Medical Admitting Officer, Dr B /
Staff Nurses, Ms D, Ms E and Mrs G /
Director of Emergency Medicine, Dr H /
A Public Hospital

A Report by the

Health and Disability Commissioner

(Case 01HDC11475)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Parties involved

Mrs A	Complainant / Consumer's widow
Mr A (deceased)	Consumer
Dr B	Provider / Medical Admitting Officer
Dr C	Consumer's General Practitioner
Ms D	Provider / Staff Nurse
Ms E	Provider / Staff Nurse
Ms F	Operations Manager Clinical Units
Mrs G	Provider / Nurse Manager
Dr H	Provider / Director of Emergency Medicine
Dr I	Radiologist
Dr J	Medical Officer Special Scale at the ED
Mr K	Chief Executive of the public hospital

Complaint

On 8 October 2001 the Commissioner received a complaint from Mrs A about the services provided to her late husband, Mr A, at a public hospital. The complaint is summarised as follows:

The public hospital's Emergency Department did not:

- *Provide an adequate standard of care to Mr A when he came to its Emergency Department on 6 June 2001 at 5.20pm with a deep venous thrombosis in the right lower leg.*

Dr B did not:

- *Adequately ascertain Mr A's referral status during a telephone referral discussion with Dr C, on 6 June 2001 at about 4.30pm;*
- *Consult with senior medical staff regarding appropriate management and/or communicate this to the appropriate staff in the Emergency Department.*

Ms D did not:

- *Adequately assess and review Mr A, the Doppler Scan Report and Dr C's referral letter, and consequently did not triage Mr A correctly;*
- *Take any formal observations or review and raise Mr A's triage category when she reviewed him at 8.30pm.*

Ms E did not:

- *Adequately assess and review Mr A's triage notes including the Doppler Scan Report and Dr C's referral letter;*
- *Consult with the medical team or Staff Nurse Ms D about Mr A following review of the scan report, and consequently did not alter Mr A's triage status appropriately;*

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- *Call for additional assistance from Ms F when it was clear that Triage Guidelines were not being met.*

Mrs G did not ensure that:
- *Triage nursing staff were adequately trained to ascertain a patient's status.*

Dr H did not ensure that:
- *Referral and consultation systems between general practitioners and Emergency Department medical admitting teams were adequate;*
- *The Junior Medical Admitting Officer, Dr B, was adequately trained to ascertain a patient's referral status.*

An investigation was commenced on 14 December 2001.

Information reviewed

- Mr A's medical records from the public hospital
- Sentinel Event Investigation Report supplied by the public hospital
- Independent medical advice from Dr Mike Ardagh, Professor in Emergency Medicine

Ms D was unable to provide a response to my investigation as she no longer resides in New Zealand and could not be contacted.

Information gathered during investigation

This is a report about a man who suffered a pulmonary embolism secondary to a deep vein thrombosis (DVT) after waiting more than four hours at an Emergency Department for treatment. It is a tragic story that highlights the risks associated with the increasingly common phenomenon of overcrowding in Emergency Departments throughout New Zealand. When departments are crowded, patients wait a long time for triage and medical assessment, and nursing resources are more thinly spread. Patient care may be jeopardised. This report highlights the need for Emergency Departments and District Health Boards to recognise the problem and respond appropriately.

Overview
On 6 June 2001 Mr A was referred by his general practitioner, Dr C, to the Emergency Department (ED) of the public hospital with a DVT. Mr A arrived at the hospital at 5.20pm. The Emergency Department was exceptionally busy and Mr A suffered a cardiac arrest at about 9.25pm, before a doctor could assess him. He initially responded to resuscitation attempts but suffered a second cardiac arrest at about 9.38pm and was unable

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to be resuscitated. Mr A died at 9.51pm. The cause of his death was a pulmonary embolism secondary to a DVT.

Mr A's death raised concerns among nursing and medical staff about the standard of care in ED, which were brought to the attention of the hospital's management. As a result the hospital initiated an internal sentinel event investigation. It provided me with a copy of the report from this investigation. I will refer to the findings and outcomes of that investigation in this report, where appropriate, as the Sentinel Event Report.

Preceding events at the hospital's ED

On 4 June 2001 all registered nurses in the ED, concerned about the number of patients and staff shortages, completed a patient/incident form. The form was not addressed and it is unclear who received it, or what action was taken as a result. The form stated:

> "Volume of [patients] too big for Emergency Department & unable to move [patients] on due to lack of beds in wards. Unsafe staffing for number of patients.
>
> …
>
> 4 beds in corridor all full 6 [patients] in [observation] still having ambulances to come in nowhere to put [patients]."

On the afternoon of 6 June 2001 the Triage Nurse, Ms D, filled out a staff accident/incident notification sheet in which she stated:

> "Concerned that no matter how hard I worked on this duty, the time between arrival and triage was up to and at times longer than 1 hour. This didn't improve even with S/N. […] helping for a short time by triaging in consult room. A number of patients left without being seen."

Mr A's referral to the hospital

At the time of these events Mr A was 64 years old. His general practitioner was Dr C. Dr C had been treating Mr A for hypertension with medication, atenolol and Inhibace. Towards the end of May 2001 Mr A developed a cough. Dr C stopped the Inhibace because it could have been the cause of the cough. Initially Mr A's cough improved but it was only about 10% better.

At 12 midday on 6 June 2001 Mr A consulted Dr C with a number of medical problems, including his cough. Dr C stated:

> "He [Mr A] told me that the cough had increased [from the May appointment]. He had gout in his right big toe last week, which had settled after some self initiated Colchicine and Voltaren, but his right calf had been swollen for the last five days. He related how he had begun to get significantly breathless with relatively simple exertion two weeks ago, not so much on the flat, but any incline would do it."

On examination Dr C noted that Mr A's right calf muscle was tense, swollen and painful. Mr A's blood pressure was 170/100. Dr C suspected that Mr A had a DVT and

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recommended that he attend the public hospital's ED for a Doppler scan and assessment. Mr A was reluctant to attend the ED because he had previously waited a long time before seeing a doctor. He agreed to have a Doppler scan privately at a radiology clinic that afternoon.

Mr A returned to work at 3.00pm and at 4.15pm he attended the radiology clinic for the scan. Dr C accompanied Mr A and sat with him while the scan was performed. The scan confirmed the presence of a DVT extending from the popliteal vein (the vein running behind his right knee). Dr C explained the results of the scan to Mr A and stressed the importance of immediate admission to hospital.

Dr C left Mr A in the sonography room to have a chest x-ray, and discussed the scan findings with Dr I, a radiologist. While Mr A was having his chest x-ray, Dr C telephoned the medical admitting officer at the hospital to discuss Dr I's findings and Mr A's need for treatment. Dr C recalled:

> "I told [Dr B] that we had diagnosed the DVT by scan and also related in detail the history of the previous events relating to the increased hypertension, the Inhibace and my concern that the breathlessness on exertion may have been an exposed congestive [cardiac] failure. I told him about the history of the swelling of the leg and gout and what medications he had taken. I wrote a short hand-written note summarising the pertinent points of the history and returned next door giving this to the radiologist so he could attach a radiology report to go with [Mr A] to the hospital. [Mr A] at that time was having a chest x-ray so I didn't see him, but my understanding was that he was going straight to the hospital from [the radiology clinic]."

Dr C believed that he conveyed the seriousness of the immediate clinical situation, as well as Mr A's other medical problems (hypertension and recent gout).

After talking with the admitting medical officer he wrote a quick referral letter, "very much [as] a secondary part of the communication with the house surgeon (the personal communication being the all-important part)". Dr C gave the admitting note to Dr I and asked him to attach his request to the note and send it with Mr A to the hospital as soon as the chest x-ray was completed.

Dr C expected that when Mr A arrived at the hospital the ED staff would notify the medical admitting doctor and he would be seen "more or less straight away". In Dr C's view he had identified a serious medical problem needing urgent attention, conveyed the urgency to the relevant inpatient team who would deliver necessary treatment, and sent the patient to the hospital. However, "the systems involved in the GP/hospital interaction and patient/hospital interaction failed to place the patient under the care of the inpatient team in the necessary timely manner".

Dr B was the admitting house surgeon for the medical inpatient team at the hospital, and took Dr C's call. Dr B accepted Mr A for admission because of his DVT but considered the referral was non-urgent. Dr B said that he did not gain the impression from Dr C's call that Mr A was unwell and considered that there was no suggestion of pulmonary embolism. His

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general impression was that "[Mr A] had an uncomplicated DVT, that he was well with this, and that he would present to the Emergency Department in the usual way for further evaluation upon his arrival".

Dr B telephoned the ED reception staff to inform them of Mr A's personal details and diagnosis. He did not discuss Mr A with the medical team or senior clinician or any ED doctors or nursing staff, as it was not "routine practice … unless some urgency is conferred by the referring practitioner".

Supervision of junior doctors

Dr H, Clinical Director of Emergency Services, was not informed that Mr A had been referred for admission.

Dr H noted that Dr B was a member of the inpatient medical team and therefore she had:

> "no ability to train, influence or manage how and what [Dr B] did from a medical perspective. I have never been invited to provide an overview of the role and function of the ED in managing acute patient care during the sessions for junior doctor introduction to the hospital."

Dr H informed me that, although she saw her Clinical Director role as much broader, it was limited to managing the care of patients who either self-referred to ED or who arrived by ambulance. Mr A had been referred by his GP and was therefore not under her care.

General practitioner referrals account for 40% of all patients attending the hospital ED. Dr H advised me that, in her opinion, first year junior medical doctors such as Dr B have insufficient experience in managing GP referrals of acutely ill patients over the telephone. Dr H stated:

> "It is inappropriate for very young doctors to be assessing acutely ill or injured patients alone or with very little supervision. This is as much the case for face to face presentations as with over-the-telephone referrals. Young doctors do not know what they do not know."

Dr H advised me that such referrals should be made to a senior ED doctor:

> "It is no longer a reasonable option, in my opinion, for definitive acute care to be divided prior to the ED. It is inappropriate, risky and accountabilities uncertain to continue the use of both inpatient acute call teams and ED teams for the management of patients attending ED. This division allows for gaps in care and it is ultimately the patient who suffers. It is also significantly frustrating, for me to be held accountable for a system of care that was not under my influence. It is my opinion that GPs should be referring their patients directly to the ED Senior Medical Officers rather than to inpatient on-call teams. The exchange of important diagnostic and therapeutic information is essential at such times."

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ED attendance in early June 2001
Dr H advised me that June 2001 was particularly busy in ED for a number of reasons. Suddenly, the numbers of elderly very ill acute patients with multiple medical problems increased attendance rates in ED by more than 25%. The severity of patients' illnesses meant that each patient spent longer in ED, requiring longer nursing and medical assessment. Inpatient numbers increased to at least 40 acutely ill patient admissions a day and each day began with 10 more patients than available beds. Patients were discharged sooner than desirable to make room for new patients arriving. ED staff had only 19 beds and were unable to find inpatient beds for patients needing admission; a number of senior nursing staff left; and the ED was unable to find junior doctors.

