Counties Manukau District Health Board General Practitioner, Dr D

A Report by the Health and Disability Commissioner

(Case 08HDC17125)



Overview

District Nursing Service

Mr A (aged 83 years) suffered from a chronic leg ulcer and, from January 2008, for several months, nurses from the district nursing service visited Mr A's home frequently to review and dress the ulcer. By the time Mr A was admitted to Franklin Memorial Hospital (FMH) in mid 2008 he was suffering from three ulcers on one leg and one ulcer on the other leg.

Dr D and Franklin Memorial Hospital — mid 2008

On Saturday Mr C came home to find his father, Mr A, cold, confused and unsteady on his feet. There was also evidence of a significant amount of diarrhoea in the bathroom. Mr A was taken to the medical centre. He was seen by Dr D, who decided to admit Mr A to FMH (the local hospital) for further assessment and observation.

Once Mr A was settled in a bed at FMH, Dr D completed a more comprehensive examination of him and made a provisional diagnosis of a chest infection. Dr D prescribed oral antibiotic treatment and requested blood tests for Monday.

Over the next 70 hours, Mr A began to exhibit significant signs of deterioration, yet it was not until his blood test results became available (at 4.30pm on Tuesday) that staff were alerted to the seriousness of his condition. The results of the blood tests indicated acute renal failure and sepsis, and Mr A was taken to Middlemore Hospital (MMH) by ambulance. Due to the advanced stage of his renal failure and sepsis, clinical staff at MMH could provide only palliative care, and Mr A died on Thursday.

Complaint and investigation

On 15 October 2008 the Health and Disability Commissioner (HDC) received a complaint from Mrs B (Mr A's former wife) about the services provided by Dr D and Counties Manukau DHB (Franklin Memorial Hospital and the district nursing service) to Mr A. The following issues were identified for investigation:

- The appropriateness of the wound care provided to Mr A by Counties Manukau DHB between January and the time of his death.
- The appropriateness of the care provided by Dr D to Mr A over four days in mid 2008.
- The appropriateness of the care provided by Counties Manukau DHB to Mr A over four days in mid 2008.

An investigation was commenced on 15 January 2009.



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The parties involved in this case are:

Mr A	Consumer
Mrs B	Complainant/consumer's former wife
Mr C	Consumer's son
Dr D	General practitioner/on-call doctor
Dr E	General practitioner/on-call doctor
Dr F	General practitioner/on-call doctor
Ms G	Registered nurse
Ms H	Registered nurse
Ms I	Registered nurse
Ms J	Registered nurse
Ms K	Registered nurse
Ms L	Registered nurse
Ms O	Enrolled nurse
Ms N	Registered nurse
Ms M	Registered nurse
Counties Manukau DHB	Funder/manager of Franklin Memorial
	Hospital and the district nursing service

The following information was reviewed:

- Complaint from Mrs B
- Mr A's clinical records
- Response from Dr D
- Response from Dr F
- Response from Dr E
- Response from Counties Manukau DHB

Independent expert advice was obtained from Dr Robin Bowman, who works in both general practice and palliative care. Her advice is attached as **Appendix A**.

Information gathered during investigation

Mr A

In January 2008, Mr A was aged 83 years and living by himself, although his son Mr C would stay two to three nights a week. Mr A was not completely independent. He suffered from a chronic leg ulcer and, in January 2008, he was admitted to the district nursing service, and was visited two to three times a week by nurses who would clean and dress his leg ulcers. He also received meals on wheels and was visited daily by his former wife, Mrs B, who would assist Mr A with his medication and domestic needs.



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Wound care by the district nursing service

The district nurses visited Mr A at his home 65^1 times between 13 January and his admission to FMH, to review and dress his leg ulcers. When Mr A was admitted to FMH, he was suffering from three ulcers on one leg and one ulcer on the other leg.

Complaint about wound care

Mrs B complained that Mr A's leg ulcers "seemed to be getting worse, and causing more pain as time has been passing". She was concerned that she had not been contacted by the district nurses about any increase in the size or number of Mr A's leg ulcers, despite providing her contact details to the District Nurse Service and writing them on a note pad on the fridge.

Summary of wound care

Counties Manukau DHB manages the district nursing service. It provided a summary of the care provided to Mr A by the district nurses which included the following:

"The district nurse visited mostly three times a week — more often if the wound was showing sign of infection or more than usual exudate.² Care was hampered at times by [Mr A's] inability to shower his leg effectively. He was occasionally forgetful and there are reports of the support that he received from his wife. A variety of products were tried to manage his varicose eczema. A Doppler assessment³ was completed on [18 April 2008] which resulted in the ankle brachial pressure index⁴ readings being outside the boundaries for compression bandaging. From [1 May 2008] progress reports [noted] a much improved lower leg following the introduction of a trial of Zipzoc.⁵ [Mr A] seemed to be managing his showering better. Referred to the vascular service. [Mid 2008] last visit by [district nurse] nothing remarkable noted, wound was satisfactory."

Response from Counties Manukau DHB

In response to the complaint, Counties Manukau DHB advised:

"The district nurses were aware that [Mrs B] did not live with [Mr A] and that their son lived with [Mr A]. There was no contact with [Mrs B] or [Mr C], his son, during the course of the district nurse intervention. [The district nurses] did not have [Mrs B's] contact details and [Mr A] was unable to remember them when asked.⁶ There was no concern regarding his well being as it was obvious that [Mrs B] visited regularly and was supportive of her husband.

The district nurses did not feel that [Mr A] was at any stage unable to make a decision or that they had any concerns that necessitated them to contact his next of kin.



¹ Mr A was not at home on five of these occasions.

² A fluid rich in protein and cellular elements that oozes out of blood vessels due to inflammation.

³ A measurement of the blood flow in the artery.

⁴ The ratio of the blood pressure in the lower legs to the blood pressure in the arms.

⁵ A stocking containing zinc oxide to soothe and promote the healing of chronic leg ulcers.

⁶ Mrs B disputes this. She advised HDC that she was at Mr A's home on two occasions when a district nurse arrived. She spoke to the nurse, and showed her the note pad on the fridge door which contained her home phone number, cell phone number and address.

No arrangements were made with the district nurses for updates on [Mr A's] ulcer progress to [Mrs B]. A welcome booklet to our service was left at his home with the contact numbers for the district nurses.

They were not aware of phone numbers [on] the fridge door as they visited [Mr A] in his bedroom and did not walk past the fridge. They left details of their next visit on a pad he had by his bed.

The clinical record details the wound care and there is no mention of any social concerns or comments. Speaking with the two primary district nurses both felt that [Mr A] was managing well, neither of them felt that he was at risk or that there were any concerns to contact his family.

Both felt that he was likely to be on our books for a considerable time as this type of ulcer is very difficult to heal. This is the reason that a Doppler assessment was requested to ascertain if he was suitable for compression bandaging ... Unfortunately the assessment showed that his reading [was] outside the [Counties Manukau DHB] guidelines for compression bandaging ... A letter detailing the results was sent to [Mr A's] GP with a request for a vascular referral."

Counties Manukau DHB also advised:

"[Mr A] discussed with the district nurses his social situation and his relationship with his wife which was close and amicable although they did not live together. [Mrs B] was recorded as being his next of kin, but the address on the notes was the same as [Mr A's]. Over the time that [Mr A] was in the care of district nurses, contact was made by the service with his wife only once, when it was suggested that she may like to assist with his wound care by supporting him with showering prior to the dressing change. This was declined by [Mrs B] and her decision was respected. At no time during the period in which district nursing care was provided did the staff feel that [Mr A] was unable to make decisions for himself or that he was unsupported, and there was frequent evidence of his wife and son's presence and of the support they were providing him."

Further information

The district nurses kept notes of each visit, detailing the date and time of the visit, a description of the wound and the treatment given, and any follow-up arrangements. Some entries noted that instructions for Mr A were put on his fridge for him to refer to.

Saturday — The Medical Centre

On Saturday, Mr C visited his father and found him in a cold and confused state at home. There was also evidence that Mr A had had a bad episode of diarrhoea. Mr C telephoned Mrs B, who lived five minutes away, and asked her to come urgently.

On arrival Mrs B noted that Mr A could not stand unsupported and was shaking violently. Mrs B also recalls there being a large amount of diarrhoea on the toilet floor, bedroom carpet and through Mr A's discarded clothes. Mrs B returned home (as Mr A did not have a telephone) and called the Medical Centre. She made an

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appointment with Dr D at the Medical Centre for that afternoon. When it was time to take Mr A to the appointment, he required assistance from his house to the car and from the car into the Medical Centre. Mr A was assisted with a wheelchair at the Medical Centre.

At the consultation, Dr D noted that Mr A was a "difficult historian" and therefore the events of that morning were relayed by Mrs B. Mrs B claims she described to Dr D the condition Mr A had been in when she found him, including the severity of his diarrhoea. Dr D disputes that the volume of Mr A's diarrhoea was ever described to him, only that "he had an unspecified bout ... and this was smeared around the bathroom". His clinical notes record "... evidence of diarrhoea ++ in bathroom".

Mrs B also advised Dr D that she had visited Mr A the previous morning and he "seemed OK", although she thought he had been more confused during the week. She noted he had left the stove on and raised with Dr D a concern that Mr A might not have been taking his medication or eating his meals (she advised that there were five uneaten meals in the fridge).

Dr D attempted to establish Mr A's mental alertness by asking him simple questions about his meals, his date of birth, where he was and what month it was. Dr D recalls that Mr A answered the questions correctly and gave a "lucid explanation for his meals piling up". Nevertheless, Dr D formed the opinion that while Mr A was quite capable of having a sustained normal conversation he was "very subtly confused".

