Ms B

General Practitioner – Dr C

A Report by the

Health and Disability Commissioner

(Case 03HDC02435)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Parties involved

Mr A	Consumer/Complainant (dec)
Ms B	Provider/Occupational Health Nurse
Dr C	Provider/General Practitioner
Food processing company	Provider/Ms B's employer

Complaint

On 14 February 2003 the Commissioner received a complaint from a barrister, on behalf of her client, Mr A. The complaint was summarised as follows:

Ms B
Ms B, occupational health nurse, did not provide services of the appropriate standard to Mr A in April 2001. In particular, when Mr A consulted with Ms B concerning an injury he received to his leg during the course of his employment, she did not:

- *adequately assess, monitor and treat the condition of Mr A's leg despite his ongoing pain and deteriorating condition;*
- *refer Mr A for further investigation and treatment in a timely fashion;*
- *provide Mr A with adequate information about his condition.*

Dr C
Dr C, general practitioner, did not provide services of the appropriate standard to Mr A in April 2001. In particular, at a consultation on 27 April 2001, Dr C did not:

- *adequately assess and treat the condition of Mr A's leg;*
- *refer him for further investigation and treatment;*
- *provide Mr A with adequate information about his condition.*

An investigation was commenced on 13 May 2003.

Information reviewed

Information was obtained from Mr A, Ms B, Dr C and a food processing company. Independent expert advice was obtained from Dr Stephen Searle, general practitioner, and Ms Wendy Spence, occupational health nurse.

Information gathered during investigation

In April 2001 Mr A had been employed as a stockman at a regional food processing company for five years. The food processing company specialises in producing and exporting sheep, lamb, goat, and bobby calf meat and offal.

Mr A's complaint about the standard of the health care provided to him by Dr C and Ms B arises from the following circumstances:

22-24 April
On 22 April 2001 Mr A presented to the health centre at the food processing company (the Centre) which is on the site of the meat works. The Centre has regular hours for dressings and other non-urgent health matters of employees. The staff handbook records that a nurse will be available throughout the day for urgent matters.

Mr A completed an accident register form in which he reported minor bruising to his lower leg after a "knock" from a sheep at 9.00am on 21 April. He was assessed by a registered nurse, who recorded in the daybook (and not in Mr A's medical file) that he had been bitten in the left leg by a sheep and had a headache. The nurse observed that his skin was not broken and there was no bruising. Mr A was administered two tablets of Panadol (authorised by Dr C under standing orders). Mr A had the following two days off work.

Mr A's wife advised (through Mr A's barrister) that he had not been bitten by a sheep.

25-26 April
On 25 April Mr A presented to the Centre, which was closed because it was a public holiday. He recorded in an accident register form that he had been hit on the leg by a sheep at 9.00am that day and had bruising.

In response to the complaint, Ms B, occupational health nurse at the food processing company, advised that there are 72 trained first aiders on site who provide continuous coverage if the Centre is closed but Mr A did not request such assistance. He also did not consult his GP or after-hours medical centre (the cost would have been reimbursed by the food processing company). The food processing company advised that the names of the certified first aiders are displayed on a poster in each department.

Mr A presented again to the Centre at 9.25am on 26 April. The first aider recorded in an accident register form that Mr A had been hit by a sheep and sustained moderate bruising on his right lower leg at 10.00am on 25 April.

The first aider assessed Mr A and recorded in the accident register form that his right lower leg was slightly swollen, bruised and painful. Mr A was referred to Ms B, who recalled that he had localised swelling to his shin but had a good range of movement and was able to walk on his foot. Arnica cream was applied to Mr A's bruise and he was given a Voltaren tablet (also authorised under standing orders) and a tubi-grip to support his leg. I note that the guidelines for the Centre concerning dressing and wound management state that, in cases of minor strains or bruising, Arnica cream should be applied, together with a tubi-grip

for support, if the employee has a good range of movement and is able to use the affected limb. I also note that the guidelines state that an employee should be informed about the care required for swelling and bruised areas.

Ms B recorded (also in the accident register form) that Mr A was advised to return in the afternoon for review of his condition. Ms B recalled that Mr A was also advised to return sooner if he was concerned about his condition; she did not "order" him to return to work but he was happy to do so. It is not disputed that Mr A returned for a review of the condition of his right leg in the afternoon and that the Centre was unattended, although it was "open" until 4.30pm.

Ms B stated that the Centre was unattended for "two minutes" at the time Mr A returned for review. She explained that the Centre was unattended on a regular basis during its opening hours because her prime role was to undertake job task analysis and assist employees with rehabilitation, which required her to visit the various work departments. Staff from the Centre also frequently assessed the condition of employees at their work site.

Ms B stated that the level of staff absence at the Centre reflected the fact that it was a first aid room and not a doctor's surgery. However, she and the first aider based at the Centre were on the meatworks' site at the time Mr A returned and he could have contacted them. My staff conducted an inspection of the site and noted a sign on the Centre door that employees can contact reception or the "foreman/first aider" in their department if the Centre is unattended. Ms B informed me that this sign was erected in 1998 or 1999.

There was a second sign on the Centre door which stated that nursing staff or a qualified first aider will be available for all emergencies by radio during clinic hours. The sign also informed employees that they could contact reception or their foreman to arrange an assessment if the Centre was unattended. I understand that an identical sign was present on 26 April 2001, although the Centre opening hours have since changed.

Ms B further advised that Mr A had presented to the Centre on other occasions and knew how to contact staff if they were absent. The food processing company advised in response to the complaint that all employees were informed at their induction that they or their foreman could page staff from the Centre through reception if the Centre was unattended.

27 April
Mr A returned to the Centre at 9.15am on 27 April. The first aider noted that the swelling on Mr A's right leg had increased overnight and referred him to Ms B, who decided to refer him to Dr C.

Ms B recalled that on 26 and 27 April Mr A did not have a blister, a break in his skin or any evidence of cellulitis in his right leg. She examined him on both occasions with his socks and boots off. Ms B explained that she could recognise cellulitis because she had worked at the Emergency Department in a Public Hospital for 12 years and had nursed patients with this condition. She did not take Mr A's temperature because she did this infrequently in light of the number of staff she assessed. Ms B did not realise that Mr A may have been bitten by a sheep on 21 April (this issue is discussed in the Other Comments section of my report).

However, she would not have done anything differently unless it was infected, as there is no specific treatment for a bite.

Ms B assisted Mr A to complete an ACC injury claim form in which he stated that a sheep butted him on the shin on 25 April at 9.25am. Mr A also reported that he had been butted by a sheep on 22 April ("also last Sunday", which was in fact the date of his initial assessment) and 26 April. Mr A was then driven to Dr C's surgery at 10.10am. Ms B phoned Dr C's surgery after she was informed by the first aider that Mr A had not been assessed by 12.00pm.

Ms B advised that when she arranged Mr A's appointment with Dr C (which she did not attend) she did not inform his receptionist about Mr A's condition. However, Dr C was provided with Mr A's medical file. The file did not include the record of Mr A's assessment by the registered nurse on 22 April (which mentioned a sheep bite) or the record of the consultation of 26 April. However, Ms B further advised that the Centre first aider recalled that the record of the consultation of 26 April was provided to Dr C.

Ms B explained that she exercised discretion in the type of information provided to Dr C as he did not want unnecessary information given his workload, and tended to start his assessment from "square one". In response to my provisional opinion, Ms B advised that she would not have told Dr C about Mr A's bite (even if she had known) because it occurred to his left leg – it was his right leg that was hit by the sheep and developed an infection. Ms B also advised that she provided Dr C with far more information about Mr A's condition and treatment – by providing his medical file and a completed ACC injury claim form (which was the "referral") – than he would usually receive or was usual practice for occupational health nurses. She did not discuss Mr A's condition by telephone with Dr C because she could refer up to ten patients a day to him, and that a number of telephone calls would disrupt his work. However, Ms B stated in response to my provisional opinion that she could contact Dr C by mobile phone if necessary.

Dr C recorded in his notes that initially Mr A reported that his injury seemed all right, but his right leg was now very swollen and bruised. Dr C noted that Mr A walked unaided but with a slight limp. Dr C recorded that Mr A's knee and ankle showed no abnormality and there was no fracture. Dr C recalled that he did not take his temperature because Mr A did not appear unwell, toxic or feverish.

Dr C concluded that Mr A had severe bruising and recommended three days in bed with an elevated leg, and that he should be reassessed within three days if this was warranted. Dr C recorded on the ACC injury claim form that Mr A needed to keep his leg elevated and was unfit to work for three days.

Dr C advised in response to the complaint that Mr A confirmed that his accident had taken place on 25 April (not 21 April). Dr C advised that there was no break in Mr A's skin or evidence of an infection in his right leg. He recalled this because he asked staff at a Public Hospital how his infection could have developed without a break in the skin. He was informed that there was a fresh blister on Mr A's heel at the time of his admission, which was likely to have developed because he travelled home to the town without wearing socks.

Mr A's barrister advised that after his assessment by Dr C he went home to the town (he stayed in a city during his working week), wrapped a towel around his right leg because it was weeping, and went to bed.

28 April
On 28 April Mr A was found at home semi-conscious by his wife, who had been away the previous night. She took him to a medical centre in the town.

The general practitioner (GP) who assessed Mr A recorded that he presented with an infection of his right lower leg and a "nasty" cellulitis of his right foot, which had developed the day before. The GP recorded that Mr A's temperature was 38°C and referred him to the Public Hospital.

Mr A presented to the Emergency Department (ED) at the Public Hospital at 9.45am. The triage nurse recorded that Mr A's temperature was 37.7°C, pulse 108 beats per minute, respiratory rate 24 breaths per minute and blood pressure 146/87.

