Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

10 December 2003

Dr A
Provider

Dear Dr A

Complaint by Mrs B

I have now completed my investigation of Mrs B's complaint that you did not diagnose her fractured hip between 4 September 2002 and 4 October 2002.

In my opinion you breached Rights 4(1) and 4(2) of the Code of Health and Disability Services Consumers' Rights (the Code) by failing to appropriately examine and diagnose Mrs B's fractured hip, and to refer her for an X-ray or to a specialist.

In forming my opinion I considered information from you, Mrs B, ACC, Mr C, Dr D, and medical records from the public hospital. I also obtained independent expert advice from Dr Helen Moriarty, a copy of which you have been provided with (enclosed).

Background information

On 3 September 2002 Mrs B was thrown approximately 15 metres from a horse. (Mrs B is a professional horse trainer.) Mrs B landed on her right hip, and experienced considerable pain and discomfort in her right hip/leg.

Immediately after the accident Mrs B visited Mr C, physiotherapist. Mr C suggested an X-ray, which she declined. Mr C recommended that she see a doctor as the injury was serious and she would require time off work. Mr C continued to provide ongoing, regular physiotherapy treatment for the injury for several more weeks.

On 4 September 2002 Mrs B visited you at your clinic. The extent of the physical examination is disputed. Both of you confirmed that Mrs B remained standing during the consultation and was unable to lie on an examination couch due to pain. However, neither Mrs B nor you has stated that she refused to be examined.

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

Mrs B said that she could not sit or lie down at this consultation as she was in so much pain. Mrs B stated that no physical medical examination was undertaken, nor did you sight the area of injury. She also said she had only a limited discussion with you.

In contrast, you stated that you did conduct a physical examination of Mrs B's injury and did not need to physically touch her to see that she had limited movement and was in considerable discomfort. You stated that you obtained the history from Mrs B. Mrs B was too uncomfortable to sit down. You stated you observed Mrs B walking slowly with the aid of a crutch and she was able to place weight on her leg. You said that she considered it would be too painful to get up on the plinth as well.

You recalled that during the course of the first consultation you asked Mrs B to demonstrate the extent to which she could move her leg. You said that examination showed pain in the right hip, inside upper thigh, and pain with flexion, extension, abduction and adduction. You did not state that you viewed the injured area, or that you asked Mrs B to remove sufficient clothing to view it.

You prescribed Mrs B Panadeine and diclofenac (non steroid anti-inflammatory) for the pain. Mrs B said you told her to continue with physiotherapy, and filled out an ACC Medical certificate for two weeks off work. As stated above, Mrs B continued to receive regular physiotherapy throughout this period.

Mrs B visited you again on 18 September 2002. At this second consultation you gave Mrs B another medical certificate for a further two weeks off work. Again Mrs B stated there was no medical examination, and this second visit was even briefer than the first. Mrs B continued with the physiotherapy treatment.

In contrast, you stated that you think you palpated Mrs B's hip at the second consultation. No improvement was recorded.

On Mrs B's third visit to your practice on 4 October 2002, minor improvement was documented; however, she was still unable to work, or walk without a crutch. You noted that Mrs B had received massage, stretching, proprioception training and strengthening treatments from the physiotherapist. You stated that you may have received a note from the physiotherapist about the treatment or discussed it with Mrs B (although a copy of this has not been provided). Mrs B said that she never discussed with you the treatment she was receiving from the physiotherapist.

Mrs B also said you told her on 4 October that if she was not able to do her job in another week, you would consider sending her to Dr E (local sports physician) for further evaluation. In contrast, you stated that you put the referral on the ACC form and anticipated that ACC would organise it. The medical certificate dated 4 October 2002 stated there was slow improvement and "? [Dr E] evaluation". Mrs B did not consult you again.

Mrs B sought a second opinion from Dr D on 18 October 2002. He was concerned by the degree of muscle atrophy. Dr D said he suspected that the fracture was not picked up earlier because Mrs B was able to weight-bear and walk, although she had a limp.

She was sent for an X-ray, and was found to have a fracture of the right subcapital neck of femur.

Mrs B was admitted to a public hospital on 18 October 2002 and underwent surgery for a cannulated screw fixation that day. Mrs B understands that the operation was inevitable, but the delay in diagnosis and surgery has led to a delay in recuperation.