As Dr D did not know Mr A, he was unable to determine if Mr A's level of confusion was normal for him, or whether it had worsened in the last week. This was compounded by conflicting statements from Mr A's family members. Mrs B gave Dr D the impression that Mr A had had some long-term confusion but this had worsened over the last week. However, Mr C said that his father "always nods off like this".

After observing Mr A and taking his history, Dr D concluded that Mr A "had a vague illness, with weakness, mild dehydration, a fever and very very subtle confusion". Although Dr D did not believe Mr A was sick enough to be admitted to MMH, he did not think he was well enough to go home alone. Based on this assessment, Dr D arranged for Mr A to be admitted to FMH for further assessment and observation.

Franklin Memorial Hospital

FMH is a rural 18 bed hospital. It is managed by Counties Manukau DHB. FMH is staffed by nurses. There is no resident doctor at the hospital, but support is provided by three doctors from the Medical Centre. Each weekday morning a doctor from the medical centre attends FMH to perform ward rounds, assess patients as required, and respond to concerns raised by nurses. Doctors at the Medical Centre are also available from 8.30am to 10pm for advice over the telephone and will come into the hospital for acute hospital assessments when required. After 10pm, on-call support is provided by local doctors. On the weekends, doctors from the Medical Centre visit FMH if needed, but there are no formal ward rounds.

Dr D described how the doctors at the Medical Centre utilised FMH:



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"In [this town] we have the advantage (or disadvantage?) of having an extra choice because we have access to a cottage hospital where we have been able to admit locally some elderly people whom we felt could not be managed at home because of some medico-social matter, or minor illness. Instead of having to admit them to Middlemore for something that we felt capable of managing locally, we have an option to treat them near home, which the patient and relatives often appreciated. The advantage for Middlemore lies in giving them the option of an extra bed for a sicker patient ... Very occasionally we have got things wrong and the nursing staff by observation are quick to report if they feel the patient is not responding as expected, or is becoming sicker. On these occasions we have arranged transfer immediately to Middlemore for investigation and treatment."

Dr D further advised that doctors at the Medical Centre:

"... are well aware that [FMH is] not a hospital for acute serious medical conditions and try and limit these admissions to minor socio-medical problems ... It is not our policy to admit patients who need drips or IV antibiotics. These patients should be in Middlemore."

Dr D provided the following information in regard to handover of patient care at FMH:

"There is no resident doctor at the hospital and no formal in-hospital hand-over arrangement. It would be a very rare scenario for the Saturday or Sunday doctor to have a formal handover to his colleague the next day, because the one stopped work at [10pm] and has gone home, and the new doctor comes on call at 8.30am. For the Sunday doctor the next ward round will be at 8.30am on Monday.

We may leave a written message at the surgery to be read from Saturday to Sunday, or the Saturday doctor can contact the Sunday doctor on the on-call cell phone now in his/her hands. This would generally be about a community patient seen at the surgery who may have left some residual clinical concerns that need to be passed on. FMH patients would rarely be the reason for this; most often this would concern a palliative care patient.

In the case of FMH, theoretically we do not admit any seriously ill patient that should cause clinical concerns and need a formal handover. We do rely on the nursing staff to alert us if they have any concerns. FMH staff have direct access to our on-call cell phone number ... Our FMH staff have never been reticent about contacting us on the weekend or statutory holidays. They are not afraid to ring up the on-call doctor in the middle of the night either."



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Saturday — FMH

On arrival at FMH, the admitting nurse took Mr A's vital signs. His blood pressure and temperature were normal⁷ but his heart rate was fast.⁸ As Dr D was the on-call doctor for FMH that day, he visited Mr A once he was settled in a bed, to undertake further investigations.

Upon arrival Dr D noted that Mr A was eating food and drinking tea. Dr D carried out a full examination of Mr A, noting that his blood pressure and temperature were normal, but he was tachycardic (had a rapid heart rate) and slightly dehydrated. Dr D listened to Mr A's chest and found localised chest noises. He noted that Mr A's leg ulcers were not infected, he did not have leg oedema,⁹ and a test for hypo/hyperglycaemia was negative.

Given the information available to him, Dr D believed the diagnostic possibilities for Mr A could be confined to "something coming on in the last week or over the last 24 hrs i.e. occult infection". As the only clinical signs Dr D could elicit for a site of infection were chest noises at the base of the left lung, Dr D made a provisional diagnosis of chest infection.

In accordance with his provisional diagnosis, Dr D started Mr A on oral antibiotics. He also made treatment orders to increase fluids, check blood sugar, and check temperature four times a day. If possible, nurses were to collect a mid-stream urine sample, and blood tests¹⁰ were to be ordered for Monday. Dr D believed Mr A would improve over the next 24 to 48 hours with this treatment and had no further contact with him. Dr D said he was not concerned that he did not have access to rapid blood test results or chest X-rays because "in general practice we are used to treating on clinical grounds alone, either at home, or in rest homes, or indeed at FMH as long as we know we have good continuous observation".

Mrs B recalls asking Dr D if Mr A could have a drip put into his arm and being told that if he could take liquids by mouth he did not need a drip. Mrs B felt Mr A should have been on a drip immediately because of his severe diarrhoea.

The nursing notes, written at 10pm that night by registered nurse Ms G, provided background on Mr A's clinical and social history. Ms G also noted that Mr A had not passed urine since admission at 5pm. She explained that she was not concerned about his urine output at that stage, but she made a note of it as something to "keep an eye on". Ms G also recalls that she was:

"... quite comfortable having [Mr A] at [FMH]. We thought it was quite an appropriate admission for here, he didn't come across as really really sick, he just needed monitoring."

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⁷ Blood pressure 130/78 (120/80 is considered normal; high blood pressure is when the systolic reading is greater than 140 and/or the diastolic reading is greater than 95); temperature 36.3° C (37°C is considered normal).

⁸116 beats per minute (50–100 beats per minute is normal for an adult. Seventy beats per minute is average for an adult male).

⁹ A build-up of excess fluid in the body tissues.

¹⁰ Full blood count, C-reactive protein, liver and renal function tests.

Sunday — Mrs B's recollection Mrs B recalls:

"Over the next day, Sunday, [Mr A] was unable to hold his drinking glass without spilling it. [H]e also drank and ate little. His leg was troubling him constantly.

•••

On Sunday our son and myself realised [Mr A] was having great difficulty in swallowing liquid. He would choke nearly all the time. He was given a straw, but he kept blowing through the straw, instead of drawing the liquid up. He could not hold a cup or glass. He could not feed himself. He received very little food and very little if [any] fluid. We spent most of the time at the hospital so we observed lunch and tea time meals. He started to sleep most of the time, except the pain in his leg kept making him wake up and moan. I thought at times he sounded delirious ... We could see [Mr A's] health was deteriorating in front of us. We kept asking for a drip to be administered, plus inoculating an antibiotic because of his leg. All we were told was [Mr A] was taking a bit of fluid by mouth and while he was able to do this, there would be no need for any drip. We felt devastated as we felt [Mr A's] health was definitely deteriorating."

FMH clinical records

The notes from the night shift were written by registered nurse Ms H, at 6.30am on Sunday. Ms H wrote:

"Slept most of the night. Briefs changed at 0100[hours] due to diarrhoea. Verbally aggressive towards staff and resisting being moved ? due to fear of being dropped on floor/hurt. Reassurance given."

Ms H explained in an interview one year after these events that Mr A's incontinence briefs were not only soiled with diarrhoea, but also urine. She knew this because "two distinct separate areas were soiled" — his urine was at the front of the briefs and his faeces were at the back.

Ms H also explained that she did not see anything in Mr A's notes to cause alarm; however, she recalls thinking that Mr A might not be drinking as much as he should be, based on what she had read in his notes. She did not think it necessary to wake him up to take fluids as he did not appear dehydrated. She did not believe his fluid intake was of sufficient concern to warrant the commencement of a fluid chart to monitor his fluid intake and output.

Ms H advised that, while she was aware there had been a change in Mr A's level of functioning, it was difficult to establish the degree of his deterioration. She explained that this was partly due to the fact that she saw him only while he was asleep ("at night you get a different picture because people are asleep"), and partly because the staff get to see only a "very small picture" of a patient when he or she is admitted. They rely on the patient's family to fill them in on details about the patient's previous level of functioning. She also noted that, as Mr A had come in "unkempt", it was an

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indication that there had been deterioration in his normal level of functioning prior to his admission.

FMH clinical records for the day shift on Sunday were written by registered nurse Ms I. Ms I noted that Mr A was showered on a shower trolley and that he was:

"... very dirty and had dead skin +++ coming off body ... incontinent of faeces ... Not able to get a urine sample this [morning]. Had to be fed all meals ... Is very, very confused. Spoke with son and wife re [Mr A's] condition. They are concerned about his deterioration ... [Mr A] has slept all shift, woken only to be fed meals and be showered. Had 1x episode diarrhoea early [morning], but nothing since."

Ms I recalls that she wrote "Not able to get a urine sample" because Mr A had passed urine while she was showering him. She also recalls that when she arrived to shower him, his incontinence briefs were wet, as was the bed. She believed it was urine due to the smell.

Ms I had no concerns about Mr A's fluid intake and output as she had seen him taking fluids and passing urine while she was showering him, and the diarrhoea "seemed to have passed".

Ms I advised HDC that she was not told about Mr A's level of functioning prior to his admission, and that she took no steps to find out this information herself.

