnosis made by excluding other pathologies first.

[Dr B] was right in his differential diagnosis.

If the diagnosis is not clear in the ED then admission for monitoring and observation is appropriate.

What specific professional and other relevant standards apply in this case and did [Dr D], [Dr B] and [Dr C] meet those standards?

Any other relevant matter.

I will now make some further observations.

On balance it is likely that the blackouts occurred as a result of an arrhythmia. [Dr B] was correct in his initial differential diagnosis. She should have been admitted there and

then on the 10th August. I think a key issue in trying to get to the core of this is to determine what was discussed between him and [Dr C] in the telephone conversation.

[Dr D's] thinking may have been influenced by the fact that she was not admitted two days earlier. However his diagnosis of a 'syncopal episode' is unlikely to have been prompted by the earlier attendance as this term (or simple faint / vasovagal) is not mentioned. An echocardiogram is not an investigation for a simple faint.

Allowing for the fact that I don't have the details of the telephone conversation, I have the impression that the doctors were acting in good faith. The two sets of notes are good and suggest an approach that is thorough and follows a conventional medical approach. The fact remains that some of the final thinking was flawed.

I would now like to open the discussion to a wider level.

If it is accepted that these doctors were acting in good faith but made some flawed decisions one immediate response may be to point a highly critical finger at them. However I am not convinced that this approach is right. I do not think they are bad doctors. Doctors make mistakes and always will do. What can be done to reduce error?

It is my view that a regimented list of guidelines and protocols for every type of presentation is not the solution. It is impractical for many reasons. In the final analysis clinical decision making is subject to the human factor. Human error cannot be totally erased.

Instead of finger pointing another response may be to look at the problem from a systematic view.

This case is not unique. The HDC and his office (as well as the legal profession and the coronial system) are fully aware of the flawed decisions that occur in an emergency / acute care setting throughout New Zealand as well as elsewhere in the world. They happen all too readily. They will continue to happen but the frequency and critical clinical significance of them can probably be addressed to some extent.

Why do doctors acting in good faith make erroneous judgements?
What is the optimum skill level and staffing for an emergency / acute care service?
How is a service run if recruitment of skilled staff is an issue?
What is the appropriate back up needed to support such doctors?
How are rural and isolated emergency departments supported?
What is the role of the larger tertiary hospitals (and their EDs)?
These are easy questions to ask but hard to answer.

I do not in any way wish to dilute the concern and complaint of [Mr A] but I think the wider overview is important in considering these matters. Be that as it may, it is my view that [Mrs A] should have been admitted into hospital for further assessment on both the 10th and 12th August."

Code of Health and Disability Services Consumers' Rights

The following Right in the Code of Health and Disability Services Consumers' Rights is 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.*

Opinion: No breach – Dr B

Right 4(1)

Dr B was the attending doctor on the evening of 10 August 2000 when Mrs A arrived by ambulance on her first attendance at the public hospital's Emergency Department.

Dr B examined Mrs A and ordered an electrocardiogram, chest x-ray and blood tests. He recorded his impression that Mrs A may have been experiencing arrhythmias or possible heart valve problems. He telephoned the medical registrar on call, Dr C, and documented the discussion as, "D/W [discussed with Dr C], med reg: able to go home. Urgent echo faxed …"

I am faced with a conflict of evidence about the scope and content of the telephone consultation between Dr B and Dr C. Dr B states that he discussed the case in detail with Dr C. Dr C, however, recalls that it was a brief conversation and that Dr B was "quite satisfied that [Mrs A] might have had a vasovagal collapse (common faint)". Dr C is "quite certain" that he did not mention to Dr B that Mrs A could be managed at home.

Dr C advised me that if he had "known the facts" summarised in this report, he would have challenged the decision to send Mrs A home. I accept that Dr B did not ask Dr C to examine Mrs A.

I am unable to conclude exactly what was said. I note my advisor's comment that a common faint is inconsistent with the differential diagnosis recorded in the notes by Dr B. In addition, Dr B's contemporaneous record did not mention syncope (common faint) as a differential diagnosis. It would therefore appear that Dr C is mistaken in his recollection that Dr B told him he thought Mrs A had experienced a common faint.

I am satisfied that Mr A told Dr B that they lived some distance from hospital and that he experienced difficulty assisting Mrs A because he was an amputee. Mr and Mrs A were not satisfied with Dr B's decision not to admit Mrs A, and made their concerns clear.

