General Practitioner, Dr B

General Practitioner, Dr C

A Report by the

Health and Disability Commissioner

(Case 03HDC13979)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Parties involved

Ms A	Consumer (deceased)
Mr A	Complainant/Consumer's father
Dr B	Provider/General practitioner
Dr C	Provider/General practitioner
Dr D	General Practitioner
Dr E	Former Medical Director of the medical centre
Ms F	Enrolled nurse
Ms G	Ms A's keyworker
Ms H	Co-ordinator at the residential care facility
Ms I	Caregiver
Ms J	Caregiver
Ms K	Community support worker
Ms L	Caregiver
Ms M	Caregiver
Dr N	Respiratory physician
A Residential Care Facility	Provider/Residential care facility
A Public Hospital	Provider/Hospital

Complaint

On 18 September 2003 the Commissioner received a complaint from Mr A about the care his daughter, Ms A, received from Dr B and Dr C at a medical centre. Mr A also complained about the care Ms A received from staff at a residential care facility. This part of his complaint has been dealt with separately. The following issues were identified for investigation:

- *The circumstances and adequacy of the care Ms A received from Dr B at the medical centre on 17 January.*

- *The circumstances and adequacy of the care Ms A received from Dr C at the medical centre on 21 January.*

An investigation was commenced on 11 December 2003.

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

Information reviewed

Information was received from the following sources:

- Mr A, including Ms A's residential care facility records
- The residential care facility
- Dr B
- Dr C
- Dr E, former Medical Director of the medical centre
- Ms A's medical records from a district health board
- Dr D, including records for Ms A
- An Ambulance Service, including the records for Ms A's transfer to a public hospital

Independent expert advice was obtained from Dr Steve Searle, general practitioner.

Information gathered during investigation

Overview
This report focuses on the care Ms A received at the medical centre from Dr B on 17 January, and from Dr C on 21 January. It centres on the failure to diagnose Ms A's chest infection and refer her to appropriate secondary services for treatment.

Background
Ms A, aged 32 years, had multiple disabilities including cerebral palsy, reduced cognitive function and epilepsy. She required assistance with daily tasks, and communicated through gestures and body language. Ms A was a long-term resident at residential care home for intellectually disabled women.

Ms A's original care facility records were given to Mr A when he requested them, and no copies were taken. Mr A has provided copies of the records to my Office. Mr A confirmed at an interview that he has provided all relevant material in his possession. I am satisfied that my Office has the full file. This includes the daily diary for Ms A, her personal wellness plan, and relevant entries from the Communication Book for all clients with disabilities at the residential home. Ms A's temperatures and any special instructions regarding her diet or medication were recorded in the Communication Book. The personal wellness plan records Ms A's visits to doctors and other health professionals.

Chronology

16 January
On 16 January Ms A's caregivers noticed she appeared to be unwell. She was shivering with a temperature that ranged from 36.76 to 39.51 degrees, and was refusing food. Mr A was contacted by the residential home staff and informed of his daughter's illness.

17 January – Dr B
On the morning of 17 January Ms A continued to be unwell. Her temperature varied from 37.13 to 39.19 degrees and she was still shivering. It is recorded in her diary that she was drinking lots of fluids. Ms A was given 500mg of paracetamol at 11.10am.

Enrolled nurse Ms F took Ms A to the medical centre, where she was seen by Dr B. Dr B had not seen Ms A before. Her usual general practitioner, Dr D, who had been treating her for eight years, was away, and a locum was covering his practice. Ms A's wellness support information recorded her doctor as Dr D, and the medical centre was recorded under "after hours".

Dr B took a history of Ms A's health from Ms F, recording that Ms A had been ill since the previous day, with fever, chills and shaking. She was not eating but she was drinking, and did not have a cough or cold symptoms.

Dr B informed me that "[t]he triage nurse takes a brief history and records temperature, blood pressure, pulse and respiratory rate/wheeze, any allergies and how sick the patient appears to be, on the patient arrival slip". It is Dr B's usual practice to sight the observations taken by the triage nurse and to check them. He then carries out relevant general and systematic examinations. He said that "[d]ue to time limitation, only the important positive and important negative findings are entered into the computer notes". As Ms A was a casual patient, only limited computer records were kept, and no patient arrival slip is available to see what was recorded when Ms A arrived at the medical centre.

Dr B recalled:

> "I then carried out a respiratory and cardiovascular examination. Both lungs were clear with no abnormal findings. Heart sounds were dual. Her abdomen was soft with no abnormal findings. An examination of her central nervous system showed that she was alert, had no neck stiffness or drowsiness … Apart from fever and chills, she had no other symptoms of note."

In his letter to Mr and Mrs A on 25 March, Dr B said that he noted Ms A's temperature was only slightly above normal (at 38), her pulse was a little fast at 88 per minute, but she had no signs of respiratory distress. These measurements/readings are not recorded in Dr B's notes.

The notes from the 17 January consultation record:

> "[F]ever, shaking with chills
>
> O/E: Febrile, ENT: OK
> RS: Clear
>
> IMP: ?UTI

Plan: Unable to confirm with MSU (Difficulty with collection)
Norflox 400mg tds
Rx. Paracetamol 250mg/ml
Rx. Noroxin 400mg TABS."

Dr B said that he examined the abdomen but there is no mention of this in the notes, or in the account from Ms F. Dr B did not order a chest X-ray because he had found no negative findings in relation to Ms A's respiratory system. Dr B recalled that he checked the computer records for Ms A, and the caregiver brought Ms A's file with her. He did not contact her usual general practitioner, Dr D. Ms F said that she took Ms A's wellness plan with her, and explained Ms A's history to Dr B.

Dr B considered that Ms A might be developing a viral/bacterial infection or urinary tract infection (UTI). He asked the caregiver to obtain a urine sample from Ms A. Dr B informed me that Ms F took Ms A out of the consultation room to obtain the sample, but returned saying she could not get a specimen. Dr B advised me that he wanted a urinary specimen for analysis to rule out a UTI, before commencing Ms A on norfloxacin (Noroxin), an antibiotic. He also gave her a prescription for paracetamol 10mls, qid (four times daily). A copy of Dr B's prescription contains the following instructions:

"Norflox, 400mg
400mg, tds
Mitte: 6

Paracetamol,
250mg/ml
10ml, qid."

Dr B also requested that Ms A return to the medical centre or see her general practitioner if she remained unwell and had not improved in 24 to 48 hours. These requests were not documented in Dr B's notes or the residential care facility records. Ms F confirms that Dr B advised her to bring back Ms A if there was no improvement in a couple of days. However, she does not recall the need to obtain a urine sample, and there are no references to it in Ms A's diary record or wellness plan.

Ms F said that Dr B listened to Ms A's back and chest and informed her that it was probably a virus. Ms F said that Ms A wore incontinence pads and it was not possible to obtain a sample. Ms F suggested using a dipstick but she does not recall taking one when she left. Dr B gave Ms F an antibiotic prescription and told her to monitor Ms A, keep her hydrated and control her temperature by tepid sponge bathing. The diary record notes that the antibiotic tablets were to be crushed before giving them to Ms A, and recorded "Paracetamol 10mls to be given (qid)". Iceblocks were also kept for her in the freezer. The following notes were recorded in Ms A's wellness plan:

> "[17 Jan] Drs Visit [the medical centre]. High temperature (fever symptoms). Checked ears, b/p; tonsils, chest front and back. Prescribed Norflox 400mg tds and paracetamol 250mg 10mls qid. Give plenty of fluids, bed rest."

Ms A's diary records: "[Ms A's] tablets arrived 6.40pm. Given straight away – pm staff … 0245: gave [Ms A] 10mls Paracare".[1]

Mr A believes that Ms A was desperately ill on 17 January, in a non-responsive state, and was struggling for oxygen when she was taken to the medical centre. He is also concerned that no X-ray, urine or blood tests were taken, and that Ms A was sent home to the residential care facility, but she did not improve despite taking the medication prescribed for her.

Mr A did not see Ms A during this time, but has spent considerable time investigating what happened, obtaining documents and speaking to the people involved. He provided me with the following account of events regarding his daughter's care:

> "On or around the 16th January I had a call from a staff member at [the residential care facility], to say that [Ms A] was not well, we assumed she had the flu, so on the 17th January, I called [the residential care facility] and staff told me that [Ms A] had been to the doctors, and was given medication, and that they were waiting for the medication to 'kick in'.
>
> It would appear that the house leader, [Ms F] took [Ms A] to [the medical centre] at 11.52am on the 17th January to be treated by [Dr B], who had never seen, or treated [Ms A] before.
>
> [The residential care facility] procedures are clear, in the Wellness Support Information, [Dr D] is [Ms A's] doctor, and has been for some years, and day time visits, or treatment are from [Dr D], or his locums with after hours visits or treatment at the medical centre.
>
> Now at this time, on 17th January, [Dr D] was on holiday, but he has made it clear, 'his locums were available to see his patients', and they would have had access to [Ms A's] medical file …
>
> So, [Ms A], still in a non-responsive state, was sent back from the medical centre, to [the residential care facility] and it was observed by staff, that no improvement was taking place after the medication was given.

[1] Paracare: Liquid paracetamol. Available in two strengths – 125/5ml and 250mg/5ml. *New Ethicals Catalogue 2001.*

> A call was made to [the medical centre] from concerned staff at [the residential care facility], and they were told by the nurse or doctor, to wait and to give the antibiotics a chance to 'kick in'.
>
> And so, the staff at [the residential care facility], relying heavily on the professional advice given, waited and waited, until the 21st January, when another staff leader, [Ms K] took [Ms A] back to [the medical centre] at 10.21am, to be treated by a [Dr C], who had never seen or treated [Ms A] before.
>
> Once again … [Ms A] ends up back at [the medical centre], in a non-responsive state … After being misdiagnosed for a second time, [Ms A] was sent back home to [the residential care facility], and the plan from the doctor was to continue to observe as the notes from the Wellness plan, Communication Book, and diary indicate.
>
> Later in the evening, a doctor was called to [the residential care facility], who immediately called an ambulance, to take [Ms A] to [a public hospital], as she had not responded to treatment and medication given to her from [the medical centre]."

18 January

Ms A's keyworker, Ms G, said that on 18 January she was concerned that Ms A's temperature was going up and down and was unstable. The co-ordinator at the residential care facility, Ms H, stated that she gave instructions to the staff that if Ms A's temperature was not under 37 degrees by 3pm she was to be taken to the doctor. Ms G said she contacted the medical centre requesting a doctor to attend Ms A. Ms G stated that the practice nurse advised that the doctor was too busy to do a house call, and that staff should give the antibiotics a few days to work. It is unclear whether the medical centre nurse checked with the doctor before giving this advice, as Dr E, the medical director of the medical centre at the time, confirmed that he could not find any record of this conversation. However, the call and advice was recorded in Ms A's diary by "Ms G", and in the Communication Book in a note to "Ms H" signed by "Ms G".

19 January

On 19 January Ms I recorded in Ms A's diary: "[Ms A] was drifting on and off into sleeps, but she looks bright always had a smile and playing with her fingers in the air." Other diary entries record that her temperature was taken throughout the day and she did not eat much, but had plenty of fluids. Ms A was also sleeping more than usual. Caregiver Ms J informed me that she rang the medical centre and spoke to the practice nurse as she was concerned about Ms A's condition. Ms J asked for a doctor's visit as Ms A was not improving. She said the practice nurse spoke to the doctor, who again advised waiting a few days for the medication to work. Ms J could not remember the doctor's name and she did not speak to him. There is no record of this call in Ms A's records.

20 January

Ms A's diary entry overnight was recorded by Ms I, who stated that Ms A was playing with her hands in the air, and that there were no major problems. Ms L recorded that Ms A ate

soft foods and was contented listening to music. Ms K, a community support worker, recorded that Ms A was sleepy in the evening, and that she might have to see the doctor.

21 January – Dr C
On 21 January Ms A was still unwell with a temperature between 37 and 38 degrees. She was eating soft food and drinking, but not eating meals. Ms A's mother visited and noted that Ms A's foot was swollen. Ms I recorded this in Ms A's diary, noted that an incident form had been completed, and informed Ms H. Ms H advised me: "We would have been concerned about cellulitis and it would have been the first medical indication that things were not improving." In addition, Ms A had a rash on her bottom.

Ms A was taken back to the medical centre by Ms K, and was seen by Dr C. Dr C had not previously treated Ms A. Ms K reported that Ms A was still not improving, and this was recorded in Dr C's records. She was also having difficulty bringing up phlegm.

Dr C recalled that Ms K told him that Ms A was improving slowly. Dr C noted that Ms A was in a wheelchair, and was taking liquids but was not eating solids well. Dr C examined Ms A and found her temperature to be just above normal at 37.9 degrees; her throat was mildly congested, but her chest appeared clear. Ms A's tonsils were not enlarged, and her heart appeared normal.

Dr C stated that Ms A's breathing was difficult to hear because of interference from transmitted upper airway sounds, but appeared to be normal. Dr C also noted her pulse rate was 96 and blood pressure was 114/76. He commented that the examination was difficult because she had cerebral palsy and was in a wheelchair. She was non-compliant, and he had little assistance from Ms K to examine her.

The following is recorded in the medical records for the consultation:

> "21 January: [The medical centre]
>
> Seen with caregiver. Severe CP/
> Still not improving.
> Not eating solids very well, but taking liquids well – Ensure etc,
> which has been increased to compensate.
> Exam – Wheel chair bound. P96, T37.9, BP114/76, Tonsils not enlarged but throat mildly congested, Chest clear, HS dual, no murmurs of note.
> Imp – ?Viral infection
> Plan – Continue to observe, if not improving by end of the week – may need referral to Hospital for Investigations."

Ms K informed me that "the doctor said words to the effect that he had no qualifications to deal with 'these sort of people'", which she found upsetting. She said Dr C did not prescribe any further medication. Ms A's antibiotics had finished the previous day.

Dr C noted that Ms A had been prescribed antibiotics for a presumed urine infection, and had improved slightly since her last visit. He considered that she was not unwell enough to be admitted to hospital, and did not consider a chest X-ray. His plan was to continue with the current treatment, and if she did not improve by the end of the week then referral to hospital for further investigations should be considered. He did not write a prescription for any medication, although Dr B's script showed that only 6 Norflox tablets had been prescribed to be taken three times daily, and the last tablet had been given to Ms A the day before.