Mr A informed an ED doctor that his right "leg/foot" had become swollen and red the day before and was accompanied by a fever and shivering. Mr A also reported that his leg was mildly painful and he was unable to place his weight on it.

The ED doctor recorded that Mr A was not toxic or distressed and had normal colour. His right leg had a red discoloration and increasing skin temperature, affecting the anterior, medial and posterior aspect of his ankle and lower leg. It also affected the medial aspect of his thigh. Mr A's right ankle was swollen "++" and he had two bullae (blisters) with serous fluid discharge on the anterior and medial aspects. The area around Mr A's ankle was dark red and purple. There was no obvious gangrene or crepitus and the tenderness in his ankle was mild to moderate. The circulation in Mr A's distal foot was satisfactory. The doctor concluded that Mr A had cellulitis and arranged his admission to the Public Hospital.

Mr A was treated with intravenous antibiotics but the skin on his right lower leg became necrotic and on 5 May surgical debridement took place. Mr A then developed an abscess, which was drained on 15 May. Mr A was discharged from the Public Hospital on 21 May.

Additional information
Dr C advised in response to the complaint that he has been the medical officer for the food processing company for over 15 years and conducts a clinic on the site every Tuesday morning to assess and review accidents and injuries. If an employee requires a medical assessment outside the hours of his clinic he or she is referred to his surgery, which is only a few minutes drive from the works. Employees are assessed on the same day by himself or one of his colleagues. The food processing company pays his fee for work-related accidents and arranges transport to his surgery.

Dr C further advised that he discussed the issues in this case with other general practitioners and specialists and was reassured that an infection could spread very rapidly in the presence of "old blood bruising" or haematoma and that generally antibiotics are not used to prevent

an infection developing. Since the complaint he has increased his clinical vigilance for any signs of infection, particularly in the presence of bruising or haematoma.

Ms B advised that she is a registered nurse and is a member of the New Zealand Occupational Health Nurses Association. She explained that the first aider at the centre will "refer to Doctor [C] or myself as required". However, at the time of the incident she was employed as the Health and Safety Manager at the food processing company. Ms B does not assess all employees who present to the centre because of her commitments as the Health and Safety Manager. However, the nurse and first aiders at the centre refer some employees to her for further "advice or treatment" because her office is in the centre and she has previous emergency nursing experience. Ms B accepts that she is a "practising health care provider", even though the list of key responsibilities in her contract of employment does not include clinical responsibilities.

Ms B also advised in response to my provisional opinion that she did not agree with the advice of my occupational health nurse expert (set out below) that all clinical information gathered by staff at the centre should be placed in an employee's medical file. Ms B explained that she records only significant injuries in the medical file, but not, for example, those injuries requiring only a band aid (which are recorded in the day book), because the documentation would be excessive – the centre applies 500 band aids every month and in 2001 there were 1500 reported accidents at the meat works site.

The food processing company advised that Ms B was not employed as a nurse and spent a significant amount of time on non-clinical matters in her role as the plant's Health and Safety Manager, for example liaising with ACC and OSH. The food processing company stated that it was "not necessarily" Ms B's role to have assessed Mr A but she was consulted by the first aider about his condition on 26 and 27 April and gave her opinion.

An orthopaedic consultant informed the assessment service which assesses ACC claims on behalf of the food processing company, that on the night of Mr A's accident (21 April) Mr A's daughter-in-law noticed a bruise on his shin, although there were no blisters. His leg ached when he was in bed and became increasingly sore when he worked the next day. The orthopaedic consultant also stated that on his regular two days off work Mr A's wife thought he was not well because he slept a lot and she did not want him to return to work on 25 April. After the assessment by Ms B on the morning of 26 April Mr A returned for a review of his leg at 4.00pm. Mr A's leg was becoming "extremely painful" by 27 April.

The orthopaedic consultant further stated that Mr A visited his son's family after his assessment by Dr C. His family thought that he should not be driving but Mr A drove home to the region. Mrs A found him in a terrible state (his leg was very smelly) at 8.30am on 28 April when she returned home. The orthopaedic consultant stated that Mr A's bullae were typical of infections caused by Clostridia organisms, which are particularly virulent and known to cause gangrene.

A surgeon advised the assessment service in a letter dated 2 October 2002 that Mr A's bruising from his injury was associated with a deep haematoma that subsequently became infected.

The food processing company's Health and Safety Manual states: "If the doctor is needed, transport to and from the Medical Centre will be arranged for you along with your medical file and associated forms."

Standard 3 of the *Standards for Occupational Health Nursing in New Zealand* (published by the New Zealand Occupational Health Nurses Association) requires occupational health nurses to "maintain a comprehensive and current record of interventions".

Independent advice to Commissioner

General practitioner advice
The following expert advice was obtained from general practitioner Dr Stephen Searle:

> "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 03HDC02435.
>
> 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 practice 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. 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. 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: [Mr A]
>
> Case Outline: Multiple injuries from being hit by sheep occurred prior to his first seeing a doctor and then subsequently he was admitted to hospital with an infection of his lower leg that resulted in severe complications. At the time of being seen by [Dr C]

either infection was not present, or was present and not able to be diagnosed (still too early) or the diagnosis was able to be made but was not made (possible failure of diagnosis).

Nature of complaint: That services were not provided of the appropriate standard concerning [Mr A's] leg condition.

Complaint about: [Dr C]

Also seen by: Various first aid personnel and nurses at his work place prior to being seen by [Dr C] and then later by doctors at [the Public] Hospital.

Referral Instruction from the Commissioner:

Supporting Information

- [Mr A] [pages 1-70]
- Notification letter [pages 71-72]
- [Public Hospital] [pages 73-205]
- [Dr C] [pages 206-214]
- [Ms B] and [the food processing company] [pages 215-450]

Expert Advice Required

Did [Dr C] adequately assess and treat the condition of [Mr A's] leg on 27 April 2001? In your response please include expert advice on whether [Dr C's] advice to [Mr A] to rest and elevate his leg for three days after which he would review his condition, or sooner if required, was adequate.

What further investigations or treatment, if any, should [Dr C] have undertaken or requested? In your response please include advice on whether [Dr C] should have taken [Mr A's] vital signs.

Should [Dr C] have informed [Mr A] about the potential risk of a serious infection?

Should [Dr C] have informed [Mr A's] GP about his condition?

(Please give your advice on the above issues on the basis that it was reasonable for [Dr C] to conclude that [Mr A] had his initial accident on 25 April (and not, as the Commissioner has determined, on 21 April).

Are there any aspects of the treatment given by other providers involved in [Mr A's] care which you consider warrants either:

- Further exploration by the investigation officer?

- Additional comment?

Documents and records reviewed:

As per the list of supporting information in the above instructions from the Commissioner.

Possible missing information:

There is a large amount of information supplied – some 450 pages of supporting information. Despite this there is still information that could be missing. To avoid further delays with this report I will try and cover all the likely possibilities when I draw my conclusions rather than seek this information before doing so. If however this information was different or additional to the other information I have I would be happy to review my report. I received this information in late 2003 and I am concluding my report in early 2004. As the original events were back in April 2001 I think that further delays are unlikely to be helpful or reveal further information – however I will try and spell out what information I consider to be missing so that any of the various parties can bring further information to the Commissioner's attention as needed.

There are blacked out lines of hand written notes on page 8 of the supporting information on a page headed '[Public] Hospital Emergency Department…'. This page is not dated but would appear to be related to him being seen some time after his first hospital admission – the hand written notes on this page clearly state 'reoccurring infections since'. This information would probably not change my opinion as it probably does not contain information that could have been available to [Dr C] at the time of presentation.

Pages 10 to 17 of the supporting information – a computer notes print out presumably from [Mr A's] usual general practitioner have various lines blacked out. These lines are in notes that concern events after [Mr A] seeing [Dr C]. This information would probably not change my opinion as it probably does not contain information that could have been available to [Dr C] at the time of presentation.

The letter from [the] orthopaedic consultant, dated 5 September 2002, pages 43 and 44 of the supporting information, appears to be incomplete as the end of the second page (page 44 of the supporting information) just stops about two thirds of the way down the page and has no signature or other ending to the letter.

Page 224 of the supporting information is a list of various persons' health problems, (not just [Mr A's]) or notes about them, presumably made by the first aid personnel or the nurse(s) at the work place. Most of the information appears to be of little consequence – but care should be taken that this information is not further disclosed by the Commissioner or any other parties who have access to this information – I suggest this information is removed from the supporting information before anyone else has access to it. I checked to see if there was any other record about [Mr A] within this information but there does not appear to be. Of note this information covers the dates 19/4/01 to 22/4/01 (or part thereof). There could

be further such notes about [Mr A] after this date up until the 28/4/01 when he was admitted to hospital but I will assume this has been searched for at his work place and no such notes found other than the notes of [Dr C] which I have.

Pages 225 to 227 are 3 accident register entries. Of note the second entry (page 226) has a date of accident as 25 April 1901 (which I will assume is an error and actually refers to 2001), but does not contain an entry for the Time/date reported section and of note comparing it to the previous (page 225) and subsequent (page 227) pages does not have an 'Employee Signature' typed heading which the other pages do have and it does not have [Mr A's] Signature. I am not sure of the significance of this – if this was a different form, or there has been some copying error or whatever. It seems unlikely that there would be further information on this form (page 226) that would change my decision but I do note there is a small possibility of missing information.

I am not sure if the information above (page 224 and pages 225 to 227) was available to [Dr C] at the time of his consultation on the 27th of April 2001. We could seek to clarify if this information was available to him or not but I will write my report to cover the possibilities either way.

