Orthopaedic Surgeon, Dr B Orthopaedic Registrar, Dr C District Health Board

A Report by the Health and Disability Commissioner

(Case 18HDC00309)



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Executive summary

- This report concerns the care provided to a man when he presented to a public hospital on three occasions in June and July 2017 with a deteriorating condition. At his third presentation, he was reviewed by an orthopaedic registrar. The registrar discussed the case with the on-call orthopaedic consultant. The registrar misunderstood, and did not perform, the consultant's instructions to perform an investigation, and discharged the man. When the consultant followed up on the results of the investigation later that evening, the registrar realised that he had misunderstood the instructions, but rather than admit this, he told the consultant that he had performed the investigation, and made up normal results.
- 2. Some two weeks later, the man was diagnosed with cauda equina syndrome.

Findings

- 3. The Commissioner found the registrar in breach of Right 4(1) of the Code. The Commissioner was critical of the registrar for compromising the man's well-being by making up a test result, and lying repeatedly about the test result.
- 4. The Commissioner was also critical of the care provided by the DHB at the second presentation, and commented on the first presentation, third presentation, and communication between senior and junior doctors.

Recommendations

- 5. The Commissioner recommended that the Medical Council of New Zealand consider carrying out a competence or conduct review of the registrar, and that he provide an apology to the man, and provide HDC with his reflections and learning from relevant training.
- The Commissioner recommended that the DHB provide an apology to the man, consider how its support and relevant guidelines provided to junior and senior staff members in relation to interpersonal relationships and communication may be improved in light of the findings in this case, and use the findings of this complaint as a basis for training staff.

Complaint and investigation

- 7. The Health and Disability Commissioner (HDC) received a complaint from Mr A about the services provided by Dr B and Dr C at the DHB. The following issues were identified for investigation:
 - Whether Dr C provided Mr A with an appropriate standard of care and quality of services in June and July 2017.

- Whether Dr B provided Mr A with an appropriate standard of care and quality of services in June and July 2017.
- Whether the DHB provided Mr A with an appropriate standard of care and quality of services in June and July 2017.
- 8. The parties directly involved in the investigation were:

Mr A Consumer

Dr B Provider/orthopaedic surgeon

Dr C Provider/orthopaedic registrar (non-vocational)

District health board

9. Further information was received from:

Dr D Emergency medicine specialist

Dr EOrthopaedic surgeonDr FGeneral practitionerDr GOrthopaedic surgeon

Physiotherapy service provider Radiology service provider

10. Also mentioned in this report:

Dr H Doctor
Dr I ED registrar

Independent expert advice was obtained from Dr Shameem Safih, an emergency medicine specialist (Appendix A), and Dr John McKie, an orthopaedic surgeon (Appendix B).

Information gathered during investigation

Background

- Mr A (in his early forties at the time of events) began experiencing lower back pain on 20 June 2017 after lifting heavy objects. He presented to the public hospital on three occasions in June and July 2017 with a deteriorating condition, and eventually was diagnosed and treated for cauda equina syndrome.¹
- This report focuses primarily on the care provided to Mr A at his third presentation to the public hospital on 10 July 2017. However, a chronology of events is set out below.

¹ A group of symptoms caused by compression of the cauda equina (the roots of the spinal nerves). Symptoms include pain in the lower back and legs, weakness and numbness in the groin, buttocks and legs, and impaired functioning of the bladder and bowel.



First presentation: 21 June 2017

- Mr A told HDC that he experienced sharp pain in his lower back, and his legs felt globally weak. He presented to the Emergency Department (ED) at the public hospital at 9.17am.
- The clinical notes show that Mr A was seen by Dr H, a doctor, at 10.56am. The DHB said that Dr H noted that the pain radiated down the right leg to the foot and big toe, which is consistent with S1² nerve root compression, and noted Mr A's previous L5–S1³ disc herniation.⁴
- On examination, Mr A's pain increased with right lateral flexion⁵ and forward flexion,⁶ consistent with disc-related pain. Dr H noted that Mr A was walking well, although he felt that his leg was weak. Formal strength testing,⁷ tone, reflexes, and saddle sensation⁸ were normal. Slightly decreased sensation was noted in the L4/5/S1 regions. Mr A denied saddle sensation loss and incontinence. The DHB stated that Dr H also sought to determine possible diagnoses other than disc prolapse, and documented this.
- 17. The discharge summary stated:

"IMPRESSION:

Mechanical back injury⁹ — likely exacerbation of L5/S1 disc herniation No cauda equina"

- The DHB stated that the diagnosis of L5–S1 disc prolapse was made on the basis of the pain pattern, having occurred after bending to lift a heavy object, being similar pain to a known previous prolapse, the pain increasing on forward flexion of the spine, and radiation of the pain/sensory disturbance felt in the S1 dermatome.¹⁰
- The DHB stated that this diagnosis was discussed with the supervising consultant, who agreed. Mr A was given pain relief, and discharged with advice to see a physiotherapist and a GP for consideration of an outpatient scan. The discharge summary notes that Mr A was also advised to return if there was worsening numbness or tingling, especially in the saddle region, loss of control of bowel and bladder, or fever.

² One of the vertebral segments of the sacrum.

³ L5–S1, or lumbosacral joint, is the joint between the fifth lumbar vertebra (L5 vertebra, the lowest of the five vertebrae between the ribs and pelvis) and the sacrum (segment of vertebral column forming part of the pelvis).

⁴ A herniated disc, also known as a slipped or prolapsed disc, is a problem with one of the rubbery discs between the individual vertebrae, where some of the gel-like substance protrudes out, putting pressure on nearby nerves.

⁵ Bending movement sideward to the right.

⁶ Bending movement forward.

⁷ Tests the strength of each muscle group, often rated on a scale of 0/5 to 5/5.

⁸ Sensation in the region around the buttocks and anus.

⁹ Back injury caused by stress or strain on the muscles of the vertebral column.

¹⁰ An area of skin supplied by nerves from a single spinal root. The S1 dermatome is the dermatome on the lateral aspect of the heel bone.

The DHB stated that signs of cauda equina were sought and not present, and an urgent or 20. emergent MRI was not indicated. It stated that there was no indication for acute referral to the orthopaedics service at this presentation.

Events between 21 June 2017 and 8 July 2017

- Mr A was seen by his GP, Dr F, on 22 June 2017 and 30 June 2017. At the latter 21. appointment, Dr F noted: "No sphincter disturbance, no saddle numbness." On Mr A's request, referrals to a physiotherapist and to an orthopaedic surgeon were arranged.
- Mr A had appointments with a physiotherapist on 3 and 6 July 2017. Mr A said that during 22. the time he was doing physiotherapy, he noticed that passing urine was becoming difficult and he was dripping slightly. He also noticed what he thought was constipation, as he could not move his bowels normally and needed to strain to pass insignificant amounts.

Second presentation: 8 July 2017

- Mr A told HDC that on 8 July 2017, he experienced a sharp, cold, and numbing pain, which 23. spread from the lower back, through his buttocks, to his feet, causing him to fall. He stated that he lost sensation in his legs and feet, lower back, and perianal region.
- The ambulance service was contacted at 10.02pm and, on arrival, the paramedics found 24. Mr A lying prone¹¹ on the floor. The notes record, "[T]his P.M. noted increasing loss of sensation down both legs particularly r[ight] leg," and document that Mr A was able to mobilise to the ambulance after receiving pain relief.
- The DHB stated that Mr A presented to the ED via ambulance at 11.19pm. A triage nurse 25. noted Mr A's history and recorded "no incontinence" and "no urinary or bowel symptoms", and assigned Mr A a triage code of 4. The clinical notes show that Mr A was seen by two nurses:
 - At 3.33am (9 July 2017), the first nurse noted that on examination, the right leg was weaker than the left. She noted that Mr A had called the ambulance because he had been unable to move his right leg.
 - At 5.35am, the second nurse noted that Mr A said that both legs felt tingly and numb, worse on the right, but that no loss of bladder or bowel control had been experienced.
- Mr A was seen by ED registrar Dr I twice: 26.
 - At 6.49am, Dr I noted a background of L5-S1 radiculopathy, 12 worsening "right LL sciatica" following injury three weeks previously, Mr A's previous presentation, and that there were no signs of cauda equina. Dr I charted analgesia at 6.55am. A nurse saw Mr A at 7.13am and 8.06am.

¹² Irritation of, or injury to, a nerve root, which typically causes pain, numbness, or weakness in the part of the body that is supplied with nerves from that root.



¹¹ Lying face down.

