MidCentral District Health Board

Emergency Medicine Consultant, Dr B

A Report by the

Health and Disability Commissioner

(Case 15HDC01723)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

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Executive summary

1. On 4 October 2015, Mr A dislocated his right shoulder and suffered a secondary blow to the head. Mr A attended the Emergency Department (ED) at a public hospital, arriving at 1.48pm.

2. The triage nurse arranged an X-ray for Mr A, which was performed. At 3.15pm, nursing staff gave Mr A ibuprofen and codeine for pain relief. Clinical Nurse Specialist (CNS) CNS C and a registered nurse assessed Mr A at 4.15pm. After reviewing the X-ray, CNS C proceeded to attempt to reduce (relocate) Mr A's shoulder, but this was stopped as the procedure became too painful.

3. CNS C spoke to ED Consultant Dr B to request intravenous opiate medication, as CNS C was going to re-attempt the shoulder relocation. Dr B prescribed 25mcg IV fentanyl. CNS C initiated the procedure again, but again stopped at an early stage at Mr A's request.

4. CNS C requested more pain relief from Dr B, and Dr B prescribed a further dose of 25mcg IV fentanyl. CNS C then initiated the procedure a third time, at 5.05pm, stopping early in the procedure. CNS C then contacted Dr B to provide procedural sedation so that the shoulder could be reduced. This was administered, and CNS C reduced Mr A's shoulder at 5.10pm. CNS C then ordered a post-reduction X-ray for the purpose of ensuring that the relocation had been successful. At 6.15pm, Mr A was discharged from the ED with advice to follow up with his GP, and was given copies of his X-rays and medical notes.

5. The day after Mr A's discharge, the X-rays were reported on formally. The pre-reduction X-ray report states there is a 1 x 0.2mm bone fragment posterior to the humeral head on the lateral view, and the post-reduction X-ray report states:

> "A subtle Hill-Sachs deformity[1] is not easily excluded on this exam. I also question subtle bony deformity of the scapula inferior to the glenoid … if indicated this area can be better evaluated by CT."

6. On 7 October 2015, Dr B viewed and signed both of Mr A's X-ray reports, and noted that no action was required. The reports were not sent to Mr A. Mr A's GP's details were not recorded in the clinical records, so the reports were not sent to his GP either. Dr B did not consider that the abnormality as described in the X-ray report required him to take any further immediate action, and was reassured that Mr A would be following up with his GP.

Findings

7. Mr A's triage documentation was incomplete, his pain was not managed adequately, no secondary survey was undertaken, and his GP's details were not captured on the MidCentral District Health Board (MidCentral DHB) system. In the Commissioner's view, these deficiencies indicate a pattern of poor care by staff, and systems issues, for which the DHB

[1] Humeral head compression fracture, typically secondary to shoulder dislocation.

is responsible. For these reasons, the Commissioner found that MidCentral DHB did not provide Mr A with reasonable care and skill, and breached Right 4(1) of the Code.[2]

8. As the ED consultant responsible for reviewing Mr A's formal X-ray reports, the Commissioner is critical that Dr B did not inform Mr A of the abnormality seen on the X-ray, especially in light of the fact that the reports were not copied to his GP. For failing to do so, the Commissioner found that Dr B breached Right 6(1)(f) of the Code.[3]

9. The Commissioner made adverse comment about CNS C's documentation.

Recommendations

10. The Commissioner's recommendations included requesting that MidCentral DHB provide updates on improvements made since this case; provide training to staff on the use of the DHB IV opioid pain relief protocol; and provide an apology to Mr A.

11. The Commissioner also recommended that Dr B provide an apology to Mr A.

Complaint and investigation

12. The Commissioner received a complaint from Mr A about the services provided by MidCentral DHB. The following issues were identified for investigation:

- *The appropriateness of the care provided to Mr A by MidCentral DHB in October 2015.*
- *The appropriateness of the care provided to Mr A by Dr B in October 2015.*

13. The parties directly involved in the investigation were:

Mr A	Consumer/complainant
MidCentral District Health Board	Provider
Dr B	Emergency medicine consultant

Also mentioned in this report:

RN D	Registered nurse
RN E	Registered nurse
RN F	Registered nurse

14. Information was also reviewed from:

CNS C

[2] Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code) states: "Every consumer has the right to have services provided with reasonable care and skill."
[3] Right 6(1)(f) of the Code states: "Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive, including … the results of tests …"

Medical centre
Physiotherapy clinic
ACC

15. Independent expert advice was obtained from nurse practitioner Dr Michael Geraghty (**Appendix A**), and emergency medicine specialist Dr Stuart Barrington-Onslow (**Appendix B**).

Information gathered during investigation

16. On Sunday 4 October 2015, Mr A (then aged 49 years) dislocated his right shoulder and suffered a secondary blow to the head. At the site of the accident at around 1pm, Mr A was given paracetamol, codeine,[4] and methoxyflurane[5] for pain relief by paramedics. Mr A told HDC that two unsuccessful attempts were made to reduce (relocate)[6] his shoulder at the accident site. Mr A's partner then drove Mr A to the Emergency Department (ED) at the public hospital, arriving at 1.48pm.

Care provided in ED

17. At 2pm, Mr A was triaged by Registered Nurse (RN) RN D, who noted that Mr A presented with a clear deformity of his right shoulder and that he had been given pain relief. RN D allocated Mr A a triage category 3.[7] RN D stated that it is her usual practice during triage to take a pulse and respiratory rate along with a pain score. She said that she did this on this occasion, but did not document the findings. RN D told HDC that from her observation and interaction with Mr A, he did not appear distressed. She stated: "I decided that a Triage Code 3 was the most appropriate code for [Mr A] at the time."

18. RN D arranged an X-ray for Mr A. The clinical indication noted for the X-ray was "pain and deformity in [right] shoulder. Unclear exactly what injury … has occurred." The X-ray was performed at 2.13pm.

19. At 3.15pm, nursing staff gave Mr A 400mg ibuprofen and 15mg codeine for pain relief. The ibuprofen was administered in accordance with the MidCentral District Health Board

[4] An opioid pain relief medication.
[5] An inhaled anaesthetic.
[6] Manipulation of the shoulder to return the bones to their normal position.
[7] The Australasian Triage Scale (ATS) triage category 3 indicates that the patient should have treatment started within 30 minutes. The description of this category is "potentially life-threatening, potential adverse outcomes from delay >30 min, or severe discomfort or distress". The performance benchmark indicates that 75% of patients should be seen within the allocated triage time. The MidCentral DHB initial nursing documentation form provides that if a patient's pain is severe (7/10 to 10/10), the patient should be allocated triage code 2. The ATS triage category 2 indicates that the patient should have treatment started within 10 minutes.

(MidCentral DHB) standing orders,[8] and Emergency Medicine Specialist Dr B told HDC that he was asked to sign for (ie, prescribe) the codeine.

20. At the time of Mr A's presentation, Clinical Nurse Specialist (CNS)[9] C was working in the minor works region of the ED, which is physically removed from the main ED down a corridor. She said that she was contacted by the Associate Charge Nurse, RN E, who was the ED coordinator, to assist with Mr A. She recorded in her clinical notes that she received a handover from RN E that Mr A had an anterior dislocation of the right shoulder confirmed by X-ray.

21. There are two records in the clinical notes of the care provided to Mr A in ED from this point. One is a typed "Emergency Department Medical Report" by CNS C (the typed record), and the other is a handwritten record in the nursing assessment document (the handwritten record) by RN F.

22. CNS C and RN F assessed Mr A at 4.15pm. The typed record states that Mr A knew immediately what he had done when he fell from his motocross bike (ie, dislocated his shoulder), and that he had a history of two previous left shoulder dislocations. CNS C recorded: "[T]reatment pre presentation — nil." CNS C told HDC that neither the nurse handing over nor Mr A disclosed that previous attempts had been made to reduce (relocate) Mr A's shoulder.