I do not have typed versions of the various hand written notes. Where needed later in my report I type out word for word these notes so that it is clear what I am basing my opinion on.

Quality of provider's records or lack of them

First I give my translation of the notes:

I have copies of the note made by [Dr C] on 27/4/01 – pages 47, 209, 228 of the supporting information (all 3 are copies of the same note). I read these notes as follows (my added interpretative comments in brackets);

'27/4/01 Sheep head butted

right leg

Seemed OK but has

now swelled up ++ (now swelled up a lot)

with lot bruising (with a lot of bruising)

knee tick (actual tick in notes meaning examined and normal)

ankle tick

bone tick (meaning no bony tenderness or abnormality in the area examined)

Not unwell (meaning he did not appear to be unwell as an overall impression)

Dx (meaning diagnosis) Severe contusion and bruising

Rx (meaning treatment) rest off feet and see SOS (as needed)'

I also have a copy of the ACC 45 form (pages 210 and 211 of the supporting information). This contains the following hand written description of the injury;

'Sheep hit me – head butted on the shin and kept being hit everyday & days ago and also last Sunday'

The date of injury is stated as 25/4/01 but also the comment referring to last Sunday would then also refer to 22/4/01. The date seen is 27/4/01.

The doctor's part of the ACC form contains the diagnosis 'SE41 right'. This is a READ code that is a way of coding diagnoses for statistical purposes including for ACC purposes. I am fairly sure this is 'SE41' – certainly the first two letters are 'SE' and this refers to the Read Codes for contusions so this would fit. I am less certain about the last two characters which I think are '41' – this total Read Code of 'SE41' in text is 'contusion, knee and lower leg' – meaning a contusion of the knee or lower leg and not necessarily both.

The work capacity part of the ACC form states [Mr A] is not fit for normal work and states 'Needs to have feet elevated'. Giving a period of 3 days off work from 27/4/01 and that a likely return to work date is 30/4/01.

My comments on the notes are:

The notes are of a good standard showing a record of the history of the event, the examination findings, and assessment of diagnosis and statement of treatment. Combined the notes plus the ACC form show that there was multiple injuries at multiple times, and that treatment included rest and elevation. It might have been desirable to include in the actual medical file note the history of multiple injuries rather than just having this information on the ACC form but I do not consider this to be a significant deficiency in the notes unless it was likely other doctors would be accessing the information.

The notes are partly deficient in that there appears to be no record of past history (did [Mr A] have any history of previous problems with his legs or pre-existing health problems of a general nature or medication use that might suggest delayed recovery or higher risk of infection?). It may be that this information was recorded elsewhere in his workplace medical file but it is not clear to me that this information was available to [Dr C] at the time of seeing [Mr A]. Even if this information was available it would be wise to recheck this as it is of course possible that [Mr A] could have had some other health problem since the last time any such workplace record was made – thus even a simple entry saying 'past history nil, medication nil' (doctors would often abbreviate to 'PHx nil, Meds nil') would have been desirable. Thus the notes were in my opinion deficient in a minor way in that they did not record the presence or absence of past medical history and medication usage.

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

Safety (not needed to be commented on in this case)

Is the patient now in a safe environment (safe from further injury) & is it safe for the provider?

(the environment is usually safe in most workplace medical clinics)

Any Serious Injury Needing immediate attention?

In this case was there a serious injury to the lower limb? As he had kept working for some time after each of his injuries this would have seemed unlikely at the time. Injury to the front of the lower leg is unlikely to impair circulation and nerves and there was no history of tingling or numbness in the foot. Crushing injury or injury to the back of the leg might cause problems with circulation and be a rapidly limb threatening injury but that was not the situation here. Certainly it turned out to be a serious injury but that was not easily predictable even at the time of his first admission to hospital.

Taking a full history (previously commented on above) – to include mechanism of injury, current symptoms (e.g. pain, numbness, loss of use), past history of injuries to the same area, past medical history including medications. As commented on above the notes were in my opinion deficient in a minor way in that they did not record the presence or absence of past medical history and medication usage.

Do an appropriate full examination.

This should include distal complications (check on sensation and circulation (or neurovascular status of the part of the body distal (or beyond) the injured part – in this case the foot) and to describe the visible appearance of the injury and the presence or absence of bony problems or problems with nearby joints. The notes clearly show that this was done with the exception of checking for distal sensation and circulation. With the injuries noted it seems unlikely that there would be problems with distal circulation and sensation but it is useful to check on this and record this in case there was pre-existing problems with the circulation or nerve supply to the foot that might have been un-noticed by [Mr A]. Such findings would alter the management in that if there was a pre-existing problem with the circulation or nerve supply to the foot more care would be needed with follow up. However having said this most doctors I have approached would not routinely check for this given the injury was to the front of the leg – see my comments later. In recent months I have become aware of information that athlete's foot predisposes people to cellulitis (a diffuse inflammation of the tissues of the body – usually referring to those just under the skin and usually referring to infection rather than other causes of inflammation) of the legs – even more so than health problems such as diabetes (Ref. 4, 5, 6). This information was not widely available back in 2001 and even today most doctors are not routinely checking for athlete's foot when lower leg cellulitis is diagnosed and certainly not before it is diagnosed. I mention it now as a

learning point for future cases of lower leg problems as being something worth checking.

Order appropriate investigation given there was no suspicion of a broken bone no particular investigation was needed. However as mentioned above a check for athletes foot should be done and a swab taken from the disordered area between the toes if present – once again [Dr C's] management was not deficient back in 2001 and even today would not be considered deficient for not checking between the toes as this is relatively new information/medical knowledge and not all doctors would check for this as yet – it is mentioned as a learning point.

Decide on appropriate management and implement this. In my opinion the management of resting [Mr A's] legs and elevating them for 2 to 3 days was appropriate. This management was appropriate for the diagnosis of contusions. Of note it is also part of the appropriate management for leg infections even though this was not suspected or diagnosed at the time [Dr C] saw [Mr A] on the 27th of April 2001.

Give the patient appropriate advice on any follow up that might be required. The advice for him to be seen if things were worse (see SOS) was appropriate and a good standard of care.

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. One possible system here would be to have notes with pre-printed headings to prompt the doctor to ask about past history and medications and allergies and tetanus status etc. – whilst this might not have made a difference in this case it could in other cases and having such headings could also speed up the writing of the notes. Other systems might be to show all entries in the accident register to the doctor and all entries in the first aid/nurse notes – I am not sure if this is practical in this work place at present but it may be worth considering. I suspect that a slightly different management might have occurred or stronger advice on possible complications had the information that there may have been a bite – notes from 22/4/01.

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

As commented on previously the notes were in my opinion deficient in a minor way in that they did not record the presence or absence of past medical history and medication usage. This was only a minor breach of the standard of care expected, and would not have affected the outcome but this is still relevant (Ref.1)

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

Expert Advice Required

Did [Dr C] adequately assess and treat the condition of [Mr A's] leg on 27 April 2001?

Yes I think he did adequately assess and treat the condition of [Mr A's] leg. As previously stated the notes were in my opinion deficient in a minor way in that they did not record the presence or absence of past medical history and medication usage. The state of [Mr A's] leg on the 27th of April 2001 is a little hard to determine in hindsight but I think it is clear from […] notes that it was noted that the cellulitis (or infection) of his leg developed rapidly – '… cellulitis of the r leg that has developed V fast…' (page 79 of supporting information). Also the admission notes to [the Public] Hospital from the 28th of April 2001 (pages 97 to 101 of the supporting information) clearly state that the 'swelling and redness of the Rt (right) leg/foot started yesterday' – meaning that the swelling and redness started on the day [Dr C] saw [Mr A] and not before – thus it is possible that the redness and swelling were not both present when [Dr C] saw [Mr A] but possibly only the swelling – certainly the swelling and redness were not recorded as being present the day before [Dr C] saw [Mr A]. This statement that the swelling and redness started the day before admission is repeated elsewhere – letter of 25 May 2001 from [a surgeon from a Public Hospital] (pages 88 and 89 of the supporting information). Thus when [Dr C] saw [Mr A's] leg it was either red and swollen starting on the day [Dr C] saw him or it was not yet red and swollen. Even if it was red when [Dr C] saw him this does not necessarily mean the leg was infected – haematomas can be firm warm and red (Ref. 3). Of note [Dr C] carefully documented checking the knee and ankle as well as checking for bony problems as documented in his notes – this was a good standard of care as often the joints above and below an injury can be overlooked.

Was [Dr C's] advice to [Mr A] to rest and elevate his leg for three days after which he would review his condition, or sooner if required, adequate?

Yes I think this advice was adequate and appropriate.

What further investigations or treatment, if any, should [Dr C] have undertaken or requested?

I have previously commented on this – in my opinion at the time [Dr C] saw him no further investigations or treatment other than rest and elevation were required based on the findings documented by [Dr C].

Should [Dr C] have taken [Mr A's] vital signs?

There was no particular reason to take his vital signs – one doctor I asked for an opinion on this case (see my comments later) would have considered this but not necessarily have done so at the time of first presentation, the other doctors would not have. I think taking of vital signs can be falsely reassuring at times and of note even at the time of admission to hospital his temperature was only 37.7 degrees Celsius (with up to 37.5

being considered normal). Also of note a temperature of less than 38.0 would not meet the inclusion criteria for cellulitis in two of the studies I checked (Ref. 6 &8) unless chills were present – so [Dr C] noting not unwell is a reasonable clinical approach to take as in cellulitis it is likely that there is either an obvious fever or chills. If vital signs are taken with this in mind – in other words if they are abnormal that they need explaining and that if they are normal that it is not necessarily reassuring (someone being unwell or having chills should take precedence over having a normal temperature) then taking vital signs can be useful. I think that in conclusion it was not mandatory to take [Mr A's] vital signs before he went to hospital and it would not be common practice based on the presentation that he had. Of note [the complainant's GP] did not note his vital signs as he was clearly unwell and needed to go to hospital anyway. Neither of the two GPs that I asked about this case situation would have taken vital signs (Ref. 8).