- At 9.22am, Dr I documented a history of pain and numbness/tingling radiating down the left leg. She documented that a history of leg weakness was not present, and that on examination, power and sensation of the lower limbs was normal. Sensation of the perianal region and anal tone (via a per rectum examination) was tested and found to be normal.
- The DHB stated that lower limb strength, sensation testing, and per rectum examination of anal tone were performed looking specifically for cauda equina compression. The DHB said that based on the clinical examination, no other investigations were indicated.
- The notes show that Dr I's impression was L5–S1 radiculopathy, with no signs of cauda equina. Mr A recalled being told by Dr I that there was nothing to be concerned about. However, Mr A felt that he was not able to walk properly, and had noticeable weakness in both legs, pain and sensory changes, dysfunction in his bladder and bowel, and saddle anaesthesia.¹³
- 29. Mr A was discharged at 9.40am with a prescription for nortriptyline, ¹⁴ and was advised to follow up with his GP.

Appointment with physiotherapist 10 July 2017

Mr A had an appointment with his physiotherapist on 10 July 2017. A senior physiotherapist also assessed Mr A on this occasion. Following this, they referred Mr A to the ED. The referral letter noted:

"It appears that since this review [referring to the 8 July 2017 presentation] his symptoms have unfortunately deteriorated. His lower back pain has increased and he reports numbness in both legs, as well as a decreased ability to walk. When watching him walk he appears uncoordinated, struggling to place both of his feet and in danger of falling. He attributes this to pain and weakness of both his lower limbs ...

[Mr A] reports decreased saddle sensation to a scratch test, although he could feel this. He reports he has been able to pass urine but has been feeling that he still has more to pass when he finishes. He has not passed a bowel motion for the past few days ...

Given his decreased saddle sensation and questionable history of bladder symptoms he may benefit from a bladder scan in regards to cauda equina issues, and ongoing investigation from there ..."

Third presentation: 10 July 2017

Mr A presented to the ED at 1.26pm. The triage nurse noted that he had been sent by the physiotherapist and had been seen at the ED three days previously. She noted that he had reduced bowel and bladder sensation but no incontinence, he had been unable to walk

¹⁴ Medication used to treat nerve pain.



¹³ Loss of sensation in the saddle area.

more than five steps for the past three days, and he had numb legs. She recorded that the physiotherapist had noted decreased saddle sensation but not paraesthesia.¹⁵

Dr C's assessment

- The ED referred Mr A to the Orthopaedic Service, and he was reviewed by the on-call orthopaedic registrar, Dr C.¹⁶ Dr C said that he reviewed the previous notes by the ED doctors, and was aware that this was Mr A's third episode of back pain, and that he had worsening symptoms that now included urinary symptoms.
- Dr C stated that on examination, Mr A was able to mobilise (walk) but was limited by pain, and required assistance with crutches. Power (muscle strength testing) was globally slightly weak at 4/5, and worst at L4 bilaterally at 4-/5. Dr C noted an "altered sensation globally in legs, worst bilaterally in L5/S1 distribution" and otherwise normal tone and reflexes. A rectal examination revealed normal tone but altered perineal sensation.
- Mr A told HDC that he discussed with Dr C other symptoms that are not mentioned in Dr C's response to HDC, such as saddle anaesthesia, bowel, urine, and sexual dysfunction, a numb genital area, and feeling that he could not walk at all.
- Dr C stated that the clinical notes identified unexplained urinary symptoms that do not clearly follow a pattern of urinary retention, and that a presentation of urinary incontinence would have been a clear indicator for cauda equina syndrome. However, he said that Mr A did not report urinary incontinence, and because his urinary complaints were less specific, consideration of cauda equina syndrome was not automatic. Dr C does not recall any reference to sexual dysfunction being reported by Mr A.
- Dr C stated that routine blood tests (performed to rule out infection) found no significant abnormality, and Mr A had no fever or recent weight loss. An X-ray of the lumbar spine was taken to determine disc damage. Dr C told HDC that the only significant abnormality was a raised post-void urine volume¹⁷ of 100ml found in a bladder scan performed by the ED Senior Medical Officer (SMO). This was undertaken specifically to rule out cauda equina syndrome.

Discussion between Dr C and on-call orthopaedic consultant

- Dr B was the on-call orthopaedic surgeon for the evening of 10 July 2017. He recalled being contacted by Dr C at 5.17pm to discuss Mr A and concerns of possible cauda equina syndrome.
- Dr B recalled Dr C recounting Mr A's history and his examination findings. Dr B stated that a residual volume of 100ml was noted on the post-void bladder scan, which is a volume of

HĴC

¹⁵ An abnormal sensation (such as prickling or tingling).

¹⁶ Dr C told HDC that at the time of events he was in his first year of work as a non-vocational orthopaedic registrar.

¹⁷ The volume of urine left in the bladder after voiding (urinating), which is measured by a bladder ultrasound scan (bladder scan). Here, Mr A had 100ml of residual urine remaining in his bladder after urinating.

retained urine that does not definitively indicate cauda equina syndrome or require an urgent MRI scan.

Dr C said that they noted that Mr A had a private referral, including an MRI scan, in two weeks' time with the orthopaedic surgeon. They agreed that the level of urine remaining in the bladder was around the borderline level for cauda equina syndrome. However, Mr A displayed only minor motor deficit, which indicated against cauda equina syndrome.

Dr B's instructions to Dr C

- 40. Dr C's recollection was that during their discussion, Dr B instructed him to see whether Mr A could pass any more urine, and that if so, he may be discharged.
- 41. However, Dr B said that he instructed Dr C to give Mr A some analgesia and fluids to enable a further trial of voiding (second post-void bladder scan), and to report back the findings.

Mr A's discharge

- 42. Dr C said that Mr A was able to pass urine.
- 43. Mr A disputes this, and stated that he never told Dr C that he had passed urine. Mr A noted that his friend assisted him to the toilet, as he was unable to get there himself, and also stayed with him, and saw that Mr A did not pass any urine at all.
- Dr C said that as the post-void bladder scan results were borderline for cauda equina syndrome and the minor motor deficit indicated against cauda equina, and on his understanding of Dr B's instruction, there would have therefore been no benefit in an MRI scan. Dr C stated that because Mr A was able to pass urine and had an upcoming appointment with an orthopaedic surgeon, Mr A was discharged with a prescription of gabapentin. Dr C said that Mr A was also advised to return if symptoms recurred.
- Dr C understands now that Dr B's instructions had in fact been to carry out a second bladder scan once the bladder had refilled, and for Mr A to be discharged only if this demonstrated normal post-void urine retention.
- It is unclear exactly when Mr A was discharged, as there is conflicting documentation; however, the discharge summary sent to his GP documented that he was discharged at 5.19pm. The discharge summary documented that the plan was for analgesia and private follow-up, and that Mr A was discharged with a prescription for gabapentin.
 - Discussions between Dr C and Dr B after Mr A's discharge
- Dr B said that at the end of Dr C's shift at approximately 10.30pm, they spoke again by telephone.

¹⁸ Medication used for the relief of nerve pain.



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- 48. Dr C recalls that Dr B requested the details of a second post-void bladder scan. Dr C said that he was taken aback by Dr B's question, and was not aware that a second scan was required, as Mr A had been able to pass urine.
- Despite not having performed a second scan, Dr C told Dr B that there had been 45ml of residual urine on the second attempt to pass urine, which is what he would have expected given Mr A's earlier scan. Dr B recalled that Dr C informed him that 45ml was the retained volume of urine within the bladder.
- Dr C said that he now appreciates that this was entirely the wrong thing to do, and emphasised that at the time he did not appreciate the significance of the second scan. He has reflected on why he made this comment to Dr B, and stated: "I can only say that I felt under a great deal of pressure to respond in line with what was expected from him, and due to it having been a very busy shift." He also said that at the time, he did not fully understand the implications of his statement.
- Dr B said that with this information, he was reassured that it indicated that whilst Mr A was clearly suffering significant radiculopathy, there was no immediate danger of cauda equina syndrome, as anything under 100ml is considered normal.
- Dr B stated that he ensured that Dr C had arranged appropriate follow-up for Mr A, and was informed that Mr A had a private MRI scan booked, was arranging to see a surgeon privately, and had been told that he could return if his symptoms deteriorated.
- Dr B noted that during the handover meeting the next morning (11 July 2017), Mr A's case was reviewed again, and when asked what the results of the second scan had been, Dr C again informed him that the second scan had a residual of 45ml. Dr B told HDC that the rationale for the second scan was discussed with the other registrars present. Dr B stated that it is his usual practice to rely on the verbal results of the scan provided, and it would be extremely unusual to physically go and check the result.

Events between 10 July 2017 and 24 July 2017

- 54. On 10 and 11 July 2017, Mr A's wife contacted the GP practice about her husband's symptoms, and asked for a referral to another specialist in order to be seen sooner. On 13 July 2017, Mr A requested laxatives for his constipation of almost a week. On 14 July 2017, Mr A contacted the practice about his ongoing constipation, and asked for an urgent referral to be sent to a private hospital, which Dr F facilitated.
- on 20 July 2017, Mr A had an appointment with Dr F. Dr F noted that Mr A had upcoming orthopaedic specialist reviews, as well as an appointment for an MRI. Dr F stated that on this date Mr A appeared to be mobilising with crutches, but was able to get up on the bed for an examination. Dr F documented that there was no sphincter disturbance, and told HDC that there was no urinary incontinence.
- On 12, 14, 17, and 20 July 2017, Mr A had physiotherapy appointments with the senior physiotherapist. At the 14 July appointment, the physiotherapist documented that he discussed cauda equina symptoms and advised Mr A that if he experienced any of these

symptoms, he should present to hospital immediately, but that otherwise it was not unusual to experience some changes in sensation.

