

A Health Service Company

Medical Officer, Dr C

**A Report by the
Health and Disability Commissioner**

Case 07HDC11548



Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Complaint and investigation

On 29 June 2007, the Health and Disability Commissioner (HDC) received a complaint from Mrs A about the services provided at a rural hospital (operated by a health service company). The following issues have been investigated:

- *The appropriateness of care provided to Mr A by the rural hospital in late 2006.*
- *The appropriateness of care provided to Mr A by Dr C in late 2006.*

The parties involved in this case are:

Mr A (deceased)	Consumer
Mrs A	Complainant/Mr A's wife
A Health Service Company	Provider
Dr B	Physician
Dr C	Medical Officer
Ms D	Inpatient Coordinator
Dr E	Medical Officer (Locum)
Dr F	Emergency Department Specialist
Dr G	General Practitioner

Independent expert advice was obtained from Dr Kingsley Logan, physician (see Appendices A, B and C).

Responses to my provisional opinion were received from Mrs A, the Health Service Company, and the District Health Board.

Overview

In late 2006, 66-year-old Mr A suffered worsening shortness of breath, thought to be caused by fibrosing alveolitis¹ or pulmonary fibrosis.²

Mr A's condition deteriorated and he was admitted to a Rural Hospital as an inpatient. Respiratory physician Dr B performed a transbronchial biopsy to assist diagnosis, and Mr A was sent home on weekend leave by Medical Officer Dr C. He became breathless early the next morning and returned to hospital via ambulance and was diagnosed with a pneumothorax.³

¹ A progressive inflammatory condition of the lungs, resulting in widespread lung damage through scarring and honeycombing and eventually leading to death from respiratory or heart failure.

² Chronic inflammation and progressive scarring of the lungs, resulting in steadily progressive shortness of breath and eventual death from respiratory or heart failure.

³ Pneumothorax is the collection of air or gas in the space around the lungs (sometimes referred to as collapse of the lung). It is a known risk of transbronchial biopsy.

Mr A's condition continued to deteriorate and he was airlifted to the Public Hospital two days later. Despite intensive care, Mr A died of respiratory failure.

This investigation considers the standard of care provided to Mr A by Dr C, the Health Service Company (which owns and operates the Rural Hospital) and the District Health Board (which funds and monitors the services provided at the Rural Hospital).

Relevant information

The Health Service Company

The Health Service Company (the Company) is contracted by the District Health Board (the DHB) to provide secondary health services in a small town. The contract has been renewed annually since the late 1990s. The Company owns and operates the Rural Hospital in accordance with its service agreement with the DHB. References to the Rural Hospital in this report include the Company.

The Rural Hospital

The Rural Hospital has a 30-bed inpatient ward, outpatient, emergency, radiology and maternity departments, as well as district nursing, social work, physiotherapy and occupational therapy services. The hospital is fully funded by the DHB through the service agreement with the Company. The Public Hospital provides tertiary-level care for patients in the rural town. The Public Hospital specialists are available for consultation via telephone (but the Rural Hospital does not have formal protocols for this). The Rural Hospital has a full electronic connection with the Public Hospital intranet and email systems and, according to the Company, there is a good level of cooperation and communication between the hospitals.

GP care

Mr A was a 66-year-old man with a history of heart attack (myocardial infarction)⁴ and coronary artery disease. In late 2006, he consulted his general practitioner (GP), Dr G, complaining of a one-month history of increasing shortness of breath on mild exertion.

Dr G ordered blood tests and a chest X-ray for Mr A. The X-ray report noted opacification of both lungs, suggestive of fibrosing alveolitis. Dr G referred Mr A to physician Dr B for further investigations.

Outpatient treatment

Dr B saw Mr A at his outpatient clinic at the Rural Hospital. Dr B believed that Mr A might have idiopathic⁵ pulmonary fibrosis so ordered blood tests and started Mr A on

⁴ In 1989, Mr A suffered a heart attack.

⁵ without a known cause

prednisone.⁶ Mr A attended a follow-up appointment with Dr B. Mr A's blood tests were normal, but the prednisone had not significantly reduced his breathlessness. Dr B noted that Mr A suffered from heartburn, for which Dr G had prescribed ranitidine.⁷ He asked Mr A to continue taking prednisone, and begin taking Losec,⁸ in addition to ranitidine, to manage his heartburn. Mrs A recalls that Dr B told her husband that ranitidine may cause respiratory problems and prescribed Losec instead of ranitidine.

Admission to the Rural Hospital

A few weeks later, (on Day 1) Mr A presented to the Emergency Department (ED) at the Rural Hospital complaining of worsening shortness of breath on exertion and chest pain radiating to his throat. He was examined and noted to have been taking Losec instead of ranitidine. A chest X-ray showed "marked deterioration since [two months ago]". Mr A was admitted under Dr B's care, with suspected pulmonary fibrosis, and a high resolution CT scan of his chest was requested from the Public Hospital's radiology department. Mrs A understood that Mr A was admitted to get an urgent CT scan at the Public Hospital. It was expected that the CT scan would be performed on Day 7.

Mr A's temperature was recorded as 37.8°C,⁹ and blood tests were ordered. Although the test results were initially normal, Mr A's white blood cell count rose overnight, and he was considered to have an acute chest infection. He was started on an oral antibiotic (ciprofloxacin) the next morning. By the evening of Day 2, Mr A's temperature was down to 36.7°C.

Bronchoscopy and biopsy

On Day 4, medical officer Dr C obtained Mr A's written consent for a bronchoscopy.¹⁰ Dr C did not complete the section relating to any additional interventions that might be required, such as a transbronchial biopsy.¹¹ Mr A and Dr C signed at the bottom of the form.

Dr C advised that he would have discussed the details of the bronchoscopy procedure with Mr A, as well as diagnostic measures such as biopsy. Dr C stated:

"The boxes are not routinely ticked in the intervention part of the consent form since it is regarded as understood in the signing of the form that a diagnosis is trying to be established to enable appropriate treatment to be given."

⁶ A corticosteroid, indicated for the treatment of pulmonary fibrosis.

⁷ Ranitidine suppresses gastric acid secretion.

⁸ Losec reduces gastric acid secretion.

⁹ Normal body temperature is around 37°C.

¹⁰ Bronchoscopy involves passing a flexible fiber-optic tube, with a camera and light source, into the tracheo-bronchial tree to inspect the lungs.

¹¹ Transbronchial biopsy may be performed during a bronchoscopy, and involves collecting biopsy specimens for diagnosis.

Dr B explained that this was not the first time bronchoscopy and transbronchial biopsy had been discussed with Mr A. He stated:

“I talked to [Mr A] every day explaining the situation and what we needed to do including the procedure of transbronchial biopsy. In this situation, bronchoscopy was performed entirely to obtain transbronchial biopsy and not just to have a look. [Mr A] knew this ... His wife was not present on every occasion that I saw [Mr A] and therefore may not have known about this discussion.”