The following was recorded in the wellness plan:

> "Has a virus. Temp check ok, blood pressure a little low, chest and back and tonsils ok. Plenty of zinc and caster oil applied to chaffing of bottom. Plenty of fluids, ensure, milo, complan and lemonade. If no improvement by Wednesday, refer to hospital for X-rays and tests [blood]."

Ms A remained unwell, and later in the day on 21 January she began to deteriorate and become unresponsive. Ms J telephoned the medical centre and was advised by the doctor to call an ambulance. She telephoned the ambulance at approximately 9pm and followed up with two further calls. Caregiver Ms M also telephoned the ambulance, which arrived at 10.17pm. The ambulance report noted that Ms A was unwell with a reduced level of consciousness after a six-day illness. The report also noted that Ms A's blood pressure was low, she had reduced breathing sounds on the right side, a high temperature and was very sleepy.

Ms A was admitted to the public hospital where she was diagnosed with pneumonia and a significant chest infection. She was noted to have a high temperature, low blood pressure, reduced level of consciousness, and a very high white blood count. On 25 January Ms A's parents were informed that a CT scan of her lungs taken on 22 January showed a massive intrapulmonary abscess, and that her right lung was permanently destroyed. A chest X-ray of Ms A's left lung showed a loss of clarity, indicating development of further infection and collapse of the lower lung. It was agreed that Ms A should receive comfort cares only. Her antibiotics were stopped and her chest drain removed, and she was commenced on morphine via a Grasby pump. Subsequently, Ms A died.

It is not clear whether the notes of either consultation at the medical centre were sent to Dr D.

Dr C wrote a letter to Dr E on 11 March describing his consultation with Ms A, and met with Mr A and Dr E on 12 March. Mr A received a letter dated 25 March from Dr B about his consultation with Ms A, and met with Dr B and Dr E on 26 March.

A letter to Mr A dated 30 July from Dr N, respiratory physician, outlined his understanding of the development of Ms A's illness. Dr N noted that on the second visit to the medical centre on 21 January:

"The doctor apparently did not recognise abnormalities in the right chest and [Ms A] was sent home … An ambulance was called to [the residential care facility] later in the evening when her clinical state deteriorated. I note that it took three calls to the ambulance before the ambulance arrived. This indicates the level of concern expressed by the staff.

Empyema is infection in the pleural space (the space around the outside of the lung but inside the chest cavity). It usually occurs as a consequence of a pneumonia (or rarely, from blood infection). The development of pleural fluid can occur quite suddenly. It is therefore possible that when [Ms A] was first seen on the 17th January that there may not have been any physical signs in the chest to indicate the need for a chest X-ray. As I said to you when we met, my own practice is to undertake a CXR as well as urine cultures at this time. Her usual doctor would also have been in a much better position to assess changes in her clinical state having seen her several times before.

It is clear from the nursing record at [the residential care facility], that the caregiving staff had recognised that there had been no response to the antibiotic which had been administered earlier and that [Ms A] was clearly getting worse. By the time she was seen by a doctor on the 21st January there would have been abnormal signs in the chest with dullness and reduced intensity of breath sounds as was recorded by the ambulance staff. Clearly at that time urgent transfer from [the medical centre] to the hospital was indicated.

I suspect that had she been transferred to [the public hospital] at that time, earlier on the 21st that the outcome would have been the same. At this stage the illness was well established and the lung damage would already have occurred.

Had [Ms A] been transferred to [the public hospital] on the 17th January at her first presentation, it is possible that introduction of IV antibiotics may have prevented her death but we can never be sure.

I have quite a degree of experience of treating intellectually handicapped children and adults and unfortunately this pattern of illness is very common in these children due to aspiration of saliva and stomach contents into the lung. This results in a mixed cocktail of bugs which can be very destructive within the lung."

Independent advice to Commissioner

The following expert advice was obtained from Dr Steve Searle, general practitioner:

"Report on complaint file 03/13979/WS

This report has been prepared by Dr S J Searle, under the usual conditions applying to expert reports prepared for the Health and Disability Commissioner. In particular Dr Searle has read the guidelines for Independent Advisors to the Commissioner (Ref. 1) and has agreed to follow them. He has been asked to provide an opinion to the commissioner on case number 03/13979/WS.

He has the following qualifications: MB.ChB (basic medical degree Otago University), DipComEmMed (a post graduate diploma in community emergency medicine – University of Auckland), FRNZCGP (Fellow of the Royal New Zealand College of General Practitioners – specialist qualification in General Practice which in part allows him to practise as a vocationally registered practitioner). As well as the qualifications listed Dr Searle has a certificate in family planning and a post graduate diploma in sports medicine. He has completed and renewed a course in Advanced Trauma – ATLS (Advanced Trauma Life Support). He has a certificate (Nov 2003) in Resuscitation to Level 7 of the NZ Resuscitation Council. More recently he has completed a PRIME course (May 2004). He has worked in several rural hospitals in New Zealand as well as in General Practice and accident and medical clinics and currently works in his own practice as well as in the Emergency Department in Dunedin Hospital. Dr Searle has worked at rest homes with residents who have a variety of physical and intellectual disabilities and has patients who reside in residential facilities who have a variety of disabilities. He is also actively involved in local search and rescue missions and training.

Dr Searle is not aware of any conflict of interest in this case – in particular he does not know the health provider(s) either in a personal or financial way. Dr Searle has not had a professional connection with the provider(s) to the best of his knowledge.

Basic Information:

Patient concerned: [Ms A]; Complaint from [Mr A], her father.

Nature of complaint: The adequacy of the standard of care provided for her during her illness [16 January] onwards and the related issues, relating to her severe chest infection that was apparently not diagnosed before admission to hospital.

Complaint about: [Dr B] and [Dr C's] standard of care [January]. They both worked at [the medical centre]

Also seen by: Ambulance service and [public hospital] staff.

Introduction:

I will attempt to summarise the time course of the illness here to help clarify things for readers of this report. Of note there are over 500 pages of information that were reviewed for this report and a simple summary will always be problematic but I have provided one to help make the report easier to use.

Summary of events: [Ms A] became unwell on Wednesday [16 January] and was taken to [the medical centre] on the [17 January] where she was seen by [Dr B] who ordered a urine test which was subsequently not done, and prescribed an antibiotic for a possible urine infection. Over the next few days she did not improve and the caregivers phoned [the medical centre] on at least one occasion for advice and were told to wait for the antibiotic to work. When she had not improved by [21 January] she was taken back to [the medical centre] where she was seen by [Dr C]. She was thought to have a viral infection and no further specific treatment was advised. Later that day she became more unwell and was taken to hospital by ambulance. She subsequently died from complications of a chest infection.

Other Introductory Comments.

This report does not attempt to determine a cause of death nor to determine which if any aspects of her care contributed to her death. I may make some comments on what if anything might have made a difference but this is more for aiding understanding rather than any other purpose. I will make comments about what is an acceptable standard of care and what is not – however some breaches of an acceptable standard of care may not have in anyway contributed to [Ms A's] death, but these breaches are still breaches of an acceptable standard of care. This is an important concept. It is important to understand the difference between the standard of care and the subsequent outcome. One of the principles of giving advice to the Health and Disability Commissioner is that the 'outcome of the care is irrelevant' – it may be that there was no departure from the accepted standards but the care still resulted in an adverse outcome for the consumer. Conversely there may have been no adverse outcome for the consumer but the care may have been substandard (Ref. 9).

Despite the substantial amount of information that has been obtained there are still some questions about exactly what happened, exactly what was examined by the doctors or not examined, and exactly what was said or not. Also it is not clear as to the details of various phone calls. These aspects of this case are discussed in the section of the report called 'Possible missing information'. It is also important to realise that a considerable amount of time has been spent considering the various possibilities – this is so a report can be made that makes it clear what each health provider or health organisation should review with respect to their standards of care. It may be that when they review these things that they were in fact satisfactory at the time of [Ms A's] illness or that they have subsequently been improved. It is possible that the exact procedures at the time of [Ms A's] illness can now not be precisely determined however this does not mean that things can not be learnt by reviewing these procedures.

It is also important to realise that where there is only a limited range of possibilities that rulings on the standard of care can be made without having to determine exactly which of the possibilities within that range were actually the case. This is a key point so that further investigation into issues that are not going to change the opinions in this report don't need to be undertaken.

I stress the above points because I think it is important that some closure can occur for all the parties involved, and especially for [Ms A's] family, and for the health providers directly involved.

Documents and records reviewed:

- Letter dated 17 September 2003 to the Commissioner from [Mr A's] solicitors, and attachments – marked 'A' (numbered 1-61).
- Letter dated 2 October 2003 to the Commissioner from [Mr A's] solicitors, marked 'B' (numbered 62).
- Letter dated 9 October 2003, to the Commissioner from [Mr A's] solicitors, marked 'C' (numbered 63–66).
- Letter dated 11 December 2003 to [Dr E] from the Commissioner, marked 'D' (numbered 67-68).
- Letter dated 11 December 2003 to […] from the Commissioner, marked 'E' (numbered 69-71).
- Letter dated 18 December 2003 to the Commissioner from […], marked 'F' (numbered 72-76).
- Transcript of interview with [Mr A] held on 5 January 2004, marked 'G' (numbered 77-91).
- Corrections made by [Mr A] to 9 October 2003 letter received on 15 January 2004, marked 'H' (numbered 92-96).
- Letter dated 27 January 2003 to the Commissioner from [Dr B], marked 'I' (numbered 97-102).
- Letter dated 27 January 2003 to the Commissioner from [Dr C], marked 'J' (numbered 103-104).
- Medical records received from [the public hospital] on 5 February 2004, marked 'K' (numbered 105-197).
- Letter dated 5 February 2004 and attachments received from [the residential care facility], marked 'L' (numbered 198-552).
- Medical notes received from [Dr D] on 19 May 2004, marked 'M' (numbered 553-555).
- Letter dated 1 June 2004 to the Commissioner from [Dr E], marked 'N' (numbered 556).
- Letter dated 20 July 2004 from [the residential care facility], marked 'O' (numbered 557-558).

Possible missing information

A reasonable amount of information has been obtained from [the residential care facility] (where [Ms A] lived) and from the staff and the organisation responsible for the employment of the staff. However [the residential care facility] states that original notes and documentation were obtained from [the residential care facility] by [Mr A] and copies were not made. The usual option would have been to keep originals and to provide copies to [Mr A] – this was [the residential care facility's] policy. This policy was not followed. I think it is understandable that this policy was not followed as it is about something that would not occur very often. Also I think it is likely the staff were trying to be helpful to [Mr A] and would not want to have appeared to be hindering him in obtaining information – an appearance that could easily have occurred if they refused to provide information for some reason such as the copies not being able to be easily made in a timely manner. All this means that I can not be certain as to whether all the information that was potentially available from her records at [the residential care facility] has been obtained. I am uncertain as to whether [the residential care facility] staff consider the information provided by [Mr A] is a complete copy of the records or not. It seems likely to me that it is reasonably complete as the information contains records made about previous visits to doctors (pages 31 to 34 of the information I have been given). Information subsequent to this (pages 36 to 60) seems to be complete copies from various diaries [the residential care facility] used for recording information about residents. Care giving facilities from my experience have a number of different ways of recording information about residents that varies from facility to facility and it is possible that there may be other places where information was recorded. As will be seen later in the report my opinion about the aspects of care at [the residential care facility], from a doctor's point of view, relate largely to their policy about which doctor a person should be taken to. They themselves openly discuss this matter in the information they have provided to the Commissioner. It seems unlikely to me that there is more information available about this aspect of her care in any records [Mr A] might have and might not have passed on to the Commissioner inadvertently or otherwise. My overall impression is that I probably do have complete records but because of the variability in record keeping at different facilities I can not be absolutely certain. I think it is unlikely that any further information that is found will affect my opinion as it needs to largely focus on the standard of care, as documented, by the doctors concerned. Of note I have all the doctors' documentation. Because original notes were not kept but rather given to [Mr A] I have taken some considerable time to analyse the information I have been given to be reasonably certain it is complete – see also the next few paragraphs.

From what I can make out the main way [the residential care facility] recorded any change in residents' care needs was by writing things in a daily diary or communication book (pages 36 to 47 of the supporting information). I think this is a good system as it provides one place for staff to look for all residents – if they had to look in each resident's file daily it could lead to things being overlooked. It is possible that notes were made in her file that were not put in the daily diary that might provide more details about exactly what plan of care resulted from each contact with medical care, including

in particular about what if any specific plan for follow up was made. It would appear I have this information (pages 33 and 34 of the supporting information) which seems to be the place in her notes that information about doctors visits are recorded for use by the caregiving staff – of note it contains information about prior doctors' visits that tend to confirm that this is the place where such information would be kept. I also have separate daily information about [Ms A] (pages 54 to 60 of the supporting information) dated [16 January] to [22 January].

It is difficult to know exactly what information was shown to the doctors at the time they saw [Ms A], however in my opinion they could have sought more information relatively easily by asking the caregiver attending with [Ms A] or directly phoning [the residential care facility], or at the time or shortly afterwards contacting her usual doctor's practice if they felt such information was needed. I note both visits to the doctors concerned occurred during normal working hours on normal working days so extra information would not have been too difficult to obtain if it was needed. Thus knowing exactly what information was shown to the doctors is unlikely to change my opinion as I consider the onus was on them to seek the relevant information if they did not consider it was presented to them. It is not clear if [the medical centre] has any other records about [Ms A] that I do not have. For example some medical record systems record separately past history, allergies, and long term medications – by this I mean there is often an extra record other than the simple consultation note made at the time. It seems unlikely if this information does exist that it would change my opinion.