Should [Dr C] have informed [Mr A] about the potential risk of a serious infection?

I think he should have, and did, inform [Mr A] to be seen again as needed – in other words if he was not getting better then the advice was to get seen by a doctor. Of note when reviewing risk factors for cellulitis (Ref. 5) I found that contusions or recent injuries that did not breech the skin were not noted to be a particular risk factor for cellulitis. In most cases of cellulitis a break in the skin where the infection gets in can be found (Ref. 5). Thus there was no particular reason to be suspicious that a serious infection could develop based on the information available to [Dr C]. Neither [Dr C] nor the subsequent doctors found a place where infection could have started – the blisters found were considered to be secondary to infection rather than the source of infection.

Should [Dr C] have informed [Mr A's] GP about his condition?

There would have been no practical timely way to inform his GP about his condition other than by fax, or giving a copy of the notes to [Mr A]. As there was no particular information that [Mr A] could not have relayed to another doctor if he needed to be seen again it was not critical for this to have been done. Even today various email systems have problems of security and confidentiality and ensuring timely information gets to GPs is a difficult issue beyond the scope of this report. However informing the GP within a few days by sending a copy of the medical notes is good practice as one of the primary roles for GPs is to help ensure continuity of care and continuity of medical records. This is still not standard practice for various providers of care such as sports medicine clinics, family planning clinics and after hours clinics with various problems arising such as consent. In my opinion unless there is a good reason, or the patient specifically does not want information sent to the usual GP then it should be sent – however this is an idea that it is not practical or generally agreed on. In this case there was no particular reason to have informed [Mr A's] GP about the visit to [Dr C] as documented on 27/4/01, and I do not think it would have changed either the management or the outcome.

Please give your advice on the above issues on the basis that it was reasonable for [Dr C] to conclude that [Mr A] had his initial accident on 25 April (and not, as the Commissioner has determined, on 21 April).

This is a difficult situation. The notes from the 22/4/01 State 'Bite L leg by sheep plus headache, skin not broken, no bruising, panadol' 'ACC form filled'. The accident register states the injury was on 21/4/01 and reported on 22/4/01 and states the type of injury as 'Bruising – bruising tick box ticked' with a mechanism as 'being hit by moving objects' and the cause stated as 'knock by sheep'.

There are also two other accident register entries – but they both refer to injury (or injuries) on 25/4/01.

The ACC M45 form clearly states 'Sheep hit me – head butted on the shin and kept being hit everyday & days ago and also last Sunday' – last Sunday being the 22/4/01.

I think given all of the above we can conclude that in fact [Mr A] clearly had multiple injuries over this time period.

I considered the following case scenarios seeking the aid of other doctors who I could ask about the case situation without having to at first reveal the final diagnosis (Ref 8 and 9);

1) The injury was within the last day or two – I think this is supported by the evidence. In this case opinions from GPs (Ref. 8) and my own opinion and that of an emergency medicine doctor (Ref. 9) was that the assessment checking for possible bony injury (any tenderness (pain when pressing) over the bones of the lower leg) followed by advice to rest and elevate the leg was appropriate. Unless there were obvious signs of local infection or general symptoms of unwellness none of us would have particularly considered cellulitis.

2) The initial injury was 5 to 6 days ago but the most recent injury (or injuries) was within the last day or two. This possibility did not change the opinions mentioned in 1) above as the overriding factor was there was a recent explanation for the worsening of his discomfort (new injury or injuries) and the concept that the new injury was the key factor was felt to be supported by [Mr A] being able to continue working up until the day of or the day before seeing [Dr C].

3) The only injury was 5 to 6 days prior to seeing the doctor – this is not actually supported by the evidence but I think I may have been asked to consider this. This possibility made doctors (Ref 8 and 9) more strongly consider possible missed fractures (or broken bones) and double check that there was no bony tenderness and no broken skin. One GP (Ref 8) would have considered an X-ray even in the absence of bony tenderness although they thought the possibility of fracture was unlikely given he had kept working but they did wonder about a fibular fracture (a break in the small bone of the lower leg). However overall this would not have changed their opinions that rest and elevation and advice to be seen if things got worse was appropriate management.

4) That there was in fact a bite injury 5 to 6 days prior to presentation – there is mention of a bite on page 224 of the supporting information but it also seems to be referring to the left rather than the right leg so this may have even been a separate injury altogether to the other leg. In this situation where there was the possibility of a bite all of the doctors I asked (Ref 8 and 9) would be suspicious of infection even in the absence of broken skin and I would agree with this. However other than in this one piece of information I could find no other reference to [Mr A] having in fact been bitten – it was not in the information he provided nor was it reported to [the complainant's GP] or the doctors at the hospital. Thus it seems very unlikely that [Dr C] would have been told that there was a bite.

Are there any aspects of the treatment given by other providers involved in [Mr A's] care which you consider warrants either:

Further exploration by the investigation officer? – No I do not think further investigation is likely to help. I had considered trying to obtain further information about which of the various possibilities actually occurred and some of the information I have mentioned as possibly missing might help but I have decided it was better to produce a report that covered most if not all of the possibilities to avoid further delays in finalising my expert opinion.

Additional comment? The main comment I would make is to draw their attention to the need to consider looking between patients' toes who present with possible lower leg infections (Ref 4, 5, 6)

Conclusion:

It is clear from the information provided that [Mr A] had a severe outcome of his lower leg infection. However this does not in itself mean that the management of his leg was of a poor standard (Ref. 1). It is possible that he could have had very good care and still ended up with a poor outcome. Similar cases may have had worse care than he received and yet had a better outcome.

I do not consider there was any major breech in the standard of care as provided by [Dr C]. However the notes were in my opinion deficient in a minor way in that they did not record the presence or absence of past medical history and medication usage – of note if [Dr C] had recorded these findings it would not have changed the outcome in my opinion.

There is a large amount of supporting information in this case. I have read through all of this in an attempt to find all the information of direct relevance to answering the questions the Commissioner has put to me. I have not attempted to answer general questions about all of the information however – in particular my report does not attempt to agree or disagree with the policy information provided about the nursing and ACC and other work place procedures and should in no way be used for any such purposes.

Recommendations:

- For doctors in general the main comment I would make is to draw their attention to the need to consider looking between patients' toes who present with possible lower leg infections (Ref 4, 5, 6). I do not know if this was an issue in this case or not but from reviewing the evidence concerning cellulitis of the legs it is clearly the key clinical finding that most doctors need to be made aware of. From my experience, including in recent months, doctors are still not routinely checking between toes in cellulitis of the leg. I think this is because if the cellulitis seems to not involve the area around the toes themselves then they may not be aware that the infection further up the leg can have a source further away between the toes. Toe-web intertrigo is mostly due to fungal infection (Tinea pedis), and its prevalence in the general population is probably higher than 10% (Ref. 5) – this may mean that doctors are so used to seeing it they do not realise it is a risk factor for cellulitis and also because it is fungal and not bacterial do not realise it can be the source of infection – the mechanism probably being a breach in the skin barrier allowing bacteria to enter and/or that a mixed bacterial and fungal infection develops. Swabs taken for culture from between the toes may be useful in isolating the cause of cellulitis (Ref. 4, 5, 6) and doctors should also consider this when seeing cases of cellulitis of the feet or legs.

- [Mr A] may or may not have had problems between his toes (I found no evidence for or against this in the notes) but as it appears that he has had some recurrent infections since he should check this with his doctor as this may help prevent recurrence. Even if [Mr A] had problems between his toes at the time of the accident it is clear that the bruising in his legs was a key part to him sustaining such a severe infection – once the infection was in the damaged tissue it becomes hard for the body's defense system and for antibiotics to get into the damaged area and help fight off the infection. It should be remembered that at times no break in the skin is found when cellulitis occurs (Ref 5) but it is rare and further review of this issue is not likely to help [Mr A], or the health providers involved.

- There is surprisingly little information in the standard textbooks of emergency medicine and handbooks of specialty medicine (Refs 12 to 15), more research is needed and this is an area of medicine that probably needs more regular updates for doctors as new information becomes available. Cellulitis is a common cause of hospital admission and various attempts to treat this without admission to hospital are being considered in New Zealand and other parts of the world and research concerning this may help doctors outside of hospital decide who might have cellulitis in the first place.

- Although I could find no evidence about recurrent injuries (or multiple injuries occurring within a week of each other) in the medical literature, I think care is required in such situations and it may be that doctors should consider that when patients present with a history of multiple injuries to the same site within a short period that care should be taken and such situations should raise a sort of red flag and make doctors take a step back in their thinking and re-evaluate the situation –

such an approach to reducing errors as a form of meta-cognition (or thinking about thinking) has been shown to reduce errors (Ref. 11).

References.

1. 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.

2. Guidelines for Independent Advisors – Office of the Health and Disability Commissioner – Appendix H of the Enquiries and Complaints Manual – effective date: 1 September 2003.

3. General Practice – John Murtagh – McGraw-Hill Book Company – 1994 – ISBN 0 07 452807 6 – see especially chapter 53 (p522-533) on Shoulder Pain.