Dr B believed, on the basis of the investigations performed and the discussion with the medical registrar, that Mrs A could safely be discharged, notwithstanding the concerns of

her family. Dr B appropriately advised that, if needed, follow-up could be sought from their general practitioner or by returning to the emergency department. Mr A acted on this advice two days later.

My advisor commented on the care provided by Dr B:

> "A reasonably good indicator of the standard of care provided by an individual is the quality of medical records …
>
> [Dr B's] notes … are in my opinion thorough and of a high quality. The special investigations are appropriate to the presentation. His listed differential diagnosis is either an arrhythmia or a valve problem. This is consistent with the likely cause of death mentioned … by [Dr E] in her internal report.
>
> He discussed the patient with the duty medical registrar, [Dr C] …"

My advisor also stated that Mrs A should have been admitted to hospital on 10 August 2000 but that "overall, … I am of the opinion that [Dr B] provided a service with reasonable care and skill".

Dr B did not admit Mrs A to hospital on 10 August 2000 when that would have been the safest course. However, he conducted appropriate investigations, arrived at a correct differential diagnosis, discussed Mrs A with the medical registrar on call and provided appropriate options for urgent follow-up if necessary. In these circumstances, Dr B did not breach Right 4(1) of the Code in failing to admit Mrs A.

Opinion: Breach – Dr D

Right 4(1)

Dr D was the attending doctor on the morning of 12 August 2000 when Mrs A arrived at the Emergency Department at the public hospital for the second time in three days.

Dr D was aware of Mrs A's cardiac history and also had access to the clinical notes of Dr B, who had examined Mrs A two days previously. Those entries refer to possible cardiac arrhythmia or heart valve problems as a cause for Mrs A experiencing episodes of loss of consciousness.

Dr D recorded his impression of Mrs A's sudden collapse after walking in the garden on a warm day as a "syncopal episode". His only recorded plan was to continue with an echocardiogram that had been requested on an urgent basis two days previously and was scheduled for 25 August 2000. My advisor noted that "an echocardiogram is not an investigation of a simple faint".

Dr D did not consult with either the on-call medical registrar or consultant physician, but decided not to admit Mrs A. Dr D understood Mrs A to be happy with the situation but

described Mr A as "irate". Although Mrs A was the patient and Dr D's primary responsibility was to her, it was unwise to discount the strong objections of her husband and primary caregiver.

Dr D concluded: "… [F]rom the information available the two blackouts were unlikely to have a sinister cause." My advisor stated:

> "The diagnosis recorded is that of a 'syncopal episode'. No differential is recorded. No second opinion from a medical registrar is requested. I think [Dr D] has satisfied himself that an acute ischaemic event (angina or myocardial infarction) was not the cause (EGG, blood tests) but has not thought of other causes.
>
> In his statement [Dr D] says that he 'concluded' 2 blackouts were unlikely to have a sinister cause'. I do not agree with him. Hindsight is a wonderful thing and I am aware that I say this with the benefit of hindsight but this is a mistaken view.
>
> … As there is no mention in [Dr B's] notes of vasovagal or syncopal episode why did he consider it now? Did he consider arrhythmia as a cause? The implication is that he came to his own conclusions in diagnosing a syncopal episode.
>
> … [O]verall, I think [Dr D] has done everything well up until his final deductions."

My advisor also commented that Mrs A should have been admitted to the public hospital on this occasion:

> "… The differential diagnosis was uncertain but an arrhythmia is one option (and a very likely one).
>
> Blackouts presenting in a woman of this age and with her cardiac history are unlikely to be benign (despite the comment of [Dr D] in his statement). Arrhythmias (abnormalities of the heart's rhythm) can lead to a drop in the volume of blood squeezed out of the heart and thus a reduction in the amount of blood circulating to the brain (known as a fall in cardiac output). This can happen if the heart beats too quickly or too slowly. Blackouts associated with one specific type of heart block (slowing of the heart) for example are known as Stokes-Adams attacks. Vasovagal attacks (or simple faints) are an unlikely explanation in a woman with this cardiac history. Simple faints are really a diagnosis made by excluding other pathologies first.
>
> [Dr B] was right in his differential diagnosis.
>
> If the diagnosis is not clear in the ED then admission for monitoring and observation is appropriate."