Mrs A was not present during her husband’s discussion with Dr C. However, she and her husband thought that he was only having a bronchoscopy, and did not know he was going to have a biopsy as well. Mrs A said that her husband was very deaf, and would have required careful explanation of each procedure — she doubted that he would have understood Dr C, who spoke with an English accent. Mrs A also questioned why a bronchoscopy was performed before CT scanning.

Dr B advised that “as part of the investigation for idiopathic pulmonary fibrosis, transbronchial biopsies are recognised as sometimes helpful in obtaining histology”.

At 9am, Dr B performed a bronchoscopy and transbronchial biopsy on Mr A, and requested that a chest X-ray be taken one hour later. A chest X-ray was taken at 10.45am.

Weekend leave

At the time of Mr A’s admission, the Rural Hospital had a practice of allowing stable inpatients to leave the ward and return home, if they so wished. Patients on leave were not discharged, and a bed was kept available for their return at any time. The decision to allow leave was always approved by the consultant or medical officer managing the patient’s care.¹²

Dr B, Dr C and Inpatient Coordinator Ms D met in the Ward Office after Mr A’s bronchoscopy had been performed, to discuss inpatient care and leave over the weekend. Ms D documented, in the ward diary, that Mr A could be granted weekend leave if he wished, and that his condition was stable. She communicated this to the nurse at handover and, later that afternoon, Dr C gave permission for Mr A to go on leave over the weekend. Mr A left the Rural Hospital, with his wife, at approximately 3pm on Friday.

Although Dr B initially advised that he “had not been contacted regarding [Mr A’s weekend leave] and would have countermanded it ...”, he later recalled that, during a discussion with Dr C and Ms D, he had agreed that Mr A could return home on weekend leave if he was well. However, he stated: “My agreement to allow him to go

¹² In September 2007, this practice was formalised by the *Placing patients on leave policy and procedure*.

on leave for the weekend was clearly dependent on no pneumothorax having developed.” This qualification was not documented.

Dr C read Mr A’s chest X-ray later that evening and, although he noted a pneumothorax,¹³ he did not take any action. Dr C did not believe that immediate treatment was necessary and felt that conservative measures would be appropriate. The Rural Hospital advised:

“... The weekend [Medical Officer] is expected to consult with the 2nd on-call doctor on roster and/or the appropriate registrar/consultant in [the Public Hospital] for any difficult cases.”

The Rural Hospital subsequently clarified that consultation with specialists occur “as required” and staff are “made aware of, understand and practice this routinely”.

Return to the Rural Hospital

Mr A became extremely breathless overnight, and returned to the Rural Hospital by ambulance at 4.15am on Day 5. He was admitted to the high dependency unit and required high-flow oxygen to maintain acceptable blood-oxygen saturation. Dr C assessed him at 4.55am.¹⁴ He considered that Mr A’s left lung had collapsed further (progressive pneumothorax), and booked him for a repeat chest X-ray as soon as the X-ray department opened, at 8.30am.¹⁵ Mrs A suggested that an urgent X-ray be arranged, but was told that it could wait until the morning. Dr C advised that he did not arrange an urgent X-ray because Mr A did not have a tension pneumothorax,¹⁶ and Mr A was comfortable (with oxygen saturations around 92–93%).

At 8am, Dr C handed over Mr A’s care to ED physician Dr F (who was 2nd on-call back-up cover for the weekend of Days 5 and 6). A chest X-ray was taken at 8.30am, which demonstrated a 90% left pneumothorax.

Dr F inserted a small pleural tube into Mr A’s chest to drain fluid and assist his lung to re-inflate. Another chest X-ray was taken in the afternoon. Locum medical officer Dr E read the X-ray and noted that Mr A’s pneumothorax was not improving, and the

¹³ Dr C reported a 20% pneumothorax. After reviewing the X-ray films in retrospect, Dr B advised there was a 30–40% pneumothorax.

¹⁴ Dr C was on call overnight (working a 24-hour shift). However, the Rural Hospital advised that Dr C’s last call was at 10pm and he was not called again until 4am the following day. Dr C recalls sleeping from approximately 11.30pm until he was called to attend Mr A and another patient at 4am.

¹⁵ The Rural Hospital’s Medical Officer Orientation document states that the radiology department offers “24 hour seven day service for acute/emergency patients”.

¹⁶ Tension pneumothorax is a complete collapse of the lung, which occurs when air enters, but does not leave, the space around the lung. As the amount of trapped air increases, pressure builds up in the chest. The lung collapses on that side and can push the important structures in the center of the chest (such as the heart, major blood vessels, and airways) toward the other side of the chest. The shift can cause the other lung to become compressed, and can affect the flow of blood returning to the heart. This situation can lead to low blood pressure, shock, and death.

drainage tube was not draining freely. Following a discussion between Dr E and Dr F, a larger drainage tube was inserted. Mrs A was concerned that the initial tube was too small and was incorrectly sited, and believes that it caused her husband unnecessary pain.

Mrs A recalls that, at this time, she requested that her husband be transferred to the Public Hospital. However, Dr E and Dr F recall that Mr and Mrs A were satisfied with the plan to transfer Mr A to the Public Hospital if his condition did not stabilise.

Although Mr A experienced significant discomfort from the large pleural tube, a chest X-ray taken that evening demonstrated almost complete inflation of the left lung.

Despite the improvement of his pneumothorax, Mr A needed ongoing continuous oxygen to maintain acceptable blood-oxygen saturation, as well as morphine and clonazepam. A chest X-ray taken at 2pm on Day 6 noted probable pulmonary fibrosis, emphysema, a mild to moderate left pneumothorax, and chest congestion. The X-ray confirmed that the pleural tube was correctly placed. Mr A's temperature was recorded as 37°C. Dr E considered that Mr A probably had a chest infection or pneumonia. He prescribed intravenous antibiotics (cefuroxime and clarithromycin).

Mr A continued to deteriorate, and Dr E telephoned Dr B at approximately 4pm to discuss his management. A decision was made to transfer Mr A to the Public Hospital, and helicopter transfer was arranged by Dr E. Mr A was transferred via helicopter on the afternoon of Day 6.

Mr A further deteriorated after admission to the intensive care unit of the Public Hospital, and died two days later. The post-mortem examination findings were that Mr A's death was due to "severe respiratory failure complicating extensive pulmonary diffuse alveolar damage in association with aged myocardial infarcts".

Actions taken by the Rural Hospital

The Rural Hospital conducted an internal case review following Mr A's death, and acknowledged that his chest X-ray should have been read before he was allowed to return home on weekend leave. The Rural Hospital advised that the following changes have been made in light of Mr A's case:

1. Transbronchial biopsies are no longer performed on Friday. The respiratory physician is to be available to monitor and review the patient for at least the next 24 hours after completion of each procedure.
2. The consenting processes for bronchoscopy and biopsy procedures have been reviewed and tightened.
3. The unwritten policy and procedure for allowing patients to go home on leave has been formalised and implemented.

The Rural Hospital stated that compliance with the above changes is to be monitored by regular internal audits. The Rural Hospital has also developed written guidelines

for facilitating consultation and transfer arrangements with appropriate services at the Public Hospital (the “Acute Admission Policy (Generic)” — see Appendix D), which were implemented in February 2009.