Of particular concern is that there are no notes or record kept by [the medical centre] of the phone call(s) made by the staff of [the residential care facility] to [the medical centre]. On the [18 January] a caregiver contacted a nurse ('Contact her nurse about her fever ...' page 56 of the supporting information a copy of the daily record for [Ms A] dated [18 January] and initialled '[…]' (presumably meaning it was written by [Ms G] one of the caregivers)) – it is unclear to me if this nurse was a [residential care facility] nurse or a nurse at [the medical centre]. However in [Ms H's] note/statement of [23 January] (supporting information pages 194 and 234 (identical copies)) it clearly states that [Ms H] had advised the caregivers to call [the medical centre] and that such a call did take place. It appears the phone advice was to the effect of it would take a few days for the medication to work. Another phone call was made on [19 January] (documented by the caregivers in the communication book (page 39 of the supporting information) – once again I am unclear as to if this nurse was a [residential care facility] nurse or a nurse at [the medical centre]. This note is headed '[Ms H]' and finished off with '[Ms G]'. I take this to mean that [Ms H] (presumably meaning [Ms H] the Service Co-ordinator and registered nurse for [the residential care facility]) was contacted by [Ms G] one of the caregivers. I note that [Ms J] (one of the caregivers) in her statement of 14 Jan 2004, states she did contact [the medical centre] on [19 January] and spoke to a nurse there who apparently spoke to a doctor and was told to 'wait a few days for the antibiotic to kick in' – as this statement was some time after the events I am not entirely sure if it can be used to conclude that a second phone call did occur – but it does reinforce the information suggesting that at least one phone call was made to [the

medical centre]. I note that on page 556 of the information I have (letter from [Dr E] dated 1 June 2004) that it is stated that no record of the telephonic conversation between the nurse and [the residential care facility] staff on [18 January] could be found. It would be interesting to know if there is a policy to record all phone conversations about patients or not, and if so if the records were checked for the days after this up to and including the [21 January]. I think that the lack of information on these phone calls makes it very hard to make decisions on this aspect of the case.

In [Dr B's] letter of 27 January 2004 he mentions an 'arrival slip' where the triage nurse notes a number of findings including observations of pulse temperature and respiratory rate. I do not have a copy of these 'arrival slips' – I am not sure if they would have been kept or not, however I think it is unlikely that this information would change my findings but I would be happy to review this information if it becomes available. I note in [Dr B's] letter of [25 March] that he states [Ms A] had a fever of 38°C and her pulse rate was 88/minute – I am not sure if this is from his memory or from some other documentation such as the 'arrival slip'. Certainly any abnormal respiratory rate findings would have been relevant, however this information alone would probably not change my overall findings.

I have considered asking if [Dr B] is satisfied with the accuracy of the 'record' of the meeting [26 March] (supporting information pages 17 and 18). I believe […] made these notes (this has been stated elsewhere in the supporting information). The copy I have been supplied has not been signed nor is there a record of […] being present at the meeting or an indication on the copy of who made these notes (presumably […]). I do not think the details of this meeting and the record of it are worth considering further as the information is largely obtainable from other supporting information and I do not think any of the information in this meeting record would change my opinion.

A record of the actual dispensing instructions for the medications prescribed on [17 January] could be useful – this is different information to what is on the script (page 26 of the supporting information). The dispensing instructions would help clarify the correct situation with respect to the antibiotic dosing instructions that were actually put on the medication (norfloxacin (Norflox) – the antibiotic) and the duration of this script. As will be seen later there is some conflicting information about this prescription – however I do not think trying to obtain this information would significantly change my final opinion and I can give my opinions allowing for the various possibilities.

It is not absolutely clear as to if [Dr D], [Ms A's] General Practitioner ever received notes about her care at [the medical centre] on any of the occasions that she was seen there. The copies of his notes about [Ms A] do not make it clear if they are simply his own notes or a complete record which would normally include notes or letters sent to [Dr D] by other doctors who had seen [Ms A]. As the copies of [the residential care facility] records record [Dr D] seeing her prior to 14/08/01 (the date of the first entry in the records [Dr D] provided – pages 553 to 555) I suspect [Dr D] may have selectively printed out the relevant records for the Commissioner rather than her entire file. I do not think any missing information would change my opinions contained later in this report.

On page 76 of the supporting information the right hand edge is missing on the copy of the ambulance notes/assessment of [Ms A] dated [21 January]. I don't think this would change my opinions in this report as most of the missing information can be surmised from the words before and after. Also there is a better copy of this exact same note contained in the hospital records that allows the missing information to be verified – page 111.

Quality of provider's records or lack of them

These records are on page 27 of the supporting information.

[Dr B's] note from the [17 January] documents the presenting problems – namely fever, shaking and chills. It doesn't clearly say if she was otherwise normal for her with respect to her general level of consciousness or her functioning (e.g. eating, drinking, talking/communicating, moving etc.). It does not state her past history, medications, allergies or the lack thereof of any of these – however this information may have been recorded elsewhere in [the medical centre] record system, or it is likely that it was in the information brought in with [Ms A] by the caregiver. The examination documentation was reasonably thorough in that the upper and lower respiratory tract were clearly examined. It is not documented as to if the abdomen was examined. The planned investigation (urine test) and treatment (paracetamol and the antibiotic (noroxin)) were documented. However no follow up advice was documented.

Overall [Dr B's] records were within a reasonable standard typical of that of doctors working in a similar situation.

[Dr C's] note from [21 January] documents both [Ms A's] major past history (Severe CP (meaning cerebral palsy)) and the presenting problem – 'still not improving', along with her not eating very well. It documents the examination of the upper respiratory tract and the heart and chest. It is not documented as to if the abdomen was examined. The plan and advice was documented.

Overall [Dr C's] records were within a reasonable standard typical of that of doctors working in a similar situation.

Describe the care as documented and describe the standard of care that should apply in the circumstances.

Taking a full history – this should include current symptoms (e.g. fever, any pain, or loss of function), past history of similar illness, past medical history including medications and allergies. In a case where the patient is unable to communicate fully it is useful to take a history from someone else and to document any change in behaviour or function vs normal function. A history was provided by the caregiver on each occasion.

As stated previously although the records do not state her past history, medications, allergies or no known allergies, it is likely this information may have been recorded elsewhere in [the medical centre] record system, and/or the information was brought in with [Ms A] by the caregiver. Hence the absence of this information in the notes is not a serious omission. I think it could have been useful to document her normal level of function compared to her level of function in the hours to days prior to each visit and to compare this information at her second visit. However it is clear from the notes that it is documented that she was unwell, and that at the second visit function is documented with respect to eating and drinking – this is a good standard of care.

Do an appropriate full examination.

Given that the presenting problem was essentially fever of unknown origin a full examination of likely sites of infection was required. This means upper and lower respiratory tracts, and heart sounds and abdominal examination. Other sites can be inspected if there is a clinical suspicion. It is clear that [Dr B] did all this except it was not documented as to if he examined the heart sounds or her abdomen. [Dr C] did all this except it was not documented as to if the abdomen was examined. The notes kept by [the residential care facility] (pages 33 and 34 of the supporting information) appear to agree with the fact that the above examinations took place although no mention is made of the abdomen being checked or not.

Order appropriate investigation at an appropriate time.

It is often forgotten that investigations have harms such as finding minor abnormalities that need explanation that require further more invasive tests. It is not unheard of for patients to die from direct or indirect results of investigations for something that in hindsight might never have caused a significant problem. Also it is well known that chest X-ray findings in chest infections tend to lag behind the clinical findings. In other words by the time something shows up on a chest X-ray there have usually already been clinical symptoms and/or signs (things doctors can find by asking and examining patients). The relevance of this point is also that if a test is done too soon it can be falsely reassuring and put both patients, caregivers and the same or subsequent doctors off the scent so to speak. The sensitivity (ability of the test or investigation to find a problem if it is present) of the chest X-ray for this patient early on in her illness might have been low for various reasons such as possible inability to take a timed breath for a good quality film. Other tests such as a blood count or CRP (C reactive protein) that can show up signs of a serious infection could have been considered – but once again there is a question of timing. In my opinion at the first presentation there was no need to perform extra tests or investigations beyond the urine test as good quality follow up advice was more likely to be reliable (see below). At the second presentation (to [Dr C]) her fevers were persisting and she still had a fever on examination and it was now 4 days since she was last seen and 5 days into her illness. At this stage given the lack of a definite diagnosis, investigation and/or a more precise follow up plan were needed. Whilst

viral illness can cause a fever for this long the chances that it was either not viral or that there was a secondary bacterial illness had increased at this point in time. The plan to investigate if not improving by the end of the week would have meant 7 to 10 days of fevers and unwellness – this would have been too long. Whilst fevers can last as long as a week in influenza the usual time course is for the fever to resolve in 2 to 3 days and for the acute illness to resolve over a 2 to 5 day period (Ref. 1).

Decide on appropriate management and implement this or seek advice and/or refer on for such management. The management includes the above possibility of investigation, any specific treatment such as antibiotics, symptom relief (such as paracetamol), or referring on (e.g. sending to hospital) and good follow up advice as below.

Give the patient or caregivers appropriate advice on follow up, and any complications to watch out for that might need earlier follow up. It is not clear exactly what if any follow up advice was given by [Dr B] and the follow up advice given by [Dr C] (concerning if she was not improving by the end of the week) was more appropriate for someone presenting on day 1 or 2 of illness and not appropriate for someone on day 4 or 5 of this type of illness. Also there was no advice documented on when to return sooner than the end of the week – for example if she was worse or if she developed new symptoms.

Have appropriate systems in place to reduce errors.

This is where there is great potential to improve the management for all patients. Doctors are human and errors can occur – however they can be minimised and/or the effects of these errors reduced or mitigated by having systems in place to check for errors and if possible to take action to prevent harm or to prevent sub-optimal outcomes for patients. Systems relevant to this case could have included:

1. To send copies of the notes to the usual GP (this probably did occur, but as the usual GP appears to have not been contacted concerning follow up ([Ms A] was taken back to [the medical centre] rather than back to her usual GP), this would not have worked in this case).
2. Giving copies of the notes to the patient or caregivers or to at least document a specific and non-ambiguous follow up plan and to verbally and/or in writing give such a plan to the patient or caregivers.
3. Using more specific plans as above to aid subsequent phone calls and the documentation of any such phone calls – this can then be used at subsequent presentations (either actual visits or further phone call requests for advice). For example if [Dr C] had notes in front of him indicating that the caregivers over the weekend were worried about [Ms A] and had phoned [the medical centre] expressing their concern it might have given him a better picture of the time course of her illness.
4. To have specific review policies in place for patients who represent for the same illness – for example faxing the note to the usual GP asking for them to

review the patient's need for further follow up, or having another doctor at the clinic review notes on patients who represent.

5. For doctors to have a method of thinking about their decision making that helps pick up errors (Ref. 4).

Having such systems in place to reduce errors was not common place at the time and such systems are gradually being developed at present. The absence of such systems can not be seen to be a breach in a reasonable standard of care at the time of [Ms A's] presentation, but I include this information to give options for improving the standard of care, and for reducing future errors for those who might read this report.

Describe in what ways if any the provider's management deviated from appropriate standards and to what degree.

[Dr B's] management [17 January]

The history was documented, and although the past history was not documented this information was available elsewhere (either elsewhere in [the medical centre] records and/or in the records brought in by the caregiver). It may have been useful to record her level of function; particularly given [Ms A] was unable to communicate in detail by herself with [Dr B]. This level of function would also be useful for future comparison if should represent in the same illness (either by phone call for advice or by re-attendance – both of which did occur). Thus there was a minor breach in the standard of care here by not recording this information. It is possible he asked about this information but did not record it as per his letter of [25 March].

The examination as documented was thorough for the presenting problem except heart sounds were not documented and nor was abdominal examination. I note that in [Dr B's] letter of [25 March], he states that he did examine these things. However not documenting them for future comparison (particularly the heart sounds) is a minor breach in the standard of care. I am unable to determine from the notes as to his adequacy of examination technique of her chest, because the statements in the notes do not enable me to determine exactly what techniques were used to examine [Ms A], and even if the notes or [Dr B's] letters of explanation did allow me to do so, this is really something that another doctor has to physically observe about [Dr B's] practice. In any case I think it is a sensible thing for him to do, after being involved in this case for his own future protection and that of patients – but I do want to make it clear that there is no actual evidence that his examination was inadequate – rather the evidence is not conclusive.

[Dr B] discusses the planned investigation, a urine test in some detail as per his letter of [25 March]. I agree that ideally the urine should have been sent to the laboratory before the antibiotic was started – however given it was likely that there would be specimen collection problems (it was noted there were problems trying to get the specimen at the time of consultation and it is likely this would also be a problem at

her residence) a more specific plan of either how to collect the urine, or what to do if it could not be collected should have been made.

The treatment with norfloxacin and paracetamol was reasonable but the dosage chosen was unusual (see copy of the prescription supporting information page 26). Firstly the antibiotic prescribed, noroxin, was written as a dose frequency of 'tds' (three times a day). This is not a standard dosage with the usual and recommended dosage being twice a day without the drug information giving the option of prescribing it three times a day (Ref.'s 2, 3, 5). I sought further information on this point from the drug information service at Dunedin Hospital (Ref. 6.) to see if there is any information nationally and internationally that noroxin can be used three times a day instead of twice a day. The information I got back was 'I have searched everywhere and can only find two references to norfloxacin three times daily' – one being a study of its use in diarrhoea and the other being in prevention of sepsis. My view is that either [Dr B] prescribed the three times a day dose on purpose or it was a typing error – whichever of these was the case I think it was a minor breach in the standard of care. Secondly I note that he prescribed the paracetamol as 250mg/ml – a strength that does not exist – even if it did exist the dose of 10ml qid (four times a day) would be an overdose (2500mg four times a day would be 10000mg or the equivalent of a dose of five standard adult tablets of 500mg four times a day or 20 tablets a day). It is much more likely that this was supposed to be a script for 10ml of 250mg/5ml (one of the two standard strengths of paracetamol) qid (four times a day) – this is an acceptable dose but is in the lower range of the usual 500 to 1000mg four times a day for an adult (the equivalent of one adult tablet four times a day – the usual dose being one to two tablets up to four times a day (or various variants of essentially the same thing – e.g. 1 to 2 tablets each 4 hours up to 8 tablets a day)). There is no clear cut breach of the standard of care if the dosage was supposed to be 5ml of the correct strength paracetamol four times a day, vs say 5 to 10ml four times a day, as doctors' opinion and practice with respect to this do vary. However there is a minor breach in the standard of care for having signed a script for an incorrect strength of paracetamol which if it was possible for the pharmacist to literally follow was potentially dangerous. From what I can make out from the caregivers' notes it seems likely that [Ms A] was given the noroxin twice a day for 3 days (Ref. 8). I had a discussion with a couple of pharmacists about the issue of how they would deal with the script as written – this issue does not affect my opinions on the standard of care (Ref. 9). Essentially a doctor is expected to take due care that the correct medication in the correct strength and dosage is what is printed or hand-written on script that is signed by the doctor – thus [Dr B] did breach a reasonable standard of care – this was a breach to a minor degree in this case and in that the error is unlikely to cause problems with these two drugs – however if similar prescription errors occur with other medications there is a potential for significant problems and [Dr B] needs to review his practice with respect to writing and signing scripts.