Identification of cauda equina syndrome on 24 July 2017

- 57. Mr A told HDC that his condition had remained the same since his third discharge, with symptoms of numbness, urinary retention, bowel constipation, and saddle anaesthesia. Mr A booked an MRI scan privately with the radiology service for 24 July 2017, and his physiotherapist arranged for an appointment with Dr G on the same day.
- The radiology service told HDC that when Mr A presented, he was unable to walk or empty his bladder, due to numbness in both legs. Mr A recalled that the technician became very worried by what she saw during the MRI scan.
- 59. The MRI scan report stated:

"CONCLUSION:

Large disc extrusion at L4/5 with secondary compression of cauda equina. No segmental numbering variation."

- The radiology service told HDC that although Mr A's appointment with Dr G was not until several hours after the MRI scan, given Mr A's condition, he was taken up to the specialist rooms on completion of the scan.
- Mr A informed Dr G that he had been discharged from ED after a post-void bladder scan of 100ml, and recalled that Dr G performed tests. Dr G told HDC that Dr B and the hospital were contacted directly for a situation of impending, if not actual, cauda equina syndrome.

Fourth presentation on 24 July 2017 and subsequent events

- Dr B said that he was on call for spinal surgery on 24 July 2017 and received a telephone call from the radiology service to inform him that Mr A's private MRI scan had revealed a very large L3/L4 disc prolapse, and that Mr A had a large volume of urine within his bladder. Mr A was transferred immediately to the public hospital, and Dr B met him in the ED.
- Dr B said that when he went through the history with Mr A, it became apparent that this was the case he had discussed with Dr C two weeks earlier. Dr B said that he was surprised to see Mr A again, and he explained to Mr A that his understanding was that he had had a second post-void bladder scan after receiving analgesia, and that this scan had shown a post-void residual volume of 45ml. Mr A informed Dr B that there had been no second scan. Dr B confirmed this by searching Mr A's medical records and finding that only one scan had occurred.
- Dr B said that this omission was disclosed to Mr A that morning, prior to his surgery. Dr B explained to Mr A that he had instructed that analgesia and a second scan be undertaken, and that he had been told the results of the second scan, which had reassured him at the time that Mr A could be discharged.

- Dr B told HDC: "Had I known that the second scan had not been undertaken I would not have discharged him, or I would have asked him to return the next day."
- of Dr B said that he telephoned Dr C that day and arranged to meet him to discuss the discrepancy. At the meeting, Dr C acknowledged that the second scan had not been undertaken.
- or B said that he operated on Mr A that day, completing an L4 laminectomy¹⁹ and removing a large piece of disc material from the canal. Dr B said that postoperatively Mr A's condition showed immediate improvement, but he then had a further recurrence of right-sided leg pain, and a second MRI scan undertaken on 26 July 2017 revealed a recurrent/retained fragment of disc still sitting in the canal. Mr A was returned to the operating theatre that day for a wider laminectomy and further exploration of the canal, and the fragment was removed without difficulty.
- The discharge summary for 10 July 2017 Mr A's third presentation was amended by Dr B on 30 July 2017 as follows:

"Additional comment by [Dr B].

Telephone conversation with [Dr C] in the night of 10 July. Concern about cauda equina recognised. Bladder Scan indeterminate. Recommend to wait and attempt further void. If ok then home. Else MRI. Discussed at round the next morning — reported that repeat bladder scan was 45mls and thus improved. MRI in private already booked. Patient was discharged — private follow up and return if deteriorates.

This note has been made subsequent to [Mr A's] admission and surgery on 24^{th} and 26^{th} July."

69. The 10 July 2017 discharge summary was also amended by Dr C twice on 31 July 2017 as follows:

"As above with [Dr B] — had second subsequent scan bladder at 45ml."

"Further amendment to above — documentation as from recollections regarding the events of that presentation to ED

Initial presentation in ED — Assessed in afternoon and case presented as above to [Dr B] — neurological findings as documented above. Reported initial $\sim \! 100 \text{ml}$ bladder scan as performed by ED SMO at bedside. Instructed to repeat bladder scan after analgaesia and a period of mobilisation with further voiding of bladder. My recollection was that a subsequent scan was performed before 9pm that night before evening handover which was verbally reported to me to be 45 mL's post void. I see this was not documented. The above was relayed to [Dr B] where the decision to discharge without further investigation based on the above information."

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¹⁹ Surgery to relieve pressure on the spinal cord or nerves.

70. Mr A was discharged on 7 August 2017.

Further information

DHB — ED care

- The DHB sincerely apologises for the distress that Mr A and his family have experienced as a result of this matter.
- Dr D, clinical director of ED at the public hospital, responded on behalf of the ED and Dr I. Dr D wished Mr A a speedy recovery from his surgery, and also expressed his apologies on behalf of the DHB for not recognising this debilitating condition. Dr D advised that the DHB has committed to review and revise its clinical guidelines to try to prevent this from happening again.
- Dr D stated that in relation to Dr I not checking for deep tendon reflexes, whilst it is agreed that this procedure forms part of the complete neurological examination, it was highly unlikely that an abnormality in the reflex testing would have prompted a change in diagnosis and management at the time. He said that Dr I acknowledged that she did not perform these tests, and had assured him that it will form part of her neurological examination in future. He said that it was important to note that decreased (or even absent) reflexes are present in a wide variety of conditions, including sciatica, which was the working diagnosis at the time.
- Dr D stated that assessing post-void bladder volume has the potential to be useful in the assessment of possible cauda equina syndrome, but definitive studies with acceptable sensitivity and specificity are lacking. He reported that it does not currently form a formal part of the assessment of patients with lower back pain. He advised that currently the DHB is conducting an internal audit on this topic, to help to guide it towards a more definitive interpretation of this investigation and subsequent use in the assessment of patients with lower back pain and/or cauda equina syndrome.

DHB — care provided on 10 July 2017

- 75. Dr E, clinical leader of Orthopaedics, stated:
 - "[...] I am not aware that there have been any comments that Registrars are under pressure to respond to Senior Medical Officers. There is a lot of pressure on Registrars to respond during busy periods, as I understand occurred on the night of [Mr A's] 3rd presentation to the Emergency Department. These pressures include making multiple decisions on patients who are under ED's discharge/disposition timeframes."
- The DHB told HDC that in the three years prior to these events, no formal issues had been raised by staff members within the Orthopaedic Department in relation to concerns about relaying information to, and communicating with, senior staff.

77. The DHB stated:

"The Orthopaedic Department at the DHB supports a culture of open communication and requires that RMOs contact their senior colleagues for any matters they are unclear about."

- The DHB advised that this is outlined clearly by the SMOs at orientation, discussed at team level on a regular basis, and reiterated at monthly [...] meetings, which are attended by the registrars. Issues or concerns raised by the registrars are formally tabled and discussed at the meetings. The team works consultatively with the SMOs by providing feedback in order to make positive changes to the culture. The DHB advised that this also extends to other departments, and includes the raising of interdepartmental concerns.
- 79. The DHB also outlined that it has taken the following actions:
 - The description of the orthopaedic registrar run was updated recently to highlight the
 expectation around handover of patients to the SMO, and documentation of patient
 outcomes.
 - The Orthopaedic Department recently finalised a Registrar Handbook, which refers to the importance of communication and handover.
 - The Orthopaedic Department implemented [an initiative] for registrars, which
 addressed issues raised around safer working hours at night and limits on consecutive
 days worked by RMOs resulting in the appointment of additional registrars to the
 service, as well as an additional position to the roster.
 - All orthopaedic SMOs have attended the Royal Australasian College of Surgeons (RACS) training, "Operating with Respect", which is a compulsory on-line module.
 - All supervisors of RMOs have completed the RACS "Face to Face" course. Others have attended the "Non-technical skills course for surgeons", which covers the importance of effective communication, teamwork, and collaboration, consistent with the nine core competencies of the College.
 - Over the past 18 months, the DHB has implemented a [programme] that aims to bring about culture change by increasing the ease and motivation for allowing people to "speak up for safety". The training has been attended by the Orthopaedic Team, and focused on promoting professional accountability, and how to manage disruptive or unprofessional behaviour that undermines safety.
- The DHB told HDC that Mr A's case and management of cauda equina patients was discussed at the Orthopaedic Department [...] meeting in November 2017. An audit was completed in relation to this over a two-month timeframe, and as a result of the audit the Orthopaedic Department continues to monitor ultrasound bladder scan results closely. MRI scans are being undertaken on an increased number of patients to monitor and

understand the different levels of urinary retention identified on bladder scan and the findings of the MRI.