23. CNS C recorded that Mr A denied being knocked out when his head was run over by another bike. She told HDC that she undertook a primary survey to determine whether Mr A required application of a hard cervical spine collar (neck brace), which she considered he did not.

24. CNS C told HDC that a neurovascular examination[10] is the foundation of any musculoskeletal assessment, and something she does with every relevant case. However, CNS C did not document evidence of the results of a neurovascular examination. She stated: "I absolutely believe I would have completed this automatically and did not find anything amiss at the time, so that when it came to writing my clinical notes I forgot to record a negative finding."

25. CNS C stated that Mr A's posture indicated a level of discomfort but that this was consistent with the level of pain often experienced by patients with a dislocated limb. CNS C documented that Mr A rated his pain experience as being "9/10".

26. RN F told HDC that Mr A's pain, rated at 9/10, needed to be addressed promptly. He noted that Mr A had already received paracetamol, codeine and ibuprofen, and provided him with

[8] MidCentral DHB has standing orders that allow nursing staff or clinical nurse specialists in the ED to administer ibuprofen, codeine, and paracetamol in some circumstances.
[9] A clinical nurse specialist is a registered nurse who operates under the expanded scope of practice guidelines for a registered nurse.
[10] Assessment of adequate nerve function and blood circulation to detect signs and symptoms of a potential complication such as compartment syndrome.

Entonox.[11] RN F established an intravenous (IV) line, as he considered that Mr A was likely to require IV opioid medication.

27. CNS C told HDC that she then viewed the X-rays electronically and was looking for fractures that would indicate that a shoulder reduction was inappropriate. As she did not see evidence of such a fracture, she proceeded to attempt to reduce Mr A's shoulder.

28. CNS C said that she sought Mr A's consent before attempting to move his arm, and asked him to say "stop" if the procedure became too painful. CNS C said that she attempted to initiate the FARES[12] technique for shoulder reduction because Mr A was already sitting partly reclined. CNS C stated: "I do not recall moving his arm very far from his body before he asked me to stop and his arm was nowhere near the position that would be required to attempt to relocate the joint." RN F documented in the handwritten notes: "[M]anual reduction attempted by CNS."

29. CNS C said that she spoke to Dr B as she considered that Mr A required intravenous opiate medication, and she was going to attempt shoulder relocation again. Dr B stated: "I cannot recall exactly what information I was given about [Mr A]. I would have relied on the health care staff who had seen him to guide me as to how much pain he was in and what analgesia he wanted."

30. RN F documented in the handwritten notes that Mr A's pain was "unbearable" at 4.28pm, and Dr B prescribed 25mcg IV fentanyl,[13] which was commenced by RN F. CNS C said that Mr A appeared slightly more relaxed, and she initiated the procedure again, but again stopped at an early stage at Mr A's request. RN F documented in the handwritten notes: "[S]till unable to reduce dislocated shoulder."

31. CNS C stated that she requested more pain relief from Dr B. She told HDC: "[Dr B] would have been fully aware of what I was doing although I cannot recall the exact contents of our conversation." Dr B prescribed a further dose of 25mcg IV fentanyl, which was administered by RN F and completed at 5.05pm.

32. CNS C then initiated the procedure a third time, stopping early in the procedure. She stated:

> "I had initiated the procedure to reduce the shoulder by applying slow traction and starting to move the arm but on each occasion I did not get to a point where there was any attempt to relocate the joint."

33. RN F documented in the handwritten notes: "[C]ontinued manual reduction by CNS to no avail." CNS C stated that it became clear that she would not be able to attempt to relocate the joint, and therefore she advised Dr B and suggested that Mr A be sedated. Dr B stated: "[A]s the only senior doctor in the department, I was contacted to provide procedural sedation so that the shoulder could be reduced." Mr A was then relocated to a higher acuity

[11] Nitrous oxide and oxygen mixture, an inhaled gas used for pain relief.
[12] Fast, reliable and safe (FARES) technique for shoulder reduction: Hold patient's wrist with gentle traction and oscillate outstretched arm in anterior/posterior direction while abducting, once at 90 degrees, externally rotate arm.
[13] A rapid onset opioid medication.

area to receive the sedation. CNS C documented in the typed record: "Review: [Dr B] (ED consultant) Plan discussed — sedation under Ketamine and Propofol at 1710 hrs."

34. Dr B told HDC that his practice is always to check the X-ray to confirm that a reduction is indeed indicated, and said that he would have reviewed Mr A's X-ray to confirm the dislocation. Dr B then obtained Mr A's written consent for the sedation and administered 170mg propofol[14] and 70mg ketamine[15] intravenously. CNS C then relocated Mr A's shoulder at 5.10pm using Kocher's technique.[16] Mr A's shoulder was then immobilised in a collar and cuff sling.

35. RN E remained present throughout the sedation, taking Mr A's observations, which remained stable throughout the procedure. Dr B told HDC: "[O]nce the nursing staff was happy that [Mr A] was waking up properly and stable then I would have left the bedside."

36. CNS C then ordered a post-reduction X-ray for the purpose of ensuring that the relocation had been successful. This was performed at 6.04pm. The typed record states: "[P]ost reduction X-ray ordered and reviewed confirms relocation of shoulder joint."

37. At 6.15pm, Mr A was discharged from the ED with a prescription from Dr B for analgesia (codeine, paracetamol and ibuprofen). The typed record states: "Discharge Plan/Advice: Follow up with [general practitioner] GP …" Mr A was given a medical certificate, printed copies of both X-rays, and his medical notes. MidCentral DHB stated that Mr A would have been advised to take the X-ray copies and a copy of the notes to his GP. However, Mr A said that he does not recall this. Mr A's partner then drove him home.

Documentation

38. The details of Mr A's GP are not recorded in Mr A's clinical notes. The notes state: "GP: Dr GP not recorded in PIMS [patient information management software]." MidCentral DHB told HDC that when a patient is registered onto PIMS, the ED receptionist will ask the patient for the name of his or her GP. If the patient is able to provide a name, it will be entered into the system and, if known to the system, the full GP name and practice details will be loaded automatically. If the GP's name is not known to the system, the receptionist will manually type the name and address into PIMS, if this is known by the patient. MidCentral DHB told HDC that the ED receptionist cannot recall her registration of Mr A. Mr A said that he thinks that his GP details were part of the admission form filled out, but admits that he does not recall this clearly.

39. CNS C did not document in the typed record any details of the three attempts at relocation.

X-ray reports

40. On 5 October 2015 (the day after Mr A's discharge), Mr A's X-rays were reported on formally.

[14] A short-acting medication that results in a decreased level of consciousness and lack of memory for events.
[15] A medication used for maintaining anaesthesia. It induces a trance-like state while providing pain relief, sedation, and memory loss.
[16] A technique for shoulder reduction that involves externally rotating the arm then pulling the elbow across the body to disengage the humeral head, then internally rotating the arm.

41. The pre-reduction X-ray report, written by a consultant radiologist states:

> "Anterior dislocation at the glenohumeral joint is confirmed. There is a 1 x 0.2mm bone fragment posterior to the humeral head on the lateral view … Summary: Anterior fracture, dislocation at the glenohumeral joint."

42. The post-reduction X-ray report, written by another consultant radiologist states:

> "There has been interval reduction of previously noted dislocation of the right femoral head. Discrete humeral head fracture is not identified, though subtle Hill-Sachs deformity[17] is not easily excluded on this exam. I also question subtle bony deformity of the scapula inferior to the glenoid … if indicated this area can be better evaluated by CT."

43. MidCentral DHB told HDC:

> "When a formal X-ray report is received in the department, the report is reviewed by an ED Consultant. If it is thought that no further action is needed, this is signed off by the Consultant and the report is filed. If the patient — or the patient's GP — needs to be contacted for further follow up, this is done by the Consultant reviewing the official report. In Mr A's case, this was not done as it was thought that no further follow up was needed."