The follow up advice as per his letter of [25 March] appears reasonably comprehensive however this was not documented in the notes at the time. A better approach would have been to record specific follow up advice in the notes and give a copy of the entire note to the caregiver. This is important in that it both allows doctors and nurses at [the medical centre] to answer any phone calls more easily and/or see the patient again, and it passes the information on to the GP (assuming a copy of the notes goes to the GP) and it lets the caregiver take a written (hopefully unambiguous) note back to show other caregivers. It also means there is a record at the patient's residence to allow comparison of findings should a house call be made by another doctor. I think that when [Ms A] herself was not able to explain to her other caregivers what the follow up plan was, then a written plan was desirable. Such a treatment plan that is a written record was important rather than just relying on one caregiver's memory of verbal advice from a doctor. Detailed follow up advice would have been appropriate – for example 'seeing the usual doctor at two weeks total illness if she was not back to 100% normal, seeing a doctor in 2 to 3 days time if she was not clearly improving, and sooner if she was worse or having new symptoms.' Also asking for the caregivers to phone for the urine result in 3 days time would have helped to ensure that it was followed up and not overlooked for whatever reason (including the urine test not being done).

[Dr C's] management [21 January]

The history and past history was documented, as was her eating/drinking status – this is a good standard of care. I note that he clearly documented she was 'still not improving'. However in his letter of [11 March] (supporting information page 19) he states 'she had improved somewhat and started back on her oral feeds'. In this letter he also states 'the main complaint was of being generally unwell and of not having improved satisfactorily since the last visit'. It seems likely that either [Ms A] was worse or not improving or there was doubt that she was improving adequately – any of these scenarios combined with her fever still being present in my opinion warranted further investigation unless a clear cut explanation for this was found on examination.

The examination was documented and clearly included a chest examination and a check of her heart sounds which was a good standard of care. However an abdominal examination was not noted. I note that in [Dr C's] letter of 27 Jan 2004 (supporting information page 103) that his point 7 was '[Ms A's] disability had quite a significant impact on the examination. This was because she was wheelchair bound, the exam was easiest to be performed while she was still in her wheelchair. Also she was non-compliant and had upper airway noises. I did not receive much help from the caregiver to examine her.' I do not think this is an adequate explanation for not examining [Ms A] thoroughly – he could have asked the caregiver to help and/or obtained assistance from other nursing and medical staff on the premises – even if such staff were not present or it was deemed unsafe to move [Ms A] from her wheelchair then this in itself would be a reason to organise other

immediate follow up – either review in hospital or a house call where presumably the normal caregiving staff were able to transfer her to her bed (for example with special lifting equipment). Thus I consider that there was a breach in the standard of care in that [Dr C] did not examine [Ms A] adequately or arrange for another doctor to do so.

I do not agree with [Dr C's] thinking that a viral infection alone could have explained her condition. It is possible that her mild throat congestion was a sign of viral infection, however regardless of there being a viral infection, or not, it was likely that there was either a primary or secondary bacterial infection, and attempts to find where this was and how severe it was, were needed. A bacterial infection or possibly other causes of fever and unwellness other than a simple uncomplicated viral infection needed to be considered given the history that was available to [Dr C] at the time he saw her. So even if there were no abnormal findings available to [Dr C] to find at examination further action was required. The finding of a persisting fever also supports this view.

Whilst he noted her chest was clear in the notes made at the time of seeing her I note in his letter of [11 March] (supporting information page 19) that he states there were some transmitted sounds. I think by this he means sounds heard on listening to her chest that sounded like upper airways noise. The other possibility is that he meant transmitted sounds in the sense of a technical term referring to (usually increased) transmission through abnormal lung – such as consolidated lung (for example in pneumonia). I suspect that he means the first of these things – in other words sounds or noises heard that he thought were not generated within the chest but rather in the upper airway (for example from a partially obstructed nose or throat or from [Ms A] not being able to breath through her mouth for examination). Regardless of which of these was the case, I think that if there was any doubt as to the origin of the sounds that further investigation such as a chest X-ray and/or treatment for a possible chest infection was warranted. [Dr C's] letter of 27/1/04 (supporting information page 103) states that he did mean 'transmitted upper airway sounds' and that because of these the breath sounds (the sounds doctors hear when listening to a person's chest) were difficult to hear. This means that either he should have been confident that he could eliminate these sounds and hear her chest well by for example getting her to cough, or moving her head and neck and then listening again to her chest and being confident that he could hear her breath sounds adequately, or he should have investigated further with a chest X-ray and/or treated her for a presumed chest infection. It would appear that [Dr C] did have difficulty hearing her chest (as per his letter) but decided her chest was clear despite this and documented 'chest clear' in the notes. The respiratory physician (chest specialist) wrote in his letter [30 July] page 015 of the supporting notes) that 'by the time she was seen by a doctor on the 21st of January there would have been abnormal signs in the chest ...'. The ambulance staff also noted reduced sounds on the right side of her chest – suggesting that there was a difference in the findings between the left and right sides of her chest. The emergency department registrar (a doctor usually within 3 to 8

years of becoming a doctor and not yet a fully qualified emergency medicine specialist) noted abnormal signs (page 115 of the supporting information) and so did the medical registrar (a doctor usually within 3 to 8 years of becoming a doctor and not yet a fully qualified physician). I think that the combination of these facts plus [Dr C's] own comments about a difficult examination and his letters stating he did in fact hear something in [Ms A's] chest (which he thought to be upper airways noise) suggest that either he did not examine her chest adequately, or did not interpret his examination findings adequately, or did not recognise the significance of his uncertainty about the origin of the sounds he was hearing. If he had been uncertain about the findings in her chest then instead of writing 'chest clear' in the notes, in my opinion, he should have either asked another doctor to examine her, sent her to hospital, or ordered a chest X-ray. Hence he either did not examine her adequately or did not seek a second opinion or a means to exclude a serious chest infection (for example a chest X-ray) and thus did breach the standard of care required.

After taking the history and examining her, [Dr C] needed to make a diagnosis and / or order investigations if necessary and/or send her to hospital to help confirm the diagnosis if needed. Given his diagnosis was viral infection no further investigations were needed provided he was confident of that diagnosis. However it would appear that from both of his letters […] that there was some sounds to be heard in her chest which he thought to be upper airways noise and not from her lungs – this is possible evidence that she might not have had an uncomplicated viral infection – the suspicion of which should have already been raised from the history of a non-improving condition and the examination finding of a persistent temperature.

[Dr C's] further statement in his second letter (27/1/04) that 'Because she was already on antibiotics ... my plan was to continue the antibiotics until finished and to observe and review her in the next few days' was not supported by [Dr B's] note stating noroxin was prescribed. This antibiotic is restricted to 6 tablets of supply at a time (unless specialist approval is obtained) and this is common knowledge to doctors practising in primary care in New Zealand (NZ). Also although the printed out notes only show 'Noroxin 400mg tabs' without a reference to the dose frequency or duration, virtually all medical computing systems in NZ allow a review of these instructions should the person reviewing the prior notes choose to do so. Hence [Dr C] should have known that [Ms A] had finished the antibiotics a day or two before he saw her. Additionally this antibiotic does not have as an indication chest infections – it is usually used for urinary tract infections and only a few other indications (Ref. 2, 3). Therefore the antibiotic, even if she was on it, would only usually cover the possibility of a urinary tract infection and not a chest infection (the two most likely sources of infection). On top of this, even if she was still on an antibiotic, clearly she was not improving and the treatment needed to be changed in some way. For all these reasons I can not agree with [Dr C's] explanation for delaying further any investigations and/or referral to hospital.

The treatment required was dependent on the diagnosis. As discussed above I do not agree that the diagnosis [Dr C] made was supported by the evidence (history and examination findings) available to him at the time he saw [Ms A]. I also do not think that [Dr C] had a good reason to think that she was still on antibiotics, and even if he did think she was still on them at the time he saw her, it was not reasonable medical thinking to suppose that they would have been adequate treatment given her condition.

Answering Questions put to me by the Commissioner's office.

[Dr B]

1. Was [Dr B's] examination of [Ms A] on 17 January appropriate?
   I do believe his examination was appropriate – see my earlier discussion about this. He did not document any examination of heart sounds or of her abdomen – he may have in fact examined these things however not documenting them for future comparison (particularly the heart sounds) is a minor breach in the standard of care.

2. If not, what should he have done? This has been commented on above.

3. Was [Dr B's] management plan appropriate? In particular:
   - Did [Dr B] order sufficient tests and/or investigations to assess [Ms A's] condition?
     His plan was appropriate and has been commented on in more detail earlier in this report. The planned investigation (urine test) was sufficient provided there was good follow up advice. Whilst such follow up advice was not documented in his notes he has stated in his letter that he asked for her to be brought back if she had not improved in 24 to 48 hours. Certainly the caregivers did contact [the medical centre] to seek review within that time period but it is not clear to me if that was based on this advice or based on their own views. Whilst it could have been desirable to have given written advice on her condition or a copy of his note to the caregiver it was within a reasonable standard of care to have simply given verbal advice. I do not think he breached a reasonable standard of care in this respect. I certainly do not think there was a reason to order a chest X-ray at the time [Dr B] saw [Ms A]. In fact it is even possible that a chest X-ray could have been normal at that time and that it could be falsely reassuring to any subsequent review – see my comments elsewhere in this report about timing of investigations.

   - Whilst the above plan was appropriate it is noted that a urine test was in fact not actually done – this was probably because to obtain a urine test was not straight forward given that [Ms A] may not have been able to provide urine in such a way that it was easy to collect. [Dr B] noted 'Difficulty with collection' in his letters of [25 March] and 27 Jan 2004

he did state that he expected the caregiver to return the urine sample the same day. I think that whilst this is an apparently reasonable plan that [Dr B] appears to not have appreciated that obtaining samples for laboratory investigation is not a routine part of a caregiver's duties – it is not clear to me if he was aware that the caregivers had access to nursing advice/support or not but I think the inability of the caregiver to obtain the urine sample at the time of the consult warranted more explicit documentation of the next step rather than just 'difficulty with collection'. As no other plan such as asking a nurse at the clinic, or for the caregivers to access their own nursing service, to obtain a urine test in some other way (for example an in/out catheter specimen), then this aspect of the plan for her care was very likely to be misunderstood or not able to be followed up. Also the writing of the script before the obtaining of the urine sample was reasonable practice but only if it had been made clear how to obtain such a sample – the writing of a script was in my opinion likely to cause confusion when a urine sample was again unable to be obtained after [Ms A] left the medical centre– it is not surprising that [Ms A] was given the antibiotic without a urine test being obtained. [Dr B] should have recognised this difficulty and either decided to give the antibiotic anyway, or to provide a more specific plan on how to get the urine sample. Giving the antibiotic anyway without the confirmation of the diagnosis would have required a more explicit follow up plan in my opinion – this would have needed very explicit advice about the fact that the antibiotic might not work because of lack of certainty about the diagnosis – if such advice was given it may have meant that the subsequent phone advice to continue the antibiotic and wait a bit longer (or words to that effect) could have been different, or that such advice would have been less readily accepted by the caregivers. It is clear from what [Dr B] has written subsequently in his letter of explanation, that a urine test was an important part of his management plan for [Ms A]. I think his plan broke down because there was a lack of clear instructions for the caregiver and/or [Dr B] did not organise for someone to check that the test was done and what the result was. Doctors need to be aware that if they suggest plans that can not be easily carried out by patients, or their caregivers, that caution is needed to have an alternative plan. All this suggests to me that [Dr B] may need to review his approach to dealing with patients with similar problems.

4. <u>If not, what else should he have considered on 17 January when assessing [Ms A's] condition, in light of her disability?</u>
   Whilst I do not think there was a problem with the overall concept of [Dr B's] plan, there was likely to be a problem with its implementation. In the previous section I have discussed the issues with the problem of obtaining a urine sample. I think in light of her disability it could be a good idea to be more thorough with communicating the follow up plan and considering giving the caregivers a copy of

the plan in writing. From my experience this helps patients and caregivers be more confident about when to come back for further review. Ideally research should be done on communication of medical plans in this setting but to my knowledge such research has not been conducted although there is some research about communicating with patients and what patients tend to remember I am not confident that this research is generalisable to this setting. Hence whilst it is my impression that written plans might help I do not think we can say that a reasonable doctor in a similar situation would have reason to believe that clear verbal instructions would be insufficient. I do not think [Dr B] breached a reasonable standard of care in this respect, but I mention the above as a possible back up system to help avoid errors that doctors and caregivers could consider using.

5. Was the information [Dr B] gave to [Ms A's] caregiver appropriate?
   Yes the information to get a urine test, give the antibiotic and to return if she had not improved in 24 to 48 hours was appropriate. I think it is clear that the later part of this advice was given as both [Dr B] states it was and the caregivers confirm this. Page 205 of the supporting information point 4.9 (The internal investigation by [the residential care facility] of the care provided to [Ms A]) includes the statement that the caregiver, [Ms F], who took [Ms A] to the doctor [on 17 January] states that the doctor '... said if there was no progress in a couple of days to bring her back'. The information about the urine test was probably not appropriate as it is clear that what [Dr B] intended (to get a urine test before the antibiotic was given) and what happened (no urine test obtained) were two different things.

6. If not, what other instructions should have been given?
   As stated above the information about how to obtain the urine test or what to do if it was not obtained was not clarified. This was a breach in the standard of care. I consider in this situation it is a moderate breach in the standard of care because it was already evident at the time of the consultation that there was likely to be a problem (difficulty in obtaining a urine test) and that a plan of how to deal with this problem was not explicitly made. Whilst it is reasonable practice to give prescriptions to patients to use after tests are done it does need specific instructions to clarify this point. It was clear at the time of the consultation that there was likely to be problems obtaining the urine test (as the test wasn't able to be done at the clinic) and hence in my opinion a specific plan of how to obtain the urine test or what to do if it was not able to be obtained was required.

7. Should any follow-up have been organised?
   As already discussed the follow up plan was appropriate, apart from the lack of explanation to the caregiver of how to carry out the plan to obtain a urine test. It is also clear that the caregivers made at least one phone call seeking follow up advice and that they did bring [Ms A] back for follow up. I do not think a routine follow up appointment was needed provided that the follow up advice was clear.

The 'Dr's visit protocol' (page 022 of the supporting information) that was available to the caregivers also covers the issue of follow up and clearly and boldly states if there are any questions that the caregivers should ask. In other words communication is a two way thing and if [Dr B's] instructions were not clear then either the caregivers, or the nurse(s) the caregivers have access to for advice, could have asked questions either at the time of the visit or subsequently via phone calls back to the clinic.