4. Association of athlete's foot with cellulitis of the lower extremities: diagnostic value of bacterial cultures of the ipsilateral interdigital space samples. Semel and Goldin, Clin Infect Dis, 1996 23(5): p1162-4

5. Risk factors for erysipelas of the leg (cellulitis): case-control study. Dupuy et al., BMJ, 1999. 318(7198): p1591-1594

6. Management of lower leg cellulitis, Cox, Clin Med 2002. 2(1) p23-7.

7. Oral pristinamycin versus standard penicillin regimen to treat erysipelas in adults: randomised, non-inferiority, open trial, Bernard et al., BMJ 2002; 325:864 (19 October)

8. Personal discussion, of Dr Searle the author of this report, with two general practitioners of the general situation of a […] male with injury to his lower leg from being run into by a sheep. The response was that they would not have considered infection unless there was broken skin found on examination or there was obvious spreading redness or the patient was unwell (none would have checked for athlete's foot). Vital signs would not have been taken. If the initial injury was 5 to 6 days ago and there was no new injury and the condition was worsening they were suspicious of possible crack fracture or other pathology and would have considered x-rays but were not particularly suspicious of infection without other supporting signs. Interestingly if the history of a bite was given rather than of a knock from the sheep's head immediate suspicion of infection was considered. I avoided stating the final diagnosis until after I asked each doctor what they would do based on the symptoms and signs at each presentation. This method of discussion was in an attempt to avoid getting a retrospective opinion with the benefit of hindsight knowing the final diagnosis of the serious infection.

9. Personal discussion, of Dr Searle the author of this report, with a senior emergency medicine doctor of the general situation and scenarios as per reference 8. They would have considered taking vital signs but would not necessarily have done so unless there were obvious signs of infection. Otherwise the response was similar to the responses mentioned in reference 8 above.

10. BMJ 2000; 320:768-770 (18 March) Education and debate: Human error: models and management, James Reason, professor of psychology.

11. Cognitive Forcing Strategies in Clinical Decisionmaking, Pat Croskerry, Annals of Emergency Medicine 41:1, Jan 2003, p110-120

12. Accident and Emergency Diagnosis and Management, A.F.T. Brown, 1987, ISBN 0 433 00031 7

13. Accident and Emergency Diagnosis and Management, 4th Edition, A.F.T. Brown, 2002, ISBN 0 340 80720 2

14. Oxford Medical Publications, Accidents and Emergencies, Sixth Edition, 1994, Oxford University Press, ISBN 0 19 262434 2

15. Oxford Handbook of Clinical Specialities, Oxford University Press, 3rd Edition 1993, ISBN 0-19-262116-5"

Additional advice

Dr Searle commented in his report that information concerning an undated presentation by [Mr A] to the ED at [the Public] Hospital (which was subsequent to his initial presentation on 28 April 2001) and his GP records were partly deleted. This information was provided to Dr Searle, who advised that this did not alter his opinion.

Occupational health nurse advisor

The following expert advice was received from Ms Wendy Spence, occupational health nurse:

"I, Wendy Spence have been asked to provide independent advice to the Health & Disability Commissioner on case 03/02435 [Mr A].

I, Wendy Spence, have read and agreed to the Guidelines for Independent Advisors.

Qualification Experience of Independent Advisor W.T. Spence:

Wendy Spence, RGON graduated 1973

Certificate in Occupational Health 1985 AUT

Post Graduate Diploma in Occupational Health Otago University 1992

Master in Health Science, First Class Honours, Occupational Health 2002

Past President Auckland Branch NZOHNA 1986

Practising Occupational Health Nurse 1983 – Current

Managing own Occupational Health Practice 1988 – current

Referral Instructions required by Health & Disability Commissioner:

Supporting Information

[Mr A] (pages 1-70)

Notification letter (pages 71-72)

[Public Hospital] (pages 73-205)

[Dr C] (pages 206-214)

[Ms B] and [the food processing company] (pages 215-450)

Record of telephone conversation with [Ms B] dated 27 January 2004

Two signs attached to outside of Centre door

Standards for Occupational Health Nursing

Expert Advice Required

Did [Ms B] provide services of an appropriate standard to [Mr A] on 26 and 27 April 2001?

In your response please include expert advice on the following issues:

1. Whether [Ms B] adequately assessed and treated the condition of [Mr A's] leg on 26 and 27 April 2001.

2. Whether [Ms B] should have requested, on 26 April, that [Mr A] return for a review of his injury later in the day or whether she should have taken some other action (including the provision of advice) in view of his condition. For example, whether [Ms B] should have discussed [Mr A's] condition with [Dr C] by phone or arranged an appointment?

3. Whether [Ms B] should have taken [Mr A's] temperature and blood pressure on 26 and on 27 April or conducted any other investigations.

4. Whether [Ms B] provided sufficient information to [Mr A] about his condition. In your response please include advice on whether [Ms B] should have informed [Mr A] on 26 and on 27 April about the potential risk of an infection.

5. Whether [Ms B] adequately informed [Dr C] on 27 April about [Mr A's] condition.

General

Please also advise the Commissioner on the following issues:

6. Whether the arrangements for assessment and treatment of employees by first aiders when the centre was closed were adequate.

7. Whether the arrangements for contacting staff, when they were absent from the centre during its hours of operation, were adequate.

8. Whether there are any aspects of the treatment (including documentation) given by other providers involved in [Mr A's] care which you consider warrants either:

Further exploration by the Commissioner?

Additional comment?

Independent Assessor's Summary of History of Events for case 03/02435: [Mr A]

21/4/01 [Mr A] filled in an Accident Form and recorded that he was knocked by a sheep on his lower leg which resulted in bruising. This incident occurred at 9pm on 21/4.

22/4/01 On the 22/4 [Mr A] saw the Nurse at 8am. Nurse's note recorded [Mr A] bite left leg by sheep plus headache. Skin not broken. No bruising. Panadol x 2 given. ACC form completed. [Mr A's] notes recorded a knock, not a bite, and the injury was to his right leg, not the left.

23/4/01 [Mr A's] day off

24/4/01 [Mr A's] day off

25/4/01 [Mr A] records a further injury that occurred on the 25/4.

There are two accident reports for this injury on the 25/4 sustained by [Mr A].

Report 1 Accident Report No.180 has been filled in by [Mr A] on the 25/4 and recorded injury time as 9 am 25/4. Bruising leg, sheep hit to leg. Treatment recorded is nil.

There is no first aid or other treatment provider record that he was treated on the 25/4. [Ms B] notes recorded that on the 25/4 this was a Public Holiday and the Medical Centre was closed.

26/4/01 Report 2 Accident Register Report No.150 (this report is not written in [Mr A's] writing) records the following:

Date of Accident 25/4 10am bruising. Got hit by sheep on the shin right leg slightly swollen, bruised painful.

[Mr A] was seen at the Clinic. He was given Voltaren tabs x 1, Arnica rub applied.

In addition the treating person, an experienced first aider, discussed the case with [Ms B] and [Ms B] consequently advised [Mr A] to come back that afternoon for review. Written at the bottom of the accident form is a note by [Ms B] that he was advised to put on tubigrip and to return to medical centre for review before going home.

[Ms B] states that as with any injury the injured person is asked to return to clinic at any time if they are concerned there is an increase in symptoms or they want to see the Doctor.

Note by [Ms B] records that [Mr A] did not return that afternoon for review, that he had a good range of movements and was walking on his foot.

[Ms B] stated in a phone call to [the investigation officer] 27/9/04 11.11am that when [Mr A] returned on 26 April for a review of his condition the centre was unmanned and locked for two minutes and that this did occur at times as staff went out into the plant to attend to other work

27/4/01 [Mr A] attended the clinic.

Information from [Ms B] states that he attended the clinic at 0915 hrs & that the treating First Aider assessed that the swelling had increased and consulted with [Ms B] on what to do. [Ms B] assessed [Mr A's] symptoms and arranged for [Mr A] to been seen by the Doctor that morning and he was taken to the Doctor at 1010 hrs.

On the morning of the 27/4 [Mr A] was seen by [Dr C] who put him off for 3 days, he was told to elevate his leg. He was to be reviewed again by the Doctor.

The Doctor noted severe contusion, significant swelling & bruising. He notes that [Mr A] was not unwell, did not have a fever or think he had an infection. The Doctor did not note any break in the skin.

[Mr A] came back to work from the Doctor and it appeared he left the site before being seen by the Medical Centre staff or [Ms B].

Facts Determined from Review of Information Provided

1. There are injuries recorded from [Mr A], in the Accident Register Forms for the 21/4 & 25/4.
2. Both of these accidents refer to the injuries as being caused by a hit/knock by a sheep.
3. Both Accident Reports record that the injury is to the lower leg. (There is another category that refers to leg/ankle/foot – this is not the category ticked.)
4. Nurse's note on the 22/4 record bite left leg by sheep. Skin not broken. All other information records the injury as a knock and to the right leg.
5. No broken skin/laceration is noted in any of the reports – this includes the Accident Reports, Nurse's notes, [Dr C's] notes.
6. There is no record in any notes, Accident record, Nurse's notes, Doctor's notes of a blister on the back of the right foot or ankle area or medial area of the lower leg. The ACC form filled in by [Mr A] in his own handwriting on the 27/4 refers to being injured on the shin.
7. On the 26/4 swelling was noted on the shin by the Health Centre treating first aider […]. [Ms B] was consulted as to what was to happen to treat this. [Mr A] received treatment and was told to be reassessed, again, later that day.
8. [Mr A] was not seen later on 26/4. [Mr A] stated he came to the clinic later that day but there was no one there. He was not seen by any other treatment provider on site and did not appear to have contacted the receptionist or foreman to organise someone to come and see him.
9. [Mr A] was seen on the morning of the 27/4 by the treating first Aider & referred to [Ms B] who arranged for him to be seen by the Company Doctor. He was taken to the Doctor's rooms an hour after being first seen that morning.
10. In the First Aider/Nurse's notes there was no record noted of infection symptoms. There was recorded signs of swelling & bruising. This was noted on the 26/4 and the 27/4. The swelling was noted to deteriorate from the 26/4 to the 27/4.
11. The Medical Centre is manned from 7.30-4.30. Dressings & non urgent matters have designated times to be seen. The Nurse is available throughout the day for any urgent matters and can be contacted by radio if not at the Clinic. Signs on the door of the Clinic state if the Clinic is unmanned to contact the Receptionist and/or Foreman. This information is also in the Staff handbook.
12. [Mr A] did not attend the Nurse/First Aider after coming back from the Doctor on the 27/4, as is required by Health Safety procedures & Rehabilitation procedures. [Mr A] had been put off by the Doctor for 3 days.
13. [Mr A] was admitted to [the Public] Hospital on 28/4/01 with cellulitis of right leg. The referral note to admit [Mr A] from [the complainant's GP], notes that the cellulitis developed quickly (Pg 79). Letter from […], Medical Advisor, [Public Hospital] notes swelling & redness of the leg associated with systemic infection which developed on the day prior to admission (Pg 88). Admission notes [Public] Hospital Emergency Department Pg 97 notes cellulitis of right leg, blisters medial aspect back of heel. That swelling &