Key findings

Standard of care

Like any patient, Mr A had the right to services of an appropriate standard, including the right to have services provided with reasonable care and skill and co-operation among providers to ensure quality and continuity of services (Rights 4(1) and 4(5) of the Code of Health and Disability Services Consumers’ Rights (the Code)). Independent expert advice on the standard of care provided to Mr A was obtained from physician Dr Kingsley Logan (see Appendices A, B and C).

Based on Dr Logan’s advice, I conclude that between Days 1 and 3, Mr A was provided with appropriate care at the Rural Hospital to control his symptoms, initiate treatment for a suspected chest infection, and attempt to quickly diagnose his pulmonary condition.

On the morning of Day 4 Mr A underwent a bronchoscopy and transbronchial biopsy. Mrs A questioned “why an invasive procedure [bronchoscopy] was done prior to the CT scan when respiratory problems were present?” Dr Logan advised:

“Bronchoscopy is seen as being more definitive [than CT scan] and is a commonly used investigation to elucidate the cause of deterioration in this situation.”

A chest X-ray was taken after the bronchoscopy and transbronchial biopsy procedure on Day 4. However, the X-ray was not read, and Mr A was not clinically reviewed, before he was granted weekend leave. Relevant contextual factors were that Dr B had agreed that Mr A was suitable to go on leave (if Mr A’s observations were stable), that Mr A’s observations were stable, he was keen to go home and a bed was available to him should his condition change. At the time, the Rural Hospital did not have a policy in place for granting leave to patients who had undergone bronchoscopy and/or transbronchial biopsy, or for granting leave in general. Dr Logan was critical of the decision to send Mr A home:

“Comprehensive clinical review and review of the [chest X-ray] prior to leaving the ward were not done and [this] is seen as a marked departure from normal practice.”

Dr C did read Mr A’s chest X-ray later that day and noted a pneumothorax. However, he did not take any action in response to this (such as to recall Mr A from leave, or discuss the situation with a specialist).

When Mr A returned to on Day 5 with severe breathlessness, Dr C considered that the pneumothorax had worsened. However, Mr A was maintained on high-flow oxygen for over four hours until the radiology department opened. An urgent X-ray was not arranged, and there was no consultation with Dr F or the Public Hospital Respiratory team about management of Mr A's condition. My expert advisor, Dr Logan, advised that the failure to arrange a chest X-ray on Mr A's arrival was a departure from accepted practice. In response, the Company suggested that an urgent X-ray was not required but that an intercostal/thoracostomy tube should have been placed at that point (and an X-ray should have followed at 8.30am to assess the placement and function of the tube). I accept Dr Logan's advice that an urgent X-ray should have been arranged, before placement of the tube.¹⁷

Upon discovery of a significant pneumothorax (revealed by the chest X-ray), Dr F initially inserted a small pleural tube. Dr Logan advised that this was appropriate and prevented a tension pneumothorax developing. Dr F later inserted a large pleural tube, and Mr A's left lung re-inflated. Dr Logan advised that this was appropriate treatment for the pneumothorax.

Although Mr A's pneumothorax improved, his condition continued to deteriorate over the next few hours. When Mr A appeared to develop a serious infection, Dr B was consulted about his management, and the decision was made to airlift him to the Public Hospital. Dr Logan advised that Mr A should have been transferred earlier but this was not "a departure from normal practice standards".

After-hours specialist consultation

Mr A was an unstable patient being cared for by a weekend on-call team, including medical officers and an emergency medicine specialist. Dr B was not generally available over the weekend, and the Rural Hospital had no formal arrangements for respiratory physician cover, or protocols for consulting with Public Hospital specialists. Dr Logan advised:

“[W]eekend admissions [should be] limited to those who only require minimum intervention, are seen to be stable, and do not require intensive investigation or management.

...

Smaller hospitals require a system of support and back-up where potentially unstable patients can be easily transferred to the larger centre where specialised investigations and sub-specialty interests will provide timely and definitive investigation and intervention. There should be a low threshold for

¹⁷ Dr Logan has subsequently clarified that it would not be appropriate or accepted practice to place the tube without an X-ray in a patient who is dyspnoeic and desaturated. He confirmed that the appropriate course of action would have been to take a chest X-ray prior to placing the tube, and take a further X-ray to check on placement.

referring these patients and definitive protocols need to be in place where the medical officers have a right to the ability to transfer patients to the larger centres if they feel this is required.”

This issue is discussed further below.

Informed consent

The consent form for the bronchoscopy and transbronchial biopsy, signed by Mr A and Dr C, did not include consent for the biopsy. If verbal consent was obtained, Dr C failed to document it.

Mrs A was not present when Dr C explained the procedures and sought consent from her husband. However, she maintains that he did not knowingly consent to the biopsy, as he was very deaf so would not have understood unless each procedure was carefully explained. She stated that they were both surprised to find out that a biopsy had been performed. No evidence that Mr A voiced his surprise to nursing staff is recorded in the clinical notes.

Dr B stated that he had met with Mr A throughout the preceding week to discuss his condition and the need for transbronchial biopsy. Dr C stated that he explained the bronchoscopy procedure and additional interventions (including biopsy) to Mr A, before obtaining his consent. Dr C explained that the boxes relating to additional interventions are not routinely ticked on the consent form because the purpose of conducting a bronchoscopy is to obtain information to make a diagnosis. It is understood that additional interventions may be necessary.

I find it probable that although the bronchoscopy consent form did not document Mr A’s consent to transbronchial biopsy he did, in fact, consent to the procedure. Mrs A was not present during the consent discussions, and both Dr C and Dr B recall that they specifically discussed transbronchial biopsy with Mr A. A biopsy was needed to correctly diagnose Mr A’s respiratory illness, and it seems likely that this would have been explained to him.

Opinion: Breach — The Company

Specialist consultation and discharge policies

Mr A was granted weekend leave without a physical examination and before his chest X-ray was read. Although Dr C made a poor choice in allowing Mr A to return home in these circumstances, it does not necessarily reflect a lack of care on Dr C’s behalf. The decision to grant leave was made at a meeting between Dr B, Dr C and the Inpatient Coordinator. At the time, there was no formal policy for granting weekend

leave, nor specific guidelines for postoperative care of transbronchial biopsy patients at the Rural Hospital.¹⁸

Mr A deteriorated after returning from leave, and specialist consultation should have occurred before the afternoon of Day 6. Again, there were no clear policies guiding Dr E and Dr F to consult the Public Hospital respiratory team or Dr B when Mr A's condition continued to deteriorate. Dr Logan advised:

“Whilst the pneumothorax initially improved, with further deterioration [Dr E] should have consulted further and discussed the issues with either [Dr B] or with the on call intensivist or Respiratory Physician [at the Public Hospital].”

The Rural Hospital advised that medical officers are able to consult with the relevant specialist team at the Public Hospital as required, and provided a copy of its Policy for Management of Acute Abdominal Pain/Surgical Cases at the Rural Hospital (“abdominal pain/surgical policy”), which includes contacting or transferring to the Public Hospital if the patient deteriorates over a 24-hour period. The Rural Hospital advised that consultation with specialists occurs “as required”, and staff are “made aware of, understand and practice this routinely”.