[Dr C]

1. Was [Dr C's] examination of [Ms A] on 21 January appropriate?
   I consider that there was a breach in the standard of care in that [Dr C] did not examine [Ms A] adequately or arrange for another doctor to do so with respect to not examining her abdomen. I have previously commented in more detail about this. I am unable to determine from the notes as to his adequacy of examination technique of her chest, because the statements in the notes do not enable me to determine exactly what techniques were used to examine [Ms A], and even if the notes or [Dr C's] letters of explanation did allow me to do so, this is really something that another doctor has to physically observe about [Dr C's] practice. In any case I think it is a sensible thing for him to do after being involved in this case for his own future protection and that of patients. We can not be absolutely certain that his examination was inadequate but the evidence is suggestive that it was reasonably likely that [Ms A] did have abnormal findings that should have been able to be found when [Dr C] saw her and I note the respiratory physician also thought this was likely. I have previously discussed the fact that [Dr C's] letters mentioned possible abnormal findings in the chest that he attributed to upper airways noise.

2. If not, what else should he have done?
   He should have examined her abdomen. I have previously discussed this – the main points being: he could have asked the caregiver to help and/or obtained assistance from other nursing and medical staff on the premises to move her to perform this examination – even if such staff were not present or it was deemed unsafe to move [Ms A] from her wheelchair then this in itself would be a reason to organise other immediate follow up – either review in hospital or a house call where presumably the normal caregiving staff were able to transfer her to her bed (for example with special lifting equipment). Thus I consider that there was a breach in the standard of care in that [Dr C] did not examine [Ms A] adequately or arrange for another doctor to do so. With respect to the noise in her chest that he thought was upper airways noise then he should have, if in any doubt as to the origin of the sounds, organised a chest X-ray and/or a referral to hospital. Not doing this in the context of the history of her unwellness was a moderately serious breach of the standard of care required.

3. Was [Dr C's] management plan appropriate? In particular:
   - Did [Dr C] order sufficient tests and/or investigations to assess [Ms A's] condition?
     No he did not for the above reasons. His plan was appropriate only if [Ms A] had been unwell for a day or two or if she had clearly been improving. His note made at the time stated she was not improving and I have discussed this issue in more detail earlier in my report.

4. If not, what else should he have considered on 21 January when assessing [Ms A's] condition, in light of her disability?
   Regardless of her disability she was clearly unwell and not improving and further assessment (e.g. Referral to hospital) or investigation was required. I have discussed this more extensively earlier in the report – see the section titled 'Describe the care as documented and describe the standard of care that should apply in the circumstances.' In light of her disability there was a number of options for examining her with better assistance or sending to hospital for such an examination and/or obtaining investigations if it was considered that her disability was limiting his ability to assess her. [Dr C] stated in his letter of 27 Jan 2004 (supporting information page 103 his point 7) '[Ms A's] disability had quite a significant impact on the examination.' Clearly [Dr C] himself felt this limited his ability to assess [Ms A]. I consider that there was a breach in the standard of care in that [Dr C] did not examine [Ms A] adequately or arrange for another doctor to do so, or to arrange for further investigation to make up for his limited assessment. I think this was a moderately serious breach of the standard of care required. Of note [Ms A's] re-presentation (coming in for a second time with the same illness) with a history of ongoing fevers and failure to improve with previous treatment meant that follow up advice alone was no longer likely to be sufficient compared with her first presentation.

5. Was the information [Dr C] gave to [Ms A's] caregiver appropriate?
   The advice given was appropriate for the (albeit incorrect) diagnosis of viral infection at an early stage in the illness. It was no longer appropriate as there was a clear history of failure to improve along with at least one abnormal finding of a persisting fever.

6. If not, what other instructions should have been given?
   This would have depended on which of the acceptable plans were followed such as admission to or referral to hospital or urgent investigation (with results back the same day). As it would probably have been difficult to organise all the necessary investigations in the community, referral to hospital might have been best, but I have not sought information on the practicalities of these two options at the time of [Ms A's] illness as it will not change my opinion – it would always have been an option to refer her to hospital even if organising necessary investigations was impractical.

7. Should any follow-up have been organised?
   At this point it would have depended on what investigation or hospital assessment had revealed – given [Ms A] was not referred for either of these things that were clearly required then the option of some sort of routine follow up such as an appointment the next day to check she was in fact getting better and that no new symptoms or signs had developed could have been acceptable earlier in her illness (for example a few days before [Dr C] saw her) but by the time [Dr C] saw her further investigation or assessment was required.

8. Should [Ms A] have been referred to a specialist?
   This has really been answered by the above question – in other words depending on what assessment at hospital, or urgent investigation(s) had shown then she could have been referred to the appropriate specialist after that. The other option would be for a specialist General Practitioner (GP) to either see her the same day, or for [Dr C] to discuss her case with a specialist GP to see if there was anything else he should do. As already stated it appears from [Dr C's] letters that he was not confident about his ability to assess her and in particular examine her, or the other alternative may have been that he felt no doctor was able to more adequately assess her (I don't think the later argument is defensible and if [Dr C] believes this to be the case then this area of his practice will need review). Experienced GPs are specialists in ongoing care and differentiating minor from serious illness, and may have had more experience in assessing patients with similar disabilities than [Dr C] might have had – referral to a GP colleague or at least discussion with one is a common management strategy that doctors can use – it is more common with GPs who practise in a group but it does occur with telephone discussion outside of group practice and at After Hours clinics even if a specialist GP is not available then discussion with another doctor is often an option.

9. Are there any other matters that you believe to be relevant to this complaint?
   The Operations Manual and other information provided by [the residential care facility].

   I have not made any attempt to comment on the general adequacy of the operations manual and policy provided by [the residential care facility] this is beyond the scope of this report. Of note there are a large number of pages, and also I note duplications (e.g. p450 and p469 appear to be identical) which I have gone through to check for relevance to this report but I have not gone through them to check every aspect of their adequacy from a doctor's point of view. These types of policies are often appropriately reviewed and updated, or other procedures are in place for reviewing them regularly as I understand it, and so there is no need for any detailed comments from myself.

The Ambulance Service Response

I note that in various parts of the information I reviewed that there was concern about how long it took for the ambulance to arrive after it was called. Detailed comment on this is beyond the scope of this report, and as stated earlier the exact information given to the ambulance service is no longer available. However a brief explanation may help those involved understand some of the issues.

The ambulance service did in my opinion respond in an appropriate manner. Whilst the exact nature and content of the phone call to the ambulance service can not be obtained (see supporting information pages 72 to 76) I think it is likely that they would have treated the call as a call for someone who was unwell, but still breathing, and possibly as someone who had actually been assessed by a doctor that day. Furthermore they would realise that caregivers were in attendance (as opposed to someone who was alone). Thus not responding as fast as they would to say someone who is not breathing or someone who has had a serious injury or who has an apparently immediately life threatening condition such as chest pain was reasonable. The ambulance services have a difficult job to prioritise calls and in my opinion their decision to make the call 'priority 3 for dispatch' was entirely reasonable. Even if they had responded more urgently it would not have changed the outcome for [Ms A].

Continuity of Care Issues

I note in the complaint that the question of which doctor [Ms A] should have been taken to was raised. [The residential care facility] have now stated that their new policy is 'Where possible clients will be taken to their preferred doctor or the locum in place of that person when they are unavailable' (page 211 of supporting information – point 5.9.3 of their document). This is a good policy as many studies support the benefit of continuity of care (Ref.10). Their previous statements are not unreasonable and certainly were within common practice at the time – namely that reasoning was that as [Ms A's] GP was away that to take to different doctors was common practice and that this had been done in the past. I think this is partly to do with not recognising the appropriate role after hours services have after hours, and the appropriate role locums have in usual working hours. This issue could be discussed at more length but as [the residential care facility] already have a new policy that is good, I do not think this is helpful. It is hard to say if her being taken to her usual doctor's surgery would have made a difference to the outcome in this case but continuity of care is good practice where it is possible for it to occur.

Future possibility of insisting on X-rays and other tests – not a good idea

[The residential care facility] in their report (Page 211 of the supporting information – their point 5.93) state that '[the residential care facility] staff now insist that Doctors take X-rays or other tests when they take clients for medical

checks. This is not formalised as organisational policy, but staff have taken it upon themselves to insist on such checks in the interests of their clients. This is as a direct result of [Ms A's] death.' Whilst this is an understandable reaction to what happened it is neither appropriate nor safe. Detailed discussion of when to do tests and X-rays is beyond the scope of this report but needs some comment. The first comment is that tests can do harm directly and indirectly. For example taking a blood test might risk a needle stick injury to someone and more importantly might make the person who is getting the blood test be put off getting future medical assistance or make them uncooperative with further visits to doctors. Modern X-rays have a small dose of radiation that has a tiny risk of harm. Indirectly tests and X-rays can show things that are inconclusive and more invasive tests can then be done that have considerable risks – such as biopsies (removal of pieces of tissues to be looked at under the microscope – although rare serious complications such as infection or even death can and have occurred). Other indirect problems are to do with the timing of the test(s) – if tests are done too soon they can be falsely reassuring for example, and this can make the patient and/or health personnel delay representation.

My best advice to the staff is not to insist on tests or X-rays but to ask doctors if tests or X-rays might help at this time, or if they should be considered at a later point in time. Also that it is more useful to clarify when or why patients should be brought back for reassessment, which may or may not include investigations.

Letter from [Dr N] Respiratory physician (pages 15 and 16 of the supporting information). I have carefully considered the information in this letter. In general I agree with the comments made, but some context of the relevance of the comments to patients being seen in the community versus in hospital needs to be considered.

In particular I agree with the comment that is likely that on 21st the doctor ([Dr C]) did not recognise abnormalities in the right chest – this has been accepted and discussed elsewhere in the report.

I also note his comments that the development of pleural fluid can occur quite suddenly, along with his comment that it is possible that when [Ms A] was first seen on the [17 January] ([Dr B]) that there may not have been any physical signs in the chest. I have discussed this elsewhere.

His comment that because of the clinical possibility of serious infection that he would have done a chest X-ray as well as urine cultures at the time she was first seen has been discussed by [Dr B] in his letter of 27/1/04 noting that at a first consultation (in primary care) that a chest X-ray would not normally be done in the absence of symptoms or signs localising the problem to the chest. I agree with both of them – the answer being that by the time someone is seen in secondary (or hospital level) care that a different level of suspicion is needed and that it is more likely that they are more unwell or have a more difficult to sort out problem

having often already been seen by doctors in primary care. So in primary care the plan to check the urine and treat that whilst awaiting the urine result was very reasonable along with the advice to come back within a day or two if she was not improving was a good plan. This would then at a second presentation normally lead to a reassessment and consideration of further investigation including the possibility of a chest X-ray at the second presentation. There are other problems with doing tests or investigations too soon such as false reassurance of an initially normal result putting doctors off repeating the test at a later time, or even before this falsely reassuring patients or caregivers leading to delayed representation – I discuss this elsewhere as well.

Conclusion:

…

Re [Dr B]

[Dr B] did not document any examination of heart sounds or of her abdomen – he may have in fact examined these things however not documenting them for future comparison (particularly the heart sounds) is a minor breach in the standard of care. When reviewing his practice with respect to documentation of examination findings I would suggest he check his actual examination technique with colleagues as well as his note taking practice. I am unable to determine from the notes as to his adequacy of examination technique of her chest, because the statements in the notes do not enable me to determine exactly what techniques were used to examine [Ms A]. This in itself is not a problem as it is common and reasonable practice to state what was examined and not exactly how. Even if the notes or [Dr B's] letters of explanation did allow me to determine exactly how the chest was examined it is really something that another doctor has to physically observe about [Dr B's] practice. I think he should have his chest examination technique checked by another doctor, because I think it is a sensible thing for him to do after being involved in this case, for his own future protection and that of patients, and because this would complement his review of the other aspects of his standard of care that I have discussed as being problematic. I do want to make it clear that there is no actual evidence that his examination was inadequate – rather the evidence is not conclusive. I must also point out that it is reasonably likely that [Ms A] might not have had any abnormal findings in her chest to be found when [Dr B] saw her and we just simply can not say if anything was there to be found or not.

The information about how to obtain the urine test or what to do if it was not obtained was not clarified. This was a breach in the standard of care. I consider in this situation it is a moderate breach in the standard of care because it was already evident at the time of the consultation that there was likely to be a problem (difficulty in obtaining a urine test) and that a plan of how to deal with this problem was not explicitly made. I have discussed this in more detail earlier in the report. In particular I note that doctors need to be aware that if they suggest plans that can not be easily carried out by patients, or their

caregivers, that caution is needed to have an alternative plan. All this suggests to me that [Dr B] may need to review his approach to dealing with patients with similar problems.

He prescribed for [Ms A] in a somewhat unusual manner in that the directions for the prescriptions were not standard directions (see earlier discussion about this and Refs. 3, 5, 6, 7). Essentially a doctor is expected to take due care that the correct medication in the correct strength and dosage is what is printed or hand-written on script that is signed by the doctor – thus [Dr B] did breach a reasonable standard of care – this was a breach to a minor degree in this case given that the error was unlikely to cause problems with these two drugs – however if similar prescription errors occur with other medications there is a potential for significant problems and [Dr B] needs to review his practice with respect to writing and signing scripts.

For the medical centre

I am not certain that a note routinely goes to the usual GP of a patient when they are seen. If this is not the case then it should be (unless the patient specifically declines). This is important for continuity of care (Ref. 10).

The general concept of who is responsible for follow up care may need review. In this case it was not clear if the GP or [the medical centre] would be following up the urine test result for example.

A key aspect of this case was the follow up advice given when at least one phone call was made to [the medical centre] a day or two after she was first seen. Whilst we can now probably never determine who gave the advice it is clear from the evidence I have reviewed that at least one phone call was made. [The medical centre] should have a method of logging such phone calls so that they can be looked back at – if they do not have such a system then they should seriously look at having such a system. It may be that for patients already seen, a note can be made in the computer system – this would then be obvious to any doctor who subsequently saw the patient, should the patient come back, and provides continuity of records. I do not think it would be helpful now to try and identify which nurse(s) or doctor(s) gave the advice over the phone, but if possible the clinic should bring this issue to the attention of all staff working at present, and if possible all the staff working at the time of [Ms A's] illness.

Could anything different have been done that would have changed the outcome?