44. On 7 October 2015, Dr B viewed and signed both of Mr A's X-ray reports. The reports are stamped, signed, and dated, and include a space for recording any required actions. Under the heading "Action" on each report, Dr B wrote "none". Dr B stated that the abnormality noted on Mr A's X-ray was seen only on the initial films and was "tiny (1mm by 0.2mm)". Dr B said that the existing practice of orthopaedic colleagues in the public hospital for such injuries has been to encourage patients to follow up with their GP, and, for patients with persistent symptoms, the patient's GP refers the patient to the fracture clinic. Dr B stated:

> "In line with our existing practice at the time I did not feel that the abnormality as described in the X-ray report required me to take any further immediate action and was reassured by the knowledge that [Mr A] would be following up with his GP as recorded in the notes …"

45. Dr B acknowledged that there will be occasions where recognition of an abnormality requires notifying the patient of this, provision of the report, and ensuring that appropriate follow-up is arranged. However, he stated: "[T]his wasn't one of those cases." In responding to the complaint, Dr B discussed his actions with a senior orthopaedic surgeon at the public hospital. In a response to HDC, Dr B quoted the surgeon as stating:

> "[T]he radiology report suggests a tiny avulsion fracture and I don't think there would be any need to inform a patient of that. They are quite common and often not even spotted … I don't think there was anything wrong with the way this was handled."

[17] Humeral head compression fracture, typically secondary to shoulder dislocation.

46. Dr B said that routinely all X-ray reports are sent to the patient's GP. However, on Mr A's X-ray reports the GP is listed as "Dr A Unknown". Therefore, the reports were not sent to Mr A's GP.

Follow-up care

47. On 7 October 2015, Mr A presented to the medical centre for review, because of the pain he was experiencing. That day he was seen by a locum GP, who noted that Mr A was still struggling with a constant ache, was kept awake at night, and had severe nerve pain with sudden movement. Mr A's shoulder was immobilised in a collar and cuff. The locum GP said that she did not attempt to remove the collar and cuff to examine Mr A as she felt that this would compromise the healing process and increase his pain.

48. The locum GP noted that Mr A had no neurovascular symptoms. She reviewed his medication and prescribed him tramadol[18] to replace codeine, and made an electronic referral to another hospital's orthopaedic clinic (DHB2). She also recommended physiotherapy. The locum GP said that, at the time of the consultation, no X-ray reports or hospital notes were available.

49. On 12 October 2015, Mr A spoke to a medical centre practice nurse on the telephone about activities he could undertake with his injury. On 22 October 2015, Mr A telephoned the medical centre to request more analgesia. Voltaren[19] and tramadol were prescribed.

50. Mr A attended physiotherapy appointments and then had his first orthopaedic clinic appointment at DHB2 on 12 November 2015. It was confirmed that Mr A had a rotator cuff tear and a bony Bankart lesion.[20] Mr A had a series of orthopaedic clinic appointments and further investigations, and was considered for surgery to repair his rotator cuff. However, surgery was not performed owing to a lack of movement in his shoulder.

51. Mr A told HDC that he is now faced with a permanent disability due to a severe lack of movement in his shoulder. In response to the information gathered during this investigation, Mr A advised that a further MRI scan performed 10 months later showed that the Bankart fragment measured 30mm by 7mm.

Further information

MidCentral DHB

52. MidCentral DHB stated that Mr A's pain was assessed inadequately at triage. It also stated that testing the movement of Mr A's dislocated joint should never have been attempted by any of the clinicians involved in his care, because of the level of pain he was experiencing and the suboptimal pain relief he had been given.

53. MidCentral DHB stated that "the several attempts to reduce [Mr A's] shoulder and the sublevel amounts of analgesia given to him were unacceptable". It apologises unreservedly to Mr A for this.

[18] An opioid pain medication.
[19] A non-steroidal anti-inflammatory drug.
[20] A Bankart lesion is an injury of the anterior (inferior) glenoid labrum of the shoulder due to anterior shoulder dislocation. A bony Bankart is a Bankart lesion that includes a fracture of the anterior-inferior glenoid cavity of the scapula bone.

54. MidCentral DHB stated that if relocation of a dislocated joint is unsuccessful, then it should either be escalated to a more senior clinician, or there is a need for a significant change in methodology — for example, provision of an appropriate increase in analgesia, a nerve block, a change in the reduction method, or a combination of all of these. It stated that if a second attempt fails under the changes, then escalation to a more senior clinician should occur.

55. MidCentral DHB acknowledged that there is no mention in the clinical records regarding Mr A's axillary nerve[21] function, and that this was poor practice. MidCentral DHB considers that it is the responsibility of all involved in the examination of a patient to undertake a neurovascular examination. It stated: "[F]or a patient with a dislocated shoulder this should have occurred and should have been documented at triage by [CNS C] and [Dr B]."

56. MidCentral DHB acknowledged Mr A's concern that the small fracture should have been operated on immediately. The MidCentral DHB ED Clinical Director noted that, anecdotally, they had never seen anyone operate acutely on a Hill-Sachs deformity, and that after reviewing literature, they could not find anything stating that an acute repair is necessary or desirable. The MidCentral DHB ED Co-clinical Director stated that while it is their view that the fracture does not constitute a clinically significant bone deformity, they do accept that it is good practice to communicate this to the patient, and they apologise that MidCentral DHB failed to do this.

57. MidCentral DHB acknowledges that the lack of vital signs recorded at triage, the analgesia provided, the general standard of nursing documentation, and the absence of documentation by CNS C with regard to the attempted reductions are departures from the expected level of care.

58. MidCentral DHB told HDC that the ED clinical nurse specialist team has specific expertise to deal with a variety of injuries and illnesses. It stated:

> "They have received mentoring and additional training and practice at an expert level … they work alongside a senior doctor within the ED when they are on duty and ensure that all patients receive a consistent level of care, treatment and follow up advice for their presentation to the department."

59. MidCentral DHB has a protocol entitled "Adult IV Opioid Protocol for Patients in Pain with Existing IV Access (including women in labour)".[22] This allows appropriately certified nursing staff to give incremental doses of IV opiates to patients reporting a pain score at or above 4/10. The protocol can be used when morphine has been prescribed by medical personnel and "as per IV Opioid Protocol" is documented on the medication chart. The protocol was not used in Mr A's case.

Dr B

60. Dr B explained that the ED is a team environment, and while the ED consultant is in charge of the department, "it is simply not possible for them to assess every patient themselves"

[21] A major peripheral nerve of the upper limb.
[22] Revised December 2014.

and they rely on the competence and expertise of the other health professionals working alongside them. Dr B stated that the clinical nurse specialists work independently and manage their own patients, and will approach a doctor only if they need advice or help. He said that normal practice is for the healthcare staff who have seen a patient in pain to start the patient on appropriate pain relief, by approaching a doctor to inform the doctor about the case and suggesting medication to be signed off, or using the standing orders.

61. Dr B stated:

> "The responsibility is on the staff member who is looking after the patient to guide with pain management and if at any point they are worried or concerned then they can speak to a more senior doctor and either ask for a stronger analgesic medication or for them to review the patient."

62. Dr B stated that, as the primary provider, CNS C would have continued to manage Mr A, and would have been responsible for documenting Mr A's neurovascular function.

63. Regarding the X-ray reports, Dr B stated that if any abnormality were reported in the X-ray reports then follow-up would depend on the urgency of the condition. He stated that if it was a serious condition that had been missed earlier, the patient would be contacted directly and asked to come back to the ED. He said that if there was an abnormality requiring further follow-up (but not immediate review), and if the patient had no GP on record and no appropriate follow-up plan in his or her notes, the report would get posted to the patient's address with a request to see his or her GP.

64. Dr B told HDC that generally Sunday afternoons are very busy, with a lot of trauma and high acuity patient work load. He said that he would have had his own patient work load as well as supervising four junior doctors, and that the consultant-led medical handover occurred at 4.30pm.

65. Dr B stated: "I sincerely regret to hear that [Mr A] had a poor patient experience in the [ED] as that was never my intent."