An account of Ms I's discussion with Mrs B and Mr C is noted under the "significant issues" section of the notes. It states:

"Spoke with son and wife re [Mr A's] condition. They are concerned about his deterioration. Explained that [he] will have tests done tomorrow to see what's going on. Also explained that if he has an infection this can cause confusion and lethargy."

Mr A's wound care notes for Sunday record that the dressings were changed. The skin on his legs was described as:

"... very fragile — large pieces of skin flaking off while showering. Has 3 ulcers on [right] leg. Large one approx 5cm diameter, and two smaller ones approx 3cm long. [Left] leg has small (10c piece size) ulcer, and surrounding skin very red and shiny."

The evening shift records, written by Ms G, note that Mr A was:

"More alert this afternoon ... becoming confused as evening progressed. Incontinent of faeces x1 ... Has eaten small amounts but taking fluids well."

Ms G explained that, at this stage, she was "quite happy for [Mr A] to be [at FMH]" and she "wasn't concerned about him really at all" as he appeared alert, and was talking and taking fluids well. She also knew that elderly patients get confused from



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things as minor as urinary tract infections. As it was suspected that Mr A had an infection, she did not see his confusion as a cause for concern.

Sunday — FMH on-call doctor

On Sunday, Dr E was the on-call doctor from 8.30am until 10pm. Dr E had known Mr A and Mrs B for 15 years and was their family GP. Dr E received no messages from FMH while on call and was not aware of Mr A's admission to FMH until Monday.

Monday — FMH clinical records

The night shift nurse, Ms J, documented her observations at 6.30am on Monday. She recorded that Mr A had not passed urine during her shift, and that fluids were offered to him. Ms J could not specifically recall Mr A when interviewed one year after the event, but advised HDC that it would be unusual for a patient not to pass urine during an eight-hour shift and thought she would have noted it, as something the nurse on the following shift should be made aware of.

Registered nurses Ms K and Ms L (who was the charge nurse) took over from Ms J's shift on Monday morning. Ms K cannot recall what was said at handover, but Ms J would have given her general information about Mr A from her shift. Ms K did not read Mr A's notes from the previous shifts as she did not have time. She believes it is common practice for the nurses to go by what they are told verbally at handover about patients, rather than read the patients' notes from previous shifts.

Ms L recalls being told at handover that Mr A was accepting fluids and had a normal temperature. She also recalls reading Mr A's notes from previous shifts.

Dr E was the duty doctor for FMH that day. He attended the hospital at 8.30am for an hour to conduct a routine ward round and assess patients causing concern. After discussing Mr A with Ms K and Ms L, it was agreed that Mr A did not require review by him, as he was not causing the nurses concern.

Dr E provided the following account of his discussion with Ms L:

"I was informed of [Mr A's] admission, [Saturday], by Charge Nurse [Ms L] who gave me a verbal summary of his admission and progress. The information I received was that [Mr A] had been admitted with a suspected chest infection and had been commenced on oral antibiotics. I was informed that his observations since admission were stable, that he was afebrile and had no respiratory signs of concern, that he was drinking well and taking his medications as prescribed. He was due to have laboratory blood tests [that day] including a full blood count, serum creatinine¹¹ and electrolytes. Following this discussion ... we felt that [Mr A] did not need reassessment at this time and I attended to other clinical tasks at the hospital."

Ms L explained that she would have based her advice to Dr E on both the information she had received at handover from the night shift nurse and information contained in Mr A's chart and nursing notes.



¹¹ A test to evaluate renal function.

Ms K recalls that she also had a discussion with Dr E about Mr A. The information she gave Dr E would have been based on the information she had received verbally at handover from Ms J. Ms K did not write any progress notes during her shift, but did write the following notes under the "Significant Issues" section at 8.50am:

"Given Xalatan eye drops this morning ... Discussed [with] Dr E, no concerns & no new orders."

Although not recorded in the notes, Ms K recalls that she also had to change Mr A's incontinence briefs during her shift as they were wet.

The next notes are recorded at 9pm that night by enrolled nurse Ms O, and state:

"Reluctant to drink. Encouraged fluids. [Has not passed urine.] Son very concerned regarding [Mr A's] rapid deterioration & expressed a wish to discuss this with Dr. Ate small amount of dinner. Required feeding ... Remains confused."

Ms O explained the difficulty she had in determining Mr A's normal level of functioning owing to conflicting accounts from Mr C and Mrs B. Ms O remembers that Mr C was "quite upset" by his father's poor condition, describing how his father had been "OK last week" and had been able to walk into town. However, Mrs B disagreed with Mr C, stating that Mr A "had not been OK last week" and that he had not been able to walk into town for a long time.

Despite the conflicting information, Ms O could see that the family were concerned. She re-read the notes, in search of any further information she could provide them. She remembers reading that there had been no further orders from the doctor that morning and relaying this to Mr C and Mrs B. She also recalls advising them that a doctor would be in at 8 o'clock the following morning if they wished to discuss their concerns, and they replied that they would.

Dr E returned to the hospital that evening to admit two patients:

"After finishing work at [the Medical Centre], I returned to FMH and admitted two new patients to the hospital. Before leaving the hospital between 8.30 and 9pm, I passed by [Mr A's] bed and said hello. I recall that [Mr A] recognised me and addressed me as '[Dr E]' ... Over the course of [Monday] I was not alerted to a change in [Mr A's] clinical condition or new information of concern and I did not examine him."

Blood tests

On admission, Dr D had ordered blood tests to be done on Monday. Ms L advised that the medical laboratory usually came in each weekday between 2pm and 3pm to collect the specimens; however, during her shift on Monday she noted that Mr A's bloods had not been collected. She was surprised by this and called the laboratory at about 2.30pm and asked them to come in to collect Mr A's bloods. She then left for the day, assuming the laboratory would come in. However, the laboratory understood that there were only swabs to be done, and therefore the decision was made that the request could wait until the following day. No other nurse at FMH followed up the

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laboratory again until Tuesday morning, and the bloods were taken at midday that day.

Counties Manukau DHB advised that:

"The Clinical Nurse Manager ... investigated this delay with [the laboratory]. After informing [the laboratory] of this incident, [the laboratory] reviewed [its] processes and ... confirmed [it] will ensure [that] daily visits (Mon–Fri) for the collection of specimen/bloods are adhered to To improve the process of bloods/specimen collection, FMH staff participated in an in-service education session which reviewed this issue and reinforced that blood tests that are taken and awaiting collection be checked on to ensure they are collected daily per [the laboratory's] contract."

Tuesday — FMH clinical records

There are no nursing notes from the night shift for Monday/Tuesday. The nurse on duty, Ms H, advised that she would only write notes if there was something "out of the ordinary" or "untoward" about a patient. As Mr A was not causing her any concern she did not feel it was necessary to write any notes for this shift.

Ms H recalls that she did not have to change Mr A's incontinence briefs that night. She was not concerned by this as she knew that the briefs were designed to last 8–12 hours by removing the urine away from the skin. She also recalls that when she went in to turn Mr A he did not assist with the change of position. She explained to HDC that if a patient is "alert and orientated" he would normally stir, acknowledge you were there, and assist with any change of position. The fact that Mr A did not respond as an alert and oriented patient did not concern Ms H at the time as she recalled that he had also failed to assist with the change of position on the Saturday night. She therefore reasoned that there had been no significant change in his condition and, accordingly, there was no need for concern.

Ms G was the nurse on the morning shift. She cannot recall handover from Ms H but remembers noting that Ms O had asked the family to come in that morning to discuss Mr A with the duty doctor.

Ms G described her thoughts on entering Mr A's room that morning:

"I thought wow, there's been a dramatic change here, there was a huge decline in his condition and I noted that his bloods hadn't been done ... and that really concerned me."

Ms G advised HDC that she called the laboratory to come and collect the bloods. She had to call them quite a few times as she only reached the answer phone, but she wanted to speak directly with someone to request they come in as soon as possible. She decided to take no further action at this stage as she knew the duty doctor was coming in at 8am.

Dr F was the duty doctor on Tuesday. He was requested by the nurses to examine Mr A and provided the following account of his examination:

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"On examination I noted that [Mr A] was confused and had slurred speech. His temperature was 36.4 degrees, pulse 90 and his blood pressure 100/70. An examination of his chest revealed reduced/diminished air entry at the lung bases — the left side was greater than the right side, suggestive of a lung infection … His heart sounds were dual and abdomen was soft — the bladder was not palpable and there was no abdominal tenderness. His legs were covered with dressings … and he had pedal oedema.¹² Neurological examination, especially power/tone reflexes, was difficult to assess due to stiffness of his limbs.

My first diagnosis was a lower respiratory tract infection (LRTI — pneumonitis) with ... differential diagnoses of electrolyte imbalance ... and acute renal failure following diarrhoeal illness.

Blood tests had been ordered on [Monday] however they were not collected by the [laboratory] service that day ... I asked the nurse to arrange to have the blood tests picked up and completed urgently ... In the meantime the management plan was to continue with the oral cotrimoxazole, oral feeding and await results of the urgent blood tests."

Ms G also recalls that during her shift she took down Mr A's dressings for his leg wounds. She recalls that his wounds had been "manageable" when he was first admitted but they had deteriorated significantly and looked "terrible". She asked the enrolled nurse on duty (who had been a wound specialist) to come and have a look and recalls the nurse's reaction:

"She came in and looked at [the wounds], turned around and mouthed 'he's dying'. He was just sort of shutting down."

Ms G agreed with the enrolled nurse, but decided to take no further action as "they were awaiting Mr A's blood results to find out what was going on".