However, at the time Mr A received care, there were no formal respiratory physician cover arrangements for Dr B's patients over the weekends, and no written protocol for after-hours liaison with the Public Hospital specialists. Dr Logan advised that Dr C, Dr F and Dr E should have sought specialist consultation, or transferred Mr A to the Public Hospital, at an earlier stage.

In case 04HDC00656,¹⁹ involving a rural hospital, I discussed the importance of appropriate policies and systems to facilitate consultation with specialist physicians in regional hospitals. I warned that “Medical officers should not be placed in the position of providing acute medical care without well-established ... support mechanisms.”

While I accept that staff at the Rural Hospital were generally aware that they could consult the Public Hospital specialists, the process for doing so was not clearly outlined for staff. As the Rural Hospital highlighted in response to my provisional opinion, the decision whether to consult or transfer a patient is a matter of clinical judgement. However, medical officers may not necessarily have the skills to make these difficult judgements. Staff need access to appropriate policies to guide their decision-making. That no specialist input was sought before late Sunday afternoon, Day 6, despite Mr A's complex respiratory condition, suggests that there was not an appropriate system to facilitate consultation with specialist physicians.

The Rural Hospital maintains that “[Mr A] was already under the care of a Respiratory Physician with a moderately well documented diagnosis and investigation process”,

¹⁸ I note that the Rural Hospital has since developed specific guidelines for postoperative management of transbronchial biopsy patients, and general policy and procedure guidelines for granting leave.

¹⁹ See: <http://www.hdc.org.nz/files/hdc/opinions/04hdc00656medicalofficer.pdf> (19 April 2006).

and he “experienced a relatively simple complication (pneumothorax)”. On this basis, medical staff had the capability and experience to care for Mr A (and a written policy on consultation with specialists would not have changed the management of his care). This response overlooks the seriousness of Mr A’s condition and the importance of specialist input into his care. As noted by Dr Logan, a medical officer at the Rural Hospital would not be expected to have had extensive experience with the complications of a transbronchial biopsy, or knowledge of the particular problems relating to patients with fibrotic lung disease.

The service agreement with the DHB requires the Company to have arrangements relating to specialist consultation and referral of patients to a higher level of service (including tertiary).²⁰ It is important that the Rural Hospital ensures that policies or protocols are in place to facilitate consultation between medical officers and the Public Hospital specialists, and immediate transfer of unstable patients to the Public Hospital, particularly during the weekend.

The Rural Hospital explained that the “abdominal pain/surgical policy” was required because of recurrent misdiagnoses of abdominal pain/surgical cases and because of a lack of surgical back-up available (even during normal working hours). This is a sensible response to problems identified with the management of complex or difficult abdominal pain/surgical cases. However, the policy relates only to patients with abdominal pain or surgical cases, and is limited to guidance on when to consult with, or refer to, the Public Hospital. The recent “Acute Admission Policy (Generic)” likewise provides limited guidance on the availability of the Public Hospital specialists for consultation, and does not provide guidance on the process for seeking specialist input and documenting any consultation.

Obviously, rigid protocols, such as that developed for management of abdominal pain/surgical cases, cannot cover the full range of possible conditions and complications. However, I encourage the Rural Hospital to ensure that clear protocols are developed for non-specialist medical officers on duty over the weekend to contact the relevant specialist team at the Public Hospital. The suggested protocol should provide clear guidance to staff on the availability of the Public Hospital specialists for consultation in complex or difficult cases, set out the process for consultation, and include a means of recording the outcome of the consultation (such as using a fax-sheet similar to the example provided by Dr Logan (see Appendix C)).

²⁰ Agreement between Health Funding Authority and the Health Service Company “Tier One — Specialist Medical and Surgical Services Service Specification” (as at 23 February 2009):

“5.1.3 ... Comprehensive coverage will be obtained by referral of patients to a higher level of service (including tertiary) when the severity or complexity of the condition is beyond the technical and clinical capacity of the local service.”

“8.3 ... Services work closely with primary, secondary and tertiary specialties to ensure the appropriate referral of patients with conditions which are beyond the technical and support capacity of the local medical and surgical service.”

Medical officer on-call hours

I note that, according to the staff roster for Days 4 and 5, Dr C was rostered for a 24-hour shift, and had been on duty for over 20 hours when Mr A returned to the hospital from leave. Dr C decided that an urgent chest X-ray was unnecessary and elected to maintain Mr A on high-flow oxygen until the radiology department opened. Dr Logan advised that this was “a cognitive error ... and is seen as a marked departure from acceptable practice”. Dr Logan attributed the error to excessive on-call hours, stating:

“... It is not accepted to be on duty for more than 16 hours. Prolonged duties [and] poor and/or interrupted sleep will continue to lead to cognitive errors. This again emphasises the need for support and back-up and if this is not locally available then care and responsibility needs to be formally taken over or shared by the regional hospital.”

The Rural Hospital responded that Dr C had not sustained prolonged duties and poor or interrupted sleep while on duty on Days 4 and 5. The Rural Hospital operates a 24-hour call system, with 4–5 FTEs to cover the service. There is a system in place for ensuring the on-call medical officer does not suffer from excessive workload or insufficient rest, whereby a second on-call medical officer can be called in. On the night of Day 4, Dr C’s last call was at 10pm and he was not called again until 4am the following day. Dr C recalls sleeping from approximately 11.30pm until he was called to attend Mr A and another patient at 4am. The Rural Hospital explained that the roster is designed by the medical staff and if staff were not accommodated in this way it would be highly likely that staff would leave.

I accept that, in the circumstances of a rural hospital with limited funding and staff, the system for on-call medical officers is reasonable. However, I draw to the Rural Hospital’s attention Dr Logan’s advice that it is not acceptable for medical officers to be on duty for more than 16 hours.

Informed consent

In relation to consent for Mr A’s transbronchial biopsy, Dr C stated that the boxes relating to additional interventions are not routinely ticked on the consent form. The purpose of conducting a bronchoscopy is to obtain information to make a diagnosis and it is understood that additional interventions may be necessary. Although I accept that informed consent is a process, and that in a case like Mr A’s what really matters is that the patient makes an informed decision to have invasive procedures, it is still important to keep a *record* of consent having been obtained.

I note that the Rural Hospital staff members met to discuss this issue at a critical events meeting on 7 March 2007, and the need for robust documentation of consent processes was highlighted. In April 2008, the Company submitted a copy of the informed consent policy/procedure in use at the Rural Hospital to the District Health Board as part of a progress monitoring report on the routine audit of services conducted on 5 and 6 December 2007. The policy/procedure was noted to be “comprehensive and covered the [relevant] aspects of the Code of Health and Disability Services Consumer[s] Rights”.

I am satisfied that the Company has appropriate policies in place to guide staff in obtaining informed consent, and staff are adequately trained in documenting their discussions with patients. I recommend that regular audits of documentation be undertaken.