Dr D failed to recognise the potential significance of Mrs A's episodes of loss of consciousness, despite her known cardiac history and recent presentation at the Emergency Department. This failure was recognised in the internal hospital report and confirmed by my independent advisor. In failing to admit Mrs A to hospital for further observation, Dr D breached Right 4(1) of the Code.

In his response to my provisional opinion, Dr D stated that he agreed with my opinion and in particular that Mrs A should have been admitted to hospital on both 10 and 12 August. He stated:

> "I admit that I was in error and that I was in part influenced by the advice given to [Dr B] by [Dr C]. My reasoning was that this was a repeat of the previous collapse on the 10th August and that as the examination and investigations were the same then the advice given by the medical registrar would also be the same. It is for this reason that I made no referral to the on-call physician. This was an incorrect assumption and I am more than willing to apologise to [Mr A] for this mistake. However, I hope you and [Mr A] appreciate this was a difficult decision. As you know, [Mrs A] was seen both by her general practitioner and the consultant cardiologist who performed the echocardiogram after I saw her on the 12th September and before her sad death on 16th September. No admission to hospital was made on these occasions either."

Opinion: Breach – Dr C

Right 4(1)

Dr C was the medical registrar on call at the public hospital on the evening of 10 August 2000. Dr B, the Emergency Department MOSS, telephoned Dr C to discuss Mrs A.

There is a conflict of evidence about the scope and content of the telephone consultation between Dr B and Dr C. Dr B states he discussed the case in detail with Dr C who in turn states that he is "quite certain" that he did not mention Mrs A could manage at home. Dr C recalls that Dr B was "quite satisfied that [Mrs A] might have had a vasovagal collapse (common faint)".

As discussed above, I accept my advisor's comment that a common faint as a cause for Mrs A's sudden collapses is inconsistent with the train of thought recorded by Dr B. His differential diagnosis of arrhythmia or possible heart valve problems and his consideration of an echocardiogram to assess the prosthetic heart valve do not indicate that he thought Mrs A had experienced a common faint. Dr B's contemporaneous record that he discussed the case with Dr C, and Dr C's acknowledgement that Dr B canvassed the echocardiogram with him, satisfy me that Dr B did discuss Mrs A's cardiac history and current presentation. It would therefore appear that Dr C is mistaken in his recollection that Dr B told him he thought Mrs A had experienced a common faint. I am unable to conclude, however, exactly what was discussed.

My advisor stated that Mrs A should have been admitted to the public hospital:

> "The differential diagnosis was uncertain but an arrhythmia is one option (and a very likely one).

> Blackouts presenting in a woman of this age and with her cardiac history are unlikely to be benign. … Arrhythmias … can lead to a drop in the volume of blood squeezed out of the heart and thus a … fall in cardiac output. This can happen if the heart beats too quickly or too slowly. Blackouts associated with one specific type of heart block … for example are known as Stokes-Adams attacks. Vasovagal attacks (or simple faints) are an unlikely explanation in a woman with this cardiac history. Simple faints are really a diagnosis made by excluding other pathologies first.
>
> [Dr B] was right in his differential diagnosis.
>
> If the diagnosis is not clear in the ED then admission for monitoring and observation is appropriate."

I accept that Dr C's degree of supervision of Dr B was tailored to the fact that Dr B was a MOSS from overseas who had greater experience than a house surgeon. I also note that Dr C has expressed remorse that he did not challenge Dr B's proposed management plan for Mrs A, and that he did not assess Mrs A himself.

Dr C did not advise Dr B to admit Mrs A, despite being made aware, at least in a general sense, of her cardiac history and presentation to the Emergency Department. Dr C did not offer to assess Mrs A himself. It was Dr C's responsibility as medical registrar on call, to satisfy himself that the Emergency Department MOSS who consulted him had made appropriate decisions. In my opinion, in not assessing Mrs A himself or advising Dr B to admit Mrs A, Dr C did not demonstrate the standard of reasonable care and skill expected of a registrar in such circumstances. He therefore breached Right 4(1) of the Code.

Opinion: No breach – The Public Hospital

Right 4(1)

Vicarious liability
At the time Mrs A attended the Emergency Department at the public hospital on 10 and 12 August 2000 the public hospital was the employer of Dr B and Dr D.

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.