Relevant Code provisions

RIGHT 4
Right to Services of an Appropriate Standard

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

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

Opinion

Assessment of injury
Mrs B is concerned that you did not assess her right hip adequately, and did not consider a fracture injury.

Although you stated that you obtained the history of the injury from Mrs B, my advisor noted that there are no details recorded in the medical notes such as how far she was thrown, how she landed, or whether she had difficulty getting up. The physiotherapy notes also record that Mrs B had had other injuries in the past, but there is no mention of such injuries in your medical notes.

It is also unclear whether Mrs B had consulted you before, or whether she had consulted other health professionals for these injuries. However, given Mrs B's profession as a horse trainer, a history of injuries would have been likely and it would have been prudent to ask about any previous injuries.

Mrs B stated that you did not physically examine her at any of the consultations, or perform any tests. She said that you did not view the injured area. Mrs B said she was on crutches at all three visits, and there was little discussion. She stated that you knew she was receiving physiotherapy but did not discuss with you any details of the treatment.

There is no mention of any subsequent examinations in the medical notes of the consultations on 18 September or 4 October. You think you palpated Mrs B's hip at the second consultation. You said that you asked about the pain Mrs B was experiencing at each session, and considered the pain was consistent with gluteal injury and appeared to be decreasing. You noted that Mrs B did not request any further pain medication after the first consultation. Slow improvement was recorded at the third consultation, but no further information about the type of improvement is

documented. You observed on 18 September and 4 October that Mrs B still could not walk without the aid of a crutch.

My advisor quoted a number of standards, including the following from 'General Practice' by John Murtagh (2nd ed, 1999):

> "… instructions for clinical examination of the hip … 'Follow the traditional methods of examination of any joint: look, feel, move, measure, test function, look elsewhere and X-ray'."

The ACC Treatment Profiles quoted by my advisor state that for a suspected contusion (bruise) lower limb, "Reassess the next day if significant haematoma forming …"

My advisor stated:

> "The two most important elements of examination of the legs, hip and sacroiliac joints are good positioning and adequate exposure of the affected region. With the exception of observation of walking, the patient must be positioned lying for examination and sufficiently disrobed …"

My advisor said that it is unclear whether you discussed the importance of a thorough medical examination with Mrs B, or even if you offered to do such an examination. The notes also do not state whether Mrs B declined a thorough examination.

My advisor noted the lack of detail in the clinical records, which do not sufficiently cover the history of the injury, and the examination findings. It is not clear that you viewed the injured area or any haematoma that may have formed since the accident, or requested that sufficient clothing be removed in order to view the area. It appears from the information provided that you did not position Mrs B correctly for a thorough examination at any of the three consultations. There is no documented reason why a full examination was not undertaken at either of the 18 September or 4 October consultations.

Given the absence of information to the contrary, I consider that you did not obtain a full history from Mrs B during any of the consultations. Previous injuries were not noted, nor were specific details taken of the incident that caused the injury in question. There is also no evidence that you discussed the importance of a thorough medical examination with Mrs B. It is not clear that you performed a thorough clinical examination or view the injured area at any of the consultations.

Diagnosis
It is not disputed that you did not diagnose Mrs B's fracture.

You stated:

> "I accept that I did not diagnose [Mrs B] as suffering from a subcapital neck of femur fracture and incorrectly concluded that she did not have a bony fracture."

You said you were under the impression that the injury was muscular, because of the fact that Mrs B was weight-bearing, and she was receiving ongoing physiotherapy treatment. You said in your letter dated 14 November 2002 to Mrs B that you were under the impression Mrs B wanted you to complete the relevant forms, give her sick leave, and she would continue to receive physiotherapy.

You stated:

> "The clinical presentation appeared, to me, to be one of muscular bruising of the buttock or thigh and I prescribed the treatment I thought would help alleviate her pain and signed off the sick leave. It did not appear to me that this was a bony injury as all the neck of Femur fractures that I have seen in A&E Departments were unable to partially weight bear or undergo physiotherapy treatment."

You also said:

> "I was however misled by the fact that she had already attended physiotherapy and wished to resume with that treatment. On the further two consultations I had with her, she continued to have physiotherapy and in particular at the third consultation was showing signs of improvement. The physiotherapy recorded was significant treatment and not what I would ever imagined would have been possible with an injury of her type."