The Emergency Department Policy in relation to GP referrals, developed by Dr H, dated December 2000, stated as follows:

"**Analysis of Emergency Department Operations – [the public hospital]**

Emergency Department Operations

The analysis of emergency department operations is presented in relation with the following processes:

- summary of emergency room processes;
- intake process;
- medical evaluation process;
- consultation and investigation process;
- referral process.

Summary of processes

The summary presented covers all of the phases that may be involved in responding to the patient's needs, from the time the patient arrives at the emergency room to the time he or she leaves it.

Process on arrival in emergency room: intake

The intake process constitutes the patient's first contact with the emergency department. It is aimed at collecting basic information on the patient, briefly ascertaining the reason for the attendance, and registering the patient, by activating his file or creating a new patient file.

The patient's first contact with the emergency department should be with the triage nurse. Triage must be done quickly and in accordance with the emergency department's established protocols. The purpose of triage is to assign a severity code for examined cases and determine the mode by which the patient is to be seen (stretcher or ambulatory).

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Medical evaluation processes

This process involves the ED medical staff (or, in the case of GP-referred patients, the on-call inpatient clinical staff) and is aimed at arriving at a diagnosis or medical opinion.

Evaluation-treatment

The maximum period for evaluation-treatment by the emergency medical team/inpatient on-call team, should be three hours. By the end of three hours, a decision should have been made regarding further action with respect to the patient's disposition: release, admission, observation, consultation.

Consultation and investigation process

It is essential to have a clear policy regarding emergency consultations. It is recommended that the period between the request for consultation and the decision-making on the part of the inpatient team be two hours (maximum of four hours if other tests prove necessary). By the end of this period, the inpatient team should have made one of the following decisions:

- admission;
- release or consultation needed in another specialty.

Referral process

This process is aimed at healthy management of stretcher use in the emergency department and referral of clients to the proper resources on the basis of their needs."

Dr H advised me that there is a lack of clarity and direction in ED procedure and that the current system paralyses the ED team's ability to work together. In her opinion the nursing staff feel stymied and uncertain about what to do; on one hand nursing management recommend one way of dealing with a patient, and on the other hand senior clinicians and medical staff tell them to do things another way. As the Director of the Emergency Department she has tried to implement changes but has encountered a lot of resistance, particularly from senior clinicians who do not seem to want to become involved with GP referrals. In her view senior clinicians should be consulted about the best course of action when a GP refers a patient to hospital.

ED attendance on 6 June 2001
ED records indicate that on the evening of 6 June 2001 14 people came to the reception desk between 5.00pm and 6.00pm; eight between 6.00pm and 7.00pm; seven between 7.00pm and 8.00pm; five between 8.00pm and 9.00pm; and seven between 9.00pm and 10.00pm. Fifty percent of the attendees were GP referrals. Everyone needed medical assessment and investigation before any decision could be made on his or her admission. The number of people exceeded the number of available beds or trolleys, leading to a backlog and delays in meeting triage targets. The hospital advised me that "one triage nurse

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is expected to assess a maximum of eight clients per hour". The Sentinel Event Report notes:

> "Given the numbers presenting during the hours listed, she [the triage nurse] was not able to assess new patients within the expected time frames. However there does not seem to have been any attempt made to get additional assistance to assess patients in a timely manner. It is fair to say that all staff in the ED were working to their maximum capacity throughout the shift, however the Operations Manager Clinical Units was not informed of the prolonged waits for triage and medical assessment."

The ED nurse co-ordinator on duty was Ms E. She described her role as co-ordinator as very mobile, liaising with many people within ED and outside in the wards and other departments in the hospital. She attempted to move patients into beds for assessment in ED or transfer them to the ward for admission. She dealt with other personnel such as radiology, laboratory, after-hours support staff, transport, orderlies and ward staff, as well as patients and their families. Ms E also dealt with cases brought in by ambulance. Ambulance cases impact heavily on bed availability because the patient must be taken off the ambulance stretcher in the shortest possible time. Inpatient admitting team doctors assess their patients in ED before deciding whether to admit them.

Ms E advised me that the evening of 6 June had been "extraordinary" because of the number of patients attending and the increased severity of their illnesses. All medical teams were working in ED and all teams had the wait for beds. The paediatric team had priority on beds for sick children. This prioritisation also limited the beds available for adults. Ms E stated that when ED is busy "doctors tend to rifle the incoming notes" to access the notes of their patients. This can cause notes to be out of order or misplaced. Any free beds that become available are "hijacked by doctors bringing in their own patients without discussion with the co-ordinator". Ms E stated that both occurred between 4.00pm and 5.00pm and, although it did not "impact directly on [Mr A]", it caused bed delays for everyone especially as all the beds were occupied at the beginning of the shift. Ms E further stated:

> "[Ms F, Operations Manager Clinical Units] and I were in constant contact throughout the night. I do not recall stating specifically to her that the Department was not meeting triage times. I would not have thought to because, historically, and even on quieter nights, we do not meet triage times. Triage times become triage priorities."

Ms F advised me that when she arrived on duty Ms E told her ED was busy and had seven patients in the observation unit, two of whom were orthopaedic patients. When Ms E told her that two patients were ready to go to the ward she went to the ward to check whether beds would be available. She advised Ms E that the ward staff were readying some patients for discharge. Within a few minutes Ms F received a telephone call from a doctor advising her that the ED was busy with seven patients in the observation unit and that more staff were needed. This was soon after she received the handover report at about 1.50pm. She told the doctor that she had arranged for patients to be transferred to the ward and that she would continue to monitor ED staffing throughout the shift. The longest wait between a request for a bed and its provision was 20 minutes. Although she was aware the ED was

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busy, she was not "requested to escort patients up to the ward or aware that patients were not being triaged within established guidelines".

Mr A's care at the hospital
On 6 June 2001 Mr A drove himself from the radiology clinic to the hospital, registering at ED reception at 5.20pm. The only triage nurse on duty was Ms D. At 6.30pm Ms D assessed Mr A. She recorded the following:

> "R [right] (DVT) according to scan results (in notes). Swelling started approx five days ago. Pain three days ago. Some pain present at the moment in R (leg)."

Ms D took Mr A's observations and recorded: temperature 36.9, blood pressure 175/103, pulse 64bpm, good colour, no apparent shortness of breath and "talking in full sentences". Ms D categorised Mr A as triage code 3, which means he should have been seen by a doctor in 30 minutes. The Sentinel Event Report notes that it appears Ms D may not have looked at the scan report "which had the definitive diagnosis, and extent of the thrombus clearly stated". The Report further states:

> "The GP's cover note was cursory, and gave no indication of the severity of the problem, though it was written after the scan had taken place. However it would be expected that the Triage Nurse would review all written information available to her as this could influence clinical decisions."

Ms E received and read the notes between 7.15pm and 7.45pm. She did not recall viewing the scan report at that time but remembered reading the scan report later with Dr J. In her opinion the notes and scan report were assessed accurately and adequately. She was unable to bring Mr A in for assessment, observation or treatment because there were no empty beds in ED.

Mrs G, Nurse Manager, advised me:

> "I am of the opinion, that on the evening of 06 June 2001, due to the numbers and acuity of patients already in the waiting room and department and the 34 new patient presentations to the ED between 1700 and 2100 hours as indicated in the sentinel event report (Emergency Department Presentations 6 June 2001) [Ms D] was faced with a situation that was beyond safe management by any nurse. She appropriately indicated that she was unable to cope with the volume of patients arriving in the ED but, due to the numbers of patients within the department, was only able to be assisted for a short time by another ED staff nurse. In my opinion, by the time [Ms D] was able to triage [Mr A], her workload was such that she was not able to spend as much time triaging as is optimal. This I believe is where the letter from [Dr C] can be brought into question. While [Dr C] had included the doppler scan report with his letter, [Ms D] had time to focus on his brief letter only. She made her triage decision on the observations she made of [Mr A], all of which were stable and not indicating any reason for concern. She also read [Dr C's] note which stated that [Mr A] had a 'Right leg DVT'. It did not indicate the concern that [Dr C] had regarding this patient. It does indicate that the doppler scan report was available, however [Ms D] may not have read this due to the volume of work

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> she was faced with. In light of the brief information in [Dr C's] letter and the current practice of treating many patients with diagnosed DVT as outpatients, it was not unreasonable for [Ms D] to have coded [Mr A] as needing medical care within 30 minutes."

The Sentinel Event Report states:

> "After triage, [Mr A's] notes were placed in the Triage/patient waiting box on the clinical workstation, ready for the doctor's use. These are filed according to triage category to ensure timely assessment of each category. The ED Nurse Co-ordinator read the triage notes, and despite reading the scan report, took no action, as there were no beds available for the patient to be seen by the medical staff at that time. There is no evidence of consultation between the ED Nurse Co-ordinator and any medical staff to see if [Mr A] should be brought through, despite a crowded department. This concurs with past habits where GP referred inpatients are left for the referral teams to see, even when busy or delayed elsewhere. This attitude continues to prevail despite education and formal protocols."

(The Protocol referred to above outlines the responsibilities of the triage nurse and the nurse coordinator in moving patients, assessed as triage code 3, into assessment beds. The Protocol states that patients assessed as triage codes 1 and 2 go into ED immediately. Triage code 3 patients "go through to treatment spaces if available – the remainder go to Reception and complete Registration". The Protocol is dated November 2001 and was not operating at the time of these events.)

Ms E advised me as follows:

> "Prior to 2000hrs, [Dr J], ED MOSS [Medical Officer Special Scale] read through the incoming patients' notes and stated [Mr A] should be in the Department. I said I knew [Mr A] was in the waiting room. I stated that [Mr A] was a priority and that he would be the next person in. Two beds were being made available (10-15 minutes maximum) and [Mr A] would have one of the beds, the other was marked for a febrile child with abdominal pain. There was also concern for another patient in the waiting room with ? DVT who arrived at 1710hrs at triage.
>
> I do not recollect talking to the medical admission team specifically about whether [Mr A] was expected, but do remember commenting to one that beds were very limited, and that there were priorities (meaning and including [Mr A])."

Ms E said that although Mr A's triage code was not changed in his notes it was verbally changed by the discussion between herself and Dr J.

Ms E recalled that at approximately 8.00pm, she went to the waiting room and apologised to those waiting to be seen by the doctor. While she was there she took the opportunity to view all the patients who were waiting. No one looked in distress or uncomfortable and no relatives expressed concern. She asked anyone who was concerned to contact either the triage nurse or reception. Ms E stated that because beds were becoming available, and staff

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knew what to do, she was satisfied that she could take a "brief" break. After 8.00pm she had a 10–15 minute meal break. When she returned she noted the following:

> "The Department seemed to be busier, with new arrivals; someone had a seizure and another person was having chest pain. Also, one of the bed transfers to the ward had not yet left the Department. It would have taken a few minutes to catch up with the changes, and I realised [Mr A] had not yet been brought into the Department.
>
> At this time I was concerned there was only one bed free in the corridor and I remember considering this option and who could manage [Mr A], as well as dealing with other Department business.
>
> I went to the waiting room and called for [Mr A] – somewhere between 2030hrs–2045hrs. He was not there. I checked elsewhere but he was not outside the department, nor in the toilets."