redness of right leg/foot started yesterday with fever & shivering & unable to put full weight on right leg. That [Mr A] knocked right leg (tibia) on head of a sheep at work on Sunday (6/7 i.e. 6 days prior to 28/4) That he had no problems initially & he managed to continue with his normal work (12 hrs/day).

Expert Advice Required:

1. *Whether [Ms B] adequately assessed and treated the condition of [Mr A's] leg on 26 and 27 April 2001.*

On the 26/4 Ms [B's] advice was sought by the treating first Aider on 26/4, for [Mr A's] sore leg.
Notes by [Ms B] in her letter to the Commissioner on the 16/6/03 noted that [Mr A] had localised swelling to the shin, good range of leg movements and ability to weight bear (pg 216). There is nothing in the notes that referred to infection. [Ms B] asked for [Mr A] to return in the afternoon to be reviewed. [Ms B's] stated Mr A returned to work happily, i.e. he did not say he was unable to work or his leg was too sore.

[Ms B] stated that she:

- Checked for range of movement and ability to use the limb.
- Physically looked at the leg.
- Applied Arnica and Voltaren tabs x 1 was given.
- Applied tubigrip.
- Advised him to return for another review that day.
- Sent him back to work.

There are Guidelines for Occupational Health Centre that are Standing Orders for the treatment of various injuries. The treatments, actions and advice that [Ms B] gave to [Mr A] are consistent with these Guidelines (pg 233 –237).

On the 27th [Mr A] was again seen at the Clinic at 0915. The first aider in the clinic noted the swelling had increased. [Mr A] was referred to [Ms B] again, who assessed him and consequently made arrangements for him to be seen by [Dr C] at his clinic. [Mr A] was taken to the Clinic at 1010 hrs.

[Ms B] stated:

'I am a Registered General and Obstetric Nurse (A copy of my practising certificate is enclosed).
I registered in […] and worked for […] years at [a Public] Hospital with only time off for Maternity Leave.
I am a member of the NZ Occupational Health Nurses Association (since 1996)
I am the treasurer of the […] Occupational Health Nurses association (since […]).

Prior to my commencement of employment with [the food processing company] I worked in the Emergency Department at [a Public] Hospital for […] years.
In that time I observed and nursed several patients with Cellulitis and a few with Septicemia. I believe I am adequately trained to recognize the symptoms of Cellulitis. I believe [Mr A] was referred to Dr C] in a timely manner.'

Opinion:

[Mr A] was assessed as having a sore & swollen right shin with bruising by [Ms B] for which she applied the standing orders treatment. She assessed the significance of swelling by assessing functional capacity of the lower leg which she states was normal.

There is no information about redness, heat, related to the swelling, no measurements were taken, i.e. temperature. It is not considered that checking the temperature is essential element for the presenting symptoms of swelling at this stage.

Normal procedure for Bruising, Sprains is to get the person to come back daily for assessment. [Ms B] asked [Mr A] to come back earlier than is normal, i.e. that afternoon for reassessment. This would allow [Mr A's] condition to [be] reassessed and monitored to detect any change to this swelling

It is considered [Ms B] did adequately assess [Mr A] that at the time he was seen that she did treat the presenting symptoms of swelling & bruising as they were at this stage and did assess that he was able to continue normal daily activities. In addition she did assess that the swelling needed to be regularly monitored for any possible changes and asked him to come back for this in a shorter time frame than normal, i.e. to come back that afternoon of the 26/4.

2. *Whether [Ms B] should have requested, on 26 April, that [Mr A] return for a review of his injury later in the day or whether she should have taken some other action (including the provision of advice) in view of his condition. For example, whether [Ms B] should have discussed [Mr A's] condition with [Dr C] by phone or arranged an appointment?*

The action [Ms B] took in making the first assessment on the 26/4 was that there was swelling, pain, normal functional capacity without restriction of the leg & normal weight bearing. Using tubigrip indicates that the possibility of a haematoma was considered but did not, at that stage, warrant any further action. This was followed up with the advice that if anything changed or got worse he was to come back (page 216)

By asking [Mr A] to come back at the end of the day, [Ms B] was increasing the monitoring of the condition, more than what is done normally.

As there does not appear to have been any significant symptoms, i.e. infection, excessive pain, incapacity, that necessitated medical review, discussion with the Doctor does not seem to have been required at this stage.

[Ms B] has worked in A&E situations for […] years prior to working at [the food processing company]. That level of experience should enable her to recognise infection symptoms & take appropriate nursing action to detect any symptoms, i.e. seek medical opinion.

[Ms B] is an approved ACC provider authorised to treat a range of conditions & injuries (pg 373-376).

Opinion:

[Ms B] assessed that [Mr A] had swelling of his leg. She assessed that this swelling was not inhibiting normal functioning and there were no recorded signs of infection. She asked [Mr A] to come back again that day to be reviewed, indicating her assessment identified the need to monitor it closely to detect any changes that would indicate any further action was necessary.

3. *Whether [Ms B] should have taken [Mr A's] temperature and blood pressure on 26 and on 27 April or conducted any other investigations.*

[Mr A] presented with swelling of the right lower leg. There was no recorded laceration, sore, redness or other signs of infection in the lower leg.

The following practices would be expected methods for identifying infection:

- Physical examination – look at the area concerned.
- Check for symptoms of infection
- Redness
- Heat
- Ooze/discharge
- Swelling
- Temperature
- Pulse

In the absence of these symptoms and with the prevalent symptom being swelling it is not seen as critical that a temperature was not taken.

Taking a person's blood pressure would be done to assess systemic health status and heart status. There were no observations that [Mr A] was unwell or toxic, i.e. skin colour changes, statements of feeling unwell.

Opinion:

Given that the assessment [Ms B] made was that there was swelling, that this needed to be monitored for changes and that there were (from the notes submitted) no

specific indications of infection, a temperature check is not seen as critical at this stage.

On the 27/4 [Ms B] determined that he needed further action & referred him for medical assessment.

4. *Whether [Ms B] provided sufficient information to [Mr A] about his condition. In your response please include advice on whether [Ms B] should have informed [Mr A] on 26 and on 27 April about the potential risk of infection.*

It is not stated whether [Ms B] informed [Mr A] specifically of potential risk of infection. What [Ms B] stated in her letter of the 16/6 (pg 216) is that what [Mr A] was told on the 26/4, as with any injury, the following information is given:

The person is asked to return at any time or have a further review if there is any increase in symptoms or the person wishes to see the Doctor.

In the standing orders document on Guidelines for Occupational Health Centre – Minor sprains, bruised area, pg 237 one of the requirements of the standing orders for treatment of sprains bruised area is 'educate the employee on care of bruising/swelling'.

[The food processing company] is an accredited employer under ACC Partnership programme Health & Safety. This requires an annual audit of the company's health & safety performance in order to remain in the scheme. There are three levels of accreditation that an employer can be at. 1st level Primary, 2nd Secondary, 3rd Tertiary. [The food processing company] is at Primary level.

To be a part of the Partnership programme the food processing company must comply with and be able show that they meet the 19 critical elements. In addition, the Company had to submit a number of rehabilitation and injury management cases that occurred at [the food processing company] for scrutiny.

Listed below are comments from the Audit that indicate information and informing staff are a standard requirement of practice:

The audit of Critical Element Information Training & Supervision standard, documents that staff have been trained in the Hazards of the Job (pg 415). The auditor's specific summary comment on training is 'The training and management of training is very well organised within [the food processing company] and after viewing training records from the departments found a very well organised system for ensuring maximum compliance with this unit.' (pg 417)

Audit review for Rehabilitation outcomes, return to work and follow up procedures: Standard achieved: (comments and commendation)

'Again, [the food processing company] showed consistency in that their return to work and follow-up procedures were in line with their planning and administering

their staff who had been injured. The rehabilitation management has come from years of experience and a lot of effort on behalf of the Health and Safety Manager who has achieved very good results in getting staff to be returned to work as quickly as possible.'

[The food processing company] received a positive report at their last audit 14/9/02 which stated:

'Given the fact that the company has been at a primary level for the past 2 audits and that there has been positive organizational culture change with respect to health and safety over this time and that they have also redeveloped their operational procedures to meet the secondary level requirements (some tertiary levels have been also attained from this audit) the time is now right to move [the food processing company] to the next level in recognition of their achievements to date.'

Opinion:

In giving the information to [Mr A] about his condition, that he was to come back that afternoon, (this is sooner than the standard practice which is a daily review) that if his symptoms change or he is concerned, the opinion is that he has been adequately informed.