You said that you noted at the third consultation that Mrs B had been seen for a month with a thigh strain, but according to Mrs B at no stage was a thigh strain mentioned to her during the consultations.

My advisor quoted a number of key facts from the Murtagh textbook in regard to clinical diagnosis including:

> "Always consider the lumbosacral spine, the sacroiliac joints, and hip joints as important causes of leg pain
> …
> limp has an inseparable relationship with painful hip and buttock conditions, especially those of the hip
> …
> diagnostic difficulties can arise because of the referred pain from the lumbosacral spine, hip and pelvis
> …
> a trap can be the impacted subcapital fracture that may allow partial weight-bearing …"

My advisor noted that you were not aware of the possibility of partial weight-bearing with this type of fracture, and you have provided no information about any ongoing medical education that you have undertaken in this area. It appears that you were unaware of the possibility of weight bearing with the type of fracture in question. My advisor said this incident demonstrates you have a significant knowledge gap in this area.

You state that the involvement of the physiotherapist misled you. However, examination and diagnosis is the responsibility of the medical practitioner, regardless of the involvement of other health professionals.

I consider that you did not accurately diagnose Mrs B's condition because you did not consider that she might have a fracture, owing to a lack of knowledge in this area, and because she was receiving physiotherapy.

Referral for X-ray or specialist assessment
Physiotherapist Mr C suggested that Mrs B get an X-ray when she first consulted him on 3 September 2002; however, she declined. My advisor noted that it is not clear if you knew this, and it is not mentioned in the clinical notes.

You stated in your letter of 14 November 2002 to Mrs B that you would have been more inclined to get an X-ray if she had consulted you first before the physiotherapist. You said that Mrs B's symptoms also appear to have confused the physiotherapist, as well as the doctor who ultimately ordered X-rays of several different views.

Mrs B responded to your comments as follows:

> "I don't believe that the fact that I did not go to him on the very first day is a very good reason for not ordering X-rays. Also, the doctor that did order the X-rays on my first visit to him on the 18/10/02, believed that the problem was the hip but because I had had so much trouble walking etc, my knee by that time was causing me pain and he wanted to eliminate there being any issues with the knee and likewise with the pelvis X-rays he felt that with the nature of the fall which I described to him he thought it sensible to be sure there was no damage done in that region either."

You stated:

> "I do not accept that I did not refer [Mrs B] for an X-ray or Specialist assessment. On her third consultation I did refer her to a specialist, namely [Dr E] as I indicated above. At that time [Mrs B] was showing improvement, however, I was concerned at the speed at which she was progressing. I anticipated that the referral made on the ARC 18 would be arranged by ACC and that the X-rays would be taken at that time if [Dr E] considered them to be indicated."

Mrs B stated that this is incorrect, and it was only if she was no better one week after the consultation on 4 October that she was to return and you would arrange a referral to Dr E.

My advisor confirmed that the appropriate way to refer a patient to a specialist is by a letter of referral. A note on ACC forms is not sufficient.

Mrs B went to see Dr D for a second opinion on 18 October 2002. Dr D stated: "I was alarmed at the amount of muscle atrophy that she had and after a very long

consultation we decided it was important to see whether she had any bony abnormality." Dr D referred Mrs B for X-rays.

Dr D also said:

> "I am NO expert but I suspect that things were not picked up earlier purely because [Mrs B] was still able to weightbear and she was walking – although it was with a slight limp. The limp apparently did get progressively worse with time."

My advisor stated that radiological investigations are the only way to definitively rule out bone injuries. However, she stated the Murtagh textbook cautions that an impacted subcapital femoral fracture may not always be observed from plain X-rays, and if a fracture is strongly suspected, a bone scan should be undertaken.

My advisor also stated:

> "The ACC Treatment Profiles suggest X-ray to exclude fracture both for suspected sprain and for suspected contusion. The Treatment Profiles also recommend review of contusion one day after injury to assess if significant haematoma is forming and referral to an orthopaedic surgeon where there is massive haematoma. The Treatment Profiles recommend referral for Specialist review if a suspected sprain of the hip or thigh shows no improvement after 2 weeks."

My advisor said:

> "Clinical suspicion of a fractured hip depends upon the association of the history of a significant fall with telltale examination findings (classical findings are leg shortening and/or rotation at a position of rest, restriction of specific hip movements, bruising of associated muscle groups and local tenderness)."