Ms E said that she paged Ms F to inform her of the situation in ED, which was causing her some concern, but her return call was answered by one of the ED staff and she was not called to the phone. Ms F therefore was not alerted to the situation.

At approximately 8.30pm Ms D reviewed Mr A and he told her that he was "the same as on arrival" and the pain in his right leg continued. Ms D did not take any formal observations. The Sentinel Event Report notes that Mr A's triage category should have been reviewed and raised at this time, according to the usual protocols in ED.

The Sentinel Event Report records that a patient (named) who had been treated in the ED, and had had previous discussions with Mr A, returned to the waiting room at 8.55pm. She noticed that Mr A was still there and looking "clammy and his attention and speech was wandering".

At about 9.15pm Dr I, the radiologist who had diagnosed Mr A's DVT earlier that day, came into ED. He found the waiting room completely full. Dr I discussed Mr A, and a number of other patients, with Dr J.

At 9.25pm Mr A returned to the reception desk. The receptionist called Ms D. Ms D made the following observations about Mr A:

> "Sweaty and pale yellowish to look at. Asked if he had chest pain, and sent to the receptionist and for a bed. [Mr A] stated he had no chest pain but felt SOB – short of breath."

Ms D asked the receptionist to bring a bed but, as none were available, she brought a wheelchair. Mr A was taken into ED and placed on a bed. By this time Mr A was grey in colour and sweaty. Ms D placed him on oxygen and handed him into the care of Ms E.

Ms E attached Mr A to a portable ECG monitor and, aided by a house officer, moved him to the resuscitation bay. Mr A "arrested" (his heart suddenly stopped beating), his eyes rolled and he had a "seizure type episode". Mr A was roused when his name was called and

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when Ms E shook his shoulder. She attached him to the central monitoring system. A medical team, consisting of two medical registrars and Dr J, was called. They commenced resuscitation, with the assistance of ED nurses.

At 9.28pm one of the medical registrars recorded that Mr A was "very, very distressed, sweaty, cyanosed" and his blood pressure was 80/40. He continued Mr A's oxygen, commenced IV fluids and administered Maxolon and morphine. He telephoned the consultant cardiologist.

The consultant cardiologist recommended using a tissue-type plasminogen activator (enzyme used to remove an arterial blockage) and transferring Mr A to the Critical Care Unit (CCU). He informed CCU and asked that they prepare for Mr A's arrival.

Ms E telephoned Mrs A to inform her about her husband and ask her to come to the hospital urgently.

At 9.38pm Mr A suffered a second cardiac arrest as he was leaving the resuscitation bay. Mr A was given direct current shock treatment, 1mg of Adenosine, atropine and Gelofusin (a blood-fluid substitute) while cardiopulmonary resuscitation (CPR) continued. At 9.51pm one of the medical registrars consulted the consultant cardiologist. Mr A had no cardiac output and the medical registrar considered it futile to continue with resuscitation. The consultant cardiologist recommended that CPR be discontinued and Mr A died soon after.

The medical registrar informed Mrs A of her husband's death. The Police and Coroner were also informed. An autopsy report noted that Mr A died from a "massive pulmonary embolism" with complicating DVT in his right leg.

Ms E recalled:

> "[A]s [Mrs A] left the Emergency Department with her family, she asked for the overnight bag she had brought in for her husband. I eventually located it in the Department's children's waiting room. This concerned me because I wondered if [Mr A] had been sitting there when I had called for him previously at 2030-2045hrs. If so, he would not have heard his name called and would not have been visible to anyone in the waiting area or Department."

Subsequent events – concern about overcrowding in the ED
At 9.30pm on 6 June an ED nurse filed an incident report. The report stated:

> "Inadequate staffing and beds to cope with the demand of emergency presentations. Minimum three-hour wait – unfortunately this man we couldn't get in to be seen – this resulted in him moving from a DVT to a PE – doesn't look very good from a nursing point of view."

Later that evening the ED nurse wrote to the General Manager of the hospital, as follows:

> "[V]ery unfortunate evening but this is the fourth day in a row where we can't cope.

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> High patient activity
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> High patient demand
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> Lack of available beds
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> Lack of numbers both nurses and Drs.
>
> This is putting us in a very unsafe condition and although the team have [been] worried out of [their] skins and feel very unsafe no matter how fast/hard efficient we work, more sick/sick [patients] are waiting. I wonder why three nurses (senior) are leaving?"

Mr K, Chief Executive of the hospital, advised me that the comments about senior staff leaving were "emotive" and that "staff attrition is highly variable and seniority of staff fluctuates depending on recruitment at any point of time".

Dr H advised me that the lack of beds in ED was first raised with the Health Authority Secondary Services Report in 1994. The report predicted that by 2001 the hospital would be "significantly under bedded causing potential delay in patients accessing beds acutely". In March 2001 she assisted with the preparation of a report to the hospital in which she identified that the current bed capacity in the district, according to international experts, fell short by 100 (a 20% shortfall). (Mr K advised me that the number of ED beds increased significantly in November 1999, when a new ED was opened.)

Nursing staff wrote to the Chair of the District Health Board by letter dated 7 June 2001. Staff stated that they wanted to highlight the fact that they had expressed their concerns about unsafe staffing levels in ED to Mr K, Chief Executive, at a meeting with him in September 2000. Mr K informed them there was "a temporary hiatus in patient presentations". The nursing staff, many of whom were experienced ED nurses, did not share his view. There had been no improvement and by mid-December the ED nurses and doctors wrote to the General Manager outlining their continuing concerns.

Mr K advised me that a number of meetings occurred between the Nurse Manager ED and the General Manager between December 2000 and February 2001 to develop strategies for managing nursing resource and maintaining patient safety. The General Manager responded to the staff letter on 31 January 2001 and outlined a number of strategies that had been or would be implemented.

In the opinion of staff, it was not a constructive reply. The staff letter had pointed out that many senior experienced nurses were leaving and were usually replaced by less experienced nurses, placing a greater burden on the remaining experienced staff. Nursing staff had completed numerous incident forms, identifying areas where staff shortages made nursing unsafe, but had received little response and "no action". Nursing staff were frustrated by what they perceived as the "inertia of management", and were fully aware of the dangerous scenario in an overworked department.

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The staff letter identified the "typical" events of the previous evening with the patients triaged some 60–90 minutes after arriving at the reception desk and staff being so busy that there was no opportunity to retriage patients at the allotted times. As an example of the dangers of the situation, the letter related the events surrounding Mr A's case. Nurses were angry that management seemed unwilling to intervene to stop an event that could happen again if there was no change to the staffing levels. Nursing staff requested legal advice about their culpability in such situations and asked whether management shared some responsibility. They asked that the Chair meet with the nursing staff and keep them fully informed about any intervention the Board proposed to take.

Mr K advised me that it is not correct to say that management was inert. Incident reports were investigated and reports generally fed back to the appropriate department. He provided evidence that non-clerical staffing numbers in ED increased significantly between June 1999 and June 2002, from 27.58 to 39.09. At the time of these events there were 35.45 staff rostered in ED even though only 34.9 staff were budgeted for.

On 7 June 2001 Dr I wrote to Dr H expressing his concern:

> "… ED staff were obviously under considerable pressure during Wednesday evening, so much so that patients with life-threatening problems were parked in the ED hallway.
>
> … a patient with a diagnosed potentially life-threatening condition was not able to be commenced on medical therapy sooner."

On 8 June 2001 at 8.00pm an ED staff nurse filled in an incident notification sheet. The nurse stated:

> "Unsafe working conditions – [increased] patients [insufficient] beds available and [not] complete ability to care for the demand at the emergency entrance. Three-hour waiting time putting nurses at large risk."

Events contributing to overcrowding

Dr H advised me that problems arose during June 2001 for a number of reasons:

> "First, we had a sudden onslaught of very ill elderly patients and those with significant multiple disease presenting to the ED, just after Queen's birthday weekend. This caught everyone by surprise resulting in a greater than 25% increase in our daily ED attendances.
>
> Second, as well as a rise in acute attendances, we had a much greater number of significantly ill patients requiring longer ED nursing and medical assessment and care as well as requiring acute inpatient admission. Our bed statistics at the time reflected this problem in that we were admitting around 40 acutely ill patients per day and began each day with 10 or more patients in hospital than we had beds available. This meant that patients in hospital needed to be discharged before those for admission could be brought up to the wards from the ED.

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Third, the ED had a total of 19 treatment beds (2 resuscitation, 1 procedure, 1 child, 5 observations and the others general treatment beds). The problems we were having are that delays in accessing inpatient beds resulted in the ED beds being blocked by these patients. Instead of Triage category 2 and 3 patients accessing a medical review within the prescribed time, patients were waiting for care – either on trolleys in the hall or in the waiting room.

Fourth, for various reasons, a number of our more senior experienced nursing staff had elected to move on to other centres and we were left with a pool of less experienced people and a real shortage of skills and numbers of nursing staff.

Fifth, our junior medical pool was in flux. Normally this happens as junior doctors who come to [the town] primarily to enjoy the summer, decide to move on. This is always a difficult time, as the British doctors are generally not available until July/August and the ability to attract New Zealand based doctors is limited due to demands in larger teaching centres. Over the past four years, the ED has employed Junior doctors who have a minimum of 3 post-graduate years training experience. These people are difficult to come by but we have been much better placed to provide better care with more experienced people. The good part is that we have had a stable group of senior medical officers overseeing the totality of care provided and this has enabled improved team work in the ED."

Allocation of staff to triage roles and staff training

In relation to nursing staff training and allocation of staff to ED, Mrs G made the following statement:

"It has always been my practice as Nurse Manager, to ensure that no nurse is assigned to the triage role for a shift, without first having worked in the ED for at least one year and successfully completed the Emergency Nurses' College, formerly the Emergency Nurses' Section of NZNO, Triage course or a similar certificated Triage Course, if the nurse has trained overseas.

I do not assign nurses who have trained and practised overseas, or in other New Zealand hospitals, to the triage role until they have worked for at least six months in the [hospital's] ED and have an understanding of the demographics of the region, the types of illnesses and injuries treated in the ED.

I also encourage discussion with Co-ordination and triage staff regarding allocated triage codes and am often asked to review these with a view to ongoing learning for these staff.