CNS C

66. CNS C stated that, at the time of these events at MidCentral DHB, clinical nurse specialists were allowed to manage limb injuries only. If they identified the presence of actual, or the potential for, other injuries, they would inform the consultant on duty so that the consultant had the overall responsibility to identify and treat the other injuries. CNS C does not recall this direction being given to clinical nurse specialists in a written document, and said that the role has expanded over time.

67. CNS C said that the standard method for documenting that a doctor is involved in the patient's care and overseeing the care delivery is to document the doctor's name under the heading "Review". She did this in Mr A's case. She noted that this is also a way to show that the patient is more complex than the usual case load. CNS C said that she involved Dr B because Mr A had sustained a significant mechanism of injury, which had the potential to cause other injuries, and he reported that he had suffered a secondary blow to the head. CNS C stated that most patients assessed by clinical nurse specialists are seen without the direct oversight of a doctor and, in those cases, it is usual to record "Review: Nil by Dr".

68. CNS C said that when reducing dislocations, she uses slow and gentle application of traction to overcome the shortening of muscles and tendons that allow a joint to be relocated successfully. She said that if traction is not tolerated by a patient, she would never attempt to apply force to a joint or attempt to progress to a particular manoeuvre of joint relocation.

RN E

69. RN E told HDC that on the afternoon shift on the day of Mr A's admission, the ED was very busy, and the waiting room was busy, which made working within the triage times difficult. RN E noted that the variance response management tool changed colour to yellow on his shift. He said that usually this colour signifies that patient volume is stretching resources, especially in the waiting room.

Changes made since these events

MidCentral DHB

70. MidCentral DHB stated that all staff involved in Mr A's care have been made fully aware that their care and treatment was not acceptable practice.

71. MidCentral DHB advised that it has made the following changes to the service it provides:

- Improvements to triage assessment: The nursing team acknowledged that there were issues regarding competence of nurses undertaking triage, and has been working through a programme of improvement. This includes documentation of vital signs and accurate assessment and categorisation of patients. The triage process has been reviewed and improved, focussing on the safety of patients and staff. In-house training has been implemented to ensure that there is consistency amongst triage nurses and prioritising the movement of patients into the department as their presentation dictates.

- Escalation protocol: The medical and nursing teams are working on a protocol for escalation to senior clinicians for procedures (eg, IV cannulation and all joint dislocations).

- Letters to patients advising of X-ray results: The ED senior medical team has developed a letter to be sent out to all patients with a condition or injury identified on the X-ray report that was not seen at the time of their presentation. This is to be used when the injury/condition is of a nature that does not require the patient to be recalled to the department, but the patient will be advised to discuss the problem with his or her GP.

72. MidCentral DHB stated that the ED clinical team acknowledges the mistakes made and has been introducing changes to ensure that a similar event does not occur.

Dr B

73. Dr B stated: "What I have personally learned from this incident is the importance of having proper safety systems in the [ED] especially ways for all patients to have their GP details recorded and GPs to have access to hospital X-ray reports."

74. Dr B no longer works at MidCentral DHB.

CNS C

75. CNS C said that in future she will document and differentiate between when traction has been applied and has failed, a manoeuvre has been initiated but not completed, and when a manoeuvre has been completed and has failed.

76. CNS C said that as soon as she became aware of Mr A's complaint, she informed the CNS peer group within the ED to review her actions and documentation. She stated that amendments and further developments to a clinical notes template have been made to aid with the recording of relevant details in patient care, and to help avoid omission of information.

Responses to the provisional opinion

77. Responses to the provisional opinion were received from Dr B and CNS C. MidCentral DHB had no comments in response to the provisional opinion. A response to the "information gathered" section of the provisional opinion was received from Mr A. Where appropriate, changes have been made to the report.

78. In addition, Dr B stated that even if Mr A or his GP had been informed of the abnormality on the X-ray, the end process would have been the same as what occurred — referral to the DHB2 orthopaedic service by his GP.

Opinion: MidCentral District Health Board — breach

Introduction

79. MidCentral DHB was responsible for ensuring that Mr A received care of an appropriate standard in accordance with the Code. This includes responsibility for the actions of its staff, and an organisational duty to facilitate continuity of care. In my view, the care provided to Mr A fell short of expected standards. While some of the individuals who provided care to Mr A hold a degree of responsibility for the shortcomings in this case, I consider that there are aspects of Mr A's care that are ultimately the responsibility of MidCentral DHB. These are detailed below.

Triage

80. Mr A presented to ED at 1.48pm. He was triaged by RN D at 2pm. RN D allocated Mr A a triage category 3. RN D said that it is her usual practice during triage to take a pulse and respiratory rate, along with a pain score, and that she did this on this occasion, but did not document the findings. Mr A was then formally assessed by CNS C at 4.15pm. RN E told HDC that the ED was very busy at the time of Mr A's presentation, which made working within the triage times difficult.

81. My expert advisor, nurse practitioner (NP) Michael Geraghty, advised that from the patient's perspective, a shoulder dislocation is an exquisitely painful injury, and it is difficult to attain good analgesic effect.

82. The MidCentral DHB initial nursing documentation form provides that if a patient's pain is severe (7/10 to 10/10), the patient should be allocated triage code 2. The ATS triage category 2 indicates that the patient should have treatment started within 10 minutes. NP Geraghty also advised: "There is no recorded pain score on the initial nursing document form. Subsequent documentation consistently rates [Mr A's] pain as 9/10 (at rest); as such his initial triage score should have been … category two."

83. NP Geraghty stated that a full set of vital signs should have been taken by the triage nurse at the time of arrival, or soon after, as part of the initial nursing assessment. NP Geraghty noted that there was no form of ongoing assessment (pain score or vital signs) between 2pm and the time of formal review at 4.15pm. NP Geraghty considered these to be minor departures from the expected standard of care.

84. MidCentral DHB acknowledged that the lack of documentation of vital signs at triage stage is a departure from the expected standard of care.

85. I accept NP Geraghty's expert advice. I am critical that Mr A's pain score and vital signs were not documented at triage. The failure to document this information is concerning, and, in my view, this impacted on Mr A's patient journey in ED. In particular, I consider it is more likely than not that Mr A's pain score was higher than 7/10 on arrival, given that subsequently it was found to be 9/10 on more than one occasion, and, accordingly, he should have been allocated a triage code 2. I am also critical that there was no form of ongoing assessment between triage and formal review at 4.15pm.

Inadequate analgesia

86. Mr A had been given paracetamol, codeine, and methoxyflurane at the accident site at around 1pm. The first pain relief Mr A received in ED was at 3.15pm, when nursing staff gave him 400mg ibuprofen (in accordance with MidCentral DHB Standing Orders) and 15mg codeine (prescribed by Dr B). After review by CNS C at 4.15pm, Mr A received Entonox and fentanyl to aid the relocation attempts.

87. MidCentral DHB has an IV opioid protocol that allows appropriately certified nursing staff to give incremental doses of IV opiates to patients reporting a pain score at or above 4/10. The protocol can be used when morphine has been prescribed by medical personnel and "as per IV Opioid Protocol" is documented on the medication chart. It is not clear from the protocol who is responsible for initiating it, which I consider is unsatisfactory, and the protocol was not used in Mr A's case.

88. My expert advisor, emergency medicine specialist Dr Barrington-Onslow, advised:

> "[T]he analgesia given was completely inadequate for his pain level for such a time. The duration and level of pain is a major departure from acceptable care. If he was adequately analgesed, then the wait [from the time of triage until the CNS review], while being suboptimal, is acceptable."

89. NP Geraghty advised:

> "The amount, type and timing of the analgesia given between 1400 and 1615 hours would not be considered adequate. The emergency department's Standing Orders indicates the use of either intravenous Morphine or Fentanyl to be given to patients with a pain score great[er] than 4/10 and who are physiologically stable …
>
> [Mr A] could have been [given] an intravenous opioid much earlier in his admission which may have mitigated his pain significantly. The pain management instigated from the time the CNS took over the care reflects a more appropriate drug regime."