As previously noted by my advisor, the clinical notes do not record a detailed history of the injury, or the examination findings, in sufficient detail to determine whether Mrs B's clinical presentation would lead to a suspicion of a fracture.

I consider that you should have referred Mrs B for X-rays after the first consultation to exclude any bony injury, and referred her to a specialist when she showed little improvement after two weeks. Referral to a specialist in writing may also have been appropriate after the first consultation if there was evidence of significant haematoma. However, there is an absence in the medical notes of any record of observed haematoma.

Conclusion

My advisor noted: "[Dr A] has admitted that he did not comply with standard clinical examination, did not order investigation nor make the diagnosis, and did not initially refer." My advisor stated that the documentation also confirms that there was a departure from standard examination techniques. She also said that you offered mitigating circumstances to explain this departure, including the pain Mrs B was suffering. However, my advisor notes that there are a number of unknowns about the consultations that make it difficult to assess the extent to which you departed from professional standards when you examined Mrs B.

Following a careful review of the information available, my opinion is that you breached the Code in terms of examination, diagnosis and referral. I accept my expert's advice that you did not carry out your consultation of 4 September 2002 in accordance with professional standards. Nor did you perform a thorough examination at either of the subsequent consultations on 18 September or 4 October 2002. As a result your diagnosis was inaccurate. You failed to refer Mrs B for an X-ray to exclude bony injury, or to an appropriate specialist when her condition did not improve after two weeks. Earlier specialist referral may also have been appropriate for a significant haematoma, but no information has been provided to show whether a haematoma was present or not. In conclusion, your documentation and explanation of the consultations is inadequate to show that the appropriate standard of care was provided to Mrs B.

Follow-up actions

I note that you have accepted my findings and will approach further presentations of this type of fracture differently. You confirm that you will seek to undertake further medical education in relation to this type of fracture, by obtaining relevant articles from an orthopaedic surgeon. You will also review your documenting practice.

In the circumstances I consider that no further action is necessary. I will send a copy of my report with identifying features removed to the Royal New Zealand College of General Practitioners. A copy of my report, with identifying features removed, will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

I have forwarded your written apology to Mrs B. Thank you for your assistance with my investigation.

Yours sincerely

Ron Paterson
Health and Disability Commissioner

Ref: 02HDC16966

cc: Mrs B

Medical Council of New Zealand
Expert Advisor's Report

"**Expert Advisor Report: Complaint 02/16966/…**

Question 1. ***What are the relevant standards relating to this complaint …?***

This complaint concerns standard of care to be expected, when a patient presents to a General Practitioner both with:
(1) Acute pain in the hip or thigh and
(2) Chronic (longstanding) pain in the hip or thigh.

The standards for clinical examination and investigation, diagnosis and referral (both for diagnostic tests and specialist opinion) are outlined below. Quotations have been taken from two sources:

'General Practice' by John Murtagh published by McGraw-Hill Book Company, Australia, 2nd edition, 1999.

This is a reference textbook in General Practice, well known and widely used throughout New Zealand and written by a highly respected Australian academic. It describes standard clinical examination and investigation of most conditions seen in General Practice. And

'Treatment Profiles 2001' published by the Accident Compensation Corporation (ACC), Wellington, December 2000.

This was developed as a resource for New Zealand clinicians to help summarise current practice in management of common injuries. The profiles are consensus-based guidelines (not evidence-based). They are available to ACC providers both in hard copy and on the Provider section of the ACC Healthwise website www.acc.org.nz .

a. Expected standards for clinical examination

The Murtagh textbook describes standard techniques for General Practitioner examination in various chapters. Chapter 59, entitled Hip and Buttock Pain and Chapter 60, entitled Pain in the Leg, are of particular relevance to Question 1.

Chapter 60 states that for a pain in the leg 'examination of the joints, especially the hip and sacroiliac joints, is very important'.

Chapter 59 gives instructions for clinical examination of the hip, beginning with: 'Follow the traditional methods of examination of any joint: look, feel, move, measure, test function, look elsewhere and X-ray'.