…

Comment on Sentinel Event Report

During the sentinel event investigation into [Mr A's] case I repeatedly stated a request for there to be a recommendation that there be a similar process of investigation

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instituted for General Practitioners and other primary care providers as I felt that positive changes may be able to be made to pre hospital patient care. I continue to feel this way as [Mrs A] particularly states in her letter to you, that she believed 'the hospital appears to have downplayed the significance of the communication between [Dr C] and the hospital staff'. As mentioned earlier [Dr C] did not indicate in his letter to the hospital that he was any more concerned about [Mr A] than he would have been about a patient with a small lower leg DVT. It is my opinion that [Ms D's] assessment of [Mr A] would have been significantly changed had [Dr C] written *extensive* femoral popliteal DVT.

…"

Mrs G further stated:

"…

- I have been actively involved in the teaching of triage assessment skills in the [the hospital's] ED since September 1997.
- I have actively sought placement for [the hospital's] ED staff in triage training courses run by The College of Emergency Nurses, on an annual basis.
- I maintain a daily informal audit of the triage codes and disposition of all patients who attend the ED.
- I actively access patients' records to identify the basis for triage code decisions and provide ongoing review with and education of staff, should I identify any inconsistent decisions.
- I identified the need for restriction on the staff who carried out the Co-ordinator role in the ED to try and develop a more consistent and supportive mentorship of less experienced staff and to ensure that the patients brought into the Treatment area for care were the most appropriate for the time.
- Despite annual requests for a Clinical Nurse Educator in ED, this has not been achieved.
- I believe that there should also be a sentinel event inquiry process established in the Primary Care Community in the event of GP referred patients suffering an untoward outcome within 24 hours of attending hospital."

With regard to allocation of staff to triage role and staff training, Mrs G advised me:

"**Comment on Triage training**

As mentioned earlier I have accessed the triage training provided by the College of Emergency Nurses as the sole formal education for ED staff. Of recent date I have had

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some concern that the course may not be evolving to meet the changes in management of illnesses in New Zealand. I believe that the basic triage training available is appropriate, but I am of the opinion that it could be extended beyond two days and that scenarios of cases such as this, may be examined. I have expressed these concerns to colleagues and recently spoke with […] the Clinical Nurse Educator at [another public hospital's] ED regarding this. [The Clinical Nurse Educator] has subsequently met with some of the teaching staff of the triage course and has represented my concerns, with which she agreed.

Allocation of Staff to Triage Role

Allocation of staff to roles within the ED is done on a daily basis by me as the Nurse Manager or in my absence, by my assigned deputy. I do this to ensure that the triage and co-ordinating 'teams' for each shift are the most compatible to ensure ease of communication and understanding between them.

If there is a newly certificated triage nurse assigned to triage this relationship is even more important. I always ensure that the Co-ordinating Nurse is very experienced and able to support the triageur by informally auditing their assessments and coding. I also try to ensure that this staff combination most often occurs on a morning shift when I am also available to support and assess the performance of the triage nurse.

On 06 June 2001 I was attending an Emergency Care Co-ordination Team meeting in [a nearby town] and had deliberately assigned [Ms E] and [Ms D] to Co-ordinating and triage respectively for the afternoon shift. I had done this because I was not in the Department and because the workload in the Department over the preceding weeks had been very heavy. These two staff worked well together and were in my opinion best suited to manage the workload. Both staff had worked in ED for at least 10 years and were certificated in Trauma Nursing (TNCC), Advanced Cardiac Life Support (ACLS) and Triage. [Ms D] also held a Certificate in Emergency Nursing (CEN) qualification."

Review of Mr A's care – GP referral

Dr H advised me that, in her opinion, it is not ideal that junior medical officers take GPs' referrals to the ED. In Mr A's case it would have been better for a senior clinician to take the call as a young medical officer did not have the experience to decide what is the most appropriate action. The junior medical officer does not discuss the matter with the medical team or a senior clinician and the outcome was that Mr A was not seen by any of the medical team in ED until it was too late.

Dr H raised concerns about the lack of clarity and direction in ED procedures and systems. In her view, this "paralyses the Emergency Department team's ability to work together". She noted the difficulty that nursing staff experienced with conflicting recommendations from senior nurses and medical staff. Dr H requested that I recommend that "some clear protocols and guidelines" be put in place for dealing with GP referrals to ED. Dr H recommended that the practice in ED needed to be regularly monitored and evaluated.

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Dr C described the current system for GP referrals for acute admission to the hospital, in a letter dated 12 January 2003:

> "I was pleased to be invited to be part of a series of […] District Health Board meetings referred to as an Acute Care Forum in the later part of 2002, to help devise a system that could prevent further such problems. [Mrs G] the ED Nurse Manager, Mr […], recently appointed ED Clinical Director and myself were charged to devise a new system of admission for trial. Preliminary thoughts were conveyed back to the wider Forum and subsequently refined for later meetings.
>
> The final draft form of the system … was referred to as the 'Single Portal of Entry' system of GP admissions to [the hospital]. In particular, the issue of conveying the GPs Level of Concern was highlighted, as was a faxed pro-forma Admissions Letter which would clearly be the most important Document to convey essential information to the Hospital ED system.
>
> The attached sheets were to be printed double sided, laminated and distributed to all GPs and A & M centres. A draft letter, written by myself, [was] proposed to go out to all GPs …
>
> Much to my dismay, the final Acute Care Forum meeting in October 2002 resulted in the plan being shelved. The reasons for this appeared to revolve around the internal politics of the Hospital as it related to Inpatients Teams vs the Emergency Department, and concerns of the Junior staff, in part as it related [to] their clinical training.
>
> This has been most disappointing. Efforts will be made this year to revive and further refine the proposal if necessary to allow a trial to be mounted."

Recommendations following sentinel event investigation

Following Mr A's death the sentinel event investigation concluded that Mr A waited an unacceptably long time in ED before he was seen by a doctor. A number of actions were identified to help remedy the situation, including the following:

> "This unfortunate man should not have waited so long for assessment and treatment, however given the severity of his condition, even with timely intervention he may not have survived.
>
> There are a number of process issues to be addressed which contributed to the unacceptable delay this man experienced in the ED and the untoward outcome.
>
> **I. Communications between professional staff.**
>
> The sense of urgency for his admission was not appreciated or perceived by the medical admitting officer from the telephone discussion with the GP.

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Action:

Review of referral process between GPs and medical admitting teams to take place. Recommend that the Consultant on call, or his Registrar should receive the incoming calls from GPs. This would enable a higher level review of the need for admission, and ability of the GP to manage the patient in the community.

Action:

For expected admissions, a record of expected admission to be logged on Emergency Department Admission form by the receptionist, and kept as permanent record, rather than 'paper notelet', as at present, which is discarded when the patient arrives.

Action:

Emergency Department Manager to explore options of an information system in the waiting area, advising patients of 'wait time to be seen' and encouraging patients to present to reception if concerned.

II. Delay in initial and subsequent Triage.

The current process is based on the Australasian guidelines for Triage, and is appropriate for use in the ED. On this occasion the established processes were not followed rigorously.

Action:

If more than 8 attendances present within one hour, ED Nurse Coordinator to be informed by the receptionist and activate the ED Rapid Assessment Team, i.e. an additional Triage Nurse and MOSS to be called forward to the reception area. ED Nurse Coordinator also to inform Support Manager of the hospital, alerting them of the increased level of activity in the department. The external consult room, and interview rooms should be used to assist with the processing of waiting patients. [Mrs G advised me that this recommendation had been actioned in an adjusted, more precise form and is now a part of the major incident response escalation plan.]

Competency of nursing triage and assessment. All nurses trained in Triage categorisation and assessment skills.

Action:

Introduce use of the 'Wellington' flow chart.

Competency reassessment of nursing staff by audit of records and educator support.

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ED Nurse Manager to review selection criteria for 'triage nurses'.

Triage review:

[Mrs G advised me that at the time of these events the last three criteria listed above had been in place and operating for some time.]

Action:

Nurse Coordinator and Senior MOSS to monitor triaged and waiting client files every 30 minutes, and upscale triage category if outside the time limit. MOSS also to re-prioritise clients for assessment. ED doctors are required to see any patients, including those referred in for on call medical teams, when admitting team delayed or busy.

III. Management of GP referrals for medical assessment/admission.

Action:

Review of current process within ED to be undertaken, led by the Clinical Directors of ED and Medicine. Consider bypass of Nurse triage.

Additional 2 trolley spaces to be created in ED when department busy and backlog of patients developing.

Free standing screens required to provide patient privacy when beds used in corridor areas. [Mrs G advised me that fixed curtains, rather than free-standing screens, have been installed.]

Trial to be implemented of Acute Assessment space in the Interview room. [Mrs G said that this trial had not proceeded and it does not now seem necessary.]

Trial of use of 'triage category' for referrals from GPs and Ambulance officers. Senior Medical staff to educate junior doctors in diagnostic probability analysis.

IV. Absence of Thrombolytic therapy in ED.

Action:

Discuss with Cardiologists potential to initiate thrombolysis in ED (as well as fast track clients to CCU). Thrombolysis protocols and treatment regimes to be developed, with education of ED staff in their use.

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V. Procedures and clinical protocols.

Action:

ED Clinical Director and Nurse Manager to review existing protocols to ensure all requirements are met.

VI. Nursing Resources.

Action:

ED Nurse Manager has identified core staff to take Triage and Coordinator roles to ensure consistency and competency in performance. [Mrs G advised me that this has always been her practice regarding triage allocation, and that she introduced this prior to Mr A's attendance.]

Health Care Assistant role to be trial led in support of nursing team to relieve Registered Nurses of non nursing duties."

Implementation of Sentinel Event Report recommendations
Dr H advised me that in response to these issues work has been done to improve patient flows and in July 2001 three extra beds were added to the Emergency Department. Even with this additional capacity the ED continued to have problems when the number of patients with acute illness or injury exceeded the number of beds available. She predicted that problems would continue until more beds are added.

On 19 July 2001 Mr K wrote to the Director-General of Health advising her of the actions taken by the hospital to improve access to health care in ED. His letter noted the following:

"The steps completed, or underway, so far, are:

- A Health Care Assistant has been employed to reduce some of the non-clinical workload.
- Discussions have been held with the General Medicine Specialists to ensure they/or Registrars, are available to process patients through the Emergency Department.
- A parallel system for GP referrals for admission is being investigated. A high proportion of referrals to the Emergency Department at this time of the year are from GPs. Some of these patients come with previously confirmed diagnosis but not all are admitted into hospital (two-thirds admitted).
- GPs will be reminded that they need to contact a Senior Medical Staff Member when they refer to the Emergency Department. Consideration is being given to establishing an 'emergency category system' for GP use.
- Two additional cubicle spaces are being created in the Emergency Department to allow additional patients to be more closely monitored whilst waiting.

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The staff members at the meeting indicated that they were satisfied that the issues were progressively being addressed.

I must stress that in my opinion, many of these solutions are not addressing the real problem in [the district]. We have already seen additional costs being generated which go well beyond our funding levels. I am sure your monitoring unit have already reported their concern about the deficit we have at [the hospital].