90. MidCentral DHB stated that the "sublevel amounts of analgesia given to [Mr A] were unacceptable". I agree. I accept the advice of Dr Barrington-Onslow and NP Geraghty. I am critical that Mr A's pain was not managed adequately in ED, and that the IV opioid protocol was not used to provide him with adequate analgesia, given the extended amount of time he had to wait for formal review.

Secondary survey

91. CNS C reviewed Mr A at 4.15pm and conducted an initial assessment. This included recording that Mr A denied being knocked out when he had his accident. CNS C said that she undertook a primary survey to determine whether Mr A required the application of a cervical spine collar, which she considered he did not.

92. CNS C explained that she involved Dr B in Mr A's care because Mr A had sustained a significant mechanism of injury, which had the potential to cause other injuries. She stated that clinical nurse specialists were allowed to manage limb injuries only, and the consultant had the overall responsibility to identify and treat other injuries.

93. NP Geraghty advised that the clinical examination documented by CNS C is a brief systems examination with the main focus being on Mr A's shoulder injury. NP Geraghty stated:

> "No secondary survey is undertaken. The pain associated with this type of injury is distracting enough to mask other injuries and there should have been a more detailed systematic assessment of the head, chest and abdomen documented (an assessment of his cervical spine is given)."

94. I accept NP Geraghty's advice that a more detailed systematic assessment of Mr A should have been undertaken. In my view, this was not the sole responsibility of CNS C, as she involved Dr B in Mr A's care. I am concerned that both CNS C and Dr B have different views on who had overall responsibility for Mr A's care. I consider that it is MidCentral DHB's responsibility to ensure that these roles are clear to its staff. In the circumstances of Mr A's case, I am critical that none of MidCentral DHB's staff undertook a secondary survey of Mr A.

GP details

95. The details of Mr A's GP are not recorded in Mr A's clinical notes. MidCentral DHB told HDC that the ED receptionist will ask the patient for the name of his or her GP and, if the patient is able to provide a name, it will be entered into the system. If known to the system, the full GP name and practice details will be loaded automatically. If the GP's name is not known to the system, the receptionist will manually type the name and address into PIMS, if

this is known by the patient. MidCentral DHB told HDC that the ED receptionist cannot recall her registration of Mr A.

96. I acknowledge that Mr A's GP was outside of the MidCentral DHB area, so the GP practice details may not have been known to the MidCentral DHB system. However, I am concerned that Mr A's GP details were not loaded into the system manually. This is particularly important information to include at patient registration, and, in Mr A's case, it meant that the pre- and post-reduction X-ray reports were not able to be copied to his GP.

Conclusion

97. Mr A had the right to have services provided to him by MidCentral DHB with reasonable care and skill. Mr A's triage documentation was incomplete, his pain was not managed adequately, no secondary survey was undertaken, and his GP's details were not captured on the MidCentral DHB system. In my view, these deficiencies indicate a pattern of poor care by staff, and systems issues, for which the DHB is responsible. For these reasons, I consider that MidCentral DHB did not provide Mr A with reasonable care and skill, and breached Right 4(1) of the Code.

Other comment

98. I acknowledge the improvements MidCentral DHB has made in its ED processes regarding triage assessment, an escalation protocol, and letters to patients advising them of particular X-ray results. I consider that these changes are appropriate in the circumstances.

Opinion: Dr B — breach

Failure to inform of abnormality seen on X-ray

99. On 5 October 2015, Mr A's pre- and post-reduction X-rays were reported on formally. The pre-reduction X-ray report notes that there was a "1 x 0.2mm bone fragment posterior to the humeral head on the lateral view … Summary: Anterior fracture, dislocation at the glenohumeral joint". The post-reduction X-ray report confirmed that the dislocation had been reduced, and states: "Discrete humeral head fracture is not identified, though subtle Hill-Sachs deformity is not easily excluded on this exam. I also question subtle bony deformity of the scapula inferior to the glenoid … if indicated this area can be better evaluated by CT."

100. MidCentral DHB told HDC that when a formal X-ray report is received in the department, the report is reviewed by an ED consultant. If it is thought that no further action is needed, this is signed off by the consultant and the report is filed. If the patient — or the patient's GP — needs to be contacted for further follow-up, this is done by the consultant who reviews the official report.

101. On 7 October 2015, Dr B viewed and signed both of Mr A's X-ray reports. Under the heading "Action" on each report, Dr B wrote "none". Dr B stated that the abnormality noted on Mr A's X-ray was seen only on the initial films, and was "tiny (1mm by 0.2mm)". Dr B stated:

> "In line with our existing practice at the time I did not feel that the abnormality as described in the X-ray report required me to take any further immediate action and was reassured by the knowledge that [Mr A] would be following up with his GP as recorded in the notes …"

102. Dr B said that routinely all X-ray reports are sent to the patient's GP. However, on Mr A's X-ray reports the GP is listed as "Dr A Unknown". Therefore, the reports were not sent to Mr A's GP.

103. Dr B acknowledged that there will be occasions where recognition of an abnormality requires notifying the patient of this, provision of the report, and ensuring that appropriate follow-up is arranged. However, he stated: "[T]his wasn't one of those cases." Dr B provided a statement from an orthopaedic colleague, who noted that the radiology report suggests a "tiny avulsion fracture", and goes on to state: "I don't think there would be any need to inform a patient of that." In response to the provisional opinion, Dr B further stated that even if Mr A or his GP had been informed of the abnormality on the X-ray, the end process would have been the same as what occurred — referral to the Wellington orthopaedic service by his GP.

104. The MidCentral DHB ED Co-clinical Director stated that while it is MidCentral DHB's view that the fracture does not constitute a clinically significant bone deformity, it does accept that it is good practice to communicate this to the patient.

105. Regarding the failure to advise Mr A or his GP of the abnormality on the X-ray, Dr Barrington-Onslow stated:

> "[T]he abnormalities documented by the reporting radiologist were not, as far as I can tell, passed onto the patient or the patient's own doctor. This is a major departure from standard of care. If an abnormality is seen on X-ray and it is not appreciated at the time, then it is essential that it is followed up in a timely manner. In this case, as [the ED] did not have [Mr A's] own General Practitioner's details, then [Mr A] should have been contacted to inform him of the findings and either get a copy of the report to himself, to show to his General Practitioner, or sent directly to his GP so that appropriate follow up is arranged …
>
> This is, in my opinion a major deviation from the standard of care. The reason is that, if an abnormality is found, then it needs to be assessed in a timely manner. This allows for the potential of further review and investigations, as well as appropriate treatment if there is an ongoing issue."

106. I acknowledge Dr B's opinion that the abnormality identified in the X-ray report was not one that required reporting to Mr A or his GP, and that the end process would have been the same even if the information had been provided to Mr A or his GP. However, in my view, although the abnormality was small, Mr A had the right to receive available information in relation to it. It was particularly important given that the records clearly showed that the X-ray results had not been copied to Mr A's GP (as the GP details were recorded as "Dr A Unknown").

107. Right 6(1)(f) of the Code states: "Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive …" This includes the results of tests. As the ED consultant responsible for reviewing Mr A's formal X-ray reports, I am critical that Dr B did not inform Mr A of the abnormality seen on the X-ray, especially in light of the fact that the X-ray reports were not copied to Mr A's GP. For failing to do so, I find that Dr B breached Right 6(1)(f) of the Code.

Opinion: CNS C — adverse comment

108. CNS C became involved in Mr A's care when she was asked by the ED coordinator, RN E, to assist with Mr A's case. CNS C undertook an initial assessment at 4.15pm, and made an initial attempt at relocating Mr A's dislocated shoulder. When that was unsuccessful, she spoke to Dr B to request IV opiate medication. CNS C made two further attempts at relocation after the administration of fentanyl at 4.28pm and 5.05pm, but these were both stopped early in the procedure. CNS C then requested that Dr B undertake procedural sedation, and CNS C successfully reduced Mr A's shoulder at 5.10pm.