The DHB stated that it continues to monitor patients who present with cauda equina syndrome with a view to implementing a policy that gives weight to bladder scanning when considering which patients need an urgent MRI.

Dr C

- Dr C apologises to Mr A and fully acknowledges the distress caused to him and his family. Dr C stated that he has taken this complaint very seriously. He said that he was still relatively junior, and feels that he has been given a wake-up call.
- Dr C said that this case has been reviewed within the department as a serious event, and he has taken steps to ensure that nothing like this happens again. He appreciates that he has had to improve his communication skills, both in terms of conveying information accurately and completely, and clarifying instruction, and also in responding to difficult enquiries. He said that he has had a frank discussion with Dr B about this, and has enrolled in a Communications Skills Training course.
- Dr C said that as a department, they have reviewed the assessment procedure for patients with possible cauda equina syndrome, so that they are all aware of the red flags and how to assess diagnosis. He stated that he has reflected greatly since this event, and considers that he is now better equipped to deal with both the diagnosis of the condition, and also the pressure that is a reality in his job.
- Dr C stated that although he appreciated that the first scan was undertaken in order to rule out cauda equina syndrome, he did not appreciate that a second scan of this nature was necessary. He said that he does not offer this as an excuse, but at the time he did not fully understand the implications of his statement.
- When asked to elaborate on his previous statement about feeling under pressure, Dr C advised that a number of factors contributed, including the following:
 - The general pressure the ED is under to achieve targets of dealing with all patients within six hours of admission. He said that as a result of his observations, there was no reason to admit Mr A, and therefore he saw no reason to delay Mr A's discharge. Dr C said that had he considered there to have been any clinical reason for Mr A to remain, he would not have allowed his discharge.
 - This was a particularly busy shift with multiple patients to see at any one time, with complex issues, and he was also required to deal with telephone enquiries for advice.
 - There are now two doctors undertaking the work that previously was done by him alone, and this has had a real effect in relieving the burden on him.

 When discussing his concerns around perianal paraesthesia, Dr B commented along the lines of, "We'll end up admitting him and he'll have a couple of normal bladder scans and be sent home."

87. Dr C also stated:

"It is probably fair to say that at the time of this incident I felt particularly under scrutiny by [Dr B] more so than with other consultants. I can't articulate the particular reason for this and I continue to work with him, but on reflection I did feel rather intimidated. I feel that this must have been a factor in why I gave the answer that I thought was expected of me, rather than initially reporting my mistake. I can only apologise for this. I have clearly reflected very deeply on this and feel that I have learnt a great deal from the error. I provide details of the changes to my practice that I have made as a result of this below, but the overwhelming change is a deeper understanding of the consequences of my actions."

Dr B

- Dr B said that he cannot comprehend the amount of distress this matter has caused Mr A and his family, and wishes him all the best for his recovery.
- Dr B stated that he had a comprehensive discussion about Mr A with Dr C, who answered questions confidently, and the nature of the discussion was not at a level where he thought information was insufficient, nor did he have concerns about what was being conveyed. Dr B noted that he and Dr C had three conversations about this patient, and had there been any doubt that the scan had not been done, or that the report was inaccurate, he would have arranged for Mr A to return immediately for his review, but at no time did he detect any uncertainty from Dr C. Dr B stated:

"I would also like to comment that I have great respect for [Dr C] and that we have worked together since this matter. I do not wish to speak badly of him at all and I see this matter as a one off. After this event [Dr C] was asked to provide a comment at our Morbidity and Mortality Review and he had no explanation as to why he had persisted reporting that the scan had been undertaken, when it had not."

- Dr B said that he discussed with Dr C the fact that he did not complete the second scan but advised that he did, and advised that the results were normal. Dr B said that Dr C acknowledged that the information he provided was incorrect, and apologised that this had misled Dr B to assume that a second trial of voiding had been completed and was normal. Dr B said that they discussed the importance of following and completing instructions as requested, and that reporting of outcomes of investigations is to be honest and accurate. Dr B regrets the effect on Mr A on this occasion.
- Dr B told HDC that as far as he was aware, there had been no allegation by Dr C about feeling intimidated by him or any other senior.
- Dr B stated that he was shocked to read Dr C's comments of feeling under scrutiny and intimidated. Dr B said that previously Dr C had had no qualms about raising concerns

about patients directly with him, and he respected Dr C's abilities and never doubted that he had any issues or difficulties answering questions or speaking up about his concerns.

- Dr B considers that Dr C's recollection of their discussions about perianal paraesthesia and admitting Mr A demonstrates that Dr C knew of Dr B's concerns about the patient developing cauda equina syndrome, which needed to be excluded by a second scan.
- Dr B said that this matter has been the subject of an internal review of how they deal with cauda equina in the ED in particular, what should be considered an abnormal level of residual volume on post-void scans, as there is variability in the cut-off level and no clear fixed level for what was considered abnormal and to require further investigations (such as MRI).
- Dr B said that as a result, they conducted an audit of cases where patients have completed a post-void bladder scan and then had an MRI, and the aim now is to conduct a larger study to refine the scan volume that is considered abnormal, and then proceed immediately to an MRI in those cases. He has now arranged that all patients who are reviewed and sent away after satisfactory bladder scans are followed up the next day by either their GP or by himself at the hospital, to ensure that close monitoring of these patients occurs until they manage to obtain an MRI if necessary.
- Dr B noted that it is essential for hospitals to develop a culture in which all staff feel free to raise concerns, and it has always been his practice to engage with, and listen to, all members of the team. He reported that he had completed the RACS online program about workplace bullying, which also includes respect and an awareness of the power imbalance that exists, and has also attended an RACS seminar about registrar assessment and communication. He stated that they work hard to provide a caring and supportive department, and he actively encourages all medical and nursing members of their team to raise any concerns they may have with him at any time. He reported that this is the first time in over [...] years of practice where allegations of intimidation or pressuring staff or colleagues have been made against him, and he has never had any concerns raised with him about his communication style.
- 97. Dr B advised that he has reflected on the circumstances surrounding the event, and is very cognisant of the responsibilities of consultant practice and the responsibilities relating to the supervision and oversight of junior staff. He noted, however, that the ability to function in any team requires trust and honesty, and consultants need to have trust and confidence in their team members. He stated that after he learned of what happened, Dr C was supported and provided with mentoring, and encouraged to think about changes he could make to his practice as a result of this case, and they continued to work well together until Dr C left the hospital.

Responses to provisional decision

Mr A

98. Mr A was given an opportunity to comment on the "information gathered" section of the provisional report, and stated: "If, among the many actions which needs to be

addressed by the DHB mentioned above, are not handled properly, more patients are very likely to suffer the same syndrome I have."

Dr C

99. Dr C was given an opportunity to comment on the provisional report, and advised that he had no further comment to make, and that he accepted the proposed recommendations.

Dr B

Dr B was given an opportunity to comment on the provisional report, and commented that significant learning has been taken from Mr A's case, and he continues to reflect on the circumstances surrounding the event, and now is even more mindful of the importance of communication and the power dynamic between senior and junior doctors.

DHB

The DHB was given an opportunity to comment on the provisional report, and advised that it had no further comment to make.

Opinion: District health board

21 June 2017 — other comment

Mr A first presented to the ED in relation to his symptoms on 21 June 2017. My expert advisor, Dr Shameem Safih, advised that at this presentation, due consideration was given to searching for, and ruling out, cauda equina syndrome. He advised that a good examination was completed and good advice given prior to Mr A's discharge, and it was reasonable to discharge Mr A on this occasion. I accept Dr Safih's advice, and consider that the care provided to Mr A on 21 June 2017 met accepted standards.

8 July 2017 — adverse comment

103. Mr A next presented to the ED on 8 July 2017, and was seen by Dr I. Dr Safih noted several issues:

- The significant delay in Mr A being seen by a doctor at this presentation.
- The incongruency between Dr I's entry of no complaint of weakness of limbs, with the reports of Mr A, the ambulance officers, and the two nurses who had assessed him prior to being seen by Dr I.
- While Dr I's physical examination appears to have been thorough, she did not check for deep tendon reflexes, which would have completed the neurological examination of the lower limbs, and she could have checked for post-void bladder volume to see whether there was any bladder dysfunction.
- However, Dr Safih advised that Dr I actively sought signs of cauda equina syndrome. Despite the inconsistency in the history, neurological examination was undertaken specifically to search for signs of loss of power in the limbs, signs of loss of or altered

sensation in the perineal region, and signs of loss of anal tone. Dr Safih advised that management was based on hard physical findings at the time, and this was reasonable. He stated:

"Apart from there being a significant delay to being seen by the doctor on the second visit which probably reflects the busyness of the department, I believe the standard of care provided would be consistent with that provided in EDs elsewhere in NZ. In the absence of hard findings of sensory loss, loss of muscle strength, acute bowel and bladder dysfunction, an MRI is not able to be obtained urgently. Physical examination does have to be diligent and findings interpreted accurately."