I would have considered that by giving out the above information and it would have required an explanation, of why he needed to come back, why he was being more frequently monitored and what the risks of this injury might be, and that this would have been covered in this discussion with [Mr A]. Also as a part of this discussion you would expect that advice about if his symptoms change, would have covered risk of infection.

Given that [Mr A] had worked at [the food processing company] for 9 years, he would have had a level of knowledge of the hazards of the job and what is required action for these hazards. Given that being injured by an animal is a hazard of the job that this must have been discussed with staff in their training on hazards, along with what was needed to be done and monitored for when such an injury occurred.

5. *Whether [Ms B] adequately informed [Dr C] on 27 April about [Mr A's] condition.*

From the Nurse notes & statements there was identified the need for [Mr A] to be assessed medically as his swelling had continued to deteriorate.

An appointment was made for him to be seen that morning.

He was seen by the Doctor and put off for 3 days. It does not appear at this stage the condition was critical.

It is noted that from when [Mr A] arrived at the Doctors he was not seen until midday. The reason for this is not clear. It would be expected that he would have been seen sooner.

[Ms B] states that on the 27/4 [Mr A] was taken to [Dr C's] Medical rooms (pg 216), that [Ms B] referred and arranged for him to go to the Doctor, made an appointment and transported him there.

[Ms B] rang the Dr's Medical rooms and arranged for [Mr A] to be seen. There is no record of whether [Ms B] spoke to [Dr C] or what she said when she made the appointment for [Mr A] when speaking to the Medical Centre.

There is a requirement at [the food processing company] that when a person is referred to the [food processing company] Dr that their medical notes go with them and associated forms. There is a procedure for management of reporting workplace injuries in the [food processing company] Health & Safety Manual (pg 383).

This procedure is as follows:

'**Report workplace injuries**

1. all work related injuries, however small, must be reported immediately to your Foreman or Leading Hand, and to the Occupational Health Nurse at the Medical Clinic.

   record injury details and treatment in the Accident Register.

   assess whether the attention of the company doctor is necessary. If the doctor is needed, transport to and from the Medical Centre will be arranged for you along with your medical file and associated forms.

2. back to the Occupational Health Nurse, complete with medical file & medical certificate.

   the nurse will contact your foreman or leading hand immediately to confirm whether alternative duties or time off has been given.'

The medical file that [Mr A] took with him was not in the information provided to me.

Opinion:

If procedures were followed, [Mr A] would have been sent to the Doctor with the medical file and associated forms.

It is expected that there would have been a referral note to the Doctor with details of symptoms & progression of these, any identified causes of symptoms and what the need of the assessment was from the Doctor.

It would be expected that where the referring health person had a concern that the patient's condition was of a critical, dangerous and/or may necessitate a higher level of medical care than the Doctor, i.e. hospital admission/specialist review, that the health professional would speak to the Doctor and/or speak to another health professional working with the Doctor, to note to the Doctor, their concern. In addition, they would do this to ensure that the person was seen immediately on their arrival at the Doctor's rooms.

General

6. *Whether the arrangements for assessment and treatment of employees by first aiders when the centre was closed were adequate.*

The Hours for the Clinic are 7.30am – 4.30pm. If the Clinic is unmanned, which it can be at times throughout the day, the nurse is contactable by radio. In addition, attendees can contact the Receptionist and/or Foreman if the Medical Centre is unmanned.

There are 72 First Aiders at this workplace. There is a designated car to transport people to the Medical Centre or Hospital.

Medical assessment can be by:

- Attending the Company Doctor's clinic.
- Being referred to the Company Doctor.
- At the After Hours Medical Service
- Referral to Hospital.

Opinion:

The Occupational Health Centre provides for treatment of injuries and accidents; it is manned by an experienced First Aider, who happens to be currently completing a Health Science degree at Massey University. In addition, this person is a Registered Nurse [in another country].

There are times when the Nurse or first Aider is not in the clinic as they go out on site to do other work. There are 72 First Aiders on site so at any one time there will always be someone health trained, available. In addition, there is the provision of alternative medical care and emergency care through a local Medical Centre and after Hours Medical Centre outside the clinic hours 7.30am-4.30pm.

It is considered that staff can access medical care in reasonable time, at any time, in 24hrs, with the above services provided. It is not considered necessary to have a nurse on site 24 hours 7 days per week. The role of the Medical Centre is to provide primary acute and first level of assessment and to move from this to a fully manned Centre is to move to the next level and to operate at an Accident and Emergency level. This is not what is required at a first level primary care response and with the existence of other adequate back up services.

7. Whether the arrangements for contacting staff, when they were absent from the centre during its hours of operation, were adequate.

Yes.

Opinion:

There are clearly marked instructions of how to reach the Nurse or First Aider if the clinic is unmanned, this includes being able to contact the persons by radio.

Notwithstanding these three options for contacting staff from the center either through the foreman, the reception service or by using the radio. There are vast numbers of first aiders on this worksite. At the very least contact could be made with someone trained to assist who would find or arrange for further medical assessment. In addition to this there is in place a process and procedures for assessing the need for further medical care.

8. Whether there are any aspects of the treatment (including documentation) given by other providers involved in [Mr A's] care which you consider warrants either:

- *Further exploration by the Commissioner?*

No

- *Additional comment?*

The Health and Safety Manager's job description has no reference to Occupational Health Nurse clinical practice activities as being a part of that job description i.e. assessing treating and making nursing diagnosis and yet the Health and Safety Manager is expected to provide clinical nursing services. Currently the first aiders consult the Health and Safety Manager on Occupational Health matters from a clinical perspective. If this is a part of the job then the scope for this should be stated in the job description including Standards of practice for an Occupational Health Nurse.
The documentation for injuries that was provided to the Commissioner consisted of accident reports, Day book register for the clinic and specific notes written by [Ms B], in response to the Commissioner's questions. There is a need for documenting Nursing notes on staff seen, activities and treatments provided, as part of the Nursing clinical practice."

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.

…

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

RIGHT 6

Right to be Fully Informed

1) Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive, including –
a) An explanation of his or her condition; …

Opinion: No breach – Ms B

In my opinion, Ms B did not breach the Code of Health and Disability Services Consumers' Rights (the Code) in respect of the following matters, for the reasons set out below.

Health care provider
Ms B accepts that she is a "practising health care provider" to whom employees and staff at the centre refer to for "further advice or treatment", even though she is employed as the Health and Safety Manager with no clinical responsibilities in her contract of employment.

Section 3(h) of the Health and Disability Commissioner Act 1994 (the Act) defines a health care provider as any registered health professional. Ms B was a nurse with current registration and a member of the New Zealand Occupational Health Nurses Association, and she assessed Mr A's condition on 26 and 27 April 2001. Although she was not employed as an occupational health nurse, Ms B provided health services to Mr A. Accordingly, Ms B's actions met the definition of "health care provider" in section 3(k) of the Act.

Assessment, monitoring and treatment
Right 4(1) of the Code states that patients have the right to have services provided with reasonable care and skill. This applies to patients who consult nurses while at work.

Mr A complained about the standard of the assessment and treatment of his right leg by Ms B on 26 and 27 April 2001 and that the Centre was unattended when he returned for review on 26 April at 4.00pm. His complaint is understandable in light of his subsequent admission to the Public Hospital with a serious infection (cellulitis) on 28 April. This infection resulted in significant treatment and disruption to his life.

Ms B advised that she properly assessed and treated Mr A on 26 April. She examined his right leg, and noted that he had good range of movement and was able to walk on his foot. Arnica cream was applied to Mr A's bruise, and he was given a Voltaren tablet and a tubi-grip to support his leg. Ms B recommended that Mr A return in the afternoon for a review of his condition. She referred him to Dr C for further assessment on 27 April, which was timely. Ms B advised me that Mr A did not have a blister or any signs of cellulitis on the two occasions she assessed his condition.

My occupational health nurse expert, Ms Wendy Spence, advised that Ms B properly assessed and treated Mr A's right leg on 26 April and appropriately told him to return for review later in the day.

Ms Spence advised that there is no clinical evidence Mr A had an infection in his right leg or that he was unfit to work at the time of the consultation on 26 April. In particular, there is no clinical evidence that Mr A's right leg or foot was red (in addition to the swelling), blistered, hot, lacerated, lacked normal function, was excessively painful or that he was unwell. Further investigations, such as the recording of vital signs and blood pressure, were not required. Mr A's condition also did not warrant a referral to Dr C for assessment on 26 April.

Ms Spence considered that the signs attached to the outside wall of the Centre were sufficiently clear about how to contact Ms B or the first aider if the Centre was unattended.

I accept Ms Spence's advice that the standard of the services Ms B provided to Mr A was satisfactory. Although it is likely that Mr A's severe infection in his right leg arose from his initial or subsequent similar injuries, there is no evidence that on 26 or 27 April he had any symptoms of infection.

I acknowledge that on 28 April Mr A informed the ED doctor at the Public Hospital that his right "leg/foot" became swollen on 27 April, which was also the date of his assessment by Ms B and Dr C. However, it is probable that the condition of Mr A's right leg began to deteriorate rapidly after his assessment by Dr C (at which point his symptoms became evident) owing to an aggressive infection, resulting in his admission to hospital the next day in a very poor state. My view is supported by the orthopaedic consultant's comment that the blisters Mr A developed on his foot were caused by Clostridia, which are "particularly virulent organisms". My view is also consistent with the advice of my expert GP, which is discussed below.

I accept that Ms B, given her clinical experience, would probably have been able to identify symptoms of cellulitis. Mr A worked on 26 April, which indicates that his mobility was satisfactory, and Ms B appropriately requested him to return for a review of his condition later that day. She also promptly arranged for him to be assessed by Dr C on 27 April when he had increased swelling.