[The hospital] is now at the point where we cannot operate within the funding level allocated, without increasing our clinical risk. The average age of our patients and the ever increasing volume, is creating an enormous strain on [our hospitals]. Although the problems in the Emergency Department are very real, they reflect a hospital operating at a capacity level well above its resourced levels."

Mrs G provided the following information in January 2002 about the steps taken to improve access to ED services, which have exacerbated staffing problems:

"Following the sentinel event investigation into this case, I have purchased three more ED trolleys to enable more patients to be given beds earlier, however this has exacerbated our staffing situation. The three extra beds have resulted in an increase of sick patients in the department but I have not been able to secure funding for extra staff to care for them. In short the problem and risk to patients has now been transferred from the waiting room to the bed area of the department. This also has resulted in increased workload for the staff in treatment areas and reduces further their availability to assist the triage nurse if required.

All the recommendations made in the sentinel event report that were identified as my responsibility to action, are in place with the exception of the information system in the waiting room advising patients of 'wait time to be seen' and encouraging patients to present to reception if concerned.

I have not introduced this facility because the waiting times vary according to the triage codes assigned to patients, therefore it would be misleading to have a standard time displayed. Triage nurses have been strongly encouraged to ensure that patients are aware they should voice any concerns they may have during their waiting time.

Co-ordinator Role

A group of six senior staff who are well respected, have extensive clinical knowledge and have displayed excellent management skills have been appointed to Clinical Co-ordinator roles since 06 June 2001. The need for this position was identified by me earlier this year as I believed that Co-ordination of the Department was in need of review as it was disjointed and inconsistent. I was able to identify that Co-ordination was being best achieved by a small group of very senior staff. I also saw this role as crucial to achieving best allocation of increasing patient numbers to nursing staff who were best able to provide the care they required. It was also important for the development and mentorship of less experienced staff as they would have readier access

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> to these senior staff. At the time of [Mr A's] ED visit this was under trial with S/N [Ms E] one of two staff undertaking the role.
>
> Review of the appointment of Co-ordinators is now due and will be undertaken using a questionnaire to all staff, late in February 2002.
>
> …
>
> Since my appointment to the Nurse Manager role, it [has] always been my practice to informally audit the daily census printout for each 24 hour period and note triage codes that have been allocated for presenting problems. I also check the disposition for each patient and review patient notes if the triage code and the disposition do not correlate. Should I identify any inconsistencies, I always speak with the nurse concerned and provide advice and strategies to follow.
>
> Since my appointment as Nurse Manager I have requested, on an annual basis, that I be permitted to employ a Clinical Nurse Educator for the ED. This request has not been successful to date. The Staff Nurse FTE of the Department has increased from 20.5 to 35.8 and I am no longer personally able to provide the degree of departmental education required for this number of staff.
>
> Limiting the selection of triageurs to senior experienced staff is, in theory, a very sound proposal but is difficult in practice as there is always the need for newer staff to get clinical experience in the role. My policy of matching the Co-ordinators and the triage staff is I feel, the safest way to achieve this."

Mrs G advised in February 2003 that the past practice of leaving GP-referred inpatients for the referral teams to see, even when busy or delayed elsewhere, no longer occurs. Patients are now referred to the ED doctor for assessment, if the ED doctor is available. There is now a closer working relationship between the senior medical staff in ED and the nurse co-ordinator on each shift.

Mr K advised me in January 2003 that as part of a campus redevelopment an Acute Admissions Unit and expansion of the Emergency Department is planned, and will improve the capacity of the hospital to provide more rapid patient assessment and treatment.

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Independent advice to Commissioner

The following expert advice was obtained from Dr Mike Ardagh, Professor in Emergency Medicine:

"*Purpose*
To advise the Commissioner on whether [the hospital's] Emergency staff provided services with reasonable care and skill to [Mr A].

Complaint
The complaint is outlined in [Mrs A's] letter to the Commissioner but in essence her complaint is that:

- [The hospital's] Emergency Department did not provide an adequate standard of care to [Mr A] when he presented on 6 June 2001 at 5.20pm with a referral letter from his General Practitioner, [Dr C], and a Doppler scan report from … radiology. [Mr A] had a diagnosis of right deep vein thrombosis and he was for admission. [Mr A] subsequently died at 9.51pm while waiting to be seen by the medical team.

In particular, the Medical Admitting Officer, [Dr B], did not:

- Adequately ascertain [Mr A's] referral status during a telephone referral discussion with [Dr C] on 6 June 2001 at 4.30pm.
- Consult with senior medical staff regarding appropriate management and/or communicate this to the appropriate staff in the Emergency Department.

Triage Nurse, [Ms D], did not:

- Adequately assess and review [Mr A], the Doppler Scan Report and [Dr C's] referral letter, and consequently did not triage [Mr A] correctly.
- Take any formal observations or review and raise [Mr A's] triage category when she reviewed him at 8.30pm.

Emergency Department Nurse Co-ordinator, [Ms E], did not:

- Adequately assess and review [Mr A's] triage notes including the Doppler Scan Report and [Dr C's] referral letter.
- Consult with the medical team or Staff Nurse [Ms D] about [Mr A], following review of the Scan Report, and consequently did not alter [Mr A's] triage status appropriately.
- Call for additional assistance from [Ms F] (Operations Manager Clinical Units) when it was clear that Triage Guidelines were not being met.

Director of Emergency Medicine, [Dr H], did not ensure that:

- Referral and consultation systems between General Practitioners and Emergency Department Medical Admitting Teams were adequate.
- The Junior Medical Admitting Officer, [Dr B], was adequately trained to ascertain a patient's referral status.

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Nurse Manager, [Mrs G], did not ensure that:

- Triage nursing staff were adequately trained to ascertain a patient's status.

Supporting Information

- [Mrs A's] letter to the Commissioner
- The Commissioner's investigation letters to [Dr B], [Ms D], [Ms E], [Dr H] and [Mrs G]
- [Dr B's] response to the Commissioner
- [Ms E's] response to the Commissioner
- [Dr H's] response to the Commissioner, including Sentinel Event investigation and other supporting documentation including Triage and Observation Policies and letters outlining concerns about pressures of work
- [Mrs G's] response to the Commissioner
- [Mr A's] medical records from [the hospital]

Expert Advice Required

To advise the Commissioner whether in my opinion, [Mr A] was provided with services with reasonable care and skill while he was at the Emergency Department at [the hospital] and in addition, to answer the following questions.

- What standards apply in this case and were those standards met?
- Whether the admitting house surgeon had the skill and experience needed to adequately assess [Mr A's] referral status, and if not, what level of medical practitioner should be given this responsibility?
- Whether the admitting house surgeon should have consulted senior medical staff regarding the appropriate management and/or communicate to the appropriate staff the information that he had regarding [Mr A]?
- Whether Triage Category 3 was appropriate, given [Mr A's] medical history and diagnosis?
- Whether formal observations should have been taken as a part of the triage assessment and whether [Mr A's] triage category should have been reviewed during the course of the evening?
- Whether the Emergency Department Nurse Co-ordinator had a responsibility to assess and review [Mr A's] triage category during the course of the evening?
- Whether it was appropriate for the Emergency Department Nurse Co-ordinator to discuss [Mr A] with appropriate medical staff when it was known he was in the waiting room for such a long time?
- Whether the Emergency Department Nurse Co-ordinator should have gained additional assistance when it was clear that the triage guidelines were not met?
- Whether the Director of Emergency Medicine should have ensured that referral and consultation systems between General Practitioners and Emergency Department Medical Admitting Teams were appropriate?
- Whether the Director of Emergency Medicine should have responsibility to ensure that junior doctors were adequately trained to take a patient referral status over the telephone?

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- Whether the Nurse Manager had a responsibility to ensure that triage nursing staff were adequately trained to ascertain a patient's triage status?

Summary of facts
I will very briefly reiterate key facts as I see them, but I will not attempt to reproduce the sequence of events or the facts in detail, as these have been well presented in the documentation of the Sentinel Event Investigation. I will make some comments regarding some of the events listed.

In summary these occurred:

- [Mr A] was referred to the inpatient medical team by his General Practitioner with a diagnosis of deep venous thrombosis confirmed by ultrasound imaging.
- Assessment of patients by inpatient medical teams referred in this manner, is expected to occur in the Emergency Department.
- [Mr A] presented to the Emergency Department where he waited an hour and ten minutes for triage (or an hour and 15 minutes – there is some variation in the triage time reported in the Sentinel Event documentation). Ideally he should have been triaged within ten minutes of presentation.
- He was triaged as a triage category 3, meaning that he should wait to be seen by a doctor no longer than 30 minutes. In my opinion, this is an appropriate triage category for his presentation, however it must be noted that the time to see a doctor is the time from presentation, and therefore, by the time [Mr A] had attained the triage category of 3, he was already 40 minutes beyond the time that he should have been seen by a doctor.
- Approximately four hours (again there is some variation in the time he represented to triage and was taken through for medical care) after presentation to [the hospital's] Emergency Department, he was seen by a doctor. Medical assessment at this time was precipitated by his marked deterioration.
- Less than five hours after presentation to [the hospital's] Emergency Department, [Mr A] had died consequent to a massive pulmonary embolism.

Expert Advice Required
I will respond to each of the questions, asked of me by the Commissioner, in turn.

- **What standards apply in this case and were these standards met?**

The Australasian triage scale is published on the website of the Australasian College for Emergency Medicine and is accompanied by documentation about its implementation in an Emergency Department. According to the standards suggested in these documents, patients should present to a triage nurse first, before an Emergency Department receptionist, triage should be prompt (within 10 minutes is a figure commonly employed) and patients should be seen by a doctor within a certain time, according to their triage categorisation. These standards were not met in this case.

It must be noted however that triage is used as a means of augmenting patient flow, according to clinical urgency, through a system of patient care. The fact that these

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standards were not met is not necessarily an indication that there was a problem with triage, but instead that there was a problem with the system. I will expand on this in discussion to follow.

In addition, the standards defining waiting times by triage category include performance indicator thresholds which represent the percentage of patients within a triage code, who commence medical assessment and treatment within the relevant waiting time, from the time of their arrival. In other words, the expectation is that, when auditing performance, not all patients will be seen within their triage code defined maximum waiting time, as Emergency Departments are subject to considerable ebbs and flows of demand which are not always predictable and seldom controllable. The indicator threshold for triage code 3 is that 75% of patients should be seen within the 30 minutes defined. Although it may be argued that [Mr A] is one of the 25% allowed to fall outside this 30 minute period, it is my opinion that a four hour wait to access medical attention in [Mr A's] case, represents a failure of access to appropriate medical attention.