- I agree. While I consider that the assessments and examination undertaken on 8 July 2017 in the ED met accepted standards, I am critical of the significant delay in Mr A being seen. Seven and a half hours to be seen by a doctor was unacceptable.
- 106. It is positive that the DHB has taken on board my expert's recommendations for improvement, in relation to assessing post-void bladder volume.

10 July 2017 — other comment

- Mr A again presented to the ED on 10 July 2017 his third presentation in less than three weeks with a worsening condition. He presented a letter from his physiotherapist outlining concerns about possible cauda equina syndrome. However, despite an abnormal post-void volume finding, further testing was not performed, and Mr A was discharged home.
- My expert advisor, Dr John McKie, advised that it is clear that all practitioners who saw Mr A considered cauda equina syndrome as a possible diagnosis, and the history and examination findings comment on Mr A's anal tone and lack of bowel and bladder incontinence. However, as noted by the physiotherapist, the signs were present, even if initially they were subtle. The same subtle sign of altered perianal sensation was also noted by Dr C on this date.
- Dr McKie advised that in his view, clear justification for an acute MRI scan was certainly present by 10 July 2017. He advised:

"I note, as part of the policy review by the Department, they have a more rigorous follow up and review process planned which, if in place at the time, might have prevented the patient going for a further two weeks before having a radiological diagnosis prompting surgical intervention ...

[T]he system essentially failed the patient and given that the physiotherapist had essentially made the diagnosis and documented the examination findings in his admission letter, the departure from an acceptable standard of care probably needs to be rated as being severe.

... [T]he clinical picture that is painted here, from thorough review of the notes, is of a patient with significant and worsening symptoms who, if not able to have an acute out

of hours MR scan to either confirm or refute the diagnosis, would almost certainly have been much better to have been admitted, observed in hospital and then examined by a senior clinician the following day."

- However, Dr McKie advised that Dr B made reasonable clinical decisions based on the information presented to him. Dr McKie also advised that Dr C noted the pertinent examination finding of altered perianal sensation when he examined the patient, which is commendable. It is at the point of making up the result of a test that was not carried out where Dr McKie's criticism lies.
- In my view, based on the information available, the care provided at this presentation was appropriate. Dr C's assessments were appropriate, and Dr B gave appropriate advice. Given that Dr C had misunderstood Dr B's instructions and discharged Mr A on this basis, I do not consider that I can be critical of the discharge.
- However, at the point of Dr C's realisation that he had misunderstood the instructions from Dr B, and his subsequent lie to Dr B, the care provided became inappropriate.
- Dr C's misunderstanding of instructions, and then, upon realisation, his failure to admit to the misunderstanding, meant that Mr A was not provided with further care in a timely manner. Up to this point, the care had been appropriate, and it was the lie that was the catalyst for the lack of diagnosis and appropriate care being provided to Mr A. In my view, in these particular circumstances, this falls on the individual, and will be discussed below.
 - Communication between senior and junior doctors other comment
- On 10 July 2017, Dr C was the on-call orthopaedic registrar, in his eighth month of work as a non-vocational orthopaedic registrar. Dr B was the on-call orthopaedic consultant. Dr C misunderstood Dr B's instructions namely, to give Mr A some analgesia and fluids to enable a further trial of voiding (second post-void bladder scan) and did not admit to this when Dr B queried the performance of the instructions. Dr C instead said that the second scan had been performed, and made up a result of 45ml for the scan.
- Dr C advised HDC that he felt under particular scrutiny and rather intimidated by Dr B, as a contributing factor to the pressure he felt on this occasion, and stated that he felt under pressure to respond in line with what he thought was expected from Dr B.
- It appears that Dr B and the DHB were unaware that Dr C was feeling intimidated. The DHB stated that it was not aware of any comments that registrars were under pressure to respond to SMOs. It also noted that in the previous three years, no formal issues had been raised by staff members within the Orthopaedic Department.
- I note also Dr B's initial comments that there has been no allegation of Dr C feeling intimidated by him or any other senior. Dr B stated:

"[A]fter this event [Dr C] was asked to provide a comment at our Morbidity and Mortality Review and he had no explanation as to why he had persisted reporting that the scan had been undertaken, when it had not."

- 118. It was only once Dr B was provided a copy of Dr C's response to HDC that Dr B became aware that Dr C had felt intimidated.
- I consider that while there was an issue in this particular instance (as discussed below), on the information available to me, there is no evidence of a wider issue at the DHB in relation to communication between senior and junior doctors.
- I consider that the DHB had measures in place for staff to be able to raise concerns. I acknowledge the actions and training the DHB has provided to staff in relation to these issues, and that it supports a culture of open communication and of raising concerns, and that staff are reminded of this regularly.
- I note that since these events, the DHB has also taken further actions to address any possible issues, which I consider appropriate (as outlined under "Further information/[the DHB] care provided on 10 July 2017" above).
- I consider that the DHB had taken such steps as were reasonably practicable to prevent this particular issue occurring, and, accordingly, that it did not breach the Code of Health and Disability Services Consumers' Rights (the Code).
- 123. With the natural flow of staff members coming and going, as at any workplace, it is important that mitigation of any communication or teamwork issues remains an ongoing priority for the DHB. I trust that it will continue to maintain this, and implement new measures where necessary.

Opinion: Dr C — breach

- On 10 July 2017, Mr A presented to the ED for the third time in less than three weeks, at the direction of his physiotherapist. Dr C was the on-call orthopaedic registrar. He assessed Mr A and performed tests, and considered that the only significant abnormality found was a raised post-void urine volume of 100ml in a bladder scan.
- Dr C contacted the on-call orthopaedic consultant, Dr B, to discuss Mr A's presentation and examination findings. Based on this information, Dr B instructed Dr C to give Mr A analgesia and fluids, to enable a further trial of voiding, and to report back the findings. Dr C reported that his understanding of the instructions at that time was to see if Mr A could pass any more urine, and, if he could, he may be discharged.
- Dr C advised that as Mr A was subsequently able to pass urine, Mr A was discharged. I note that Mr A disputes this, and says that he never told Dr C that he had passed urine. I am unable to make a factual finding regarding this, although I note that Dr C did not document that Mr A had passed urine. Given the events that followed, I do not consider it necessary to make a finding on either recollection.

- At approximately 10.30pm, Dr C and Dr B again discussed Mr A's case. Dr B requested the details of the second post-void bladder scan. Despite not having performed a second scan, Dr C told Dr B that there had been 45ml of residual urine on the second attempt to pass urine.
- My expert advisor, Dr John McKie, advised that when Dr C examined Mr A, Dr C noted the pertinent examination finding of altered perianal sensation when he examined Mr A, which was commendable. I am not critical of Dr C's assessment of Mr A on 10 July 2017. Given that Dr C had misunderstood Dr B's instructions and discharged Mr A on this basis, I also do not consider that I can be critical of the discharge.
- 129. However, in relation to the made-up test result, Dr McKie advised:
 - "I would suggest the lack of ability to communicate clinical concerns to his senior, represents a mild to moderate deviation from an acceptable standard of care, but to make up fictitious results to an investigation that never occurred is both a concerning action and a severe deviation from acceptable practice."
- During the handover meeting the next morning (11 July 2017), Mr A's case was reviewed again, and Dr C again informed Dr B that the second scan had shown a residual of 45ml.
- Dr C again maintained this lie after Mr A's admission for surgery, as evident by his amendments made to the previous presentation's discharge summary on 31 July 2017 (a week after Mr A's admission).
- I cannot dismiss Dr C's statement that he felt intimidated and particularly under scrutiny by the consultant — more so than with other consultants — and felt under pressure to respond in line with what was expected of him. I am cognisant of the power dynamic between senior and junior doctors, and cannot diminish the real and tangible effect this can have.
- I acknowledge Dr C's submissions that he was still relatively junior, and has reflected very deeply and learned a great deal from the error.
- 134. Nevertheless, in my view, Dr C allowed his own needs and the pressure he felt to take precedence over Mr A's well-being. Dr C actively chose to lie to his superior, and the effect of that lie was disastrous for his patient. His behaviour was unacceptable.
- I consider that there were multiple missed opportunities for Dr C to admit his error. When Dr B asked him for the result that evening, he could have told Dr B that he had misunderstood the instructions. When Dr B asked him again the following morning, he could have admitted this. He could have disclosed the information in the intervening timeframe between 10 July 2017 and 24 July 2017. Had he done so, at the very least, Mr A could have been asked to return for further review.