Conclusion

The Company failed to ensure that the Rural Hospital had appropriate policies in place in relation to patients going on “weekend leave” or appropriate specialist support (in the form of appropriate specialist cover and/or clear protocols for contacting Public Hospital specialists). Such policies are particularly important for rural hospitals, which often do not have local specialist cover and rely to a large extent on locums. While such policies (and earlier consultation with a specialist) may not have altered the outcome for Mr A, given his complex condition, I consider that the Company did not provide Mr A with services with reasonable care and skill, and did not sufficiently facilitate cooperation between its staff and the Public Hospital specialists to ensure quality of care. In these circumstances, the Company breached Rights 4(1) and 4(5) of the Code.

Opinion: No breach — Dr C

Dr C read Mr A’s chest X-ray after he had left the Rural Hospital, and discovered that he had developed a pneumothorax. Dr Logan advised that not recalling Mr A to the hospital at this point “was an error of judgement given the situation of a patient with lung disease”. Dr Logan went on to state that “[Dr B] was primarily responsible for the care of [Mr A] and this complication should have been reported to him”.

However, Dr C explained that “[Dr B] was not contacted as he was no longer on duty or call”. The Rural Hospital confirmed that Dr B was not generally available over the weekend. There were no policies in place relating to weekend leave or postoperative management. Dr B had approved the weekend leave for Mr A and had left no instruction whether he should be recalled from leave if the X-ray revealed certain features. Further, Mr A was able to return to the ward if his condition changed. In these circumstances, I consider that Dr C acted reasonably in not recalling Mr A from leave after reading the X-ray.

Dr Logan also advised that Dr C’s failure to arrange an urgent chest X-ray when Mr A returned to hospital on Day 5 was a departure from accepted practice. However, Dr Logan considered that this does not imply that his practice has not followed an appropriate standard of care. Dr C followed acceptable clinical guidelines and stabilised Mr A, but made an error of judgement in not obtaining an urgent X-ray. However, Mr A was adequately maintained on oxygen and, as a medical officer at a rural hospital, Dr C did not have the appropriate specialist support readily available

(through consultation with Dr B or the Public Hospital specialists) to assist with this decision.

A provider can only realistically be expected to take “reasonable actions in the circumstances” prevailing at the time (see clause 3 of the Code). On balance, given the lack of appropriate arrangements for consulting with specialists, I consider that Dr C (as a medical officer at a rural hospital) took reasonable actions to provide appropriate care to Mr A and therefore did not breach the Code.

Other comment — The District Health Board

Under the New Zealand Public Health and Disability Act 2000, the DHB is responsible for planning, funding and providing health care services for the people of the region. Although the DHB may enter into “service agreements” with other service providers (such as the Company), the DHB remains responsible for “monitoring the performance under that agreement of the other parties to that agreement”.²¹ Even where services are contracted out, the DHB also retains the duty to ensure the provision of services for its resident population,²² and monitor the delivery and performance of services by it and by persons engaged by it to provide services.²³

As outlined above, the service agreement contract between the Company and the DHB states that the Company must have arrangements and protocols in place for specialist consultation and transfer of patients requiring complex treatment to a more appropriate provider. No such arrangements were in place, despite audits on behalf of the DHB in 2001, 2004 and 2007. The Ministry of Health also carried out a certification audit in 2005.²⁴

The DHB is funded both to provide and contract for health and disability support services to its population, which includes the town where the Rural Hospital is located. These duties do not cease when the DHB makes an arrangement with another provider to provide services. The DHB has a statutory duty to ensure the provision of services for its resident population and to monitor the delivery and performance of services by it and by persons engaged by it to provide services. The DHB must have appropriate systems in place for such monitoring. This is particularly important where secondary care/hospital services are contracted out.

²¹ New Zealand Public Health and Disability Act 2000, s 25(3).

²² New Zealand Public Health and Disability Act 2000, s 23(a).

²³ New Zealand Public Health and Disability Act 2000, s 23(i).

²⁴ Since these events, the Ministry of Health has undertaken another certification audit (in 2007) and a surveillance audit (in 2008).

In this case, the Company has been found in breach of the Code for failing to ensure that there was appropriate specialist support (in the form of appropriate specialist cover and/or clear protocols for contacting specialists).

The DHB accepts that a district health board has a responsibility to monitor the performance of its providers in relation to any service agreements entered into, particularly where the service agreement relates to a “substantial service such as a secondary hospital”. While audits cannot traverse every aspect of the service provision, the audit tool used should cover at least the key service specifications. The audits undertaken on behalf of the DHB did not pick up that there was no appropriate system at the Rural Hospital to facilitate consultation with specialist physicians (even though this was a term of the service agreement). The DHB has advised that the audit tool used to audit the Rural Hospital will be urgently reviewed to ensure that it covers the key service specification areas.

This case highlights the important responsibility of a district health board to monitor the delivery of services that it funds within its district, particularly where those services are secondary care/hospital services. A fundamental prerequisite for the Company to provide hospital services at the Rural Hospital is that adequate systems are in place for consultation with, and referral to, a higher level of service when the severity or complexity of the condition is beyond the technical and clinical capacity of the local service. It is reassuring to see that the DHB is taking steps to tighten its monitoring of service provision by the Company at the Rural Hospital.

Naming of providers

As Commissioner, I have the discretion to name group providers in the final version of any breach reports published on the HDC website and sent to relevant agencies. As set out in HDC’s Naming Policy,²⁵ there is a presumption that HDC will name public hospitals found in breach of the Code. In my view, there is a strong public interest in knowing the identity of a public institution when it is found wanting. However, each case must be considered on its own merits, taking into account all the relevant factors.

In this case, the Company submitted that I should not name the Rural Hospital, the Company and the DHB because this would lead to the identification of the individual practitioners involved. There are very few medical staff at the hospital and all are well known within the community. The Company also submitted that identification would erode the community’s confidence in the Rural Hospital, and have a negative effect on service provision. This would not be justified given that the events investigated occurred over two years ago. The DHB stated that the DHB and hospital should not be

²⁵ See www.hdc.org.nz/files/hdc/Naming-Providers-in-Public-HDC-Reports.pdf.

identified because it would lead to the identification of the individual doctors involved.

I have carefully considered these issues and decided that, on balance, the privacy interests of the individual doctors outweigh the public interest in knowing the name of the hospital. The hospital provides services to a close-knit community, and there is a strong likelihood of the individuals being easily identified by many people in that community. Although no doctor has been found in breach of the Code, there has been some criticism of their practice. This could readily lead to negative media coverage that could impact on their professional reputations and on the retention of key medical staff. The public interest in knowing the name of the hospital is mitigated by the fact that the deficiencies identified in this report are unlikely to be unique to this rural hospital, and are being remedied. For these reasons, the Rural Hospital, the Company, and the DHB will not be named in the version of this report published on the HDC website.