- **Did the Admitting House Surgeon have the skill and experience needed to adequately assess [Mr A's] referral status, and if not, what level of medical practitioner should be given this responsibility?**

Contrary to some of the opinions presented in the documentation received, my opinion is that the House Surgeon in this case did have the skill and experience needed to adequately assess [Mr A's] referral status. However I agree with many of the sentiments expressed in the documentation that, in general, junior medical officers should not be the ones taking General Practitioner referrals, but instead such referrals should be taken by Registrars or Consultants. The reasons for this have been discussed in the documentation, but include the requirement for experience to recognise the severity of illness, the urgency for medical care and also intuitively, it is appropriate for a referral from an experienced General Practitioner to be to someone who is not considerably more junior. In this respect, it is pleasing to see a change in practice for medical referrals at [the hospital]. However, in [Mr A's] case, he was referred by his General Practitioner as a patient with a deep venous thrombosis. He had had some shortness of breath on exertion, but in the referral letter this was associated with his recent change in medication and there was no suggestion of a possible pulmonary embolus. In addition, the subsequent report of the General Practitioner suggests that he was thinking that the shortness of breath may have been due to congestive heart failure. Clearly [Mr A] had had pulmonary emboli already, in the hours or days prior to presentation to [the hospital], but it appears that in the eyes of the General Practitioner, the Medical House Officer, and the Triage Nurse, he had presented with a large, though uncomplicated, deep venous thrombosis. I think it is likely that a more senior person on the end of the phone would not have done anything differently to the house surgeon who took the call.

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- **Whether the Admitting House Surgeon should have consulted senior medical staff regarding the appropriate management and / or communicate to the appropriate staff the information that he had regarding [Mr A]?**

The comments in response to the previous question are relevant to this one also. However, clearly communication is essential when a patient is referred to one team but is received by another. In this setting, it is extremely important that the accepting team, who have taken information from the General Practitioner, communicate this information to the receiving team (the Emergency Department nurses and doctors) so that they are aware of relevant information and the plan for patient management. Otherwise the Emergency Department staff risk leaving things out with an assumption others will do it, or duplicating activities the admitting team intend to undertake.

- **Whether Triage Category 3 was appropriate given [Mr A's] medical history and diagnosis?**

Yes triage category 3 is appropriate.

- **Whether formal observation should have been taken as part of the Triage Assessment and whether [Mr A's] triage category should have been reviewed during the course of the evening?**

And

- **Whether the Emergency Department Nurse Co-ordinator had a responsibility to assess and review [Mr A's] triage category during the course of the evening?**

It appears on the initial assessment, the Triage Nurse did take some observations and these were normal. These are reproduced in the Sentinel Event Investigation papers. As far as I can tell, this initial assessment was an appropriate triage assessment. Triage is a dynamic process and the triage category should be changed as the patient's condition changes. In addition, all patients in an Emergency Department, both prior to and subsequent to seeing a doctor, should have regular observations undertaken with a frequency determined by their perceived seriousness or potential seriousness of illness. [Mr A] was reassessed at 2030 hours, but no formal recordings were taken. His formal recordings at this point may well have remained normal, although another patient noted that he was looking unwell at 2055 hours. Exactly when he began to deteriorate is unclear, but it seems likely that it was between 2030 and 2055 hours.

The concept that a patient who has waited beyond their triage category should be retriaged and given a higher category is, in my view, wrong. Triage defines an urgency for care, which is independent of other patients demanding services in the department and how long the patient has been waiting. If [Mr A] was the same at 2030 hours, as is alleged, then his triage category would remain a triage category 3. A deterioration in his clinical state does demand a review of the triage category because his urgency has changed, but there is no indication to change his triage category if his clinical condition has not changed. Triage categorisation is a clinical observation, like temperature, degree of pain, or degree of pallor. It is not altered by factors independent of the patient (like ED workload) but it does strongly influence where in the queue the patient waits. However it is not the only determinant of where in the queue the patient waits, and a waiting time already well beyond the accepted threshold standards is a reason to

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advance up the queue, not requiring a change in triage category. Indeed changing the triage category for workload reasons manipulates a clinical measure, alters department case mix measures and creates confusion when dealing with an overloaded department and conflicting clinical priorities. I strongly recommend 'up-triaging' is not used to advance a patient up the queue.

- **Whether the Emergency Department Nurse Co-ordinator had a responsibility to assess and review [Mr A's] triage category during the course of the evening?**

From the documentation received, it appears that the triage nurse was a competent triage nurse. [Mr A's] triage category 3 was an appropriate one and there was no need for this to be reviewed initially by the Nurse Co-ordinator, or by anyone else. However, as [Mr A] waited beyond his triage category, as discussed above, it is appropriate that he was reviewed to see whether his clinical condition had changed. In addition, it was appropriate that his medical assessment was expedited, with increasing vigour, the further he went beyond the 30-minute threshold.

- **Whether it was appropriate for the Emergency Department Nurse Co-ordinator to discuss [Mr A] with appropriate medical staff, when it was known he was in the waiting room for such a long time?**

Yes. A triage category 3 patient in the waiting room for a number of hours represents a failure of access to care. It is appropriate therefore for the staff in charge to do what they can, to improve the access to care. The documentation received suggests that such discussions did occur with the Medical Officer of Special Scale on duty and there were some attempts to notify others in the hospital, of the strains the Emergency Department was under. It must be appreciated that the perception remained that [Mr A] had an uncomplicated deep venous thrombosis and that there were many other competing priorities at that time.

It seems clear from the documentation that all the staff in the Emergency Department realised that what was happening to [Mr A] and to other patients was a bad thing, but that they were somewhat hamstrung in their abilities to do anything about it due to the other and multiple demands placed upon them. This will be discussed further.

- **Whether the Emergency Department Nurse Co-ordinator should have gained additional assistance, when it was clear that the triage guidelines were not met?**

As discussed above, I understand attempts were made to gain additional assistance, but that these attempts were either incomplete (a return call was not received) or minimally effective (only some patients could be moved). I, like many Emergency Department practitioners around the country, am well aware of how difficult it is to manage a situation of Emergency Department overload of this type. Considerable and increased effort is required internally to get through the overwhelming workload and at the same time, attempts need to be made to lessen the external influences contributing to the Emergency Department overload. This will be discussed further.

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- **Whether the Director of Emergency Medicine should have ensured that referral and consultation systems between General Practitioners and Emergency Department Medical Admitting teams were appropriate?**

This issue has been discussed by the Director of Emergency Medicine and it is clear that attempts have been made to improve the process of patient flow from the community to inpatient admitting teams. The Emergency Department is an integral part in such a system of patient flow, but it cannot claim to control the system. It must be remembered that the Medical Admitting Teams are not Emergency Department Medical Admitting Teams, but are teams from other departments in the hospital, who use the Emergency Department as a venue for assessing their acute admission patients. In this respect, Emergency Medicine Directors around the country have the frustrating problem of incomplete influence over what happens in their departments. It is my view that it is the responsibility of the General Practitioners, the Emergency Department Director and the inpatient admitting teams to ensure that referral and consultation systems are appropriate, and not the responsibility of any one individual or department.

- **Whether the Director of Emergency Medicine should have responsibility to ensure that junior doctors were adequately trained to take a patient referral status over the telephone?**

In reference to this case, the Director of Emergency Medicine has limited influence over the activities of a house surgeon in a medical team. This question is more relevant to the Director of General Medicine.

- **Whether the Nurse Manager had a responsibility to ensure that Triage Nursing staff were adequately trained to ascertain a patient's triage status?**

The Nurse Manager does have such a responsibility, but in this case it appears the Nurse Manager had undertaken that responsibility appropriately, despite difficulties in doing so related to resources and access to education. I must emphasise again that, in this case, the triage assessment and the initial triage of category 3 were appropriate. The fact that [Mr A] had to wait far longer than he should have for triage and for medical care was inappropriate, but was not directly a consequence of problems with triage. This will be discussed further.

Conclusions and Discussion

[Mr A] died of a massive pulmonary embolus. He had a large deep venous thrombosis and it is apparent that he had been having small pulmonary emboli prior to presentation to [the hospital], and he had a large pulmonary embolus while waiting for medical care in the Emergency Department waiting room. It must be noted that instigation of appropriate medical care for his deep venous thrombosis 2-3 hours earlier may have made no difference to his outcome. Indeed the medical team assessing him may well have investigated him for pulmonary embolus and might not have started any treatment prior to his large pulmonary embolus. However, it remains a possibility that earlier medical assessment may have been sufficient to save [Mr A's] life.

The only aspects of care below an acceptable standard that I can identify are that he had to wait too long for triage by a triage nurse and he had to wait too long for medical

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assessment. I cannot find any fault with individual aspects of [Mr A's] care, including the assessment and referral by the General Practitioner, the acceptance of the referral by the Medical House Officer, the triage of [Mr A] as triage category 3 and his attempted resuscitation.

In regard to other criticisms of his care, it appears that he was reassessed in the waiting room, although this reassessment may have been cursory. It also appears that staff attempted to get additional assistance to deal with the workload, although these attempts were limited and largely unsuccessful. It also appears that staff attempted to get [Mr A] into the department earlier, but these attempts were limited by a lack of space in the department and on one occasion, by being unable to locate [Mr A] in the waiting room. These limitations, and the major deficiencies related to waiting times are all a consequence of the fact that the Emergency Department was overwhelmed.

Two important points need to be made here. The first is that overwhelming, or overcrowding of Emergency Departments, is a problem throughout New Zealand and I am unaware of any Emergency Department in this country that manages to see their patients consistently according to the standards defined by the triage waiting times indicator thresholds. Secondly, the overwhelming of the Emergency Department on the night that [Mr A] presented was clearly not peculiar to that night and there is correspondence in the documentation I received, attesting to the frustrations, the low morale, and the concerns about patient safety of the Emergency Department staff. The comments that follow therefore are pertinent to [the hospital's] Emergency Department, but indeed have national relevance.

Emergency Department overcrowding is a common phenomenon and has a number of consequences which infringe the rights of patients in terms of access to care and standards of care provided. When departments are crowded, patients wait a long time for triage and for medical assessment. The nursing resource is spread more thinly and nursing observations and interventions occur less frequently and less promptly than desired. Medical staff in the Emergency Department are rushed and decisions, assessments and medical interventions may be rushed or truncated as a consequence. The contributors to Emergency Department overcrowding can be considered in three categories.

The first category relates to the patient-load coming in the door, and there are a number of interventions which can be utilised to try and reduce the demand, such as the provision of robust community After Hours Services, and patient education. The second category relates to the Emergency Department resource itself, and includes the physical space for patient care, as well as the human resource for managing patients. The third category relates to the ability to get patients out of the department, particularly in to hospital beds. The difficulty getting in to hospital beds may be related to the bed resource, including nursing staff numbers, or may relate to systems which involve the need for inpatient teams to complete a prolonged work-up of the patient in the Emergency Department.

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In [the hospital's] Emergency Department, as in many Emergency Departments in this country, it is clear that the second and third categories are significant contributors to overcrowding (the contribution of the first category is unknown from the documentation I received). It is clear therefore that solutions to Emergency Department overcrowding, and the consequent poor standards of care, are not purely the responsibility of Emergency Departments, but require a consolidated response from the Emergency Department, pre-hospital care and inpatient care.