- Dr C could have disclosed the information even once Mr A had been admitted for urgent surgery. Rather, he maintained the lie, even until 31 July 2017 as evidenced by his notes on the discharge summary.
- 137. I acknowledge Dr C's submissions about his workload, and that the ED was particularly busy and is generally under pressure to achieve targets. However, I do not think this excuses dishonesty.
- As my expert advisor aptly put, "[I]t is forgivable not to know things, but it is unforgivable to lie and make up results." I am severely critical of Dr C for making up a test result and thereby compromising Mr A's well-being.
- While acknowledging Dr C's submitted mitigating factors, in my view, by lying repeatedly about the results of the test, Dr C failed to provide services to Mr A with reasonable care and skill, and, accordingly, breached Right 4(1) of the Code.

Opinion: Dr B — other comment

- orthopaedic registrar, Dr B was the senior orthopaedic consultant on call. The on-call orthopaedic registrar, Dr C, contacted Dr B at 5.17pm to discuss Mr A's presentation. During this conversation, Dr B gave instructions to Dr C namely to give Mr A analgesia and fluids to enable a further trial of voiding, and to report back the findings.
- When Dr B contacted Dr C at approximately 10.30pm, Dr B requested the results of the second post-void bladder scan. Despite not having performed this scan, Dr C told Dr B that he had, and gave him a fake result of 45ml.
- The following day, during the handover meeting, Dr B again asked for the result, and Dr C again informed him that it was 45ml.
- As the consultant on call, Dr B had overall responsibility for Mr A. My expert advisor, Dr John McKie, advised that Dr B is the leader of a team, and the person who should have an awareness of the skills and competence of the juniors working under him.
- 144. However, Dr McKie advised that Dr B made reasonable clinical decisions based on the information presented to him. Dr McKie noted that presumably Dr B was inappropriately reassured of the unlikelihood of a diagnosis of cauda equina syndrome by the fictitious 45ml second post-void scan result relayed to him. Dr McKie accepts that Dr B would quite reasonably expect to be given a true and accurate answer to a direct question that he posed to Dr C.
- Although a different outcome may have ensued had Dr B examined Mr A, as noted by Dr McKie, it is difficult to criticise Dr B given that he acted according to the information that was provided to him at the time. I also accept Dr McKie's advice that a consultant

would take at face value the result of a test relayed verbally by a junior staff member, and would not normally feel the need to check the validity by looking for annotation of such results unless there was expressed uncertainty.

- 146. Further, I note Dr B's statement that he did not have any reason to doubt Dr C, and that during the comprehensive discussion about Mr A, Dr C answered questions confidently, and the nature of the discussion was not at a level where information was insufficient or he had concerns about what was being conveyed. Dr B noted also that previously Dr C had had no issues raising concerns about patients, nor did Dr B have any concerns about Dr C's abilities.
- Dr B also stated that he actively encourages all members of the team to raise with him any concerns they may have at any time, and that this is the first time in [...] years of practice where an allegation of intimidation or pressuring staff or colleagues has been made against him, and he has never had any concerns raised with him about his communication style. He also outlined relevant training he had completed.
- For the reasons outlined above, I am not critical of the care Dr B provided to Mr A on 10 July 2017.
- 149. While I am not critical of the care Dr B provided, I trust that he will carry into his future practice any learning taken from this complaint, and continue to be mindful of communication and the power dynamic between senior and junior doctors.

Care provided on 24 July 2017 — other comment

150. For completeness, I note Dr McKie's advice that the dural leak experienced by Mr A postoperatively is a recognised and accepted complication of the type of surgery performed, particularly when dealing with a very large disc prolapse, and, similarly, the problem of a recurrent or residual disc prolapse requiring further exploration and removal of disc material is an acknowledged and accepted complication of this type of surgery. Dr McKie advised that no fault can be found with Dr B's surgical care of the patient.

Recommendations

151. I recommend that Dr C:

- a) Provide a written apology to Mr A. The apology is to be sent to HDC within three weeks of the date of this report, for forwarding to Mr A.
- b) Provide HDC with his reflections and learning from the Communication Skills Training Course, within one month of the date of this report.

- I recommend that the Medical Council of New Zealand consider whether a review of Dr C's competence or conduct is warranted, and report back to HDC on the outcome of its consideration within six months of the date of this report.
- 153. I recommend that the DHB:
 - a) Provide a written apology to Mr A. The apology is to be sent to HDC within three weeks of the date of this report, for forwarding to Mr A.
 - b) Consider how its support and relevant guidelines provided to junior and senior staff members in relation to interpersonal relationships and communication may be improved in light of the findings in this case, and provide HDC with a copy of any changes it has made, within six months of the date of this report.
 - c) Use the findings of this complaint as a basis for training staff at the DHB, in a way that maintains the anonymity of all parties involved, and provide evidence of that training, within three months of the date of this report.

Follow-up actions

- A copy of this report with details identifying the parties removed, except the experts who advised on this case, will be sent to the Medical Council of New Zealand, and it will be advised of Dr C's and Dr B's names.
- A copy of this report with details identifying the parties removed, except the experts who advised on this case, will be sent to Technical Advisory Services Limited and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A: Independent advice to the Commissioner

The following expert advice was obtained from Dr Shameem Safih, an emergency medicine specialist:

"My name is Shameem Safih. I am an emergency physician with over 20 years of practice as a specialist (FACEM 1997). The Health and Disability Commissioner has asked me to review the care provided to [Mr A] at the Emergency Department of [the public hospital], on 2 visits, on 21 June 2017 and on 8 July 2017.

Specifically I've been asked to comment on

- 1. Whether sufficient consideration was given to excluding a diagnosis of a cauda equina lesion given [Mr A's] symptoms and medical history.
- 2. Whether it was reasonable to discharge him on 21 June 2017
- 3. Whether it was reasonable to discharge him on 8 July 2017
- 4. Any other matters in this case that I consider warrant comment

I have read

- 1. The letter of complaint, dated [...]
- 2. The DHB's response dated 28 March 2018
- 3. The clinical records relevant to the two presentations
- 4. Complaint from [Mr A]

Key points from the complaint letter

- [Mr A] had multiple visits to the ED at [the public hospital]
- He felt he had the cauda equina syndrome earlier on than when it was diagnosed
- He feels this diagnosis was missed
- He was discharged without an MRI on 3 occasions (the first 2 pertain to his management by ED doctors)

On 21 June [2017] he experienced sharp pain in his lower back with weakness in the legs. He was seen and discharged from [the] ED.

He was followed up by his GP and had physiotherapy.

He says he noticed difficulties in passing urine and experienced some constipation.

On 08th July 2017 he experienced a sudden sharp pain going from his lower back into his buttocks and feet. He experienced some loss of sensation and weakness of his lower limbs and fell to the ground. He was taken by ambulance to [the public hospital].

He was seen by [Dr I], ED registrar, who did some tests including a rectal examination. He was discharged for further management by his GP.

On 9th July [2017] he was seen by physio and provided crutches.

On 10th July [2017] his physiotherapist referred him to orthopaedic services at [the public hospital] to rule out a cauda equina syndrome. He was discharged on this occasion as well.

On 24th of July he had an MRI which showed a cauda equina syndrome and he went to theatre for surgery, and in fact had to go back again as repeat MRI showed persistent cord compression.

Review of the first 2 ED visits

1st visit

21/06/2017

Seen by [Dr H]

[Dr H] noted

- History of lifting heavy [item] the previous day.
- Complaint of Pain down the right leg with intermittent right big toe paraesthesia (tingling).
- No sensory symptoms in the saddle distribution, incontinence of urine, fever, night sweats, history of cancer, steroid or drug use.
- The background of L5/S1 disc herniation in the past (how long ago is not noted).
- On examination, restriction of back movement due to pain, particularly right lateral and forward flexion.
- No midline tenderness in the back.
- Pain over the right sacroiliac joint.
- Normal power in all muscle groups.
- Slightly decreased sensation in L4 L5 and S1 regions (presumably in the right leg).

The impression was mechanical back injury with likely exacerbation of L5 S1 disc herniation.

He specifically states there was no cauda equina syndrome.

After discussion with the senior doctor on duty he discharged [Mr A] with adequate pain relief, with warnings on which symptoms to watch for and to return to ED if these symptoms were to occur. The symptoms he listed would be red flags for the development of cauda equina syndrome (worsening numbness/tingling especially around the groin and buttocks, worsening weakness and losing control of bowel and bladder). He also warned him to return if he developed a fever.

Second visit 08th July 2017 (18) days after the first visit

There are two nurse entries before the doctor's entry, summarised as below. I am focusing specifically on the relevant symptoms and signs they have recorded.

[Nurse] [0333] hours

Pain worsened in the lower back the night before, with numbness around lower back, worse pain down right leg. On examination she found the right leg to be weaker than the left. She noted that [Mr A] had called ambulance because he had been unable to move the right leg.

[Nurse] 0535 hours

She noted the history of sudden onset of numbness at waist with numbness and tingling to both legs, right worse than left. She noted that there was no history of loss of bowel or bladder control.

Seen by [Dr I], ED registrar at 0649.

A brief entry is made of presentation with worsening right sided sciatica with similar symptoms at previous presentation. She notes there were no symptoms or signs of cauda equina syndrome (she hasn't recorded any details at this stage).