Documentation — adverse comment

Initial assessment

109. CNS C reviewed Mr A at 4.15pm and conducted an initial assessment. She recorded that Mr A knew immediately what he had done when he fell from his motocross bike, and that he had a history of two previous left shoulder dislocations. She recorded that Mr A denied being knocked out. CNS C recorded: "Treatment pre presentation — nil." CNS C told HDC that neither the nurse handing over nor Mr A disclosed that previous attempts had been made to reduce Mr A's shoulder. CNS C said that she undertook a primary survey to determine whether Mr A required the application of a cervical spine collar, which she considered he did not.

110. Regarding CNS C's initial assessment documentation, my expert advisor, nurse practitioner (NP) Michael Geraghty advised:

> "The typed notes … are systematic but scant in detail … The notes state that [Mr A] received no treatment prior to arrival when the triage note states otherwise, there may also have been attempts to reduce his shoulder pre-hospital which is an important factor to note."

111. I accept NP Geraghty's advice, and I consider that CNS C should have more accurately documented the treatment provided to Mr A prior to his arrival at ED.

Neurovascular examination

112. CNS C told HDC that she performs a neurovascular examination with every relevant case. She stated: "I absolutely believe I would have completed this automatically and did not find anything amiss at the time, so that when it came to writing my clinical notes I forgot to record a negative finding."

113. NP Geraghty also advised:

> "The assessment of the shoulder exam does not include any documentation of the neurovascular status of the limb either prior to or after the reduction; this is a fundamental expectation in the management of any orthopaedic injury …
>
> I take note of [CNS C's] statement about assessing neurovascular function as being a fundamental and standard part of her care but would argue that if it is that embedded in her practice then the documentation of this would equally be so."

114. I accept CNS C's explanation that she considers that she would have conducted a neurovascular examination in Mr A's case, and that this is something she performs with every relevant case. However, I am critical that CNS C did not document the outcome of this examination, regardless of the findings.

Relocation attempts

115. CNS C did not record any details of the three attempts at relocation that were initiated by her in ED, but stopped owing to Mr A's pain. These attempts were noted in RN F's handwritten record.

116. Regarding the failure to document the details of the three initiated relocation attempts, NP Geraghty advised: "The absence of documentation around this would constitute a minor departure from the expected standard."

117. I accept NP Geraghty's advice, and I am critical that CNS C did not make a record of these attempts. In my view, this is important information to be available in the clinical record, particularly for subsequent providers caring for Mr A.

118. CNS C said that in future she will document and differentiate between when traction has been applied and has failed, a manoeuvre has been initiated but not completed, and when a manoeuvre has been completed and has failed. I consider that this is appropriate in the circumstances.

Recommendations

119. I recommend that MidCentral DHB:

a) Provide HDC with an update on the improvements to triage assessment, within three months of the date of this opinion.

b) Provide HDC with a copy of the escalation protocol, within three months of the date of this opinion.

c) Provide HDC with evidence that the letter to patients advising them of additional X-ray results is being used where appropriate. This may be in the form of audit results, and should be provided within three months of the date of this opinion.

d) Consider giving triage nursing staff appropriate training and authority to order X-rays.

e) Provide training to ED nursing and medical staff on the use of the IV opioid protocol and the circumstances in which this should be implemented, and by whom. Evidence of this training should be provided to HDC within three months of the date of this opinion.

f) Remind ED reception staff of the importance of obtaining a patient's GP details.

g) Provide a written apology to Mr A for the failings identified in this report. The apology should be sent to HDC within three weeks of the date of this opinion, for forwarding to Mr A.

120. I recommend that Dr B provide a written apology to Mr A for the failing identified in this report. The apology should be sent to HDC within three weeks of the date of this report, for forwarding to Mr A.

Follow-up actions

121. A copy of this report with details identifying the parties removed, except the experts who advised on this case and MidCentral DHB, will be sent to the Medical Council of New Zealand, and it will be advised of Dr B's name in covering correspondence.

122. A copy of this report with details identifying the parties removed, except the experts who advised on this case and MidCentral DHB, will be sent to ACC, HQSC, and the Australasian College for Emergency Medicine, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A: Independent nurse practitioner advice to the Commissioner

The following expert advice was obtained from NP Michael Geraghty:

"**Disclaimer**.

I have been asked to provide an opinion to the Commissioner on case number C15HDC01723. I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

Personal Statement.

I am an Emergency Nurse Practitioner (NP) and currently employed at Auckland City Hospital, Adult Emergency Department (ADHB) and have been in this role initially as a Clinical Nurse Specialist (CNS), then as an NP since 2001. A large focus of this role is the management of common musculoskeletal injuries presenting to the emergency department. As part of this role I would regularly manage the care of a patient presenting with a suspected glenohumeral joint dislocation and over the past 15 years would have reduced numerous such cases.

I hold a Masters of Nursing degree (University of Auckland) and continue to work at the University in an Honorary Professional Teaching Fellow position and was instrumental in establishing a post-graduate paper specifically teaching the management of common musculoskeletal and soft tissue injuries to emergency nurses being employed as a CNS.

Information reviewed.

This report was based on the following information provided by the Commissioner:

1. A copy of the original complaint by [Mr A]
2. Correspondence from the [CEO of MidCentral Health DHB]
3. Radiology reports.
4. The initial triage, nursing assessment and clinical notes, medication chart and observation charts from the patient's visit (4th October 2015). The consent form for procedural sedation
5. A CD containing the pre and post reduction x-rays.

Subsequent documentation requested included a position description for the CNS role (December 2011) and the emergency department's standing orders for Ibuprofen, Paracetamol, Codeine and intravenous opioid administration (revised 2nd Dec 2014).

Information requested.

I have been asked to make particular comment on the following:

1. The initial triage process.
2. The level of analgesia provided.
3. The number of relocations attempted.

4. Details of whether the actions of the CNS were within her scope of practice.
5. The standard of nursing documentation

In acknowledging the above points this is contextualised further by addressing the following questions:

1. What is the standard of care/accepted practice in NZ?
2. If there has been a departure from this standard(s), how significant is this departure?
3. How would this be viewed by a peer group?

Report.

What is the standard of care/accepted practice?

A glenohumeral joint dislocation is one of the commonest dislocations presenting to the emergency department.

The standard emergency department approach (in brief) for the management of any orthopaedic injury would expect to include the following:

a. A thorough history taking to discern the mechanism of injury.
b. A history of the patient's medical and surgical past, medications, allergies and social circumstances.
c. A clinical exam guided by the information obtained in the history — a dislocation can occur from the simplest of falls or be associated with a significant traumatic event. The exam should make note of:
    I. Any disruption in the integrity of the skin — an open or closed injury.
    II. A neurovascular exam — the motor function, the sensory pathways and the vascular integrity of the limb distal to the injury. This is particularly important when the clinician is considering a procedure such as relocating a dislocated joint.
    III. Any other associated injuries — the common principle is to exam from the joint above to the joint below a suspected injury but equally consider the 'whole picture' in respect to other potential injuries.
    IV. When there is a high index of suspicion for a dislocation it would be reasonable to not test the movement of the joint.
d. Treatment — analgesia (oral, intravenous, inhaled or even intra articular anaesthesia — the latter not commonly utilized) a sling, cushion support or other supportive measures to limit joint movement.
e. Appropriate investigation — an x-ray is commonly required particularly in the context of trauma to confirm the diagnosis and to exclude a clinically significant fracture.

f. Treatment — to reduce the dislocation in the absence of a clinically significant fracture.

g. Disposition — frequently patients with a dislocated shoulder can be safely discharged with appropriate follow up (GP, Physiotherapist or an Orthopaedic out patient clinic).

From the patient's perspective a shoulder dislocation is an exquisitely painful injury and it is difficult to attain good analgesic effect. The best pain relief strategy is to relocate the joint as soon as possible. Relocation relies on the patient being relaxed enough to enable the clinician to slowly move the joint back into place but does not routinely require the patient to be sedated. There are numerous techniques to achieve this with no one technique being considered better than any other — it is generally accepted that the clinician should have a repertoire of two or more different methods reflecting the fact that one technique will not always work. Irrespective of the technique utilised the procedure is generally one of gentle movement that is normally pain free and certainly one that does not increase the patient's pain or distress.