Assisting Ms G with her duties was registered nurse Ms M. Ms M recorded the following notes:

"[Mr A] only responsive to his name, when he opens his eyes ... Bowels opened, very loose. Also wet with urine ... Ulcer on [right] leg inner calf, black, necrotic-looking,¹³ very offensive odour, ooze ... [Mr A] not talking. Wife & son visited ... and spoke with Doctor ... [Mr A] had great difficulty swallowing [medication] ..."

Ms M advised HDC that it seemed to her that Mr A was obviously quite sick. He was underweight, not very communicative, had trouble swallowing, was suffering from quite bad diarrhoea, and his leg wounds looked necrotic. Ms M did not believe any further action needed to be taken at this stage as "[h]e was in the right place for us to care for those things and we were awaiting blood tests".



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¹² Oedema of the foot.

¹³ Necrotic tissue is dead tissue.

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Tuesday — blood test results

The blood test results were faxed to FMH and Dr F at approximately 4.30pm on Tuesday. The results revealed creatinine of 404, indicative of acute renal failure (the normal range being 60–120); raised white cell count (indicating infection); high levels of C-reactive protein (indicating significant inflammation); and platelets "markedly decreased in number" (indicative of significant sepsis).¹⁴

Dr F contacted the on-call medical consultant at MMH, who advised that Mr A should be transferred to MMH for further management of suspected pneumonitis¹⁵ with renal impairment.

Wound care at FMH

There is no record of the dressings being changed on Monday; however, there were only notes for the morning and night shifts (no day and evening shift notes) that day. On Tuesday the ulcer on the right inner calf was described in the nursing notes as "black, necrotic-looking, very offensive odour, ooze". On admission to MMH the admitting nurse, general medicine registrar and intensive care unit (ICU) registrar all described the ulcer as looking infected or necrotic.

Fluid intake and output at FMH

On admission to FMH Dr D noted that Mr A was slightly dehydrated and ordered increased fluids. He did not request that a fluid balance chart be implemented, as he did not consider one was necessary in the circumstances. However, he advised HDC that nursing staff would have commenced a fluid balance chart if he had instructed, and accepts that it was his responsibility to request this.

There is minimal documentation about Mr A's fluid intake or output during his admission at FMH. For instance, there is no record of any steps taken to rehydrate him beyond encouraging small amounts of fluids orally. The only record of Mr A passing urine is on the afternoon he was transferred to MMH (nearly 70 hours after his admission). Despite this lack of documentation, three nurses recalled in interviews a year after the event that Mr A had passed urine during their respective shifts. On admission to MMH Mr A was described by three different staff members (the admitting nurse, the medical registrar and the ICU registrar) as extremely dehydrated and not producing urine.

Tuesday, Middlemore Hospital

On admission to MMH Mr A was initially assessed by a nurse, who made the following notes:

"... Appears very dehydrated, crusty dry lips, ulcers both legs ... catheter bag empty ... tongue coated and dry ..."

Mr A was immediately put on intravenous fluids and was seen by a medical registrar at 9pm. Clinical notes from this assessment include:

¹⁵ Inflammation of the lung.



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¹⁴ A life-threatening illness in which the bloodstream is overwhelmed by bacteria.

"General: Looks really unwell, struggling generally — cachexic,¹⁶ distressed ... Skin: Cold, poor perfusion,¹⁷ cyanotic peripheries¹⁸ ... Other clinical observations: Ulcer, looks infected, raw base, chronic."

Mr A was found to be severely dehydrated, in acute renal failure and suffering from anuria.¹⁹ He also had sepsis, most likely caused by an infected ulcer on his right leg.

The medical registrar's orders were for Mr A to be rehydrated "as intens[ely] as possible"; antibiotics to be administered intravenously; and swabs to be taken from his right ankle ulcer (which was noted to be "necrotic looking" by the admitting nurse). The medical registrar also referred Mr A to ICU for review.

The ICU registrar noted:

"Likely septicaemia source from necrotic ... chronic ulcer on right leg with surrounding soft tissue infection.

Severe volume depletion secondary to diarrhoea ... Dry mucous membranes, cracked lips/tongue, [decreased] skin turgor,²⁰ cachectic looking ..."

The ICU registrar also noted a discussion with Mr C, during which he explained that Mr A's kidneys had ceased functioning and there was nothing ICU could do for him. The best treatment at this stage would be intravenous fluids and antibiotics, both of which could be administered on the general medical ward.

On Wednesday at 12.30pm Mr A was taken for a renal ultrasound scan; however, owing to a sudden deterioration in his condition he was returned to the general medical ward and a medical emergency was called. Mr A was referred back to ICU for review. The clinical notes from the review note:

"... likely [Mr A] has capillary leak syndrome²¹ having now developed oedema and pulmonary oedema²² causing shortness of breath. He is also hypotensive²³ with this and he has developed multi-organ failure.

His outcome is likely very poor and the feeling, having discussed with the ICU team is that aggressive intervention ... will not change his likely outcome."

²³ Abnormally low blood pressure.11 December 2009



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¹⁶ General ill health with weakness and emaciation.

¹⁷ The degree of blood flow.

¹⁸ A bluish discolouration of the skin.

¹⁹ Cessation of urine production.

²⁰ Skin turgor (or elasticity) is measured by observing how long the skin takes to return to its normal position after being pinched. If it returns slowly, skin turgor is said to be decreased and is a sign of moderate to severe dehydration.

²¹ A rare condition where the number and size of the pores in the capillaries are increased which leads to a leakage of fluid from the blood to the tissue fluid resulting in low blood pressure, oedema and multiple organ failure.

²² A condition where fluid accumulates in the lungs.

After discussing the poor prognosis with the family, it was agreed that nothing further could be done for him and Mr A was referred to the palliative care team. Mr A died at 4.45pm on Thursday.

Responses to the complaint

Dr D's response to the complaint

Dr D provided a written response to the complaint. While Dr D admits he failed to correctly interpret Mr A's symptoms and recognise the seriousness of Mr A's condition, he believes that his history and examination of Mr A was adequate in light of Mr A's "subtle presentation". Dr D assessed Mr A as being only mildly dehydrated. Although his elevated pulse rate "was a pointer for a more serious infection", Dr D attributed this to his diagnosis of a chest infection.

Regarding the appropriateness of his decision to admit Mr A to FMH rather than MMH, Dr D explained that it was his belief at the time that Mr A would improve on antibiotics. He was happy to wait until Monday for the blood tests as the nurses at FMH "had a good record of communicating to the on-call doctors any deterioration in general condition or declining hydration".

Dr D was "shocked" to discover that Mr A was transferred to MMH with sepsis and acute renal failure only two and a half days after admitting him to FMH. He acknowledged that "[Mr A] was much sicker than [he] suspected" and added that MMH would have been "the best place for him to go".

Dr D advised HDC that he has made the following changes to his practice since these events:

"In light of [Mr A's] case I am practising with extra caution. It is likely that some loss of confidence in my own diagnostic interpretation of the elderly will lead to more admissions to secondary care in the future. I have been supplied with the MMH PUP score assessment forms (Physiological Unstable Patient). We will be developing this for FMH in association with the Community Geriatrician, and this should help our assessments in any future community admissions."

Counties Manukau DHB's response to the complaint

Counties Manukau DHB advised that it "sincerely regretted" the death of Mr A and it had taken the events "very seriously". After Mr A's death, a Service Manager had met with Mrs B and Mr C to discuss their concerns. This was followed by an internal investigation into the concerns raised and several "gaps" in Mr A's care were identified, including:

- 1. Lack of baseline recordings and lack of follow through from assessments
 - Absence of a fluid balance chart
 - No mention if [incontinence] briefs were wet
 - Dehydration not picked up

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- Dr not alerted to lack of fluids
- Temperature not consistently carried out.
- 2. Documentation
 - Dr notes not time entried
 - No morning shift progress notes
 - No night shift documentation.
- 3. Lab test process and collection
 - The laboratory did not collect bloods for testing in accordance with their usual collection procedure.
- 4. Other factors
 - Two admissions and one discharge on the Monday following Mr A's admission may have contributed to the staff not picking up the acuity of Mr A's condition.

Counties Manukau DHB advised that the outcome of its analysis into the causes indicated that the issues were multiple and systemic rather than individual. As a result the following action was taken:

- 1. Education sessions were held for the nursing staff at FMH on the importance of recording accurate and timely observations of unwell patients, and identification and documentation of significant changes in these patients
- 2. An education session was held on the process for collecting lab tests
- 3. A variation of the PUP scoring system in place at Middlemore Hospital has been introduced at FMH on a trial basis. The PUP system is designed to ensure that information obtained through the patient observations is clearly collated and that physiologically unstable patients are identified as early as possible
- 4. A reminder to staff that patients admitted from the community are to have their vital signs taken at least three times a day. An "Admission from Community" guideline is currently being developed by the Clinical Nurse Director, in consultation with the staff at FMH. This will clearly define the clinical management of unwell patients, including additional cautions over a weekend period.

Counties Manukau DHB advised HDC:

"The DHB accepts responsibility for the lack of policies and processes in some areas and agrees that had these been instituted they may have improved the standard of care provided to [Mr A]."



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"Given that there was no clear indication of what was expected by the GP and no clear instructions given as to the degree of observations or monitoring required, the subsequent comments about nursing practice seem particularly harsh. The adequacy of the communication by the admitting doctor is directly relevant to the reasonableness of the actions taken by nursing staff."