The two most important elements of examination of the legs, hip, and sacroiliac joints are good positioning and adequate exposure of the affected region. With the exception of observation of walking, the patient must be positioned lying for

examination and sufficiently disrobed, 'The patient should strip down to the pants...' (Murtagh).

b. Expected standards of clinical diagnosis

The Murtagh textbook lists Key Facts at the start of each chapter to assist diagnosis. The following Key Facts are most relevant to this complaint.

In Chapter 60 the first Key Fact is: 'Always consider the lumbosacral spine, the sacroiliac joints, and hip joints as important causes of leg pain'.

In Chapter 59 the Key Facts include: 'limp has an inseparable relationship with painful hip and buttock conditions, especially those of the hip'.

Chapter 121, on Common Sporting Injuries, carries a warning about groin pain in the acute (newly injured) phase: 'diagnostic difficulties can arise because of referred pain from the lumbosacral spine, hip and pelvis' (Murtagh p1187).

And on the diagnosis of Femoral Fractures: 'a trap can be the impacted subcapital fracture that may allow partial weight-bearing ...' (Murtagh p1161).

The ACC Treatment Profiles provide differential diagnoses and Red Flags for GPs to consider when faced with common injuries. Red Flags, developed by ACC in conjunction with the National Health Committee, are for identifying potentially serious conditions.

Differential diagnoses relevant to this complaint are for a suspected Sprain Hip/Thigh, where the list begins with 'Fracture/Dislocation' and for a suspected Contusion (Bruise)/Lower Limb where the list begins with 'Fracture', which appears again further down the list emphasising the importance.

Red Flags for suspected Sprains/Strains include: 'significant trauma', and 'pain that gets worse when patient is lying down'.

c. Expected standards for appropriate investigation.

The ACC Treatment Profiles recommend investigations for common injuries. The investigation list for a suspected Sprain Hip/Thigh and also for a suspected Contusion (Bruise)/Lower Limb both begin with 'X-ray to exclude fracture'.

The Murtagh textbook carries a cautionary comment about impacted subcapital femoral fracture (in the acute, newly injured phase): 'the fracture may not be evident on plain X-rays. If suspicion of fracture is still high, a bone scan should be performed.' (Murtagh p1161).

For chronic (longstanding) groin pain five options are given for investigation, each is a radiological test; the first is 'X-ray of the pelvis' (Murtagh p1187).

d. Expected standards for General Practitioner treatment.

The ACC Treatment Profiles carry recommended treatments for common injuries. For a suspected Sprain Hip/Thigh this includes pain relief, crutches, early mobilisation, exercise training as prevention of muscle wasting, with referral to Specialist (if there is a suspected fracture), and to Physiotherapy (for rehabilitation and to monitor progress).

For a suspected Contusion (Bruise) Lower Limb the advice reads: 'Reassess next day if significant haematoma forming ...'.

e. Standards for Specialist referral.

The ACC Treatment Profiles carry recommended criteria for referral to a specialist. For a suspected Sprain Hip/Thigh this is if there is 'No improvement after 2 weeks'. For suspected Contusion (Bruise)/Lower Limb with '… gross haematoma of any large muscle group …' ACC advises referral to an Orthopaedic Surgeon.

Question 1 (continued) ***' … and did [Dr A] comply with these?'***

[Dr A] has admitted that he did not comply with standard clinical examination, did not order investigation nor make the diagnosis, and did not initially refer.

[Dr A] has offered mitigating circumstances to explain why he did not comply with standards for clinical examination and investigation and achieve the correct diagnosis.

Question 2. *'**From the information available did [Dr A] examine in accordance with professional standards?'***

The documentation confirms that there was departure from standard examination techniques. However, there are important gaps in the known facts, making it difficult to supply a straight-forward answer to Question 2.

To illustrate the difficulties posed by incomplete knowledge, the known and unknown elements are detailed below for the two key aspects of the examination (good positioning and adequate exposure) and for the associated documentation and clinical reasoning.

a. Good positioning for examination.

Known:

- [Dr A] did not position [Mrs B] correctly for a thorough examination of the hip during any of the three consultations in question (accounts given by both parties).
- At the first consultation [Mrs B] considered that it would be too painful to get up on the plinth ([Mrs B's] letter of 11th November).

- At the first consultation [Mrs B] was unable to sit on a chair or sit on the bed in the doctor's office because of considerable pain ([Dr A's] letter of 26th February).