(uptodate.com/shoulder dislocation/SC Sherman/updated 25th May 2016)

1. The initial triage process.

   I. There is no recorded pain score on the initial nursing document form. Subsequent documentation consistently rates [Mr A's] pain as 9/10 (at rest); as such his initial triage score should have been ACEM category two. Reassessment and re-triaging is appropriate practice reflecting a change in the patient's original status i.e either improving or not.

   (https://www.acem.org.au/getattachment/d19d5ad3-e1f4-4e4f-bf83-7e09cae27d76/G24-Implementation-of-the-Australasian-Triage-Scal.aspx General Principles point 1.5).

   II. There are no recorded vital signs taken at triage or anytime prior to 16.15 hours. Vital signs provide an objective record of an individual's physiological response to an injury or disease and provides the clinician with objective data of a patient's response to treatment, interventions. A full set of vital signs should have been taken at the time of arrival by the triage nurse or soon after as part of the initial nursing assessment.

2. The level of analgesia provided. Emergency nurses (including the CNS) are not prescribing clinicians and are only allowed to administer medication either via standing orders or once prescribed. The nursing staff are however advocates for their patient and as previously mentioned all recorded documentation of [Mr A's] pain was a rating of 9/10 (at rest). The amount, type and timing of the analgesia given between 1400 and 1615 hours would not be considered adequate. The emergency department's standing orders indicates the use of either intravenous Morphine or Fentanyl to be given to patients with a pain score great than 4/10 and who are physiologically stable. The triage documentation notes that [Mr A] was given Methoxyflurane, Paracetamol and Codeine pre-hospital. He was given further oral analgesia at 1515 hours that would have had very little efficacy for his

level of pain. Entonox was used during the initial attempts to reduce the shoulder — this is commonly used for this type of presentation, it creates a slightly dissociated state, relaxes the patient and the actual act of holding the mouthpiece and breathing through it acts as a distracting technique. Intravenous Fentanyl was also used which again is an appropriate drug choice for a person experiencing his level of pain. The timing of the administration of the latter two agents coincides with the time [CNS C] assumes responsibility for the patient's care and reflects good practice.

3. The number of relocations attempted. The successful relocation relies on the capacity of the patient to adequately relax, the experience of the clinician to facilitate this and their practical experience at reducing the shoulder. I am unaware of any literature that dictates how many attempts one clinician should attempt. In canvassing a number of my emergency department colleagues (both nursing and medical) the common number given was two but many did not think three attempts to be unreasonable. As noted above (standards of care/accepted practice introduction) a good clinician needs two or more techniques in their repertoire as one technique will not always be adequate. As already addressed by the DHB and the ED Clinical director there was no documentation on the number of attempts tried, nor the methods used. It is noted in the clinical records that [Mr A] had two previous dislocations of the left shoulder — further exploration of how these were managed may have guided the clinician to how best to manage this particular episode.

   From the documentation made available it appears some attempt to reduce the shoulder occurred pre-hospital and at least one attempt was made by one of the ED doctors (clinical notes difficult to read but infers this). In my experience there comes a point where the pain becomes intractable, the state of mind of the patient is such that they are unable to relax at all and continued attempts to manipulate the shoulder without sedation becomes futile.

4. Details of whether the actions of the Clinical Nurse Specialist (CNS) were within her scope of practice. The clinic nurse specialist is a relatively new position but now common to many EDs in NZ. They work with a fair degree of autonomy and a dislocated shoulder would be a common injury the CNS would be expected to manage. The CNS (similar to all ED health professionals) would be expected to seek further help, guidance if unable to safely manage a particular ED presentation. Having assumed responsibility for the care of a patient the CNS can equally choose to not continue as the primary clinician if subsequent history taking and exam suggests the case to be more complex than they had originally believed it to be and where the experience of a medical practitioner might better serve that patient's needs. The typed notes of [CNS C] document a review of the x-ray and diagnosis of a right anterior dislocation. She further notes there being no associated fracture and whilst this subsequently transpired to be incorrect the fracture fragment is very small (1 x 0.2mm) and more importantly would not have altered the plan to reduce the shoulder joint at that time; it would not have altered the plan to attempt this without conscious sedation in the first instance. [CNS C] attempted to reduce the

shoulder, was unable to do so and subsequently sought help from the ED Senior Medical Officer (SMO) which was appropriate.

5. The standard of nursing documentation. The hand written notes on pages two and three of the clinical notes are barely legible, as are the signatures.

   I. Triage — As noted above there is no recorded vital signs on arrival and no pain score documented. Under the Assessment Prompts and Investigations heading the box for 'Obs' is ticked but no vital signs recorded. There is no nursing documentation between 1400 and 1615 hours, with no vital signs, or ongoing assessment of [Mr A's] pain.

   II. [CNS C] — The typed notes (Emergency Department Medical Report) are systematic but scant in detail. The history is of [a fall with a secondary blow to the head]. There is notation of the patient being conscious and alert since the injury and self-presenting to the ED with his partner. The notes state that he received no treatment prior to arrival when the triage note states otherwise, there may also have been attempts to reduce his shoulder pre-hospital which is an important factor to note. The clinical exam after this is a brief systems exam but the main focus being on the shoulder injury. No secondary survey is undertaken. The pain associated with this type of injury is distracting enough to mask other injuries and there should have been a more detailed systematic assessment of the head, chest and abdomen documented (an assessment of his cervical spine is given). The assessment of the shoulder exam does not include any documentation of the neurovascular status of the limb either prior to or after the reduction; this is a fundamental expectation in the management of any orthopaedic injury. As previously mentioned and addressed the number of attempts was not recorded (or the techniques tried) but the successful reduction once sedated was documented well. The list of documentation provided at discharge (ACC, prescription, post sedation advice etc) would be considered reasonable.

Summary

1. If there has been a departure from this standard(s), how significant is this departure?

   - The initial triage process:
     — All recorded pain scores note a score of 9/10. This would have changed [Mr A's] triage code to a triage code two which would have decreased the delay until definitive treatment.
     — No vital signs are recorded at triage (or soon after).

     Both these issues have been identified and addressed as noted in the CEO's reply to the HDC (7th January 2016).

     Both these points reflect minor departures from the expected standard.

   - The level of analgesia provided:

— The ED nurse is an advocate for their patient and should have continued to monitor [Mr A's] response to any analgesia given. It is the ED nurse's duty to utilise available standing orders, or to inform the medical staff of the patient's distress so more appropriate medication can be given. [Mr A] could have been [given] an intravenous opioid much earlier in his admission which may have mitigated his pain significantly. The pain management instigated from the time the CNS took over the care reflects a more appropriate drug regime.

This failure reflects a minor departure from the expected standard.

- The number of relocations attempted:

— There are no guidelines determining how many attempts are correct and the best determinant of this is how well the patient is tolerating the procedure. The clinical notes record a persisting pain score of 9/10 at rest; it is difficult to envisage any clinician successfully relocating the joint under these circumstances. The time from the initial contact by [CNS C] to the time a decision was made to sedate [Mr A] was approximately 30 minutes. This time frame does not seem unreasonable. In respect to the actual number of relocations attempted I do not believe there has been any departure from a reasonable standard.

- Details of whether the actions of the CNS were within her scope of practice:

— [CNS C] was working within her scope of practice as defined by the job description provided and this is substantiated by the correspondence from [the] CEO to the HDC. [CNS C] took responsibility for the patient's care at 1615 hours, attempted to reduce the shoulder after assessing the patient, viewing his x-ray and soon after sought senior medical help when she was unable to complete the procedure satisfactorily. A more appropriate analgesic regime was instigated during the time [Mr A's] care was being managed by her. No breach in standard.