The DHB stated that from its analysis, the root causes of Mr A's deterioration included:

"1. The failure to diagnose the clinical cause of the illness, including the impact on renal function of the diarrhoea as reported by the family

2. The lack of confirmation of the diagnosis of pneumonia with a chest X–ray

3. The lack of a blood test to determine the underlying physiological status

4. The admission at the weekend to a hospital which did not have radiology or laboratory facilities, rather than to an Emergency Department at which these facilities were available

5. The lack of instructions about the physiological parameters to be monitored (it should be noted that the PUP score does not include a fluid balance as a routine parameter)

6. The lack of instructions about the threshold which would alert the nurses to seek additional assistance, nor from whom."

The DHB submitted:

"It is our expectation that the primary responsibility for establishing a detailed clinical care plan including comprehensive clinical recordings and parameters for escalation sits with the facility's medical staff as the lead clinicians. This planning should be conducted with the nursing staff, who hold their own responsibility for clinical observation, documentation and escalation as and when indicated."

Opinion: No Breach — Counties Manukau DHB (District Nursing Service)

Mrs B raised concerns about the adequacy of wound care provided by the district nurses to Mr A, and communication by the nurses with his family and general practitioner about the condition of his ulcers.

Standard of wound care

Dr Bowman notes that the district nurses usually visited Mr A three times a week and wrote progress notes after each visit. Swabs of the ulcers were taken when they

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looked infected, a Doppler assessment was arranged and the nurses contacted Mr A's GP to arrange a vascular referral. Dr Bowman advised that the standard of wound care provided by the district nurses was appropriate. Once it became apparent that Mr A was not eligible for compression bandaging, a letter detailing this was sent to his GP with a request for a vascular referral. Taking all of the above into account, I consider that the standard of wound care provided by Counties Manukau DHB was appropriate and did not breach the Code.

Failure to contact next of kin/GP

I have reviewed the information received from Counties Manukau DHB and find its explanation for not keeping Mrs B informed and updated about the condition of Mr A's leg ulcers reasonable. There does not appear to have been a clear arrangement for Mr A's next of kin to be kept informed about the progress of his leg ulcers although there is evidence that Mrs B had left her contact details for the district nurses. In any event, at no point did Mr A cause the district nurses sufficient concern to require contact with his next of kin.

Opinion: No Breach — Dr D

Introduction

Dr D undertook an initial examination of Mr A at the Medical Centre on Saturday. While he appreciated that Mr A was not well enough to go home alone, he did not believe he was sick enough to be admitted to MMH. Dr D therefore admitted Mr A into FMH, where he could undertake a more thorough examination. Following his examination at FMH, Dr D believed that Mr A was suffering from a chest infection and ordered treatment accordingly. Dr D expected Mr A to improve over the next 48 hours, and that any deterioration in his condition would be reported by nursing staff to the on-call doctor.

Expert advice

Dr Bowman noted that Dr D "appears to have taken a fairly comprehensive history". However, he failed to correctly interpret, or recognise, the importance of the facts elicited, and did not appreciate the severity of Mr A's infection:

"[Dr D] failed to fully understand that there had been quite significant deterioration in [Mr A's] level of functioning ... The amount of potential fluid loss caused by profuse diarrhoea may not have been fully appreciated.

...

[Dr D] had an elderly gentleman who was febrile, tachycardic and had an altered level of consciousness, all signs which should have made him aware that [Mr A] was very unwell ... [Dr D] missed the critical signs and symptoms that [Mr A] presented with. If he had picked up on these, he probably would have admitted him to Middlemore Hospital for urgent investigation that day."



As noted earlier, Dr D does not dispute that he failed to appreciate the severity of Mr A's symptoms (and consequently reached an incorrect diagnosis). However, in determining whether a provider has breached the Code, the question to be asked is not whether the diagnosis was right or wrong, but whether, in the circumstances, it was reasonable.

Dr Bowman advised that Dr D's working diagnosis of chest infection was reasonable. In reaching her conclusion, my advisor pointed to factors that may have hampered an accurate interpretation of Mr A's presenting symptoms:

"Assessment is more difficult if the patient is not known to the doctor [as was the case here] ... The history given by his family was disparate at times and this could have contributed to the reason that [Mr A's] change in functional status was not fully identified earlier.

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Elderly patients, especially if frail, often do not present with the classical signs and symptoms that an otherwise healthy adult may present with. The presentation of disease may be altered by the patient's physiological factors, their ability to report their disease, and also by coexistent morbidities. For example, sepsis may present without fever."

I agree with Dr Bowman's conclusion that the diagnosis, while incorrect, was reasonable in circumstances where Mr A's usual level of functioning was unknown and there was some conflict in the statements from family members.

Given the diagnosis, Dr Bowman believes Dr D's management was generally appropriate (oral antibiotics, increased fluids, blood sugar checked, temperature checked four times a day, a mid-stream urine sample collected, and blood tests ordered for Monday), but "it would have been advisable" for Dr D to implement a fluid balance chart to formally monitor Mr A's fluid intake and output. Dr D accepts that it was his responsibility to request a fluid balance chart, and he explained that he did not request one because of his examination findings. In the circumstances, I do not consider that this omission amounts to a breach of the Code.

Admission to FMH

Dr D's decision to admit Mr A into FMH, as opposed to MMH, also appears reasonable in the circumstances. His decision was based on his belief (albeit mistaken) that Mr A could be managed locally with oral antibiotics and fluids, and that should he not respond to this treatment, the FMH staff would alert the on-call doctor.

Obviously, with the benefit of hindsight, it would have been prudent of Dr D to arrange a medical review of Mr A. Dr Bowman has commented on this, noting the absence of any medical follow-up plan:

"[Dr D] did not hand over his care to another doctor, but was relying on the nursing staff to report any change in his condition, which did not happen."

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Nevertheless, I consider that Dr D did not breach the Code, as his working diagnosis and management of Mr A was reasonable in the circumstances.

Opinion: Breach — Counties Manukau District Health Board (Franklin Memorial Hospital)

Mr A was admitted to FMH on Saturday with a provisional diagnosis of chest infection. He was expected to improve over the next 24 to 48 hours with antibiotics, but his condition deteriorated. Staff were not alerted to the seriousness of his condition until the results of his blood tests became available on Tuesday, indicating acute renal failure and sepsis. Mr A was urgently transferred to MMH that day. There was little that could be done for him and he died on Thursday.

Mr A did not receive care of an appropriate standard. There were inadequate systems to ensure that his deteriorating condition was detected and responded to. This failure was compounded by the earlier failure to correctly diagnose his condition and order a fluid balance chart, and by the delay in collecting his blood tests.

Many HDC reports emphasise the importance of DHBs having appropriate systems in secondary care hospitals, to help staff identify and respond to patients who become physiologically unstable.²⁴ This case illustrates the same point in a community (primary care) hospital. The failure to appreciate and respond to Mr A's deteriorating condition (discussed below) highlights the need for Counties Manukau DHB to develop appropriate systems in community hospitals such as FMH, to assist nurses in the early detection and response to physiologically unstable patients. It is good to see that the DHB is remedying the situation.

Detecting and responding to deteriorating patients

Staff at FMH did not arrange for Mr A to be reviewed by a doctor until Tuesday, some three days after his admission. Even then, Dr F and the nursing staff elected to wait for blood test results before transferring Mr A to MMH. Yet there were a number of warning signs that should have alerted staff to the fact that Mr A was much sicker than initially thought.

At 10pm on the evening of his admission, it was noted that Mr A had not passed urine since his admission at 5pm that day, and early the next morning (1am) he was noted to have had an episode of diarrhoea. The notes for Sunday (the day following his admission) described Mr A as "very, very confused" (the day prior, Dr D had described his confusion as "very very subtle"), he had to be fed all his meals, he had a further episode of diarrhoea, and his family raised concerns about his deterioration with the nurse on duty. On Monday morning, it was noted that Mr A had not passed urine overnight.



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²⁴ Opinion 05HDC11908 at pages 48–50; Opinion 06HDC19538 at page 8; Opinion 07HDC21742 at pages 13–14. See also Dr Mary Seddon *Safety of Patients in New Zealand Hospitals: A Progress Report* (6 October 2007), accessible at www.hdc.org.nz.

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Notes written at 9pm on Monday state that Mr A was reluctant to drink, he had not passed urine, and his family had again raised concerns about his "rapid deterioration". There were no notes for the night shift, as Mr A had not caused the nurse any concern, but by Tuesday morning the nurse on duty noticed there had been "a huge decline in his condition" since she last saw him on Saturday night. He was only responsive to his name (when he would open his eyes), he had diarrhoea and great difficulty swallowing, and his leg ulcers were necrotic-looking.

The physical descriptions of Mr A by medical staff on arrival at MMH paint the picture of a very unwell and dehydrated man. Yet, despite numerous indicators, staff at FMH failed to identify that Mr A required far more specialised care than FMH could provide.

In my opinion the failure to recognise and respond appropriately to Mr A's deterioration was due to a series of omissions. This is accepted by both Dr Bowman and Counties Manukau DHB.

Basic observations were not recorded. This appears to be due in part to deficient documentation practices and also to a lack of clear instructions about how Mr A was to be monitored. As Dr Bowman notes:

"[Dr D] requested that [Mr A's] temperature be taken regularly, and this was done to some degree. However there is no recording on his temperature, pulse and blood pressure chart of either his pulse or his blood pressure being taken perhaps because they were not requested by the doctor."

Counties Manukau DHB made the valid point that "the adequacy of the communication by the admitting doctor is directly relevant to the reasonableness of the actions taken by nursing staff".