Unknown:
- Did [Mrs B] receive any explanation of the importance of a thorough medical examination?
- Was there any discussion about how [Dr A] might minimise the pain triggered during examination of the injured leg?
- Did [Dr A] actually offer to do a thorough clinical examination of the leg or hip joint?
- If so, did [Mrs B] decline a thorough examination?
- Did pain prevent [Mrs B] being positioned correctly at the physiotherapist rooms for the conduct of a physiotherapy examination or treatments?

b. Adequate exposure for examination.

Known:
- Bruising was visible on the R buttock (as physiotherapist noted 'contusion' 3.9.2)
- There was also contusion of hip and thigh (as [Dr A] noted on ARC 18 dated 4.9.2).

Unknowns:
- To what extent did [Dr A] request clothing to be removed to facilitate his examination?
- Did [Dr A] view the bruising present on the buttock?
- Did [Dr A] personally view the haematoma of the hip and thigh?
- If not, who informed [Dr A] of presence of hip and thigh bruising, [Mrs B]? Or the triage nurse?

c. Documentation and clinical reasoning.

Known:
- [Dr A] diagnosed S53 (thigh sprain) and SE40 (contusion (bruising)).
- 'SE40' has been written down as if an afterthought (on ARC18 of 4.9.2)
- Precise examination findings are not well documented by the doctor.

Unknowns:
- Did [Dr A] know of the presence of gross haematoma?
- Is so, was this sign overlooked in coming to a diagnosis of sprain and contusion?
- Did [Dr A] know of the diagnostic significance of gross haematoma around the hip?

There are similar known and unknown details with regard to clinical history-taking. It is unclear how completely the accident history was taken by [Dr A]. Details of the incident (the distance that [Mrs B] had been thrown, the force with

which she had hit the ground, the position she had landed in and any difficulty she had experienced in getting up after the fall) were not documented. It is not clear if the severity of this fall was known but the significance of the trauma was not recognised, or if the relevant information was not sought at all during the consultations.

Question 2 (continued) ***'… was his departure from those standards minor, moderate or major?'***

There was departure from examination standards, but given the unknowns in the circumstances of clinical history taking and examination, as outlined above, it is not possible to judge the severity of departures from examination standards. It is not clear if the action taken by the doctor at the time was a patient-centred response to the expressed difficulty in getting onto the examination couch. It is not clear if the importance of persevering with a standard examination despite that difficulty was explained. It is not clear if the patient expressed a wish not to do so.

Question 3. ***Was it reasonable of [Dr A] to conclude that [Mrs B] did not have a bone injury, and that her injury was muscular?***

Bone injury cannot be definitively ruled out without radiological investigations. However in the case of impacted subcapital fracture an early X-ray can be falsely reassuring because the fracture line is sometimes invisible initially as described by Murtagh above. In this eventuality, there must be a strong clinical suspicion of a fracture and further investigation if the fracture is to be discovered early.

There is a potential 'catch-22' situation when the initial clinical presentation is not typical or not sufficiently convincing of fracture, since without a strong clinical suspicion an initial X-ray may or may not be ordered, and if ordered a 'normal' initial X-ray appearance may also lead to a delayed diagnosis.

Clinical suspicion of a fractured hip depends upon the association of the history of a significant fall with telltale examination findings (classical findings are leg shortening and/or rotation at a position of rest, restriction of specific hip movements, bruising of associated muscle groups and local tenderness).

Therefore the key consideration is: did [Mrs B] have a typical clinical presentation, one that would trigger most practitioners to suspect of the likelihood of a fracture? The available documentation reveals some gaps in the known facts.

Known:

- [Mrs B] was thrown approx. 15 metres from a horse ([Dr D's] letter 14.2.3),
- [Mrs B] had experienced similar injuries in the past (Physiotherapy note of 3.9.2),
- She had not fully recovered from her most recent previous injury (Physiotherapy note of 3.9.2),
- [Mrs B] led a very busy physically active lifestyle and she had strived to continue with her workload as much as possible despite ongoing discomfort,
- She was able to partially weight-bear on the hip after the injury,

- [Dr A] was not aware of the possibility of partial weight-bearing capacity with an impacted subcapital hip fracture (his letter of 26th February),
- The acute clinical signs were not elicited in the normal manner,
- The 'muscle atrophy' (wasting) noted and investigated by [Dr D] (letter of 14th Feb) was a late sign and would have not been evident at the initial consultation.