As employer, a public hospital may reasonably expect that junior doctors will consult with a more senior doctor when necessary, and that a registrar will appropriately supervise a junior doctor on his team, unless there are reasonable grounds for believing otherwise.

I am satisfied that the public hospital is not vicariously liable for Dr D's and Dr C's failures and therefore did not breach Right 4(1) of the Code.

Other comment

The public hospital – impending strike action
There is insufficient evidence to conclude that the anticipated strike action (notified by the Resident Doctors Association to commence on 23 August 2000) impacted upon the medical decision-making concerning Mrs A's non-admission to the public hospital on 10 and 12 August 2000. Both Dr B and Dr D denied ever receiving any instruction to limit the admission of patients to the wards. The public hospital advised me that no contingency planning commenced until 15/16 August 2000.

Mr A advised that subsequent to the death of his wife staff informed him that a memorandum had been issued to staff by the public hospital to limit admissions in preparation for strike action by the doctors. The public hospital did publish an open letter addressed for patients that stated:

> "[The public hospital] wishes to inform you that due to strike action by the Resident Doctors Association the ability to provide you with the best medical care may be compromised between the following times:
>
> 8am Wednesday 23 August 2000 to
>
> 8am Wednesday 30th August 2000
>
> Elective surgery and outpatient appointments have in most cases been cancelled in an attempt to reduce patient numbers in the hospital.

Emergency medical care will be available on a limited basis during this time.

…"

It is possible that advice of this open letter gave rise to Mr A's impression that the anticipated strike action impacted on the decision making about his wife's admission to hospital. However, it was incumbent upon the public hospital to fully inform the public about the anticipated limitation to services available.

I accept the public hospital's advice:

"While contingency planning was commenced on receipt of the strike action, patient services were not affected until the middle of the second week of the notice period, i.e. 15/16 August. At that time we commenced postponing outpatient clinics and limiting elective surgery cases to day cases. [The public hospital] was fully functional in terms of patient services at the time [Mrs A] presented to the Emergency Department. If staff mentioned the strike to [Mr A] and/or [Mrs A] then that is unfortunate. They were certainly not acting under instructions from [the public hospital]. [The public hospital] continued to admit acutely unwell patients up to and during the strike. We had plans in place to transfer patients to other Hospitals if necessary."

The public hospital – internal review

The public hospital advised me that it "refuted [Mr A's] complaint that his wife did not get the service she required when she needed it" and claimed both emergency doctors "correctly followed [the public hospital's] protocol by seeking advice where necessary from the medical registrar". However, on 12 August 2000 Dr D did not seek advice about Mrs A from the medical registrar.

The public hospital arranged for an internal review by cardiologist Dr E, which was in turn reviewed by the Clinical Director of the Emergency Department. The Clinical Director noted:

"On 12 August the investigations conducted on 10 August were repeated, and the results were similar. In these circumstances further medical referral to other disciplines would not have been considered necessary under those circumstances."

This statement is not consistent with the finding of cardiologist Dr E and my independent advisor. Dr E stated in her report:

"At presentation to the ED she [Mrs A] was appropriately examined and investigated and correctly referred on the first occasion to the on call Internal Medicine team. On the second occasion that referral was not made … However, it is my opinion that the medical advice given was insufficiently aggressive. Had I been consulted I would have advised admission to CCU or the cardiology ward for continuous ECG monitoring for arrhythmias, cardiology review and urgent inpatient echo …"

Dr Hughes stated:

> "Blackouts presenting in a woman of this age and with this cardiac history are unlikely to be benign (despite the comment by [Dr D] in his statement). …
>
> If the diagnosis is not clear in the ED then admission for monitoring and observation is appropriate."

The public hospital – duty of candour
The public hospital did not reveal the contents of Dr E's report to Mr A. Health care providers, including public hospitals, have a duty of candour to patients and their families where an adverse event has occurred. It may have helped Mr A to understand the circumstances of his wife's death if the public hospital had voluntarily disclosed a copy of the internal review report.

Actions taken

Dr D and Dr C have apologised in writing to Mr A for their breaches of the Code, and have reviewed their practice in light of this report.

Other actions

- A copy of this opinion will be sent to the Medical Council of New Zealand.
- A copy of this opinion, with identifying features removed, will be sent to the Australasian College for Emergency Medicine (New Zealand Faculty) and the Royal Australasian College of Physicians, and will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.