However, this does not excuse the failure to record basic observations, such as pulse and blood pressure.

A further issue is the failure to commence a chart to monitor Mr A's fluid intake and output. Although a fluid balance chart is not routinely used, Dr Bowman pointed out:

"Nursing staff should understand that elderly patients are more vulnerable to fluid imbalance due to their physiology. This means that fluid losses that a healthy adult could tolerate, may cause dehydration and electrolyte disturbances in an older person particularly if they have other co-morbidities. It is therefore important for older patients to have their fluid intake and output documented on a Fluid Balance Record if unwell."

A fluid balance chart is valuable where there are a number of people involved in a patient's care.²⁵ A chart brings the issue of fluid intake and output to the forefront of the nurse's mind each shift, and means any problems with fluid intake/output are more likely to be noticed and acted on. As Dr Bowman notes:

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²⁵ During Mr A's three-day admission, his observations were recorded by eight different nurses.

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"... Because no record of fluid intake/output was requested, the fact that [Mr A] had not passed urine since admission was not documented in one place alone, and therefore this fact was overlooked ... Although 'HNPU' had been written in three shift reports, this information was not collated. No single person read the previous reports and realised that this could indicate a problem with Mr A's urine output ..."

Similarly, because there was no one person taking responsibility for Mr A's care, the seriousness of his condition went undetected. Throughout Mr A's admission different staff members took over responsibility for his care. In such circumstances it is essential that robust systems are in place to mitigate against the inevitable risks associated with numerous staff caring for a patient. For instance, relevant observations need to be recorded regularly and accurately, and handover procedures need to be detailed and thorough so that any changes in the patient's condition are picked up on and responded to appropriately.

When viewed in isolation, the observations made by each individual nurse about Mr A did not cause concern, yet when viewed in context (of past observations and the previous level of functioning) it becomes clear that Mr A's condition was more serious than a chest infection. As Dr Bowman notes:

"[Mr A] had previously been living alone ... During admission he is reported as being very, very confused, being showered on a shower trolley ... and having to be fed. This indicates to me that his level of functioning had changed significantly. Once again the information is being recorded by each individual nurse with no one putting the whole picture together ..."

There was also a failure to identify, and act on, the fact that Mr A was not responding to treatment as expected. It is clear from Dr D's admission notes that he was not certain of Mr A's diagnosis — "in view of chest sounds, I will treat him for infection … Need to see how he goes ATR [Assessment, Treatment & Rehabilitation]". If Dr D's diagnosis was correct, and Mr A was only suffering from a chest infection, he should have improved over the next 24 to 48 hours on antibiotics.

Where there is uncertainty over the patient's diagnosis, and the doctor is relying on the nurses to "see how the patient goes", nurses need to be especially vigilant with their observations, and to have a low threshold for seeking further medical investigation should the patient fail to improve on the doctor's treatment orders. Dr D said he was not concerned that he did not have access to rapid blood test results or chest X-ray, because he believed Mr A would receive "good continuous observation" at FMH, and any deterioration in his condition, or declining hydration, would be relayed by the nurses to the on-call doctor. Unfortunately, there was no clear medical handover plan and Dr D's belief proved incorrect. A "wait and see" approach was inappropriate in circumstances where Mr A's diagnosis was uncertain and he was not responding to treatment as expected.

Although staff at FMH were willing to contact the on-call doctor with any concerns, in this case there were inadequate systems in place to identify when the threshold for medical intervention had been reached. The nurses needed training and policies to



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guide their decision-making. That fact that no medical input was sought before Tuesday (over 60 hours since his admission, and with Mr A showing clear signs of deterioration), suggests that the informal arrangement in place was inadequate to facilitate timely and effective medical intervention.

The situation was compounded by the lack of documentation by nursing staff. There were no morning or night shift notes on Monday. This case is a good illustration of why clear, detailed clinical notes are so important. Where a number of staff are involved in a patient's care, it is vital that accurate and detailed notes are documented for each shift. This provides subsequent staff with valuable information, which is essential for continuity and quality of care.

All these factors contributed to the delay in recognising Mr A's physical deterioration and the need for urgent transfer to MMH.

Conclusion

I agree with the conclusion reached by Counties Manukau DHB, that the issues are "multiple and systemic rather than single focused". The DHB failed to ensure that Mr A received appropriate quality, and continuity of care. I conclude that the DHB breached Rights 4(1),²⁶ 4(4)²⁷ and 4(5)²⁸ of the Code of Health and Disability Services Consumers' Rights (the Code).

Changes made by Counties Manukau DHB

As Dr Bowman noted, under the PUP (physiologically unstable patient) scoring system, in order for observations to be taken in the first place, there needs to be recognition that a patient is unstable. Dr Bowman advised that it would be sensible to have a policy that each patient's baseline vital signs are taken on admission and at least once a day, and more often if deemed necessary by the doctor.

Dr Bowman also recommended implementing the following changes to avoid a similar event recurring:

- 1. include a fluid balance record for older patients who are unwell, as the physiology of elderly patients makes them more vulnerable to fluid imbalance
- 2. ensure a report is written by someone on each nursing shift, to minimise the risk of missing important information
- 3. nurses to attend an education session covering the possible signs and symptoms that may indicate deterioration in a patient's condition, including change in functional status
- 4. the on-call doctor to see new admissions over the weekend as a matter of course, i.e. the doctor on call Sunday would see any patient(s) admitted Saturday, and likewise the Monday doctor doing rounds would see any patient(s) admitted Sunday.

²⁶ Every consumer has the right to have services provided with reasonable care and skill.

²⁷ Every consumer has the right to have services provided in a manner that minimises the potential harm to, and optimises the quality of life of, that consumer.

²⁸ Every consumer has the right to co-operation among providers to ensure quality and continuity of services.

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I recommended to Counties Manukau DHB that it:

- 1. implement the four changes suggested by Dr Bowman above
- 2. review its handover procedures at its community hospitals such as FMH
- 3. report the results of the trial of the Physiological Unstable Patient assessment form at FMH, including details of how it has been implemented, monitored and assessed
- 4. provide a copy of the Admission from Community guideline it developed following Mr A's death
- 5. report the results of the audit of documentation at FMH and any steps taken in response
- 6. provide evidence that Dr Bowman's recommendations have been implemented.

On 30 October 2009 I received a comprehensive response from Counties Manukau DHB confirming that it has implemented all of the above recommendations, with documentary evidence in support.

The DHB has implemented a new nursing handover procedure which requires that the significant issues page and progress notes of the patient's clinical record be read at the time of general handover, and that for patients causing concern, handover must be from RN to RN at the patient's bedside. The DHB is also considering the introduction of an electronic bed management system at FMH. This will allow electronic recording of handover information, including ongoing investigations and recordings of each patient.

The first phase of the PUP Early Warning Scoring System has been introduced and audited. The audit results showed that "PUP vital signs monitoring had been appropriately completed on all community and AT&R [assessment, treatment and rehabilitation] admissions".

An audit of documentation at FMH has confirmed compliance with the new processes (ie, fluid balance chart, documentation on each shift, and the PUP tool).

I commend Counties Manukau DHB on its impressive and comprehensive response to Mr A's case, and the steps taken to improve quality of care for future patients in its community hospitals such as FMH.

Follow-up action

A copy of this report with details identifying the parties removed, except the expert who advised on this case and the names of Counties Manukau DHB and FMH, will be sent to all district health boards, the Royal New Zealand College of General Practitioners, the Australian and New Zealand Society for Geriatric Medicine, the Nursing Council of New Zealand and the New Zealand Nurses Organisation, and placed on the Health and Disability Commissioner website, <u>www.hdc.org.nz</u>, for educational purposes.



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Appendix A — Expert advice from general practitioner Robin Bowman

Initial advice

The following initial advice was obtained from general practitioner, Dr Robin Bowman:

"Introduction

I am Robin Bowman. My specialist field is General Practice. My qualifications are B.Med, FRNZCGP, FRACGP. I hold a Post Graduate Diploma in Geriatric Medicine. I work in both General Practice and Palliative Care.

Summary of the Case

The case concerns [Mr A] who presented acutely unwell to [Dr D] [on Saturday]. I have been asked to comment upon the overall care that [Dr D] provided and in particular whether he should have investigated further or referred [Mr A] to hospital on that day.

The documents examined in this case are referenced in Appendix 1. There is a chronology of the key events in Appendix 2 [which has been omitted for brevity].

Summary of conclusions

This report will show that in my professional opinion the standard of care provided by [Dr D] fell below an acceptable standard of care.

[At this point in her report, Dr Bowman sets out the facts of the case. This detail has been omitted for the purpose of brevity.]

My Opinion

[Dr D's] assessment

[Dr D] appears to have taken a fairly comprehensive history. In his letter he states that 'he talked to him ([Mr A]) at length' and I consider that he gained an adequate history. His interpretation of that history, and that he did not recognize the importance of the facts elicited during the history taking are of concern. He failed to fully understand that there had been a quite significant deterioration in [Mr A's] level of functioning as evidenced by his decreased mobility and mentation. The amount of potential fluid loss caused by profuse diarrhoea may not have been fully appreciated.

[Dr D's] physical examination findings are fairly brief. In the Medical Centre notes there is only mention of a temperature recording. Neither in those notes nor those from Franklin Memorial Hospital is there any record of him taking [Mr A's] blood pressure. He notes that he is mildly dehydrated but does not state how he came to that conclusion. He wrote that [Mr A] was 'obtunded' which I interpret as meaning that his mentation was slower and that he was less responsive than normal. He noted a tachycardia of greater than 120. Again I consider that it is his interpretation of these examination findings that is found wanting. He had an elderly gentleman who was febrile, tachycardic and had an altered level of consciousness, all signs which should have made him aware that [Mr A] was very unwell, and particularly since he had articulated a wish to be given active treatment, should have alerted him to organise urgent further investigation and management at that stage.