Piecemeal attempts to solve the problem will have transient or limited effect and the example of providing two extra Emergency Department beds without an increased nursing resource to manage those beds, is testament to this.

[The hospital's] Emergency Department has adequate expertise and leadership, in the form of [Dr H] and the senior nursing staff, to devise local solutions, but in general terms the following initiatives are worthy of exploration:

1. Patient education and the provision of robust acute After Hours General Practitioner Services, to limit the requirement for Emergency Department care.
2. A well resourced Emergency Department with adequate space, nurses and doctors to undertaken the specialist task of a modern Emergency Department.
3. Systems of patient flow which maximise efficient use of space, and minimise duplication of patient assessment. This would usually involve the Emergency Department as the central conduit for all acute admissions, and the Emergency Medicine staff as the doctors receiving the initial referral and undertaking the initial assessment and stabilisation then the definitive 'work-up' of the admitted patient would occur in a setting outside the Emergency Department.
4. Systems and sufficient capacity to allow the dispatch of patients from the Emergency Department to inpatient beds without delay. This includes initiatives to free up the existing inpatient bed resource, such as discharge policies, discharge lounges, day of surgery admissions and early access to rest home and nursing home beds.

Clearly these initiatives require a commitment to improving the Emergency Department overcrowding problem by many who are not directly troubled by it. To ensure [the hospital] resolves the contributors to [Mr A's] poor care requires a leadership and authority at least at the level of the DHB. To remedy this problem nationally requires direction from the Ministry."

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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

Mr A's wait for five hours at the hospital's ED before he received medical attention was clearly unacceptable and may have contributed to his tragic death. However, I am guided by my advisor's advice that no individual aspects of Mr A's care, including the assessment and referral by the general practitioner, the acceptance of the referral by the medical house officer, the triage of Mr A as triage code 3, and his attempted resuscitation, can be faulted. While bearing in mind the significant issues concerning the risks of an overcrowded and understaffed ED that this case raises, I have accordingly formed the opinion that no one individual breached the Code in this case. My reasons for forming this opinion follow.

Dr B

In my opinion Dr B provided services with reasonable care and skill and did not breach Right 4(1) of the Code.

Mrs A's complaint is that Dr B was too inexperienced to assess Mr A's status from Dr C and should have consulted senior medical staff about his condition and discussed appropriate management. Furthermore, Dr B should have told ED medical staff about Mr A's pending arrival.

Dr B was aware that Mr A was coming to ED with a DVT. He did not consider Mr A an urgent referral because Dr C said that he was stable and did not suggest that he had a pulmonary embolism. In Dr B's mind, Mr A had an uncomplicated DVT and was coming to ED for evaluation in the usual way. He telephoned ED reception with Mr A's personal details and diagnosis. He did not discuss Mr A with ED nursing or medical staff because it was not the hospital's usual practice to do so unless the general practitioner suggested that the patient could require urgent medical attention.

Dr I had diagnosed Mr A's DVT by Doppler scan and reported his findings to Dr C. Dr C discussed the scan results with Dr B but had not seen the chest x-ray. Dr C explained Mr A's medical history of hypertension, medication, his recent increase in breathlessness on exertion, which could be congestive heart failure, and his recent gout. I am satisfied that Dr

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C conveyed the seriousness of Mr A's immediate clinical situation and his need for urgent treatment.

My advisor agreed that, as a general rule, junior doctors lack the skill to recognise the severity of an illness and the urgency with which medical treatment is needed, and lack the intuitive ability that comes with experience. My independent emergency medicine specialist advised me that, contrary to Dr H's advice, Dr B had the skill and experience to assess Mr A's referral. Dr C was an experienced general practitioner who had examined Mr A and considered that his breathlessness was due to heart failure, whereas it is likely that he had had pulmonary emboli hours or even days before.

My advisor indicated that despite his opinion that Dr B acted reasonably, in this setting it is extremely important that the accepting team, who have taken information from a general practitioner, communicate this information to the receiving team (the ED doctors and nurses) so that they are aware of the relevant information and the plan for patient management. Nevertheless, it is unlikely that a more senior person on the end of the telephone would have done anything differently to Dr B when he took the call from Mr A's general practitioner. I accept my advisor's report.

In my opinion it was reasonable for Dr B to rely on the general practitioner's advice and assume Mr A was being referred to ED with an uncomplicated DVT. Accordingly, Dr B did not breach Right 4(1) of the Code.

Ms D

In my opinion Ms D provided services with reasonable care and skill and did not breach Right 4(1) of the Code.

Mrs A's complaint is that Ms D did not adequately assess Mr A because she did not take the results of his Doppler scan report or Dr C's referral letter into account. As a consequence, Ms D's allocation of triage code 3 was incorrect. Furthermore, Ms D did not raise Mr A's triage category while he waited for medical assessment.

Initial triage category allocation
The hospital informed me that a triage nurse would be expected to look at all information, including radiology reports, as a part of her triage assessment. The sentinel event investigation indicated that Ms D did not seem to have taken into account Dr I's radiology findings, which clearly identified the DVT, when she completed her triage assessment.

Dr C's referral letter was brief and did not signal the need for urgent medical treatment, since he had already conveyed the urgency of the situation during his telephone call to Dr B. Ms D did not read the radiology report because, due to the number of arrivals in ED waiting for triage, she did not have time. Ms D assessed Mr A at 6.30pm. Ms D took Mr A's observations, which were within normal limits, and recorded that his colour was good with no indication of shortness of breath. Ms D triaged Mr A as code 3, which means that a doctor should have seen him within 30 minutes of Ms D's assessment.

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Although Ms D was too busy to read Mr A's accompanying radiology report, my independent emergency medicine specialist advised me that Ms D's initial assessment of Mr A and allocation of triage category 3 was appropriate.

Reallocation of triage category

Ms D reviewed Mr A at 8.00pm. She documented that Mr A told her his condition was unchanged and he still had the pain in his leg. She did not take any formal observations or raise his triage category. Ms D was expected to triage a maximum of eight patients an hour, yet she needed to triage 14 patients between 5.00pm and 6.00pm. Ms E confirmed that she took the opportunity to quickly assess those waiting at 8.30pm and found no one in distress or needing urgent medical attention.

My independent emergency medicine advisor noted that reallocation of triage categories for patients who have waited beyond their triage time is, in his view, wrong. Triage allocation is a dynamic process, which should be changed as a patient's condition changes. Patients' observations should be taken regularly and the frequency with which observations are taken must be in keeping with the severity of the illness or potential seriousness of the diagnosis. He concluded that if Ms D had taken Mr A's observations at 8.30pm, in all probability they would have been unchanged. Mr A was noted to be unwell about half an hour later.

Triage is a measure of urgency that is independent of other patients demanding services or how long a patient has waited. Triage categorisation is a clinical observation like any other, and is not altered by factors external to the patient. As Mr A was triage category 3 at 6.30pm and his condition was unchanged at 8.30pm, his demand for medical attention was unchanged.

It cannot be established when Mr A developed the pulmonary embolism. Clearly Mr A needed to be seen by a doctor as he had waited several hours in ED with a potentially serious medical condition. However, his medical condition, when Ms D saw him at 8.30pm, gave her no reason to alter his triage category or seek immediate medical attention. For these reasons, in my opinion Ms D acted appropriately and did not breach Right 4(1) of the Code.

Ms E

In my opinion Ms E provided services with reasonable care and skill and did not breach Right 4(1) of the Code.

Mrs A's complaint is that Ms E did not adequately assess Mr A because she did not review the results of his Doppler scan report or Dr C's referral letter. As a consequence, Ms D's allocation of triage status 3, with which she agreed, was incorrect. Furthermore, Ms E did not raise Mr A's triage category while he waited for medical assessment and did not seek additional assistance from the operations manager, Ms F, when it became obvious that triage times had not been met.

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Triage category – initial assessment
I have addressed the issue of alteration of triage category above. However, the circumstances of this case, as noted by my independent advisor, suggest that the issue is not one of triage category. My independent specialist in emergency medicine advised me that when Mr A was not seen by a doctor within 30 minutes (triage 3 time frame), his case should have been discussed with the emergency doctor because he was being denied access to medical care.

Ms E and the emergency doctor, Dr J, discussed Mr A at about 8pm and they agreed that he needed to be seen by a doctor as soon as possible. There was no bed immediately available but two beds were becoming free at about 8.30pm. Ms E went into the waiting room to notify Mr A but she could not find him. If he had been in the children's waiting area, he would not have heard her or been seen by her.

Additional assistance
As the nurse co-ordinator in ED, it was Ms E's role to find beds for patients in ED. She did this by assisting the flow of patients through ED, either for transfer to the ward or discharge home. She was in constant communication with the operations manager, Ms F, as well as with other departments within the hospital, and with patients and their families in the waiting room.

Ms F recalled that, to her knowledge, the longest wait between a request for a bed and availability was 20 minutes and she was not informed that triage times were not being met.

Ms E does not recall whether she informed Ms F about the backlog of patients waiting for a bed or that triage times were not being met because this situation was not unusual. She had to make beds available for sick children and for patients coming to the hospital by ambulance. This meant that fewer beds were available for adult patients. Earlier in the shift she obtained additional nursing assistance, although this was limited, and did not solve the problems incurred by overwhelming patient numbers and the backlog of patients waiting for a bed. Ms E attempted, unsuccessfully, to contact Ms F to inform her of the situation when she returned to ED sometime after 8.00pm.

There is evidence that the chronic shortage of beds in the ED had been discussed at senior management level. On the night of 6 June, Ms E did not specifically tell Ms F she needed a bed for Mr A because it was not unusual for patients to wait beyond their triage times; in fact it was so usual as to be considered normal practice. There were competing priorities for beds in ED at a time when Mr A's condition remained unchanged.

I accept my advisor's conclusion that Mr A was perceived to have an uncomplicated DVT and that Ms E was powerless to cope with the overwhelming patient demand operating at the time. In my opinion, in these circumstances Ms E responded appropriately and did not breach Right 4(1) of the Code.

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Mrs G

In my opinion Mrs G provided services with reasonable care and skill and did not breach Right 4(1) of the Code.

The complaint against Mrs G is that she failed to ensure that triage nurses were adequately trained.

As Nurse Manager, Mrs G had a responsibility to ensure that the nurses she was supervising were appropriately trained in triage assessment. Mrs G used the College of Emergency Nurses education programme for formal education of basic triage training of ED staff. However, she had some concerns about whether the College's programme was able to keep up to date with changing demands in patient management. In her opinion triage training could not be covered in the two-day programme. She approached colleagues and the nurse educator at another public hospital, who undertook to raise the issue with the College.

I am satisfied that Mrs G carried out her responsibilities appropriately and did not breach Right 4(1) of the Code.

Dr H

The complaint against Dr H is that she failed to ensure that the referral system between general practitioners and the ED medical team was appropriate, and that the junior admitting doctor was adequately trained to ascertain a patient's referral status.