Whilst this type of question is hard to answer I think it is useful to discuss it in this case to help bring some closure for everyone involved.

In short it may be that the infection was just too severe for [Ms A] to survive. Empyema is a complication of chest infections that is not that common (about 2% of pneumonias – Ref. 1) but can be severe.

As the Respiratory physician has stated in his letter that if [Ms A] had been sent to hospital at the time of her second visit to [the medical centre] ([Dr C]) the outcome would probably have been the same. He also states that if she had been sent to hospital back at her first visit ([Dr B]) it is possible her death might have been prevented but we can never be sure. I consider it is possible that if she had been reassessed in the day or two after her first visit (taken back to be seen again as a result of the phone call to [the medical centre] instead of being told to wait a few more days for the antibiotic to work) it is possible that she might have been sent to hospital earlier or further investigation undertaken. I think it is clear that [the residential care facility] staff went to considerable trouble to watch [Ms A] – they took her temperature multiple times throughout her illness for example. I think that from a doctor's point of view they did appropriately take her to doctors to be seen, and phoned at least once after her initial visit to seek further advice – all entirely appropriate and sensible things to do.

In short there was probably only a small window of opportunity to avoid [Ms A's] death or she happened to have a severe illness that she was never going to survive.

Despite the above, as pointed out earlier in the report, it is not the outcome of treatment that is being judged here but rather the standard of care. Many aspects of the standard of care that I have highlighted as needing review, even if they were carried out differently at the time of [Ms A's] illness would almost certainly not have prevented her death. Nevertheless these aspects of care need to be addressed.

I think that one positive thing that can come from her death is that various health providers learn from this case.

References.

1) Copyright© 2001 McGraw-Hill. All rights reserved. Harrison's Principles Of Internal Medicine 15th Edition; Copyright © 2001, 1998, 1994, 1991, 1987, 1983, 1980, 1977, 1974, 1970, 1966, 1962, 1958 by The McGraw-Hill Companies, Inc ISBN 0-07-007272-
2) Mims Medicines Database - MIMS NZ Version 1.00 copyright 2003, MediMedia NZ Ltd, 3 Shea Terrace, Milford, Auckland)
3) New Ethicals Catalogue; Vol 34, No.1, May 1997 (an older version of the standard drug information available to doctors in New Zealand was deliberately chosen to check that older information was not different to more recent information – it is important where possible to use information and standards applicable at the time of the event rather than at the time the writing of this report).
4) Cognitive Forcing Strategies in Clinical Decision making, Pat Croskerry, Annals of Emergency Medicine 41:1, Jan 2003, p110-120
5) Medsafe data sheet for noroxin.
6) Personal written communication between myself and the Dunedin Hospital Drug Information service – no identifiable details of the case were passed on I simply enquired about the use of noroxin three times a day.

7) Personal communication with two local pharmacists – no identifiable details of the case were passed I simply asked what their opinion was of a script for Noroxin 400mg tds M6 and paracetamol 250mg/ml 10ml qid for an adult female. One pharmacist would have just processed the script as noroxin 400mg one three times a day as it was only 6 tablets, and would have corrected the script for paracetamol to 250mg/5ml as the intention was reasonably clear and the subsequent dispensing for the paracetamol was safe and within a recommended dose range. A second pharmacist would have attempted to contact the prescriber, but noted that from experience this sort of prescription error tended to occur on handwritten hospital scripts, and the other common possibility was a 'typo' or typing error – if the prescriber was not able to be contacted this pharmacist may well have done what the first pharmacist did with the paracetamol but would have been less happy with the noroxin script and would have either changed it to 400mg twice a day or not dispensed it until the prescriber was able to be contacted.

8) The information I have in my supporting documents (page 61) dated [23 January] has a handwritten review of someone's (I can not fully make out the signature looks like [Ms H] and this is what the list of documents on page 5 of the supporting information I have suggests that it was [Ms H] ('File note from [Ms H] to [Ms …] dated [23 January]') recall of events from [17 January] onwards. Included in this note was '… she had finished her antibiotics on Sunday morning …' (to me this suggests the noroxin (antibiotic) was probably given twice a day (correctly) and not three times a day as the first dose was Thursday pm and there were only 6 tablets (so one Thursday, two Friday, two Saturday, and last one Sunday morning to make a total of 6). However this is not absolutely clear as the note the caregivers made about the doctor's visit (page 33 of the supporting information) that the 'norflox' (brand name for noroxin) '400mg tds' (three times a day). There also may be some doubt about the duration of the script for the noroxin – the hospital Emergency Department doctor noted norflox 6/7 (meaning either that she had been prescribed noroxin 6 days ago or she had been, and was still on norflox for the last 6 days). I carefully considered the possibility that [Ms A] had a course of norflox of more than the 6 tablets on the script written and this seems very unlikely to me as it would have needed another script to be written and there is no record of that. Even if [Ms A] was given a longer course of norflox then it would not change any of my opinions in this report. It may never be possible to determine if the dose was given twice or three times a day – however in my opinion it would not have affected the outcome for [Ms A] and it does not affect my opinions in this report as I have allowed for the various possibilities.

9) Statements about Health and Disability decisions: One of the principles of giving advice to the Health and Disability Commissioner is that the 'outcome of the care is irrelevant' – it may be that there was no departure from the accepted standards but the care still resulted in an adverse outcome for the consumer. Conversely

there may have been no adverse outcome for the consumer but the care may have been substandard.

10) The Value of General Practice – the key role general practice plays in the provision of Primary Health Care – publication by RNZCGP (Royal New Zealand College of General Practitioners), NZ 2002, ISBN 0-9582272-4-1 – this reviews some of the evidence for General Practice Care."

Responses to provisional opinion

Dr B

In response to my provisional opinion Dr B provided the following further information:

"Thank you very much for your preliminary report as this allows me to submit my suggestions before you finalise your opinion.

I am also thankful for 'no breach' consideration with regard to examination and assessment.

I accept all the recommendations that you have suggested in the conclusion as they are all clearly with good intention to protect the consumer rights and their safety. I will review my practice of record keeping and prescribing procedures and in addition, I will inquire and shall undertake available further training in the area of disabled and intellectually handicapped patient care.

An apology letter to [Mr A] will be forwarded to your office. I have already expressed my sincere condolences to [Mr A] for the death of his daughter by way of letter at the time of our meeting [after her death]. It is fervently hoped that this process does bring a 'closure' to [Mr A]. Premature loss of life of his daughter is very tragic and his anger and grief is understandable and I sincerely regret that his daughter did not receive optimal care. As a doctor, I have always treated patients with their interests at heart. I am always looking for improvements that can be made to my practice and shall work through constructively to enhance the overall quality of care by learning through my mistake.

I appreciate the need for your good offices to enable patients and their families to bring their concerns to you for learning and hopefully a healing process for patients, relatives and providers.

I would like to make the following submissions which are based on Dr Searle's recommendations and some of my factual evidence.

Case of prescription error

I agree that two errors occurred in the script written by me (although I have not seen if the script was computer generated or handwritten). One error relates to Noroxin, the frequency is stated that it should be given three times a day (tds).

The second error is not inserting '5 ml' instead of 'ml' in front of Paracetamol 250mg. I have altered my practice in the three and a half years since I treated [Ms A] and now no longer rely on handwritten transcripts but mostly issue computer generated scripts. Most, if not all, scripts are issued by the computer generated where I am required to choose from the list of medication which exist and therefore Paracetamol 250mg/ml does not exist. It is also my practice to check each script before it is printed and on signing.

Noroxin 400mg tds is not itself a usual dose for urinary tract infection. However using a larger dose of antibiotic initially or more frequency, is used in acute urinary tract infections involving upper renal tract and also duration can be extended longer than 6 – 7 days. This is practiced by renal specialists where I refer my patients. However I do not raise a controversy and accept that finding that using Noroxin 400mg tds (three times a day) is deviation from usual practice.

I am grateful to the staff at [the residential care facility] administering the dosage and correct frequency of medications.

In addition I would also like to draw your attention to Dr Searle's comment (page 38 para 6 from top). My failure in this regard is noted as a minor deviation from standard practice. Therefore I request you to consider adding 'minor breach' or 'minor deviation from standard practice'.

Breach follow up advice

Background: Accident and Emergency clinic vs GP Clinic

Differences exist between GP practice and accident and emergency centres. It is beyond the scope of this letter to list all the differences. But I shall mention those relevant in the case of [Ms A's] follow-up.

(a) Short consults, time constraints imposed by 'queue' system of unbooked patients. These constraints and queues may result in hurried consultations.

(b) Interruption caused by number of emergency patients and those needing urgent attention – transfer to hospital.

(c) 'Casual patients' – those who do not attend regularly but choose to remain casual. In most cases they are not likely to have any hard copy files, they also have limited information on the computer as they visit for the first time or infrequently. It is a daunting task to trace or locate their GP as many do not even have their GP and

roam from practice to practice. This is relevant in this case as [Ms A] was a casual patient.

When I left instructions to get the urine tested, and that I wanted to rule out urinary infection. I presumed it would be carried out by the nurse who normally guides the patients to the toilet and explains to them how to obtain urine, carries out Dipstick test and come back to tell us the result. As there was difficulty in obtaining urine for the test, I decided to give a script for Noroxin to be on the safe side and advised them to return in 24 – 48 hours if it did not work. This was what I considered safe enough for someone who has fever with chills when I suspect urinary tract infection – to start them on empiric treatment and not waiting for the test result. In any case, I would not be able to follow up with urine test as I did not work there and only was covering for a session as standby on that day only.

Please note that I did advise, as in standard GP practice, that the patient be brought back within 24 – 48 hours if not improving and the enrolled nurse understood that. Secondly no GP issues written instructions when they generally give that advice and I would hope that in future [the medical centre] will give copies of the notes to caregivers where necessary. I was confident that the caregiver, in this case, understood the requirements.

Obtaining a urine sample was important to rule out infection but bringing her back to see the doctor was equally important. It appears that the enrolled nurse understood the latter request. The caregivers of [Ms A] phoned [the medical centre] on the 18th which was the following day. It is reasonable to expect the caregiver who has written into her diary to bring [Ms A] back if the treatment was not effective. If she has written into her diary that shows that she understood the instructions.

It is not my practice to obtain urine by more aggressive techniques such as to catheterize the patient. I expected that the nurse with whom I left instructions to carry out urine test is competent enough to suggest an alternative plan on how to obtain urine specimen as it is a usual practice, e.g. for them to advise use of plastic bags which is usual practice at the [the medical centre].

Self review and peer review

Since the time period that we have previously been discussing, I have undertaken self review, audits, training etc which I shall mention as follows:

1. I have undertaken GP training for the Royal College of New Zealand GPs (RNZCGP) and am working towards obtaining Fellowship of the College. I passed the PRIMEX examination last year which includes exams in theory and clinical. The clinical part of the examination involves about 12 – 14 different examiners assessing some 8 consultations including physical examination of patient.

2. My practice has been audited by the GP College (RNZCGP) for accreditation. The College has awarded our clinic accreditation on 2 June by our Honorary Health

Minister. Ours in the first practice in the whole of New Zealand. I happen to be practising in this clinic and I can reassure you that any perceived deficiencies that exist in my techniques of physical examination record keeping, following up of laboratory results have all been reviewed by me. They have been scrutinized by six independent auditors in November 2004, one includes Health and Disability Auditing New Zealand (HDANZ). By obtaining this Certification, our clinic now meets the standards of the Health & Disability Service (Safety) Act 2001. With regards to training for assessment and caring of disabled people – some has been addressed as part of GP training curriculum in the first year. Further I shall endeavour to seek more training with advice from my seniors at RNZCGP.

3. Since 2003 more intellectually disabled and physically disabled patients have enrolled in my practice. There are about 20 such patients who are satisfied with our services. Intellectually and physically disabled people are quite a challenge to all the GPs as their needs are quite different than other patients. Therefore, to give them the service they deserve, I shall undertake further available training.

In summary I wish to bring to your notice reconsider in this unfortunate case:

A. I took a reasonable history from the caregiver of [Ms A], tried to identify the presenting problem, carried out the relevant examinations, suspected urinary tract infection, ordered for urine Dipstick to be carried out, delegated the responsibility to the nurse to obtain and carry out a Dipstick examination.

B. It is also reasonable and safe practice to prescribe urinary antibiotics – given the fact that there was difficulty in obtaining a urine sample. In [Ms A's] case it is more reasonable to issue the antibiotics as it is quite common that the urine sample would be more than likely contaminated (I quote Best Practice Treatment and also see textbook Murtag – indications for urine investigations).

C. It was safe to advise the caregiver to start taking the medication irrespective of the urine results, which the caregiver did according to the evidence. If anything, this was an error on the safer side. Use of the higher dose antibiotics is not usual practice but still a deviation to the safer side. I can quite accept that this is not common practice but is done in special cases where longer duration and higher dose may be better.

D. It is also reasonable not to undertake catheterization to obtain urine sample, as it is a more aggressive procedure with the likelihood of causing or introducing infection rather than trying to treat urinary tract infection.

E. It was also reasonable to ask [Ms A's] caregiver to come and see us or other GP in this situation such as [the medical centre] in 24-48 hours time. The evidence shows that the caregiver had understood what was to be done if [Ms A] did not improve in that time frame.

F. It is unrealistic to expect to give clear and written instructions on how to obtain urine the following day. Because of the likely chance of urine contamination and this would further confuse the follow-up treatment.

G. It is also reasonable to record the consultation, on the computer, due to the time constraints and interruptions and in fairness to other waiting patients. I note that it appears that not all notes that were available to me at the time, were available to your office, and in particular the nurses triage notes.

H. The error in relation to the paracetamol as confirmed by Dr Searle is a minor deviation of practice and did not affect the overall care.

I. Higher dose of Norflox is also a minor deviation from standard practice.

As I have mentioned before dosage and duration are often breached to the advantage for patient rather than toxicity which is unheard. Norflox 400mg three times a day is issued for treating infective diarrhoea and toxic states which Dr Searle has mentioned in his letter.

In summary, I would ask you to consider the follow up advice as safe, with scope for improvement by giving the patients written instructions and patient consult print outs (as it is clearly learnt in this case). Further record keeping has been suboptimal given the fact that there was severe time constraint. Please consider this as a minor breach."

Dr C

In response to my provisional opinion Dr C provided the following further information:

"I write in response to your provisional report regarding the care provided by me, and others at [the medical centre] to [Ms A] in [January]. I have read the report and the comments made by Dr Searle, who was the Independent Expert Adviser. Apparently, about 500 pages of notes were available for his reference.