Her plan was to give analgesics and review [Mr A] later.

Subsequent entry by [a nurse] twice (0713 and 0806) indicates the pain was significant and [Mr A] was unable to mobilise.

[Dr I] reviewed [Mr A] at 0922.

She notes in the history that he complained of low back pain radiating down left leg associated with tingling and numbness. She then documents that there was no complaint of weakness of legs, no bowel and bladder symptoms, and no fevers. On examination she records that the power was normal in both legs and there was no abnormality of sensation. She noted there was no spinal tenderness. She did a rectal exam and records the anal tone as being intact. Her impression was that this was L5 S1 sciatica with no signs of cauda equina syndrome.

Comments

At the first presentation due consideration was given to searching for and ruling out the cauda equina syndrome. A good examination was done and good advice was given prior to discharge.

It was reasonable to discharge [Mr A] on this occasion.

There are some incongruencies in the second presentation.

In his letter of complaint [Mr A] says that he had sudden onset of pain, numbness and weakness that caused him to fall to the floor.

This is consistent with what is recorded by the ambulance officers. They have noted 'this P.M. noted increasing loss of sensation down both legs, particularly right leg'. They found him lying prone on the floor. After 20 minutes with some support they were able to mobilise him to the ambulance.

This account is also consistent with the history obtained by nursing staff subsequently.

[Dr I's] entry of no complaint of weakness of limbs is inconsistent with what [Mr A], the ambulance officers and the two nurses have recorded. Her examination findings were normal sensation and normal power in both lower limbs. She also found normal perineal sensation and normal anal tone on rectal examination.

Her physical examination appears to have been thorough even though she did not check for deep tendon relexes which would have completed the neurological examination of the lower limbs. She could also have checked for post void bladder volume to see if there was any bladder dysfunction.

I note that [Mr A] arrived in the ED before midnight, was seen briefly by [Dr I] at 0649 and then reviewed and discharged around 0941.

In response to the specific questions by the HDC

- Whether sufficient consideration was given to excluding a diagnosis of a cauda equina lesion given [Mr A's] symptoms and medical history.
 Yes, on the first 2 occasions both doctors actively sought for signs of cauda equina syndrome.
- 2. Whether it was reasonable to discharge him on 21 June 2017. Yes, it was reasonable to discharge him on this occasion.
- 3. Whether it was reasonable to discharge him on 8 July 2017. In spite of the inconsistency in the history, neurological examination was specifically done to search for signs of loss of power in the limbs, signs of loss of or altered sensation in the perineal region and signs of loss of anal tone. Management was based on hard physical findings at the time and this was reasonable.
- 4. Any other matters in this case that I consider warrant comment. Apart from there being a significant delay to being seen by the doctor on the second visit which probably reflects the busyness of the department, I believe the standard of care provided would be consistent with that provided in EDs elsewhere in NZ. In the absence of hard findings of sensory loss, loss of muscle strength, acute bowel and bladder dysfunction, an MRI is not able to be obtained urgently. Physical examination does have to be diligent and findings interpreted accurately.

Shameem Safih
Emergency Physician

24th September 2018"

Appendix B: Independent advice to the Commissioner

The following expert advice was obtained from Dr John McKie, an orthopaedic surgeon:

"RE: [Mr A], DOB: [...], NHI: [...]

Your Ref: 18HDC00309

Thank you for your letter requesting an opinion on the above case and for the relevant clinical documents you have supplied.

I have now had the opportunity to review and reflect on these documents, as well as the operative reports of the patient's surgery which have subsequently been supplied.

Case Summary: The records show that the patient had an acute episode of low back pain and presented to the Emergency Department on 21.06.17 with pain following heavy lifting. At the time it was noted he had a previous L5 S1 MRI proven lumbar disc prolapse whilst [overseas]. At that time a diagnosis was made of mechanical back pain without any neurological compression or compromise and the patient was discharged from the Emergency Department with analgesia with a plan to return to the Emergency Department if his symptoms were worsening. There was no concern at that visit regarding any saddle signs or suggestion of cauda equina syndrome.

The patient was subsequently admitted to the Emergency Department by ambulance late in the evening of 08.07.17 with a history of increasing pain in his left leg with numbness of both legs increasing over the preceding 48 hours. No history of incontinence of bladder or bowel was noted and a rectal examination was performed and the anal tone noted to be normal.

In addition to his analgesia of Paracetamol, Codeine and Voltaren, the patient had Nortriptyline added and he was discharged from the Emergency Department at approximately 9.40 on the morning of 09.07.17, some ten hours after his initial ambulance presentation.

On Monday 10.07.17 the patient saw a physiotherapist for his symptoms as had been recommended in hospital. The physiotherapist clearly took a full and clear history, carried out a thorough directed clinical examination and wrote a very clear referral letter to the Emergency Department at the Hospital.

In his letter of 10.07.17, [the] physiotherapist details [Mr A's] history of lifting heavy materials on 20.06.17 with worsening pain and of his presentation to the Emergency Department on 08.07.17 with low back pain and numbness. He records the history of the [previous back injury] and clearly notes that the patient's clinical condition had deteriorated and his symptoms have worsened since his assessment in the Emergency Department over the preceding weekend. He notes the patient has increased back pain, reports increased numbness in both legs, as well as a decreased ability to walk and notes, on examination, that he appears uncoordinated and at risk of falling.

He also reports on decreased, but intact saddle sensation to scratching and adds the patient reported that he had incomplete bladder emptying after passing urine.

With the clear benefit of hindsight, the physiotherapist's annotation of albeit subtle changes in the patient's perianal tone and feeling of incomplete bladder emptying is consistent with an evolving cauda equina compression. This history and examination findings was also annotated by the triage nurse at the Emergency Department on the patient's presentation at 1.30 in the afternoon of 10.07.17.

The patient was seen by [Dr C], who noted the changed history and generalised minor weakness of the lower limbs and also noted anal tone to be normal, but with altered perianal sensation. The post void ultrasound bladder scan was reported at 100 ml.

The case is recorded in the contemporaneous notes as being discussed with [Dr B], there was no hard neurology or other red flags and it was also noted the patient already had a follow up in private organised with [the orthopaedic surgeon] and the patient was discharged with additional analgesia in the form of Gabapentin at 300 mg three times daily.

The amended records and the statement by [Dr B] note that following discussion of the case recommendation was given to repeat the post voiding bladder scan after the patient had been encouraged to drink. [Dr C] reported to [Dr B] that the subsequent bladder scan had revealed 45 ml residual urine volume. On the basis of this information, [Dr B] agreed with [Dr C's] plan to discharge the patient that night for outpatient follow up.

Subsequent review confirms the second bladder scan never took place and the value of the residual volume, which presumably contributed to [Dr B's] decision to allow the patient to be sent home, was fictitious.

The patient subsequently had a private MR scan performed on 24.07.17 which showed a large disc prolapse combined with some spinal narrowing causing significant neurological compression. The patient was referred immediately back to [the public hospital] where he was admitted and underwent an L3/4 discectomy, performed by [Dr B]. The records note that a large disc prolapse was removed and the surgery was unfortunately complicated by a small dural tear which needed repair.

After apparently some initial improvement, clinical concern was expressed about ongoing symptoms the patient was experiencing and a further MR scan showed recurrent/residual disc prolapse still present, which led to a second spinal exploration and further disc material being removed on 26.07.17.

High residual bladder volumes were noted and catheterization protocols were invoked in discussion with the staff at [a] Spinal Injuries Unit.

In answer to your specific questions:

1. Whether sufficient consideration was given to excluding a diagnosis of cauda equina given the patient's symptoms and medical history.

From reviewing all the records, it is clear that all practitioners who saw the patient considered this as a possible diagnosis and comment is made regarding anal tone in examination findings and history comments on the lack of bowel and bladder incontinence. However, as noted by the physiotherapist, the signs were present, even if they were initially subtle and the same subtle sign of altered perianal sensation was also noted by [Dr C] on 10.07.17.

While cauda equina syndrome is considered as a potential diagnosis far more often than it is ever confirmed, in this patient's case the significant worsening of his condition noted both in his history and the subtle examination findings, and his general increasing debility, should have sparked a higher level of clinical suspicion.

Bladder scanning is increasingly being used as an adjunct diagnostic test. Currently there are no universally accepted guidelines, but large residual volumes increase the suspicion of cauda equina syndrome, however, are not specifically diagnostic and, similarly, cases with low residual volumes have been noted in cases where radiologically proven cauda equina syndrome has occurred. [Dr B] was presumably inappropriately reassured of the unlikelihood of this diagnosis by the fictitious 45 ml second post void scan result relayed to him verbally by [Dr C].

2. Whether [Dr B] provided a reasonable standard of care to the patient.

[Dr B] made reasonable clinical decisions based on the information presented to him. Whether the situation would have been different if [Dr B] had actually seen and examined the patient on 10.07.17 will never be known. However, we do know that [Dr C] was relatively junior in terms of his experience and may have lacked the clinical or interpersonal skills to convey any concerns he had to [Dr B].