[Dr D's] diagnosis

I consider [Dr D's] diagnosis reasonable, given that he was making a provisional diagnosis based on his clinical history and examination. His working diagnosis was one of chest infection; he had considered occult infection — urinary tract and leg ulcers, as a possible source of infection, and hypo/hyperglycaemia.

It was the severity of [Mr A's] infection that I consider [Dr D] failed to appreciate. He states this himself in his letter to the [Counties Manukau DHB].

[Dr D's] management

[Dr D] reasonably started antibiotic therapy for his working diagnosis of a chest infection. I consider his plan of management appropriate for his interpretation of [Mr A's] condition at that time — an assessment that he admits in hindsight was erroneous.

[Dr D] states in his letter to the [Counties Manukau DHB] that he expected [Mr A] to improve over the next 24–48 hours. Unfortunately, [Mr A] deteriorated over the weekend and this deterioration was either not evident to the nursing staff or not reported to the doctor on call. The blood tests that should have been taken on the Monday were not [taken], which caused delay in his management.

There did not seem to be any plan for adequate medical follow-up for [Mr A]. [Dr D] did not hand over his care to another doctor, but was relying on the nursing staff to report any change in his condition, which did not happen. It is possible that [Mr A's] deterioration was subtle rather than marked given his co-morbidities and condition on admission.

Opinion regarding the standard of care provided by [Dr D] with retrospective knowledge of the diagnosis (i.e. sepsis and renal failure)

I consider that [Dr D] missed the critical signs and symptoms that [Mr A] presented with. If he had picked up on these, he probably would have admitted him to Middlemore Hospital for urgent investigation that day.

I am not sure whether [Dr D] had treated [Mr A] previously.²⁹ Assessment is more difficult if the patient [is] not known to the doctor.

Elderly patients, especially if frail, often do not present with the classical signs and symptoms that an otherwise healthy adult may present with. The presentation of disease may be altered by the patient's physiological factors, their ability to report their disease, and also by coexistent morbidities. For example, sepsis may present without fever. In the frail elderly, which [Mr A] seems to have been, the onset of



²⁹ Dr D advised that he had not treated Mr A previously.

impaired function, such as confusion, decreased mobility, falling or incontinence should raise suspicion of significant infection.

[Dr D] considered infection most likely and treated for this, but did not appreciate just how sick [Mr A] was.

As there was no hand-over to another doctor, or definite plans for medical followup made, and because it was the weekend, [Mr A's] diagnosis and consequent appropriate management was delayed.

It would appear from his letter that [Dr D] now appreciates how sick [Mr A] was.

It is hoped that there are better systems in place at Franklin Memorial Hospital for daily medical review of patients that are admitted on the weekend and to ensure that laboratory tests that are ordered by the doctor actually get done as and when requested.

APPENDIX 1 The Documents that I have Examined

- 1. HDC Complaint Form completed by [Mrs B], and attached written report by same.
- 2. Letter from [Dr D] addressed to ... Investigations Manager, Health and Disability Commissioner.
- 3. Letter from [Dr D] addressed to [General Manager, Adult Rehabilitation and Health of Older People], CMDHB (Versions 1 & 2).
- 4. [The] Medical Centre consultation notes re [Mr A].
- 5. [Medical laboratory] results for [Mr A].
- 6. Letter from [a] Haematologist, [the medical laboratory], addressed to The Medical Officer, Franklin Memorial Hospital.
- 7. Letter from [Dr D], to accompany [Mr A] to Franklin Memorial Hospital.
- 8. Franklin Memorial Hospital Admission notes written by [Dr D].
- 9. CPR Decision for Adults Form, re [Mr A], completed.

[At this point in her report, Dr Bowman includes a second appendix which sets out the chronology of the case. This has been omitted for the purpose of brevity.]

Further advice

After reviewing responses to the complaint from [Dr D], Dr F, Dr E and Counties Manukau DHB, Dr Bowman provided the following further expert advice:

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The Documents that I have Examined

- 1. Complaint
- 2. Notification letters to Counties Manukau DHB and [Dr D]
- 3. Response from [Dr D]
- 4. Response from Counties Manukau DHB

- 5. Further information request to [Dr E] and response
- 6. Further information request to [Dr F] and response
- 7. Clinical records from Counties Manukau DHB

[At this point in her report, Dr Bowman sets out the chronology of events. This detail has been omitted for the purpose of brevity.]

My Opinion

1. Standard of Care provided by Franklin Memorial Hospital

[Dr D] admitted [Mr A] to Franklin Memorial Hospital [on Saturday]. He wrote up his admission and charted his medication. He had no further input into [Mr A's] care after this time.

[Dr E] was [Mr A's] GP. He was on call for Franklin Memorial Hospital [on Sunday]. He received no messages from the staff at FMH or from [Mr A's] family and he was unaware of his admission until [Monday] when he attended FMH as the on-duty doctor and was informed of his admission by the charge nurse who gave him a verbal summary of his admission and progress. He was informed that [Mr A's] observations had been stable; he was afebrile and had no respiratory signs of concern, that he was drinking well and taking his medications as prescribed. He was due to have blood tests that day. On the basis of this discussion, they felt that [Mr A] did not need reassessment at that time and therefore [Dr E] did not go and see him. He recalls passing by his bed that evening between 8:30–9:00pm and that [Mr A] recognised him and addressed him as '[Dr E].'

[Dr F] was the on-duty doctor at FMH on [Tuesday]. He was asked to see [Mr A] by the nursing staff as [Mr A] was still confused and his family was concerned. He reviewed the medical notes and spoke with [Mr A's] family. He then examined [Mr A], finding that he was confused and had slurred speech. His examination stated [Mr A's] vital signs and chest, abdominal and power/tone reflexes findings. His impression was 'consider resp[iratory] infection with electrolyte imbalance (sec[ondary] to recent gastro[enteritis]), exclude CVA'.

His plan stated 'continue antibiotics, laboratory tests as requested (urgent), and review with the results'. He discussed his findings with [Mr A's] son and wife.

Once informed of the blood test results, [Dr F] immediately contacted the on-call medical consultant at MMH and arranged for [Mr A] to be transferred there for further management.

[The] General Manager, Adult Rehabilitation and Health of Older People, Counties Manukau DHB, states that the staff at [FMH are] happy with the communication between the nursing staff and general practitioners, calling it 'open and accessible'. The staff feel that there are no barriers to prevent them from contacting general practitioners in case of need, and they feel comfortable contacting the after hours doctor on-call [doctor].



Nursing staff wrote reports in [Mr A's] treatment and progress notes during his admission:

[Saturday]

Evening shift: A thorough social history was taken. Notes read 'Very confused last few days ... admitted in neglected state ... [has not passed urine.]'

Night shift: 'Bed changed due to diarrhoea'.

[Sunday]

Day shift: 'Showered on shower trolley. Was very dirty, and had dead skin +++ coming off body ... incontinent of faeces ... Not able to get a urine sample this am ... Is very, very, confused. Spoke with son and wife re [Mr A's] condition. They are concerned about his deterioration ... [Mr A] has slept all shift, woken only to be fed meals and be showered.'

Evening shift: 'More alert this afternoon \dots becoming confused as evening progressed. Incontinent of faeces x1 \dots taking fluids well.'

Night shift: 'Has had very little sleep. [Has not passed urine.]'

[Monday]

Day shift: No notes written.

Evening shift: 'Reluctant to drink. [Has not passed urine.]'

Night shift: No notes written.

[Tuesday]

Day shift. '[Mr A] only responsive to his name, when he opens his eyes ... bowels opened, very loose. Also wet with urine ... Ulcer on [right] leg inner calf black, necrotic-looking very offensive odour, ooze had great difficulty swallowing [meds.]'

Evening shift: 'Admission arranged for Middlemore. Refused drinks, food and medications this shift'.

From the records of [Mr A's] admission to [FMH], it seems that there was no one person taking responsibility for him. Because he was admitted on the weekend, there was no medical handover, and, as the nursing staff did not recognize how ill he was, none of the doctors on-call were notified and he was not reassessed by a doctor until Tuesday morning. [Dr D] says that he had no concerns about [Mr A's] monitoring by the nursing staff, because they had a good record of communicating to the on-call doctors any deterioration in general condition or declining hydration, and goes on to say that [Mr A] was nursed by a series of nurses and that he struggles to understand how there could have been a sudden collective collapse of observational skills by them all, or by his experienced colleagues. Unfortunately,

[Mr A] was not seen by another doctor until Tuesday morning and he appears to have recognised that he was more unwell.

[Dr D] requested that [Mr A's] temperature be taken regularly, and this was done to some degree. However there is no recording on his Temperature, Pulse and Blood Pressure chart of either his pulse or his blood pressure being taken perhaps because they were not requested by the doctor. Likewise, because no record of fluid intake/output was requested, the fact that [Mr A] had not passed urine since admission was not documented in one place alone, and therefore this fact was overlooked (I note that the nursing report from the [day shift on Tuesday] states that he was wet with urine however I consider this unlikely as he had no other urine output mentioned since admission, he had had little to eat or drink, and was anuric when admitted to [MMH] later that same day). Although ['has not passed urine'] had been written in three shift reports, this information was not collated. No single person read the previous reports and realised that this could indicate a problem with [Mr A's] urine output.