In general, I do accept Dr Searle's assessment to be fair; though there are certain parts of it I would disagree with. Some of these are a matter of clinical judgement, and unfortunately it is not always easy to put this in words, and medicine is not as exact a science we would like it to be. However, I accept your finding that it would have been better to have arranged for a full examination of [Ms A] and that some further investigations should have been done. I accept that breach as noted by you, and would like to extend my heartfelt sympathy to the family.

Regarding your recommendations, I would like to state a few things:

1. This case happened more than three years ago and since then I have definitely learnt from this experience and have already modified my practice accordingly. As Dr Searle also points out that although not all such cases require bloods and CXR – the index of suspicion, especially on a second presentation for a similar illness should definitely be higher.

2. I am currently an Advance Trainee in Emergency Medicine and am employed as a Registrar in Emergency Medicine at [a public hospital]. I have finished my Part I exams in Sep 2003 and am about 18 months away from being able to take my Part II (Specialist) exams. After this, I can apply to be vocationally registered as a Specialist in Emergency Medicine.

3. The assessment progress for this programme is quite rigorous. We have formal assessments by the Director of Emergency Medicine, Training (who is also a Specialist in Emergency Medicine) every six months, along with at least one mid-run assessment. Apart from this, we are observed on a more or less daily basis. I am enclosing a copy of my assessment for last year. The current run is finishing in about two weeks and if required, I can send you a copy of this assessment as well, when available. As you will note, there have not been any significant shortcomings noted in these assessment. Also, these are fairly comprehensive in their design, and include not only techniques of chest examination but a whole plethora of factors. Documentation of examination findings is one of the areas assessed.

4. I would especially like to also mention that I worked for six months as a Registrar at […] (Dec 2003 to Jun 2004). I mention this because during this run, we are frequently required to see patients with multiple physical and intellectual disabilities, who present with acute illnesses. The age range can vary from newborn babies to young adults. Similarly, at […] (where I have also worked as Emergency Registrar), we see patients with severe disabilities. Therefore, since [the time of this incident] I have had reasonable experience in assessing and treating patients with multiple and severe disabilities. My work was also assessed by others during the time I worked at […] and subsequently.

5. The next run that I start in about one week will be as Emergency Registrar at […]. During this term I will also be doing an EMST course (advanced trauma management). I am also on the waiting list to do an APLS course (Advanced Pediatric Life Support). I understand this has little relevance to the current case in question but I make note of this to assure you that I am committed to furthering and improving my knowledge of training all the time.

6. I am also in the process of doing a paper for presentation to the College of Emergency Medicines as part of our training, and one of the areas I am considering is about referrals made by GP's to Tertiary Services. Though this is in its very initial stages at the moment, I am sure it will take into account my personal experiences relating to this case as well.

In your report you have recommended that I apologise to [Mr A] and his family. I am happy to do so, and will send your office the letter of apology. I believe that I have reviewed my practice, both since [January], and since receiving your provisional report. I have given the case many hours of thought and reflection, and I am sure that the standard of care I would offer today, if a case like [Ms A's] arose, would be better. As regards the recommendations that I ask another doctor to observe my chest examination technique, and if necessary, seek

further training, I believe this has been addressed by my further training as described above. Also, I believe that the experience I have had since [January] will have met your concern that I seek further training in relation to examining, assessing and treating severely disabled patients. You have also recommended that I review my practice in respect of examination recording. This too, I believe, will have been fully addressed in the reviews that have been done of my work since [this incident]."

Code of Health and Disability Services Consumers' Rights

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

RIGHT 4
Right to Services of an Appropriate Standard

(1) Every consumer has the right to have services provided with reasonable care and skill.

(2) Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards.

Other relevant standards

Regulation 41 of the Medicines Regulations 1984 states:

"Every prescription shall:

- be legibly and indelibly printed;
- be signed personally by the prescriber and dated;
- contain the address of the prescriber;
- in the case of children under 13 years, their date of birth;
- indicate the name of the medicine and where appropriate the strength;
- indicate the total quantity to be dispensed on each occasion authorised by the prescription;
- indicate the dose and frequency for medicines intended for internal use;
- indicate the frequency and method of use for medicines intended for external use;
- indicate for a medicine that is intended to be supplied on more than one occasion
  - the number of occasions it may be supplied or
  - the interval to elapse between each date of supply or
  - the period of treatment."

The Medical Council publication 'Good Medical Practice – A Guide for Doctors' (2000) states that doctors must:

> "Keep clear, accurate, and contemporaneous patient records which report the relevant clinical findings, the decisions made, the information given to patients and any drugs or treatment prescribed."

Use of expert advice

Dr Searle has provided thorough and detailed advice on this matter. Some parts of this advice are outside the scope of the issues that Dr Searle was requested to consider. I appreciate Dr Searle's thorough approach but note the following points. The information that I have gathered and relied upon in reaching my opinion is set out in the "information gathered" section. Where information is not available or factual conflicts are unable to be reconciled, I have noted that this is the case. The section in Dr Searle's advice relating to "possible missing information" reflects his view, rather than my findings of fact. It is the role of the Commissioner, and not an expert advisor's role, to determine the facts in light of which the provider's conduct is to be assessed (cf. *Ambos v Accident Compensation Corporation* (HC AK CIV 2004-404-3261, 21 March 2005)).

As Dr Searle noted in the "other introductory comments" section of his advice, his role is to give advice, as a peer of the providers, as to whether the standard of the services delivered was appropriate. Determining what may have caused or contributed to Ms A's death is not the role of the Commissioner or my expert advisors. The purpose of my investigation is to determine whether Dr B and Dr C complied with their obligations as health care providers under the Code.

Opinion: No Breach – Dr B

Examination
Under Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code), patients are entitled to have services provided with reasonable care and skill. Under Right 4(2) patients are entitled to have services provided that comply with professional, legal, ethical, and other relevant standards.

Mr A's complaint centres on the care that Ms A received during two consultations at the medical centre in January. This investigation seeks to determine whether there were breaches in the standard of care she received.

Independent expert advice was obtained from Dr Searle on the acceptable standards of care. Dr Searle confirmed that it is important to differentiate between:

> "what is an acceptable standard of care and what is not … some breaches of an acceptable standard of care may not have in any way contributed to [Ms A's] death, but these breaches are still breaches of an acceptable standard of care … It is important to understand the difference between the standard of care and the subsequent outcome ... it may be that there was no departure from the accepted standards but the care still resulted in an adverse outcome for the consumer."

The first consultation was on 17 January when Ms A was taken to the medical centre and seen by Dr B.

Dr B informed me that patients were triaged at the medical centre by the charge nurse on arrival at the medical centre. He said "[t]he triage nurse takes a brief history and records temperature, blood pressure, pulse rate and respiratory rate/wheeze, any allergies and how sick the patient appears to be, on the patient arrival slip". Dr B stated that he checks these observations and then carries out general and systematic examinations relevant to the condition of the patient. Ms F (the caregiver who accompanied Ms A) informed Dr B that Ms A had been unwell for the past day or so with a fever, and had been shivering and refusing to eat.

Dr B said he undertook a thorough examination of Ms A (as described in the information gathered). In particular, he examined Ms A's heart and abdomen, and sounded her chest as part of the usual examination he carries out. In a letter dated 25 March to Mr and Mrs A, Dr B stated that Ms A's "abdomen was soft and with no abnormal findings". He informed me that he did palpate her abdomen for signs of tenderness. Dr B said that due to time constraints he usually only records important positive and negative findings in the computerised notes. The patient arrival triage slips are not kept for casual patients. Dr B stated that Ms A's temperature was 38°C and her pulse was 88 per minute. As he did not record these observations in the notes, and the triage slip was not kept, it is surprising that Dr B is able to recall these recordings so precisely. (I discuss the importance of recording such information later in this report.)

I note that there is no indication from the medical centre records or from the residential care facility records that Ms A was unresponsive during the consultation on 17 January, or that she was struggling to breathe. Dr B recalled that Ms A was alert, and that her only symptoms of note were her temperature, chills, and lack of appetite.

Dr Searle advised that an acceptable standard of care during a consultation includes obtaining a full history of the patient's current symptoms, any similar illnesses in the past, and the patient's past medical history including medications and allergies. Ms F took Ms A's file to the consultation. Given that it was a daytime consultation, further information would have been available from Ms A's regular general practitioner, as well as the caregiver, if Dr B had needed it. The onus was on Dr B to obtain additional information if he felt he did not have sufficient information during the consultation.

Dr Searle stated:

> "Given that the presenting problem was essentially fever of unknown origin a full examination of likely sites of infection was required. This means upper and lower respiratory tracts, and heart sounds and abdominal examination. It is clear [Dr B] did all this except it was not documented … if he examined the heart sounds or abdomen."

Ms A's residential care facility records confirm that examinations took place, although no specific mention is made of an abdominal examination.

Dr Searle advised that the two most likely sources of infection causing the symptoms that Ms A presented with were a urinary tract infection or a chest infection. The difficulties in collecting a urine sample for analysis and the failure to follow up on the matter are addressed below.

Dr B informed me that there were no positive findings in relation to Ms A's respiratory system. He stated that he did not order a chest X-ray because of the lack of these symptoms.

There is a discrepancy in the information provided in relation to the specimen for a urine test. Dr B stated that given the presenting symptoms he believed that the most likely cause of her condition was a possible urinary tract infection. He ordered a urine sample for testing, but there were difficulties obtaining a sample. In his response to the complaint, Dr B said he asked the caregiver to obtain a urine sample before commencing Ms A on Noroxin (antibiotics for urinary tract infection). There are no instructions in Dr B's notes about this.

In his response to my provisional opinion, Dr B said that after there was difficulty obtaining a urine sample, he decided to write a prescription for antibiotics to be on the safe side, and advised returning to the medical centre if there was no improvement within 24 to 48 hours. He said he considered this treatment was safe to provide to someone with a fever and chills, without waiting for the test results. Dr B also advised that he was only filling in that day and would not be able to follow up the test results.

Ms F noted that a urine sample was not taken, but does not recall attempting to obtain a specimen at the medical centre, nor did she record any such request in Ms A's diary, wellness plan or the Communication Book. Clearly there was some miscommunication about obtaining the urine sample, and the reasons for it. There is nothing recorded in any of the records to clarify the instructions that were given regarding the urine sample. I appreciate Mr A and his family's concern about this miscommunication. However, I am unable to resolve this discrepancy from the information provided, and given the length of time since the consultation occurred, I do not believe that further investigation by my Office will clarify the instructions. I discuss this issue further under 'follow-up advice'.

Mr A was also concerned that no X-rays were taken during the 17 January consultation. During the meeting with Dr B on 26 March, Mr A asked why no chest X-rays were taken, but he did not receive a response. I note that Dr N, respiratory physician at the public

hospital, in his letter of 30 July to Mr A, said that he would have done chest X-rays as well as urine cultures at this time, because Ms A was unable to provide a history of her condition herself.

I acknowledge Dr N's comments as a specialist with significant experience treating people with an intellectual disability. However, determination of the appropriate standard of care entails looking at the context in which the treatment was given. Neither Dr B nor Dr C, as general practitioners, possess the kind of expertise held by Dr N, and the medical centre would clearly have a different level of resources and expertise than the public hospital.

Dr Searle advised that he would not have expected an X-ray to have been taken on 17 January. He informed me that a chest X-ray at this time would probably not have shown anything, because it is well known in the case of chest infections that, if there are no apparent clinical symptoms, it is unlikely that there will be any abnormal findings on a chest X-ray.

In addition, I note that Dr N confirmed in his letter to Mr A that the development of pleural fluid can occur suddenly, and that there may have been no physical signs indicating the need for a chest X-ray when Ms A was first seen on 17 January.

I accept Dr Searle's advice that Dr B's "examination as documented was thorough for the presenting problem", but that Dr B should have examined Ms A's abdomen and heart sounds. Dr B assured me that he did undertake these examinations, although there are no records to confirm this. On 17 January, Ms A had been mildly unwell for only one day and was not displaying clinical signs of infection. In these circumstances, I am prepared to accept that Dr B's examination and assessment of Ms A was adequate, without concluding whether the undocumented examination of the abdomen and heart sounds actually occurred.

Opinion: Breach – Dr B

Prescriptions
Dr B believed that the cause of Ms A's illness was a urinary tract infection. His proposed course of treatment was to obtain a urine sample for testing before commencing her on Noroxin antibiotic medication, and paracetamol.

While Dr Searle commented that the proposed treatment of norfloxacin (Noroxin) and paracetamol for a possible urinary tract infection was reasonable, the dosage prescribed by Dr B was unusual. He said that "the antibiotic prescribed, Noroxin, was written as a dose frequency of 'tds' (three times a day). This is not a standard dosage, with the usual and recommended dosage being twice a day". From the records kept at the residential care facility, it appears that Ms A was given the Noroxin twice a day for three days (which, according to Dr Searle, is what she should have been given). Dr Searle described Dr B's prescription as a minor departure from the generally accepted standard of care.

In his response to my provisional opinion, Dr B accepts that the dosage for Noroxin was a deviation from usual practice, but stated that using larger doses of antibiotic initially or frequently is used by renal specialists in cases of acute urinary tract infections involving the upper renal tract.

Secondly, Dr B prescribed paracetamol as 250mg/ml. This strength does not exist. Dr Searle stated:

> "[E]ven if it did exist the dose of 10ml qid (four times a day) would be an overdose – 2500mg four times a day would be 10000mg or the equivalent of a dose of five adult tablets of 500mg four times a day or 20 tablets a day. It is much more likely that this was supposed to be a script for 10ml of 250mg/5ml (one of the two standard strengths of paracetamol) qid (four times a day)."

The only other standard strength for paracetamol is 125mg/5ml. As the prescription stated 250mg/ml, it is reasonable to conclude that the pharmacist would have dispensed 250mg/5ml, as that is the only standard strength for 250mg. I note that Ms A's Wellness plan records "Paracetamol 250mg 10ml qid", and her records show she was given 10mls of Paracare.

Dr B accepts that he made an error with Ms A's paracetamol prescription. He submits that the errors in relation to paracetamol and Norflox were minor deviations and did not affect the overall care. He notes that the caregivers did in fact issue the dose that was intended. I note that, since treating Ms A, Dr B has altered his practice and now usually issues computer-generated scripts.