Recommendations

I recommend that the Rural Hospital:

- Apologise for its breaches of the Code, by sending a letter to HDC for forwarding to Mrs A, by 7 May 2009.
 - Develop formal protocols for the process in place for staff to obtain specialist input, and provide copies to HDC by 31 July 2009.
 - Remind all clinical staff of the importance of consulting with specialists in complex cases, of the on-call availability of radiology services after hours, and of the requirement to maintain full and accurate documentation when seeking patients' consent to treatment.
-

Follow-up actions

- A copy of this report will be sent to the Medical Council of New Zealand.
- A copy of this report with details identifying the parties removed, except the name of my expert advisor, will be sent to the Director-General of Health, the Royal Australasian College of Physicians, the Australasian College of Emergency Medicine, the New Zealand Medical Association, the Association of Salaried Medical Specialists, the New Zealand Resident Doctors' Association, and all

district health boards, and will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A — Expert physician advice

The following independent expert advice was obtained from physician Dr Kingsley Logan:

“I am a general physician and medical director at Taupo Hospital and have been asked to provide medical opinion following the death of [Mr A].

The appropriateness of care provided to [Mr A] by [the Rural Hospital] from [Days 1 to 6].

I have reviewed the following documents:

- Letter of complaint from [Mrs A], dated 22 June 2007.
- Copy of [the Rural Hospital’s] response to [Mrs A’s] complaint, dated 3 August 2007.
- Copy of [the Rural Hospital’s] response to notification of investigation, dated 26 September 2007.
- Copy of [Mr A’s] clinical notes from [the Rural Hospital], dated [late 2006].
- Copy of [Mr A’s] clinical notes from [the Public Hospital], dated [late 2006].

1. Comment on the standard of care provided to [Mr A] by [the Rural Hospital] from [Days 1 to 6]. Was the care appropriate?

[Mr A] was admitted on [Day 1] complaining of severe shortness of breath and chest pain radiating in to his throat. CXR showed significant deterioration.

He was febrile and given Ciprofloxacin. Whilst HRCT had been requested and is part of the investigative process in a patient with fibrosing lung disease, bronchoscopy is seen as being more definitive and is a commonly used investigation to elucidate the cause of deterioration in this situation. [Mr A] had the bronchoscopy and transbronchial biopsies on [Day 4] by [Dr B].

The biopsy was done without difficulty, but the follow-up CXR was not immediately reviewed and the patient was given weekend leave from the ward.

[Mr A] had presently acutely, he was known to have compromised lung function and there were issues of diagnosis and management that needed to be addressed in this context. Whilst a pneumothorax is a well recognized consequence of a transbronchial biopsy, the effects can be masked by the nature of the underlying lung disease and very careful evaluation is essential.

[Dr C] has indicated that the CXR was not seen at the time of his weekend leave, but was seen later in the afternoon. The left sided pneumothorax was noted, but regarded as not acute, requiring intervention or re-call from leave. This was clearly an error of judgment given the situation of a patient with lung disease. This should have been discussed with [Dr B] or respiratory service at [the Public Hospital]. Whilst responsibility was delegated to the on call team, [Dr B] was primarily responsible for the care of [Mr A] and this complication should have been reported to him.

The standards we would expect, delegation of responsibility, comprehensive clinical review and review of the CXR prior to leaving the ward were not done and is seen as marked departure from normal practice.

[Mr A] became extremely breathless later in the evening and returned in the early hours of the morning of [Day 5] and it took some hours before the CXR was repeated.

This presumably reflects resource limitations *but is again seen as a departure from accepted practice, in particular in a patient with compromised lung function.* Repeat CXR would have shown the further deleterious effect of the pneumothorax.

He was appropriately managed and reviewed by [Dr F] and although intubation with a smaller tube was initially attempted, this served to exclude a tension pneumothorax and eventually satisfactory inflation of the lung was obtained with a larger tube. The difficulties encountered in management that followed were only addressed however when [Dr B] was consulted some time later when the decision was made to transfer [Mr A] to [the Public Hospital].

[Mr A] continued to deteriorate after admission to Intensive Care at [the Public Hospital] and died [two days later]. He was considered to have advanced pulmonary fibrosis non responsive to steroids with a very poor prognosis and in view of his inevitable situation active measures were withdrawn.

The post mortem results revealed agonal features of heart failure probably presumably secondary to septic shock. He had advanced atherosclerotic disease and severe underlying lung disease with poor cardiac and pulmonary reserve which only became evident as complications followed the bronchoscopy.

The isolated effect of the pneumothorax and late diagnosis cannot be easily measured in this context, but management was delayed and clearly impacted very unfavourably.

I have addressed the standards as apply in this case by these questions:

2. Should an urgent CT scan have been ordered on [Day 1], or any other time during [Mr A's] admission to [the Rural Hospital]?

The HRCT scan was requested but was not done prior to the bronchoscopy. It is unlikely this would have obviated the need for bronchoscopy given that it does not show degree of activity versus fibrosis. In addition it would not have determined the various infective causes as may have been the case by bronchoscopic examination.

3. Was it appropriate for [Dr B] to perform a transbronchial biopsy on [Day 4]?

[Mr A] was reviewed and comprehensively assessed within an acceptable time frame by [Dr B]. He was given a trial of steroids again acceptable treatment in this situation and following his admission with what was presumed to be an acute infection and marked deterioration he was then taken to bronchoscopy and biopsy in an attempt to come to a more definitive diagnosis.

The biopsy was complicated by pneumothorax, which is not unusual, and patients are invariably warned of this possible consequence. The specimens obtained were not representative and unfortunately could not provide any further information to assist in his ongoing management. Again, this is not an unusual situation where only small samples are attempted in patients with fibrotic lung disease.

Pulmonary function performed [the previous month] did not suggest the severe limitation of his pulmonary reserves and initial assessment did not easily reflect the degree of advanced pulmonary fibrosis.

It was appropriate for [Dr B] to perform a transbronchial biopsy on [Day 4] and it is only done by credentialed practitioners.

There should however have been review and follow-up of the CXR requested with further clinical consideration and evaluation before the patient was sent home. The standards we would expect, that is review of the CXR and comprehensive clinical review prior to leaving the ward, were not done and is seen as marked departure from normal practice.

4. Was it appropriate to grant weekend leave to [Mr A] on [Day 4]?

It was not appropriate to grant weekend leave to [Mr A] on [Day 4].

5. Were appropriate and timely investigations performed when [Mr A] returned to [the Rural Hospital] on [Day 5]?

The CXR was not done in a timely manner when [Mr A] returned to [the Rural Hospital] on [Day 5] and in this setting, repeat CXR should have been done on arrival.

He had an undiagnosed illness and presented markedly dyspnoeic in the early hours of the morning with the potential complication of a tension pneumothorax. Whilst the oxygen saturations rose to the 90s, it had been documented at 78% on air, and repeat CXR should have been done on arrival.

The standards we would expect CXR on arrival was not done and is seen as marked departure from normal practice.

6. Was [Mr A] provided with appropriate treatment for pneumothorax on [Day 5]?

[Mr A] was provided with appropriate treatment for his pneumothorax by [Dr F].

Whilst the pneumothorax initially improved with further deterioration the locum MO should have consulted further and discussed the issues with either [Dr B] or with the on call intensivist or Respiratory physician [at the Public Hospital].

This is again seen as a departure from normal practice.