Unknowns:
- What had happened at the previous similar injuries?
- Were these old injuries muscular in nature? Was there any prior hip bone damage?
- Had [Mrs B] mobilised in similar manner on crutches after these injuries too?
- Was [Dr A] aware of the history of similar injuries and of their nature?
- Had radiological investigations been done on the hip after previous falls?
- If an X-ray had been obtained on the first or second day of the injury would the fracture line have been initially invisible?

Question 4. ***At what point, if any, should [Dr A] have referred [Mrs B] for an X-ray or specialist opinion.***

The ACC Treatment Profiles suggest X-ray to exclude fracture both for suspected sprain and for suspected contusion. The Treatment Profiles also recommend review of contusion one day after the injury to assess if significant haematoma is forming and referral to an orthopaedic surgeon where there is massive haematoma. The Treatment Profiles recommend referral for Specialist review if a suspected sprain of the hip or thigh shows no improvement after 2 weeks.

Again there are some gaps in the known facts:

Known:
- The physiotherapist had offered an initial X-ray and this was declined (physiotherapist note of 3.9.2),
- [Dr A] first saw [Mrs B] one day after the injury, when there was a massive haematoma present,
- [Dr A] saw [Mrs B] again at two weeks, but did not document if improvement was present or not,
- The physiotherapist had documented some improvement within two weeks (notes of 4.9.2. 11.9.2 and 16.9.2).

Unknowns:
- Did [Dr A] know that [Mrs B] had already declined initial X-ray?
- If so, did [Dr A] advise [Mrs B] to re-consider?
- Did [Dr A] view the massive haematoma at the first visit?
- Did [Dr A] assess [Mrs B] for improvement at the two week visit?
- If so, how was improvement judged?

These gaps complicate the difficulties in arriving at a retrospective interpretation of the situation.

Question 5. ***At what point, if any, should [Dr A] have reconsidered his diagnosis?***

There were opportunities for reconsideration of diagnosis at the acute and chronic phase presentations, but there were also some possible mitigating circumstances.

a. in the acute situation:

If [Dr A] had been in possession of the full injury history, had been aware of the severity of the fall had viewed the full extent of the initial bruising and had recognised the significance of these factors, a review of the associated clinical signs and reconsideration of the diagnosis would have been expected at the time.

However, it is not known if [Dr A] had gathered sufficient clinical information to know that the diagnosis should be reconsidered.

b. in the chronic situation:

If [Dr A] had deemed that there was no improvement after two weeks a referral to a specialist would have been appropriate at that point.

However, it is not known if [Dr A] assessed [Mrs B] for improvement at the second visit, or if [Dr A] knew of the physiotherapist opinion that clinical improvement has occurred within the two week period. It is noteworthy that [Mrs B] had returned her crutches to the physiotherapist on 3.10.2, the day before she saw [Dr A] for the third time, indicating that there was improvement in comfort and weight-bearing ability by then.

Question 6. ***Are there any other matters relating to professional standards which you believe to be relevant to this complaint?***

[Dr A] admitted to performing a non-standard initial medical examination, citing patient discomfort as the reason for this. Medical practitioners are frequently called upon to perform examination of patients who are in pain, and this in itself is not a reason to avoid an appropriate diagnostic procedure. Under such circumstances it is usual practice to recommend a full examination and to provide information to the patient about the potentially uncomfortable examination and to seek informed consent to continue. However, the patient retains the right to refuse examination.

[Dr A] has admitted to a knowledge gap about partial weight-bearing capacity with subcapital hip fracture. This doctor has had many years of experience in A&E, General Practice and Sports Medicine, and also has an additional qualification, Diploma of Sports Medicine. In New Zealand continuing medical education is regarded as important to ensure that doctors keep up their specialised knowledge and skills. There are now recognised pathways for the accreditation and re-accreditation of doctors who work in the Sports Medicine field and in Accident and Medical settings. [Dr A] did not mention if he has been part of such programmes.

The quality of medical documentation in this case has contributed to difficulty in finding the answer to some of the above questions. The medical notes are brief and do not contain the necessary detail of injury history or examination findings. Consequently a most important question remains unanswered: were the routines of standard care followed in this case but not documented, or were they not performed at all?"