Ms B therefore did not breach Right 4(1) of the Code.

Referral and communication
Right 4(5) of the Code states that every patient has the right to co-operation among providers to ensure quality and continuity of care.

Mr A complained that Ms B did not appropriately refer him to Dr C or provide Dr C with adequate information.

Ms B advised that Dr C was provided with Mr A's medical file, but it did not include the record of Mr A's assessment by the registered nurse on 22 April (which mentioned a sheep bite) or the record of the consultation of 26 April. However, Ms B clarified that the Centre first aider recalled that the record of the consultation of 26 April was provided to Dr C.

Ms B explained that she exercised discretion in the type of information that was provided to Dr C as he did not want unnecessary information in light of his workload, and tended to start his assessment from "square one". In response to my provisional opinion, Ms B advised that she provided Dr C with far more information about Mr A's condition and treatment in his medical file and ACC injury claim form (which was the "referral") than he would normally receive or was usual practice for occupational health nurses. She did not discuss Mr A's condition by telephone with Dr C because she could refer up to ten patients a day to him and frequent phone calls would disrupt his work.

The food processing company policy on the reporting of workplace injuries states that "if the doctor is needed, transport to and from the Medical Centre will be arranged … along with your medical file and associated forms". Dr C received the necessary information, apart from the consultation notes for 22 April and (possibly) for 26 April. Dr C also received a copy of the completed ACC form.

I note my expert occupational health nurse's advice that she would have expected Ms B to provide a written referral to Dr C, which included the reasons for referral and the causes, seriousness and progression of Mr A's symptoms.

However, taking into account all the circumstances, I am satisfied that Dr C was provided with adequate information by Ms B to properly assess and treat Mr A on 27 April.

In my opinion, therefore, Ms B did not breach Right 4(5) of the Code.

Information
Right 6 of the Code affirms every patient's right to the information that a reasonable patient, in that patient's circumstances, would expect to receive.

Mr A complained that Ms B did not fully inform him of the seriousness of the injury to his right leg and the appropriate treatment required.

Ms B said that she provided Mr A with adequate information about the condition of his right leg as she recommended he return for a review during the afternoon on 26 April or at any time his condition changed.

My occupational health nurse expert, Ms Spence, advised that Ms B adequately informed Mr A about his condition, particularly since she informed him about the risk of infection to his right leg.

It is not clear, in the absence of documentation, whether Ms B informed Mr A about the risk of an infection developing as a result of his injury. In the circumstances, as it is not possible to confirm the matter with Mr A, I have decided to take no further action on this aspect of the complaint.

Opinion: No breach – Dr C

In my opinion, Dr C did not breach the Code in the care he provided and the information he gave to Mr A.

Assessment, monitoring and treatment
Mr A complained about the standard of the assessment and treatment of his right leg by Dr C on 27 April 2001.

Dr C recorded that Mr A informed him that the injury to his right leg occurred on 25 April (not 21 April) and appeared satisfactory, but later it became swollen and bruised. Dr C noted that Mr A walked unaided and with a slight limp. Dr C recorded that Mr A's knee and ankle showed no abnormality and there was no fracture. There was no break in Mr A's skin or evidence of an infection in his right leg. Dr C did not take Mr A's temperature because he did not appear unwell, toxic or feverish. Dr C concluded that Mr A had severe bruising and recommended three days in bed with an elevated leg and a reassessment within three days if warranted.

My GP expert, Dr Searle, advised that the assessment of Mr A's right leg by Dr C was adequate because on 27 April there was no clinical evidence that he had an infection. In particular, there is no record that Mr A's right leg or foot was red (in addition to the swelling), that he had any obvious fever, chills, blistering or that he was generally unwell. Mr A's injury did not appear serious as it was to the front of his lower leg and therefore unlikely to have affected his circulation and nerves. Mr A also did not have any problems with the joints above and below his injury and seemed very unlikely to develop cellulitis as he did not have a break in his skin.

Dr Searle considered that Dr C's diagnosis of contusion and advice to Mr A to rest and elevate his right leg for three days then return for reassessment (or sooner if he was concerned about his condition) was appropriate. Further investigations, including vital signs, were not required.

Dr Searle further advised that it was immaterial to his advice whether Mr A was injured on 21 April (with or without subsequent injuries) or only once, on 25 April.

I accept the advice of my GP expert. As discussed above, it appears that Mr A's symptoms of cellulitis in his right leg were not detectable until after his consultation with Dr C and that he was very unlikely to develop this condition because he did not have a break in his skin. Mr A's subsequent rapid deterioration reflected the aggressive nature of his infection, rather than substandard assessment and treatment.

In my opinion, Dr C provided services of an appropriate standard in assessing, monitoring and treating Mr A's condition on 27 April 2001 and did not breach Right 4(1) of the Code.

Referral and communication
Mr A complained that Dr C did not refer him for further investigation and treatment, and failed to communicate with Mr A's GP after his assessment on 27 April.

My GP expert advised that it was not critical that Dr C immediately inform Mr A's GP about the condition of his right leg as there was no particular reason to do so. In addition, the advice to elevate the leg was appropriate.

I accept my expert advice. There was no indication that Mr A's condition was serious or likely to become serious (particularly so suddenly) when he was assessed by Dr C on 27 April. There was no particular need to contact Mr A's GP. Dr C therefore did not breach Right 4(5) of the Code.

Information
Mr A complained that Dr C did not fully inform him of the seriousness of the injury to his right leg and the appropriate treatment required.

My GP expert, Dr Searle, advised that Dr C's recommendation to Mr A to return for reassessment if he was concerned about his condition was adequate, particularly since there was no indication that he had an infection and, in the absence of a break in his skin, he was very unlikely to develop cellulitis or deteriorate rapidly.

It is not clear, in the absence of documentation, whether Dr C informed Mr A about the risk of an infection developing as a result of his injury. In the circumstances, as it is not possible to confirm the matter with Mr A, I have decided to take no further action on this aspect of the complaint.

Vicarious liability

Given that I do not consider Ms B or Dr C breached the Code, no issue of vicarious liability arises with respect to the food processing company.

Other comments

Documentation
The registered nurse who assessed Mr A on 22 April recorded that he was bitten by a sheep on his *left* leg the previous day. I accept Dr Searle's advice that if a bite occurred Dr C needed to be more vigilant about the development of an infection. It is not clear, in the light of subsequent evidence, whether Mr A was bitten by a sheep. For example, he stated in an accident register form that on 21 April he was "knocked" by a sheep in his right lower leg and in the ACC injury claim form that he was "hit", and his wife does not recall any bite. Given the time that has elapsed and Mr A's unfortunate death, further investigation will not clarify this issue.

Ms B advised me that she did not know that Mr A may have been bitten by a sheep. It is likely that she was unaware of the bite because the registered nurse did not record the consultation on 22 April in Mr A's medical notes, but only in the clinic day book.

The issue of whether Mr A was bitten by a sheep, in view of its potential clinical significance, should have been documented in Mr A's medical notes, clarified by Ms B, and (if confirmed) notified to Dr C.

I accept the advice of my expert occupational health nurse that "there is a need for documenting nursing notes on staff seen, activities and treatments provided, as part of the nursing clinical practice". This will ensure that clinical information is recorded in one document in the medical file to assist quality and continuity of care. In this respect I also note that the record of Mr A's consultation with the first aider and Ms B on 26 April was made on an accident register form and that other information (not all clinical) about Mr A is recorded in his medical notes.

Ms B also pointed out that only significant employee injuries should be recorded in the medical notes because otherwise documentation would be burdensome, given that the Centre applies 500 band aids every month and in 2001 there were 1500 reported accidents at the meat works site.

However, clearly some injuries may not be significant when initially assessed but develop serious pathology (as in this case) and therefore appropriate documentation is needed. I note that Standard 3 of the *Standards for Occupational Health Nursing in New Zealand* (second edition, published by the New Zealand Occupational Health Nurses Association) requires occupational health nurses to "maintain a *comprehensive* and current record of interventions" (emphasis added).

Role and responsibilities
My occupational health nurse expert commented: "Currently the first aiders consult the Health and Safety Manager [Ms B] on occupational health matters from a clinical perspective. If this is a part of the job then the scope of this should be stated in the job description, including standards of practice for an occupational health nurse." I also acknowledge the statement made by the food processing company that it was "not necessarily" Ms B's role to have assessed Mr A's condition. In view of these comments, I recommend the food processing company clarify Ms B's role and responsibilities.

Medical history and documentation
I acknowledge Dr Searle's comment that it is not clear whether Dr C considered Mr A's medical history, including his medication, to exclude factors that could delay his recovery or place him at higher risk of infection. It would have been helpful for Dr C to document the factors he took into account in his assessment and treatment. I draw this matter to Dr C's attention.

Availability of information
In his expert advice Dr Searle commented that an addendum report on Mr A's condition by the orthopaedic consultant, dated 5 September 2002, appears incomplete. Mr A's solicitor, who requested the report, has confirmed that the Commissioner received the complete document.

Dr Searle also commented that the accident register form Mr A completed on 25 April 2001 does not have a heading for "employee signature", unlike the two other accident register forms he completed and signed. Dr Searle was concerned that some information may have been omitted. Ms B explained that the accident register forms were updated in March 2001 to include a space for an employee signature but Mr A used the previous version.

Actions

- A copy of this report will be sent to the Medical Council of New Zealand, the Nursing Council of New Zealand, the Royal New Zealand College of General Practitioners and the New Zealand Occupational Health Nurses Association.

- A copy of this report, with details identifying the parties removed, will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.