7. Should [Mr A] have been transferred to [the Public Hospital] sooner?

It seems there was a difference of opinion as to the option of transferring at an earlier stage to [the Public Hospital], notwithstanding re-inflation of the lung, [Mr A's] oxygen saturations remained poor and he required continuous oxygen. Antibiotic cover was extended but his transfer to [the Public Hospital] followed further discussions with [Dr B] who was able to recognize the potential gravity of the situation and the need possibly for assisted ventilation.

It clearly was important that the pneumothorax had been drained and full antibiotic cover commenced prior to transfer but further opinion should have been obtained.

In my opinion [Mr A] should have been transferred earlier to [the Public Hospital].

This is not seen as a departure from normal practice standards.

8. Are there any other aspects of the care provided by [the Rural Hospital] that you consider warrant additional comment?

Smaller hospital[s] are becoming increasingly dependant on Locum cover and in a setting of limited resources and back-up the issue is whether potentially unstable patients or complicated procedures can be safely done and delegated to the after hours emergency duty team. The on call team were not able to appreciate the complexity and potential gravity of the situation indeed their experience and ability to manage seriously compromised medical patients.

Isolated practitioners [such] as [Dr B] need to be available or have nominated back-up via the on call consultants available as in this case at [the Public Hospital]. This was not apparent and in my opinion [the Rural Hospital] did not provide an appropriate standard of care and there are several aspects that would be regarded as a departure from normal and would be regarded by the providers' peers with severe disapproval."

Appendix B — Further physician advice

Dr Kingsley Logan provided the following further advice:

“1. Whether [Dr C] provided an appropriate standard of care to [Mr A]

There are issues that relate to the disease process that need to be taken into context.

I have previously addressed these and to reiterate.

[Mr A] had presented acutely to the medical service. He had compromised lung function and whilst a pneumothorax is a well recognized consequence of a transbronchial biopsy, the effects can be masked by the nature of the underlying lung disease and ... careful evaluation was essential.

[Dr C] has indicated that the CXR was not seen at the time of his weekend leave, but was seen later in the afternoon. The left sided pneumothorax was noted, but regarded as not requiring intervention or re-call from leave. This was an error of judgment given the situation of a patient with lung disease. This should have been discussed with [Dr B] or the respiratory service at [the Public Hospital]. Whilst responsibility was delegated to the on call team, [Dr B] was primarily responsible for the care of [Mr A] and this complication should have been reported to him.

[Dr C] was well informed of [Mr A's] condition and the procedure involved. Whilst it is a procedure that is infrequently done at the hospital I would not expect [Dr C] to have had extensive experience with the complications of this procedure, or knowledge of the particular problems that relate to patients with fibrotic lung disease.

The decision for ward discharge was made in the face of a stable patient who was keen to go home over the weekend. Whilst it is a departure from acceptable practice not to review an X-ray prior to departure, and I note the hospital has now very firm protocols to address this, there is no evidence to suggest that it directly caused [Mr A's] death. There was no evidence of a tension pneumothorax and there was no evidence of an overwhelming infection at presentation.

[Mr A] became extremely breathless later in the evening and returned in the early hours of the morning of [Day 5] and it took some hours before the CXR was repeated.

This presumably reflects resource limitations but is again seen as a departure from accepted practice, in particular with a patient with compromised lung function.

[Dr C] reviewed [Mr A] on presentation to the ED. He followed acceptable clinical guidelines and handed over the patient to the on call team at 0800. [Dr C] remains of the opinion that the clinical picture did not warrant a repeat CXR at that time and as the patient seemed to stabilize on oxygen, he felt that matters could wait until later in the morning. There was no evidence that [Mr A] had a tension pneumothorax, this is a medical emergency and without timely intervention would result in profound compromise. There is no evidence that this was a complication despite further change and size in the pneumothorax.

[Dr C] is an experienced medical officer and whilst the delay in obtaining the CXR did not lead directly to the patient's death, [Dr C] had been on duty for close to 20hrs when he reviewed [Mr A] at 5.30am and reviewing their rosters it is very clear they have onerous on-call hours as has often been the case in smaller hospitals where medical officers are expected to be on duty/call for 54–55 hours/week.

I note that the roster [covering the time that Mr A was in the Rural Hospital] suggested that [Dr C] should be covering 0800 run from Thursday morning to Friday 1700. This is a systems issue where prolonged duties or poor or interrupted sleep results in cognitive errors — a particular challenge in small hospitals where the medical officers are often expected to cover these long hours.

[Dr C] attempted to examine and assess the situations within his capabilities and experience and whilst I believe there was a cognitive error in not obtaining a CXR on presentation to the emergency department and is seen as marked departure from normal practice, this does not imply that his practice has not followed an appropriate standard of care.

Similarly the initial finding of the pneumothorax regarded as not requiring intervention or re-call from leave was an error of judgment but does not imply that his practice has not followed an appropriate standard of care.

[Mr A] was appropriately managed and reviewed by [Dr F] and although intubation with a smaller tube was initially attempted, this served to exclude a tension pneumothorax and eventually satisfactory inflation of the lung was obtained with a larger tube. The difficulties encountered in management that followed were only addressed however when [Dr B] was consulted some time later when the decision was made to transfer [Mr A] to [the Public Hospital].

[Mr A] had a severe respiratory illness. He was initially assessed in a timely manner and attempts were made to diagnose matters rapidly, with a transbronchial biopsy. The procedure was complicated by a pneumothorax. There was a delay in the management of this but the course of the illness was dominated by infection and eventual multi organ failure.

2. Comment on the care provided by [the Rural Hospital] including the team approach to Inpatient care as outlined in [a] letter of 29 February

[Mr A's] care was left in the hands of the weekend on-call team which included an emergency physician and medical officer. The severity of his problem, in the setting of compromised lung function, was not readily appreciated and whilst his death can not be solely attributed to this, he deteriorated over the course of the next several hours and in this situation further advice from a respiratory physician should have been obtained. This is now recognized by the hospital. The severity of [Mr A's] illness only became apparent once [Dr B] was contacted.

There are no protocols that can easily cover the host of complications that follow severe illness and the protocol supplied on abdominal pain is explicit in management of the condition. It falls short in that it implies a 24-hr window of observation where a patient may fail to respond to treatment and certainly does not adequately the scenario and situation that was evident with [Mr A's] presentation.

[Mr A] was seen to be acutely unwell, he was investigated and treated with the chest drain and antibiotics, but the next step in the protocol would suggest that there was a 24hr window before further opinion should be obtained. [Dr B] was contacted when the course [of] events had evolved during the 12 hours of hospitalization and it is a matter of opinion whether his advice would have been different at an earlier stage. The final outcome seems to have been dominated by sepsis and whilst it has been considered that the bronchoscope may have played a role, there is no evidence to suggest this was the case.

There are a number of system issues that emphasize the need for adequate and diagnostic resources. This would include access to the subspecialties from the regional hospital at an earlier stage.

Emergency care is centered on triage, acute resuscitation and definitive care to those patients who can be simply dealt to and discharged. The remainder of the acutely unwell patients in the larger hospitals would then be handed over to the sub specialty teams. The situation in smaller hospitals is different, and does provide a number of challenges.