Referral system between GPs and the ED
The evidence indicates that Dr H was not responsible for ensuring that the referral system between general practitioners and the hospital's Emergency Department functioned effectively. The practice was that general practitioners referring patients to the hospital would contact the admitting house surgeon, who would use the ED to review the patient and decide whether to admit to the ward or discharge. The admitting house surgeon was answerable to the medical consultant. In Dr H's opinion, with which I concur, this made the line of accountability uncertain.

Training of junior medical admitting doctors
As Clinical Director of Emergency Services at the hospital, Dr H's role was limited to managing patients who either self-referred or were brought to ED by ambulance. General practitioners wishing to admit acute patients spoke directly to the admitting house surgeon, a member of the inpatient medical team. My independent emergency medicine specialist noted that inpatient medical admitting teams are not emergency department medical admitting teams, but are teams from other departments in the hospital that use ED as a venue to assess their acute patients for admission.

Dr B was a member of the inpatient medical team. As admitting doctor for the medical team, he reported to the Clinical Director of General Medicine, not the Director of Emergency Services. Accordingly, it was not Dr H's responsibility to ensure that Dr B was adequately trained to assess a patient's referral status. Dr H considered that it was not

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appropriate for very junior doctors to take telephone referrals without supervision, and would have preferred all referrals to go directly to the senior ED doctor; however, the matter was beyond her control. It is, however, clear that Dr H raised this issue and made attempts to improve the process for admission of patients.

In my opinion Dr H responded appropriately in a difficult situation as Clinical Director of Emergency Services, and did not breach Right 4(1) of the Code.

Opinion: Breach

The public hospital

My independent emergency medicine specialist advised me that the only aspect of Mr A's care that fell below an acceptable standard was that he had to wait too long for triage assessment and too long for medical attention. This occurred because ED did not have the capacity to cope with the number of patients attending, which impacted on Mr A's ability to access hospital services, and on the standard of care he received.

Overcrowding in ED occurs in many hospitals in New Zealand. The evidence suggests that overcrowding at the public hospital was not unusual. It was so "usual" that staff had raised the issue with hospital management some time before, and the Chief Executive Officer had conveyed the hospital's concerns to the Director-General of Health.

I note the following points:

- The lack of beds in the ED was first raised with the Regional Health Authority Secondary Services Report in 1994. The report predicted that by 2001 the hospital would be "significantly under bedded causing potential delay in patients accessing beds acutely". Mr K advised me that a new ED opened in November 1999 with significant increase in ED bed numbers and staff.

- In September 2000 the hospital's Emergency Nurses had a discussion with the Chief Executive Officer regarding their serious concerns about safe staffing levels in the ED.

- In mid-December 2000 things had not improved, and a letter was signed by many ED nurses and doctors and sent to the General Manager of the hospital, outlining their concerns. The management response in late January 2001 was considered inadequate by staff.

- In March 2001 Dr H assisted in a report to the hospital in which she identified that the current bed capacity in the district fell short by 100 (according to international standards).

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- In a letter dated 7 June 2001 to the Chair of the District Health Board, ED nurses indicated that numerous incident forms had been sent to management identifying areas of unsafe staffing levels and noted that there had been little response and no support from management.

- Mr K provided evidence that ED non-clerical staffing numbers increased significantly between June 1999 and 2002, sometimes in excess of the budget. Between December 2000 and February 2001 the Nurse Manager in ED and the General Manager met on a number of occasions to develop strategies for managing the nursing resource and maintaining patient safety.

- The Chief Executive Officer relayed the nurses' concerns to the Director-General of Health. In a follow-up letter, dated 19 July 2001, the Chief Executive Officer noted that "the issues were further exacerbated by two unfortunate deaths", and sought additional funding.

It is clear that the issue of understaffing and overcrowding of the hospital's ED, and the associated risks for patient safety, were brought to the attention of the District Health Board as early as 1994, and more recently from September 2000. Despite the hospital's response to the concerns, it is highly unsatisfactory that the issues remained unresolved. The tragic potential consequences of understaffing and overcrowding are evident in this case.

My advisor noted that, in general terms, the causes of overcrowding in EDs fall into three categories: the number of patients attending ED at any one time; the adequacy of ED in terms of physical space and staff available to cope with the numbers; and the ability to move patients out of ED into hospital or the community. It appears that issues related to the second and third categories significantly impacted on the care Mr A received.

In my opinion Mr A did not receive an appropriate standard of care at the hospital's ED on 6 June 2001. If a solution to these problems is to be found there must be a combined effort between the community, Emergency Department management and inpatient services. There is sufficient local expertise to devise an appropriate solution.

Although I am satisfied that individual staff members provided reasonable care, the hospital must accept responsibility for the system that failed Mr A. Accordingly, in my opinion the hospital breached Right 4(1) of the Code.

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Recommended actions

I commend the hospital on the steps it has taken to limit ED overcrowding. However, my advisor indicated that ad hoc solutions will have a limited effect. I recommend that the hospital take the following actions:

- Bring together its senior management, medical and nursing personnel to address the issues raised by my advisor to limit ED congestion: community after-hours services and patient education; physical space and personnel to manage patient load; and the ability to exit patients from the ED (currently exacerbated by the need for inpatient teams to complete a prolonged work-up of patients in ED).

- Work with local general practitioners to implement an effective system for a single portal of entry system for GP referrals for acute admissions to the hospital.

- Ensure that clear protocols and guidelines are in place to deal with GP referrals for acute admissions to the hospital.

Further actions

- A copy of this report will be sent to the Medical Council, the Nursing Council, the Director-General of Health and the Minister of Health. I will request that the Director-General of Health arrange for the Ministry of Health to audit the public hospital and advise me by 30 June 2003 of the steps taken to implement my recommendations.

- A copy of this opinion, with personal identifying details removed, will be sent to the Australasian College of Emergency Medicine (New Zealand Faculty); the Royal Australasian College of Physicians; the Deputy Director-General, Clinical Services; Ministry of Health (for distribution to all District Health Boards); and Quality Health New Zealand, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

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Appendix 1 – Guide to Adult Acute Admissions – The public hospital

Guide to Adult Acute Admissions
Hospital

Is your patient so sick that they MUST go to the Hospital ?

Ring

for routine enquiries

Ring XXXXXXX Direct-Dial to Admissions Call Desk

Speak to the Specialist Nurse who receives all calls

There will be a short electronic queue if necessary. **Fax Admitting Letter** and **Send Patient to Emergency Department with Admitting Letter** before Phone Call is completed if there is an inappropriate delay **and you are SURE the patient needs to go.**

- **Give your Name and your Phone number**
- **Give Patient Details**
  - Name
  - DOB
  - NHI
- **Give Brief facts**
  - Working Diagnosis if obvious
  - Brief History
  - How sick is the patient? Your level of concern (details over page)
- **Say what Inpatient Speciality Service you anticipate being required**
  - Eg Orthopaedic,
  - Patient will be transferred to appropriate Clinical Team
- **Ask for connection to Emergency Medicine Specialist** if needed regarding immediate care concerns for when the patient arrives at ED.
- **You will be asked to Fax Admitting Letter to XXXXXXY if at all possible** (details of minimum information below) **if not already sent.**
- **Be immediately available to receive back a phone call** if necessary (eg Hospital Doctor may need more information)
- **Send Patient**

Admitting Letter Essential Information

Admitting Doctor's name and contact phone and fax
Usual GP's name (if different)
Patients Name
DOB
NHI if possible
Presenting Problem and brief history
Pertinent examination findings
Working Diagnosis and Level of Concern
Pertinent past history
Current medication
Allergies

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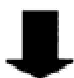
Back Page- Explanatory Notes

How Sick is the Patient? (Your Level of Concern)

Code RED

Dangerously sick or potentially so (Grave Concern)

No



Need immediate assessment when arrives at ED
Whether a diagnosis is obvious or not
Eg , Myocardial Infarction, suspected meningoccal Disease

Yes → Ring

Code ORANGE

Very sick or potentially so (Serious Concern)

No

Not apparently in immediate danger but needing assessment and sorting within 30 minutes
Whether a diagnosis is obvious or not

Yes → Ring

Code

Moderately Sick (Some Concern)

No

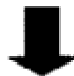
Certainly not able to be looked after at home
or
Not able to go home or stay at home without an emergency assessment and Inpatient Specialty advice

Yes → Ring

Code BLUE

Sick (Routine Concern)

No



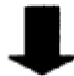
May even be moderately sick but can probably be looked after at home, after Inpatient Specialty advice

Yes → Ring
To discuss the problem and seek advice

Code GREEN

Not very Sick (Not Immediately Concerned)

No



But need to be seen at ED and be assessed or investigated by ED the same day, but are able to wait their turn

Yes → Ring

Routine Enquiry Yes → Ring
(Hospital Switchboard)
Ask for the relevant person to give the advice you seek. Eg Medical Registrar

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

Dear Doctor/ Nurse/Practice Manager,

PLEASE READ THIS LETTER- DO NOT BIN IT WITHOUT READING IT

We are about to change the way that GPs admit adult patients to Hospital.
Problems clearly evident with the current system include the age-old questions of:

- Who Ya Gonna Call? Is it surgical or is it medical?
- Waiting for the right person to be found. Often a contest to convince that person that your opinion is worthy
- Delays and glitches once your patients reaches ED resulting in some really sick people not getting the early attention they have needed, in spite of your efforts to convey the facts.

We will trial a new admitting system, which addresses these issues, for a period of some months and then evaluate it. You will receive full details in Mid November, including a coloured laminated sheet for every GP's desk. We will get you to do a quick "how are things now" assessment at that time, before we start. . This letter is simply a warning to open the batting.

The Plan

- **Routine enquiries to Inpatient Specialist Teams to seek advice** will continue, as now via the main switchboard.

but

- When a **GP is sure that a patient needs admission** then **they ring a dedicated Admissions Number** to the Admissions desk where a Specialist Nurse will take the Patient Details, brief facts and **your assessment of how sick the patient is and your level of concern** (we will have a simple man's system for grading this). You will be usually be able to **speak virtually immediately to an Emergency Medicine Specialist** or MOSS if you need to relay urgent clinical information.
- **Fax your admission letter** containing relevant information to the Admissions desk on a dedicated Fax number if at all possible (you may have done this first and maybe the patient has already hit the road)
- **Send the admitting letter with patient**
- Be **ready and available** to take a return phone call from the hospital, eg from the Medical Registrar, wishing to expand on some aspect of your patient's history.

The deal is that to get something better then we have to give something better.
Please fire up your electronics to create a form Admission Letter if you have not already done so. Perhaps print off some blanks for House Calls.
The essential fields are (please):

Admitting Doctor's name and contact phone and fax
Usual GP's name (if different)
Patients Name
DOB
NHI if possible
Presenting Problem and brief history
Pertinent examination findings
Working Diagnosis and Level of Concern
Pertinent past history
Current medication
Allergies

I will be in touch further. Contact me with any questions at [...]

Regards,

[Dr C]

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