Nursing staff need to consider the patient's condition in the context of their previous level of functioning. [Mr A's] family were concerned about him: they were 'very concerned about his rapid deterioration', and concerned about him going home. Yet [Mr A] had previously been living alone albeit with meals being delivered and daily input from his family. During admission he is reported as being very, very confused, being showered on a shower trolley which indicates that he is not mobilising independently, and having to be fed. This indicates to me that his level of functioning had changed significantly. Once again the information is being recorded by each individual nurse with no one putting the whole picture together.

[The General Manager, Adult Rehabilitation and Health of Older People, Counties Manukau DHB] states that since this incident several education sessions and feedback sessions have been conducted with the nursing staff at [FMH] specifically around the importance of base line monitoring. They have also reviewed FMH systems around monitoring unstable patients and have introduced a variation of the Physiologically Unstable Patient scoring system (PUP). My concern with this is that in order for the observations to be taken in the first place, there needs to be recognition that a patient is unstable. If a doctor does not think a patient is unstable, the tool will not be used and the patient's condition will not be monitored, thereby potentially missing any deterioration in their condition. It would be more sensible to have a policy that each patient's baseline vital signs are taken on admission and at least once a day, and more often if the doctor deems more frequent observations advisable.

Nursing staff should understand that elderly patients are more vulnerable to fluid imbalance due to their physiology. This means that fluid losses that a healthy adult could tolerate may cause dehydration and electrolyte disturbances in an older person particularly if they have other co-morbidities. It is therefore important for older patients to have their fluid intake and output documented on a fluid balance record if unwell.

It is my opinion that the standard of care provided by staff of FMH to [Mr A] between [Saturday and Tuesday] failed to meet the standard of care reasonably



expected by such a provider in these circumstances. [Mr A] was not monitored sufficiently, adequate records were not kept, and the fact that he was so unwell was not identified.

[Dr Bowman advised in later correspondence that she considered Counties Manukau DHB's departure from the appropriate standard of care would be viewed by its peers with moderate disapproval.]

2. Standard of Care provided by [Dr D] to [Mr A] between [Saturday and Tuesday]

I have answered this in my preliminary report of 16/12/08.

I have considered [Dr D's] response to that report.

I acknowledge that his only involvement with [Mr A] was on [Saturday]. Given this fact, he was not responsible for not identifying [Mr A's] subsequent and continuing deterioration, only for his error in clinical judgement in his initial assessment.

[Dr D] states that [Mr A's] blood pressure was recorded on admission to FMH however there is no record of this in the copy of the medical records that I have had access to.³⁰ The only blood pressure recorded in these notes was on [Tuesday] at 12:30pm.

[Dr D] says that 'It appears that two colleagues' ward rounds ... were performed on the Monday and Tuesday mornings without the clinical recognition of bacterial septicaemia or of sufficient dehydration to immediately require a drip and transfer to [MMH].' In fact [Dr E] did not see [Mr A] on Monday morning but relied on the charge nurse's assessment of him. [Dr F] [who] saw [Mr A] on Tuesday, appeared to recognize the fact that he had deteriorated and requested that the blood tests were done urgently.

[Dr D] states that [Mr A] was nursed by a series of nurses, and that he struggles to understand how there could be a sudden collective collapse of observational skills by them all, or by his experienced colleagues. He speculates that [Mr A] must have remained very subtly unwell with slow progression if any, to avoid the usual interpretation of increasing illness. He is correct to assume that there had been no sudden and catastrophic deterioration in [Mr A's] condition; therefore the poor condition which he was in when retrieved by ambulance to [MMH] would indicate that he had been in this condition whilst in FMH but it had gone unrecognised. Ambulance staff record his vital signs as [heart rate] 116, [blood pressure] 100/70, and his initial vital signs at [MMH] were [heart rate] 144, [blood pressure] 103/69, and [oxygen saturation] 90%.

[Dr D] states that he finds it hard to accept that [Mr A] was 'severely' dehydrated on admission to [MMH] and continues to express his faith in the judgment of the FMH nursing staff in this matter, yet [Mr A's] physical examination findings on admission to [MMH] are very clear: – ICU Registrar – 'dry mucous membranes,

³⁰ The medical records note Mr A had blood pressure of 130/78 on his admission to FMH.

cracked lips/tongue, decreased skin turgor, cachectic looking, JVP not visible'. Medical Registrar — 'cold, poor perfusion, cyanotic peripheries. ATN (ischaemic) from severe dehydration and hypovolaemia causing ARF (anuric!)' [Mr A's] initial management — 'rehydration, as intensive as possible.' This indicates to me that [Mr A] was severely dehydrated and that he would have been showing signs of this whilst an inpatient of FMH.

I am concerned that even now [Dr D] is happy to accept the judgement of nursing staff, when it is evident that vital signs were not monitored, and that important information was collected e.g. the fact that [Mr A] had not passed urine during admission, but its significance not recognized.

[Dr Bowman advised in later correspondence that she considered [Dr D's] departure from the appropriate standard of care would be viewed by his peers with mild disapproval.]

3. Standard of wound care provided by Counties Manukau DHB to [Mr A] from January to [mid] 2008.

District nurses visited [Mr A] at home usually three times a week to dress his chronic leg ulcers. Six visits were missed in this time because [Mr A] was not at home when the nurses visited.

They wrote in their progress notes each time they visited. Their contact details were left in the house for [Mr A's] relatives; however no communication was received from them.

The District Nurses asked his ex-wife if she would help to shower [Mr A] as washing his legs properly would have helped with care of the ulcers, however she declined.

Swabs of the ulcers were done when they appeared infected.

A Doppler examination was arranged appropriately.

The District Nurses requested that the GP arrange a vascular referral.

[Mr A] was last visited [the day before his admission to FMH].

On admission to FMH [Dr D] checked [Mr A's] leg ulcers and they 'were not infected'. They were redressed [on Sunday]. There is no record of the dressings being changed [on Monday] however there was no day shift nursing notes recorded for that day. On [Tuesday] it was recorded in the nursing notes that the ulcer on his right inner calf looked black and necrotic, with a very offensive odour and ooze. On admission to MMH it was again reviewed and noted that it looked infected by the doctor.

It seems therefore that the ulcer changed in nature between being seen [Sunday and Tuesday].



It is my opinion that the standard of wound care provided by Counties Manukau DHB to [Mr A] was of an appropriate standard.

4. The appropriateness of any changes made by Counties Manukau DHB subsequent to these events.

As mentioned previously, [the General Manager, Adult Rehabilitation and Health of Older People, Counties Manukau DHB] states that since this incident several education sessions and feedback sessions have been conducted with the nursing staff at [FMH] specifically around the importance of base line monitoring. They have also reviewed FMH systems around monitoring unstable patients and have introduced a variation of the Physiologically Unstable Patient (PUP) scoring system. Although this may be appropriate, my reservations have already been stated.

It is very appropriate that this incident has been discussed and that any deficiencies in their systems have been identified.

It is appropriate that [the medical laboratory] was made aware of this complaint, and that [it has] undertaken that daily visits to FMH for the collection of specimens/bloods will be adhered to. Nursing staff are to ensure that this does happen.

It is appropriate that new admissions from the community are to have increased vital signs recordings. It would also be important to include a fluid balance record for older patients who are unwell.

It would also be important to ensure that a report is written by someone on each nursing shift, as otherwise important information may be missed.

It is my opinion that an [in-house] education session covering the possible signs and symptoms that may indicate deterioration in a patient's condition, including change in functional status, not just vital signs, would be important for the staff at FMH, as it is evident from [Mr A's] case that no one identified how ill he was, no one put the 'whole picture' together.

It may also be appropriate that the doctor on call does see new admissions over the weekend as a matter of course, i.e. the doctor on-call Sunday would see any patient(s) admitted Saturday, and likewise the Monday doctor doing rounds would see any patient(s) admitted Sunday.

5. Any aspects of care provided that you consider warrant additional comment.

[Mr A] was not in good condition when he was admitted to [FMH]. He was variously described as being 'in a neglected state', 'cachectic', 'very dirty', 'has not been eating', 'probably has not been taking any medications for the last week'.

His estranged wife reported that he was a 'hoarder' and lived in a 'house too full of junk' that home help could not come in and clean. His son lived with him at least part of the each week, and his ex-wife who lived nearby visited daily. There is no



evidence they acted on any of the above concerns until [Mr A] became acutely unwell on [Friday].

Despite the state of his domestic environment, it does appear that [Mr A] had been functioning reasonably well until recent week(s). The history given by his family was disparate at times and this could have contributed to the reason that [Mr A's] change in functional status was not fully identified earlier. E.g. [Dr D's] notes read 'Wife says not taking tablets in last week, confusion — has been forgetful for a while. ? diet and use of meals on wheels ... five uneaten ones in the fridge'. He writes in his report that there was some difference of opinion between [Mrs B] and [Mr C] when he asked them if [Mr A] was more confused than usual and tended to 'nod off'. [Mrs B] said she thought he had been more confused during the week, but [Mr C] said that his father always 'nods off like this'. The [MMH] medical registrar's notes read, 'Apparently, prior to last Friday, gentleman usually fit and well on the large part, capable of managing own ADL's with meals on wheels.'"

On 22 October 2009, Dr Bowman provided the following further advice:

"... I would have thought it advisable that [Mr A's] oral intake, and output be monitored formally given the history of 'profuse diarrhoea', confusion and recent poor oral intake, therefore a fluid balance chart should have been implemented on admission, and presumably the admitting Doctor needs to request this for the nurses to action it ..."