There are a number of factors that clinicians have to face and include availability of transport as well as ability to transfer to the larger regional hospitals. There are now very firm protocols in place in smaller hospitals where after hour or weekend admissions are limited to those who only require minimal intervention, are seen to be stable and do not require intensive investigation or management. They are looked after by the single Medical Officer on duty and therefore need to have a clinical severity that can be easily met by the training and experience of the duty nursing staff and Medical Officer.

Patients therefore after initial triage and stabilisation should be considered for transfer to the regional hospital if they require further assessment, investigation, monitoring or treatment not available at the smaller facility. During normal working hours the locally based specialists are available to review and assess patients who otherwise would have been transferred and is quite different from the situation faced by the after hours on call team.

It has become increasingly apparent that smaller hospitals require a secure system of support and back-up where potentially unstable patients can be easily transferred to the large centre where specialized investigations and subspecialty interests will provide timely and definitive investigations and intervention. There should be a low threshold for referring these patients and definitive protocols need to be in place where the medical officers have a right to the ability to transfer patients to the larger centers if they feel this is required.

3. Safety and function of the bronchoscope

I do not have experience with the use and disinfection of the bronchoscopes, and have included the protocol followed at Waikato²⁶. The infectious management aspects of the bronchoscope managed at [the Rural Hospital] needs to be measured against this.

4. Any other comments about [Mr A's] care

No, but I have included my initial comments, these need to be taken into context as to the recommendations I have suggested.

[Mr A] was reviewed and comprehensively assessed within an acceptable time frame by [Dr B]. He was given a trial of steroids again acceptable treatment in this situation and following his admission with what was presumed to be an acute infection and marked deterioration he was then taken to bronchoscopy and biopsy in an attempt to come to a more definitive diagnosis.

The biopsy was complicated by pneumothorax, which is not unusual, and patients are invariably warned of this possible consequence. The specimens obtained were not representative and unfortunately could not provide any further information to assist in his ongoing management. Again, this is not an unusual situation where only small samples are attempted in patients with fibrotic lung disease.

Pulmonary function performed [the previous month] did not suggest the severe limitation of his pulmonary reserves and initial assessment did not easily reflect the degree of advanced pulmonary fibrosis.

²⁶ The protocol for use and disinfection of bronchoscopes followed by Waikato District Health Board has been omitted from this report.

[Mr A] continued to deteriorate after admission to Intensive Care at [the Public Hospital] and died [two days later]. He was considered to have advanced pulmonary fibrosis non responsive to steroids with a very poor prognosis and in view of his inevitable situation active measures were withdrawn.

The post mortem results revealed agonal features of heart failure probably presumably secondary to septic shock. He had advanced atherosclerotic disease and severe underlying lung disease with poor cardiac and pulmonary reserve which only became evident as complications followed the bronchoscope.

The isolated effect of the pneumothorax and late diagnosis cannot be easily measured in this context, but management was delayed and clearly impacted very unfavourably.

Smaller hospitals are becoming increasingly dependant on Locum cover and in a setting of limited resources and back-up the issue is whether potentially unstable patients or complicated procedures can be safely done and delegated to the after hours emergency duty team. The on call team were not able to appreciate the complexity and potential gravity of the situation.

Isolated practitioners such as [Dr B] need to be available or have nominated back-up via the on call consultants available as in this case at [the Public Hospital]. This was not apparent and in my opinion [the Rural Hospital] did not provide an appropriate standard of care and there are several aspects that would be regarded as a departure from normal.

5. Recommendations to improve the services at [the Rural Hospital]

There have been a number of important recommendations put in place by the hospital to address the issues of timing of specialised investigations and X-ray follow-up.

The management of patients presenting to smaller hospitals need to be in the face of current practice and capabilities that are otherwise available within a reasonable time frame at the regional hospitals. This includes access to specialised radiological and laboratory investigations. There are no protocols that can easily cover the host of presentations to an emergency department. There are a number of system issues that have been raised and include the need to formalize arrangements with the sub specialties at the regional hospital.

Effective communication is not only a question of responsibility and accountability but one of effective communication that results in appreciation of the situation and it has become standard practice that all calls to the larger hospitals are followed by a faxed copy of the problem and expectation of the medical officer. Responsibility for the care of the patient is defined by this document [see Appendix C] and allows for reflection by the medical officer as

part of the process with a clear expectation following the call to the receiving registrar/ consultant of the problem as defined.

Emergency care is centered on triage, acute resuscitation and definitive care to those patients who can be simply dealt to and discharged. The remainder of the acutely unwell patients in the larger hospitals would then be handed over to the sub specialty teams. There are a number of factors that clinicians have to face and include availability of transport as well as ability to transfer to the larger regional hospitals.

There needs to be firm protocols in place in smaller hospitals to limit after hour or weekend admissions recognising those will require only minimal intervention, are seen to be stable and do not require intensive investigation or management.

The protocols supplied addressing abdominal pain is explicit in management of the condition; it falls short in that it implies a 24hr window of observation where a patient may fail to respond to treatment before further opinion should be obtained. In modern terms diagnostic resources would be available within a matter of hours as would access to the sub specialties and often would fall within the limit taken to transfer patients to the regional centers.

Emergency departments in smaller and rural settings function in addition to serve minor General Practitioner complaints, the medical officers require continuous training /education in resuscitation and management of acute medical emergencies and cannot be expected to single handed manage complicated and unstable situations with minimal access to specialized investigations and back up from the sub specialties.

Finally effects of onerous on call/Duty Rosters/ proportion of direct patient contact/provision of non clinical time. It is unusual for medical officers to be on duty/call for 54–55 hours/week.

Direct patient contact time of 32 to 36 hours/week is now considered the normal and it is unusual for medical officers to be on duty for more than 42 hours /week and not accepted to be on duty for more than 16 hours [in a single shift]. Prolonged duties, poor and/or interrupted sleep will continue to lead to cognitive errors. This again emphasizes the need for their support and back-up and if this is not locally available then care and responsibility needs to be formally taken over or shared by the regional hospital.”

Appendix C — Contact form

This form was supplied by Dr Logan with his expert advice:

Date / Time of telephone call:

Consultant/Registrar:

Referred by:

Patient Label

Telephone opinion required/ Follow-up Notes.

Assessment and evaluation required.

Admission to Referring Hospital required.

Bed available Local Hospital Yes No

Estimated Time of Transfer from Local Hospital

Fax covering letter or fill in the following

- 1) Relevant History
- 2) Pertinent findings on clinical examination
- 3) Active problem
- 4) Co-morbidities
- 5) Accompanying Documents

X-rays Lab

ECG others (list) _____

Current

Medications:

MO name: _____ Pager# _____

Appendix D — Acute admission policy (generic)

	Classification No: MED 030	Version 1
Service: Medical	Name of Manual: Medical	

ACUTE ADMISSION POLICY (GENERIC)

- Purpose -**
The below flowchart has been designed to ensure the appropriate management of all acute admissions at Hospital, including consultation and transfer arrangements with appropriate services at or other base hospitals.
- Scope -**
Medical Officers and nurses employed by

ACUTE ADMISSION – GENERIC POLICY