The Medicines Regulations 1984 state that a prescription must indicate the name of the medicine and, where appropriate, the strength; the total quantity to be dispensed on each occasion authorised by the prescription; and the dose and frequency for medicines intended for internal use. It is clear that the errors Dr B made on the script meant that these regulations were not complied with in this instance.

Dr Searle said that "a doctor is expected to take due care that the correct medication in the correct strength and dosage is what is printed or hand-written on script that is signed by the doctor". He noted that the errors in the script were potentially dangerous, especially if it were possible for the pharmacist to follow the instructions literally.

I agree with my expert that Dr B's prescriptions for both medications were written without sufficient care. I note Dr B's view that they were minor deviations from accepted practice. However, the errors had the potential to cause significant harm, particularly if they had occurred with different medications. It is only through good fortune that the errors do not appear to have impacted on Ms A's care in this case. I note the changes Dr B has made to his practice. However, in failing to comply with regulation 41 of the Medicines Regulations 1984 in this instance, Dr B breached legal standards and Right 4(2) of the Code.

Follow-up advice
As no record was made of the follow-up advice that Dr B gave to Ms A's caregiver, it is unclear what advice was given. Dr B said he requested that the caregiver return with a urine sample for Ms A before starting her on the antibiotic medication. Dr B also claimed that he advised the caregiver to bring Ms A back to the medical centre if she did not improve within 24 to 48 hours.

Ms A's caregiver, Ms F, does not recall Dr B requesting a urine sample, or that she was asked to test Ms A's urine for possible infection. The notes record that there were difficulties obtaining a sample while at the medical centre, but no follow-up is noted regarding obtaining a urine sample later for testing before commencing Ms A on antibiotics. A note is made about crushing the antibiotics before giving them, and the wellness plan records: "Give plenty of fluids, bed rest".

Dr Searle advised:

> "[I]deally the urine should have been sent to the laboratory before the antibiotic was started – however, given it was likely that there would be specimen collection problems (it was noted there were problems trying to get the specimen at the time of consultation and it is likely this would also be a problem at her residence) a more specific plan of either how to collect the urine, or what to do if it could not be collected should have been made."

Dr Searle commented that a clear and unambiguous written record provided to the residential care facility would have been advisable in this case, as Ms A was unable to communicate the treatment plan. This placed considerable reliance on Ms F's recollection of the consultation and treatment instructions. In Dr Searle's view, Dr B's failure to provide a more detailed follow-up plan was a moderate departure from the expected standard of care.

Dr Searle further noted:

> "Also asking for the caregivers to phone for the urine results in 3 days time would have helped to ensure that it was followed up and not overlooked for whatever reason (including the urine test not being done)."

Dr B should have given Ms F follow-up advice that made it clear what should happen if a urine sample could not be obtained for testing. It is obvious that his advice did not make it clear that a urine test was required before commencing Ms A on the antibiotics, because she was given the antibiotics even though no urine sample was obtained. Even if Dr B did instruct that a urine sample was required, he should have given additional instructions in the event that a sample could not be obtained.

In my view Dr B's response to my provisional opinion does not shed any light on the discrepancy regarding the instructions to the caregiver about obtaining a sample after leaving the medical centre. He said that it is not his practice to obtain urine samples by more aggressive means such as a catheter, but expected the nurse to suggest an alternative

plan such as using plastic bags. Dr B also stated that he considered it was "safe enough" to start Ms A on antibiotics without the test results, which in any event he would not have been able to follow up, as he was only filling in at the medical centre and was not a permanent staff member. He also stated that it is quite common for urine samples to be contaminated.

Dr B also submitted that no general practitioner would issue written instructions that a patient be brought back within 24 to 48 hours if not improving. However, I agree with my expert that, in this case, if Dr B had given additional instructions to obtain a urine sample after leaving the medical centre, it would have been helpful to have provided such instructions in writing, not only for the caregiver but for other medical centre staff in the event that Ms A did return.

It is certainly apparent that staff at the medical centre were not aware of Dr B's instructions regarding a urine test for Ms A. When the residential care facility caregivers telephoned on 18 (and possibly also on 19) January with concerns that Ms A had not improved, the medical centre staff did not follow up on the urine sample, and instead gave instructions to continue the antibiotics and give them time to work.

In my opinion, by failing to provide clear and comprehensive follow-up advice regarding Ms A's treatment, Dr B breached Right 4(1) of the Code.

Records
The clear and comprehensive recording of notes as a result of a medical consultation is a basic element of good quality medical care.

I note that Dr B's notes do not record important information about the consultation on 17 January, which makes it difficult to assess exactly what examination took place and what advice was given. While he may have asked for information, carried out appropriate examinations, and given follow-up advice, he did not record it.

I note that Dr B has also stated that short consultations and time constraints may result in hurried consultations.

Dr Searle stated that "overall Dr B's records were within a reasonable standard". However, he went on to highlight concerns about Dr B's records, including Ms A's history, recordings of his examination findings, and documentation of follow-up advice.

Dr Searle commented that there is no record of Ms A's past history in Dr B's notes, although it appears this information was available elsewhere (either on the computer system or in the file brought by Ms F). Dr B informed me that he only records important positive and negative findings. He did not record Ms A's level of functioning, or her heart sounds and abdominal examination. Dr Searle stated that this information would have been useful for any future comparison.

Dr B also did not record his follow-up advice regarding Ms A's care. Dr Searle advised:

> "A better approach would have been to record specific follow-up advice in the notes and give a copy of the entire note to the caregiver … – for example 'seeing the usual doctor at two weeks total illness if she was not back to 100% normal, seeing a doctor in 2 to 3 days time if she was not clearly improving, and sooner if she was worse or having new symptoms' … This is important in that it both allows doctors and nurses at [the medical centre] to answer any phone calls more easily and/or see the patient again."

In this case, both telephone calls to practice nurses and a follow-up consultation by a different doctor at the medical centre occurred within four days of Ms A's consultation with Dr B. I am concerned that Dr B's failure to record detailed and complete notes may have impacted on the subsequent care that Ms A received. Dr B did not record important information which would have been useful for comparison in the days that followed. As his follow-up advice was also not documented, the residential care facility and the medical centre staff were unable to make appropriate decisions regarding Ms A's follow-up care. Regardless of time constraints, sufficient information should be recorded to ensure that appropriate continuity of care for patients is maintained.

Dr Searle described Dr B's record-keeping in this instance as a mild departure from accepted standards. In my opinion, Dr B's record-keeping breached Right 4(2) of the Code.

Opinion: Breach – Dr C

Examination and treatment
Ms A returned to the medical centre on 21 January, and saw Dr C. She had not previously been seen by Dr C.

I note that there is some discrepancy in the information provided, as to whether Ms A's condition had improved between the consultations on 17 and 21 January. Dr C's contemporaneous notes record that Ms A was "[s]till not improving", but he later stated that Ms K told him Ms A was slowly improving.

I note that no mention was made of Ms A's swollen foot, which was recorded by the residential care facility staff on the morning of 21 January. It is unclear from the information provided whether Dr C knew about the foot or examined it.

Dr Searle commented:

> "It seems likely that either [Ms A] was worse or not improving or there was doubt that she was improving adequately – any of these scenarios combined with her fever still being present in my opinion warranted further investigation unless a clear cut explanation for this was found on examination."

I consider it probable that Ms A's condition had not improved significantly between 17 and 21 January, as the residential care facility staff were sufficiently concerned that they telephoned the practice nurse at the medical centre at least once during that four-day period, and returned Ms A for a second consultation on 21 January. Ms K informed me that she told Dr C that Ms A was not improving, which is consistent with what Dr C noted in his records. Given that Ms K's recollection of events is supported by Dr C's notes, I am satisfied that Dr C was told that Ms A was not improving.

Dr C informed me that his examination of Ms A at this consultation was difficult because of her disability and being in a wheelchair. He also stated that he received little assistance from her caregiver during the examination. Dr C said Ms A had a slight temperature (37.9 degrees), and was not tachycardic or hypotensive. Her chest appeared to be clear and there were no murmurs in her heart. Dr C informed me that when he listened to Ms A's breath sounds (on examining her chest), they were difficult to hear because of interference from transmitted upper airway sounds.

Dr Searle commented that no abdominal examination was recorded. Since it appears that Ms A was examined in her wheelchair, it is difficult to see how Dr C could have examined her abdomen adequately.

In relation to Dr C's comments about the consultation being difficult owing to her disability and being in a wheelchair, Dr Searle said:

> "I do not think this is an adequate explanation for not examining [Ms A] thoroughly – he could have asked the caregiver to help and/or obtained assistance from other nursing and medical staff on the premises – even if such staff were not present or it was deemed unsafe to move [Ms A] from her wheelchair, then this in itself would be a reason to organise other immediate follow up – either a review in hospital or a house call where presumably the normal care giving staff were able to transfer her to her bed (for example with special lifting equipment)."

Dr Searle informed me that if Dr C did not examine Ms A's abdomen, or arrange for another doctor to do so, this was a moderate departure from the accepted standard of care.

In relation to the transmitted sounds that Dr C reported hearing, Dr Searle said this could have been due to a partly blocked nose or throat, since Ms A could not breathe through her mouth. He stated that "[t]he other possibility is that the transmitted sounds … [were] transmission through abnormal lung – such as consolidated lung (for example in pneumonia)". Dr Searle advised that if there was any doubt as to the cause of the sounds, a chest X-ray was required to rule out a chest infection (one of the two most common causes of infection, particularly in disabled people). Given the abnormal chest findings of the ambulance staff, and staff at the public hospital later the same day, it is reasonable to conclude that abnormal findings should have been observed by Dr C. Dr Searle stated:

> "I think that the combination of these facts plus [Dr C's] own comments about a difficult examination and his letters stating he did in fact hear something in [Ms A's] chest (which

> he thought to be upper airways noise) suggest that either he did not examine her chest adequately, or did not interpret his examination findings adequately, or did not recognise the significance of his uncertainty about the origin of the sounds he was hearing."

As a result of his examination Dr C recorded "?Virus" in his notes, and planned to continue the antibiotics until finished, and to observe and review her in a couple of days.

Dr Searle stated that he does not believe that a viral infection (which may have been indicated by her congested throat) could explain Ms A's condition at that time. Further action was required to establish the cause of her illness, which was into the sixth day. Dr Searle commented that the advice recorded by Dr C – to continue with current treatment and return if she was not improving by the end of the week – was more appropriate for a patient with a one to two day history of this type of illness, not four or five.

In addition, Ms A would have finished the antibiotics before 21 January. Dr Searle informed me that the dispensing of Noroxin is "restricted to six tablets of supply at a time … and this is common knowledge to doctors practising in primary care in New Zealand". If Ms A had been given two tablets each day, she would have used them all at least one day before she attended Dr C. Ms K stated that Ms A had in fact finished them on 20 January. Dr C should have been aware that the antibiotics prescribed on 17 January would have run out by the time of Ms A's consultation with him on 21 January, and if his plan was to continue them, he needed to prescribe more. In any event, this antibiotic would not have been effective for a chest infection which, according to Dr Searle, was the other most likely source of infection.

Dr Searle advised:

> "[E]ven if [Ms A] was still on antibiotics, clearly she was not improving and the treatment needed to be changed in some way. For all these reasons I cannot agree with [Dr C's] explanation for delaying any further investigations and/or referral to hospital."

Dr Searle described Dr C's failure to examine Ms A adequately, refer her to appropriate secondary services, or order further investigation, as a moderately serious departure from accepted standards of care.

In his response to my provisional opinion, Dr C accepts that it would have been better to have organised a full examination of Ms A and ordered further investigations.

Doctors should take further action when patients do not respond to treatment after a reasonable amount of time, whether it be by changing treatments, ordering investigations, or referring to secondary services. The assumptions made during an initial consultation should be questioned if a patient does not respond to the treatment resulting from those assumptions.

Ms A had been ill for six days when Dr C reviewed her. She had finished the course of antibiotics prescribed for her, and had not improved. Dr C did not prescribe any more

medication, he failed to examine her properly, failed to recognise the transmitted airway sounds for what they were, and he did not order any investigations to discover why her condition was not improving. In my opinion Dr C's examination and treatment of Ms A on 21 January was not adequate in the circumstances, and breached Right 4(1) of the Code.

The Medical Centre

Under section 72(2) of the Health and Disability Commissioner Act 1994 (the Act) an employing authority may be vicariously liable for an employee's failure to comply with the Code. Section 72(5) provides that an employing authority will have a defence if it can prove that it took such steps as were reasonably practicable to prevent its employees breaching the Code.

Because of the potential liability under section 72 of the Act, I notified the medical centre of my investigation about the care provided to Ms A. However, I was informed by the current General Manager of the medical centre that the ownership of the practice changed in 2003, and that none of the staff involved in Ms A's care are now employed at the practice. The company that owned the medical centre at the relevant time no longer exists. In these circumstances, there is little point in further discussion of the issue of vicarious liability. However, I intend to send a copy of my final report to the medical centre for its information.

Actions taken

Dr B provided a written apology to Mr A, in which he stated:

> "Firstly I have to express my deepest and sincere condolences for the event that has caused you so much anguish and stress. I sincerely apologise for premature loss of life of [Ms A]. It is very tragic and your anger, grief thereof is understandable. I had also sent you my condolences during our meeting [after your daughter's death]. I sincerely regret that your daughter did not receive optimal care. I fervently hope that this process brings a 'closure' to you and your family. As a doctor I have always treated patients with their interests at heart. I have immensely learnt from this process and once again, I sincerely apologise to you and I express my heartfelt condolences."

Dr B also advised that he has undertaken self-review and peer review since 2001, including general practitioner training, and his practice has been awarded with RNZCGP accreditation, which involved assessment of physical examinations, record-keeping and follow-up of laboratory results. He intends to undertake further training.

Dr C advised that he has modified his practice and been subject to reviews and assessments in his courses since 2001, which would have addressed the issues highlighted in my report. In particular Dr C is undertaking training to be a specialist in emergency medicine, which involves a rigorous assessment process. He has also worked as a Registrar at a Hospital and gained further experience in treating acutely ill patients with multiple physical and intellectual disabilities.

Recommendation

I recommend that Dr C apologise to Mr A and his family. The apology is to be sent to the Commissioner's Office and will be forwarded to Mr A.

Follow-up actions

- A copy of this report will be sent to the Medical Council of New Zealand and the Royal New Zealand College of General Practitioners.
- A copy of this report will be sent to the medical centre and the residential care facility.
- A copy of this report, with details identifying the parties removed, will be sent to the Disabled Person's Assembly, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

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