With respect to the surgery that [Dr B] carried out, the patient experienced issues with a dural leak and this is a recognised and accepted complication particularly with dealing with a very large disc prolapse and, similarly, the problem of a recurrent or residual disc prolapse requiring further exploration and removal is an acknowledged and accepted complication of this type of surgery. From a technical aspect, no fault can be found with [Dr B's] surgical care of the patient.

3. Whether [Dr C] provided a reasonable standard of care to the patient.

[Dr C] noted the pertinent examination findings of altered perianal sensation when he examined the patient, which is commendable. However, it is concerning that he made up the result of a test that was not carried out with the effect that [Dr B] was at least in part inappropriately reassured by this.

Medical staff, particularly but not exclusively at a junior level, may miss clinical signs that are present or not appreciate the significance of specific signs, findings and results. However, to make up a result seems to defy rational explanation.

4. Whether it was reasonable to discharge the patient on 10.07.17.

With the clear vision of hindsight, the answer to this question can be nothing other than no, it was unreasonable. The patient has a legitimate right to feel aggrieved about what has taken place as he presented with worsening symptoms and signs of an evolving cauda equina syndrome.

5. Other matters in the case you consider warrant comment.

I know nothing of the relationship between [Dr C] and [Dr B] and can only speculate whether [Dr C] felt intimidated by his senior and/or lacked the ability to present clinical findings and concern he had to his senior. On the one hand, senior supervising consultant staff need to be cognisant of the level of the juniors under their supervision and to be mindful of the ability of junior medical staff to competently present concerns about patients that they have seen. Notwithstanding this, one of the necessary skills of a registered medical practitioner is to be able to present their clinical findings and concerns to their seniors in an articulate way so that the senior can make valid judgements on the information provided, hear their concerns and decide whether the patient needs urgent senior review or not. Similarly, consultant staff need to be aware of the hierarchical power differential and enable juniors to express their concerns and not try and convince them that things are all right when they are not!

Assessment and management of acute presentations of back pain are exceedingly common and it is not practical for all back pains to undergo urgent MR scanning and this would be a huge waste of resource. Notwithstanding this, on review of this case, I think clear justification for an acute MR scan was certainly present by 10.07.17. The system has clearly failed this man, although I think it is inappropriate to apportion blame to one individual or specific event or inaction. I note, from the reports provided, that this case has prompted both a review of management of these presentations by the Orthopaedic Department in [the hospital] and [Dr C] has also been on a course to improve his communication skills. I note, as part of the policy review by the Department, they have a more rigorous follow up and review process planned which, if in place at the time, might have prevented the patient going for a further two weeks before having a radiological diagnosis prompting surgical intervention.

In his complaint the patient raises the issue that [Dr B] didn't ask to see the annotated result of the second bladder scan. This would not be common practice. A consultant would take at face value the result of a test given to him verbally by a junior staff member and would not normally feel the need to check the validity by looking for annotation of such results unless there was expressed uncertainty.

In summary, I feel that collectively the initial care provided by [Dr C] and [Dr B] is short of what either or both of them would expect with the benefit of reflection. It is pleasing to note that steps have been taken to lessen the likelihood of such an event occurring again.

Yours faithfully

JOHN MCKIE, MB ChB, FRACS
Orthopaedic Surgeon

Med Council No: 13530"

"15 April 2019:

Thank you for your further inquiry about the above complaint and my report. As I indicated at the time, the system essentially failed the patient and given that the physiotherapist had essentially made the diagnosis and documented the examination findings in his admission letter, the departure from an acceptable standard of care probably needs to be rated as being severe.

The fact that [Dr C] either didn't or couldn't communicate the severity of the patient's symptoms or his level of concern to his consultant, [Dr B], is concerning, although an RMO at a junior level would not be expected to have the same diagnostic skill and acumen as an experienced consultant or senior registrar.

I would suggest the lack of ability to communicate clinical concerns to his senior, represents a mild to moderate deviation from an acceptable standard of care, but to make up fictitious results to an investigation that never occurred is both a concerning action and a severe deviation from acceptable practice.

As noted in my report, I wonder whether this is a surrogate for the nature of the relationship between [Dr B] and [Dr C] that he felt intimidated and needed to have an answer to his question. I emphasise this is purely supposition on my part, but it is forgivable not to know things, but it is unforgivable to lie and make up results.

It would seem unlikely that had [Dr B] examined the patient at the time in question, that the outcome would not have been different and he would have been expected to have accurately assessed the clinical signs and either made the diagnosis or arranged for appropriate imaging to be performed. While he made his decisions on the basis of information that he had, he is also the leader of a team and the person who should have an awareness of the skills and competency of the juniors working underneath

him, so given the ultimate outcome for the patient, effectively I feel his deviation away from an acceptable standard of care should be rated mild to moderate.

I have some difficulties assigning or apportioning specific levels of errant practice to individual points on this patient's journey as there are multiple factors involved which can't reasonably be taken in isolation. I do not believe one particular practitioner should 'be hung out to dry'. Notwithstanding that there is a degree of culpability by all members of the team.

If you wish any further clarification, I am very happy to discuss this with you in person.

Kind regards

John McKie

Orthopaedic Surgeon"

"30 May 2019:

Thank you for your recent correspondence and forwarding me the copies of the various responses to my report of 18 September 2018.

I have reviewed my report and still believe it to be a fair and balanced summary of the events, in so far as I was able to ascertain from the written clinical record, and believe that the conclusions I have come to are reasonable on the basis of that evidence.

[Dr B] correctly concludes in his response that some of my comments were speculative regarding his interactions with [Dr C] and I completely accept and acknowledge this to be the case. I also completely accept that [Dr B] would quite reasonably expect to be given a true and accurate answer to a direct question that he posed to [Dr C] regarding the second bladder emptying scan.

[Dr C's] response to make up a fictitious answer and give to [Dr B] does seem to defy belief, which led to me speculating on possible reasons for him to have behaved in the manner that he did.

[Dr B] notes that the communication incident with [Dr C] was an isolated event. He also notes they have had an ongoing productive collegial relationship since that time.

Notwithstanding [Dr B's] positive view of their interaction, it would seem from [Dr C's] comments in his report of 28 November, he did feel intimidated at that time.

I would further speculate that this is not an uncommon situation where in an hierarchical system, the more senior member of the encounter is unaware of how he is perceived by the more junior member of the interaction without any willful intent to in any way intimidate or threaten the more junior member.

The essence of the patient's complaint is that he was seen on multiple occasions in the Emergency Department with worsening back pain, difficulty walking, a reported sense of incomplete bladder emptying and with noted altered perianal sensation and with expressed concerns of developing a cauda equina syndrome, and was sent away and ultimately had an MR scan done in private, following a consultant assessment, leading to a confirmed diagnosis of cauda equina compression and subsequently experienced further surgical complications.

In the light of this dramatic course of events for the patient, I do find it odd that Dr E, the clinical leader, finds my conclusion that the initial care provided to the patient by the service was less than any of them would have expected.

I acknowledge that there are challenges and compromises in terms of ED time limits with Government mandated targets to get people out of the Department and there are also challenges with the resource availability with investigations such as MR scanning, particularly out of hours, however, the clinical picture that is painted here, from thorough review of the notes, is of a patient with significant and worsening symptoms who, if not able to have an acute out of hours MR scan to either confirm or refute the diagnosis, would almost certainly have been much better to have been admitted, observed in hospital and then examined by a senior clinician the following day.

I have endeavoured to be very clear in my report that the decision making made by [Dr B] in respect to the information given to him was appropriate and I have also been very reluctant to draw undue attention to any one particular event in this patient's journey through the health service. This has been an overall systems failure which has many facets to it.

I completely understand [Dr B's] sensitivity over this issue as, as noted above, he was responding to the information he had. We will never know if either a second bladder scan was undertaken or if he hadn't been given the fictitious bladder emptying result whether he would have suggested an alternative management pathway. Notwithstanding this, I think it is completely inappropriate for [Dr C], as at that stage a junior registrar with apparently six months of experience in orthopaedics, to wholly shoulder any criticism arising from this case.

This has clearly been a seminal case for [Dr C] and it is encouraging to see both that he has taken action in terms of professional help and that he is having good constructive relationships with the consultant staff in his area.

I hope these comments are helpful and, as mentioned above, I can only draw conclusions on the basis of what was annotated in the records and try and piece

together what actually happened. These observations are inevitably always influenced with the hindsight of the case, which I acknowledged through my report, and on further reflection still believe that in this case, with a gentleman with repeated presentations and worsening symptoms, that he would have been better to have been admitted to the hospital for more senior clinical evaluation and imaging as deemed appropriate at the time.

Kind regards

Yours faithfully

John McKie, MB ChB, FRACS

Orthopaedic Surgeon"