- The standard of nursing documentation:

— Triage/ED nursing staff: No vital signs recorded from the time of admission until 1615 hours, there is no record of any care being delivered between 1400 and 1615 hours except some oral analgesia at 1515 hours. The written notes are hard to decipher and the signature difficult to identify, they do however provide a reasonably good overview of the care [Mr A] received from 1615 hours onwards.

These omissions reflect minor departures from the expected standard.

— CNS: The documentation of the number of procedures attempted and what methods used has already been addressed. The absence of documentation around this would constitute a minor departure from the expected standard. The records of the management of the shoulder injury and subsequent discharge plan are satisfactory. A more comprehensive assessment should have been documented in respect to other possible injuries he may have sustained. There is no reference to a neurovascular

exam being undertaken at any time during his admission. This latter point particularly is a significant omission and would be looked upon adversely by her CNS and Nurse Practitioner peers."

The following further advice was received from NP Geraghty:

"[…]

Information reviewed.

Original report on the above case — Michael Geraghty NP.

Response from [Dr B] (12th December 2016)

Response from Clinical Nurse Specialist [CNS C] (29th November 2016)

Response from MidCental DHB (MCDHB) (24th November 2016) with additional statements from Registered Nurses [RN E], [RN D] and [RN F].

Additional documents related to triage and radiology reporting

Response from MCDHB 7th July 2016.

Information requested.

I have been asked to make further comment, from a nursing perspective on the following:

Response from [CNS C] in respect to my original report.

Any other aspects of the care provided to [Mr A].

In acknowledging the above points this is contextualised further by addressing the following questions:

What is the standard of care/accepted practice in NZ?

If there has been a departure from this standard(s), how significant is this departure?

How would a peer group view this?

Report

Response from [CNS C].

I am generally reassured by [CNS C's] response to my initial report and am satisfied that she performed her role within her scope and with the intention to manage the shoulder dislocation. [CNS C's] comments on the documentation style of the department to delineate when the CNS is requesting further review from medical staff is explained although I would expect further documentation from the CNS specifically outlining what assistance she was requiring.

Both Dr Barrington-Onslow and I have identified the lack of any documentation of the patient's neurovascular status during his admission to the Emergency Dept. I take note of [CNS C's] statement about assessing neurovascular function as being a fundamental

and standard part of her care but would argue that if it is that embedded in her practice then the documentation of this would equally be so.

I believe her practice in respect to these sorts of injuries will be improved as a consequence of this complaint and specifically in respect to history taking and documentation. As previously stated in my original report there are no clear guidelines as to the number of times one should attempt reduction of a dislocated shoulder before sedating and the best indicator of this is the individual's response to the procedure and their pain threshold. [Mr A's] pain was managed poorly throughout his time in the ED but not specifically by the CNS.

Other aspects of the care provided

Triage — As a response to this complaint the triage process has been reviewed and improved focussing on the safety of patients and staff. In-house training has been implemented to ensure there is consistency amongst triage nurses and prioritizing the movement of patients into the department as their presentation dictates. The Australasian College of Emergency Medicine (https://www.acem.org.au/getattachment/693998d7-94be-4ca7-a0e7-3d74cc9b733f/Policy-on-the-Australasian-Triage-Scale.aspx) provides clear guidelines on how triage should be implemented and the expected tasks that should be achieved in this brief assessment period. Ideally all patients should be assessed by the triage nurse prior to any registration process, and equally have a set of vital signs taken within a 'reasonable' time frame from arrival. The department has highlighted these as areas to be addressed. In [RN D's] statement she mentions that she asked one of the doctors to order the x-rays as she was unable to — I am not sure if this is because she was on a casual contract but part of the secondary process of triage can include the initiation of relevant investigations as a way of expediting patient care. The use of triage nurses who have the training to order x-rays is recommended.

[Dr B's] response provides a very well articulated overview of the workings of an ED and in particular the collegial nature of the work and the reliance the senior doctor (or nurse) has on the staff on shift that day to accurately and appropriately inform them of issues that are relevant and critical to any particular patient or the overall running of the department. Ideally the senior medical officer on a shift should have no patient load enabling them to have a more global view of the patients and to provide clinical advice and/or review without the stress and distraction of managing their own workload.

Analgesia — MCDHB have acknowledged that the management of the patient's pain was inadequate. As per [Dr B's] response the CNS is able to administer simple analgesia and under standing orders. If a patient requires more potent analgesia then this is prescribed by the medical staff and with or without direct patient review. It is not clear if MCDHB have protocols in place for the administration of opiates as per a protocol — this may be one strategy that enables improved pain management. The value of this is the doctor signs off for on-going titration of a specific opiate within defined parameters that saves time and enables the nurse to continue to administer effective pain management without having to seek out a doctor to prescribe individual doses each time.

Radiology review process — The introduction of a letter to patients in respect to abnormal findings being reported by the radiology department is to be applauded and is a significant quality initiative. For the majority of patients such errors in x-ray interpretation do not result in any significant change in the advice/treatment initially given but has bearing on that individual's capacity to return to sports, work, rehabilitate etc as well as the predicted period they may need ongoing analgesia.

I have read the responses and gone over the initiatives that have been introduced as a result of this complaint and feel that there has been marked improvement in both the emergency department systems and personal clinical accountability. I acknowledge the comments of both [Dr B] and [RN E] in respect to how busy the department was on that day and the continuing strain of managing high volumes of patients with finite resources. It is hoped that these new systems put in place will help in the early identification of patients of high acuity and/or complexity.

I have made some recommendation in the above document and summarise them below:

The use of triage nurses with the necessary training to initiate specific x-rays.

The introduction of an opiate administration protocol.

The introduction of a 'hands-free' senior doctor on shift.[1]

I believe a peer group would look favourably upon the reflections of practice of the clinicians involved in this case as well as the systems put in place to improve care."

[1] The above recommendations are written without knowing the actual specifics of how the department does normally run but as an observation from the information available to me as part of the complaint process.

Appendix B: Independent emergency medicine specialist advice to the Commissioner

The following expert advice was obtained from Dr Stuart Barrington-Onslow:

"I have read and agreed to follow the guidelines for independent advisers provided by the office of the Health and Disability Commissioner.

I am an Emergency Medicine Specialist, qualifying as a doctor in 1988 at the University of London. I have been practising Emergency Medicine since 1997 and became a Fellow of the Australasian College for Emergency Medicine in 2007. I am currently employed as a full-time specialist at the Christchurch Hospital Emergency Department.

I have been asked to provide independent expert advice regarding the care provided to [Mr A] in the Emergency Department of [the public hospital] during October 2015. To aid me in my advice I have received documentation from the commissioner's office that includes:

Letter of complaint from [Mr A].

Response from Mid Central District Health Board.

Copy of [Mr A's] clinical notes from his presentation to [the public hospital] Ed on 4 October 2015.

A disc containing digital images of the shoulder X-rays on 4 October 2015.

Copy of the report written by HDC in house clinical advisor Dr David Maplesden.

Summary of Events

These are provided in the documentation I have received.

[Mr A] [landed] on his right shoulder on the 4th October 2015. There is documentation that he was given analgesia (paracetamol 1.5gm and codeine 40mg with methoxyflurane (an anaesthetic agent that is inhaled for pain relief)) at 'approx 1300hrs'. He arrived at [the] Emergency Department and was booked in at 1348hrs, initially assessed at 1400hrs and was given a triage category of 3. At 1515hrs he was given further analgesia in the form of ibuprofen 400mg and a further 15mg of codeine. There is no documentation of his pain score until a further assessment at 1615hrs.

He was X-rayed at 1426hrs and this confirmed an anterior dislocation of his right shoulder.

From the notes, it is documented that he was more completely assessed at 1615hrs and the diagnosis of anterior dislocation of his right shoulder was made. The plan was for sedation and relocation. There was no mention of prior attempts to relocate the shoulder in the typed notes. He was sedated with propofol 170mg and ketamine 70mg and his shoulder was relocated, using Kocher's method, at 1710hrs. A post procedure X-ray was taken and documented as relocated, and his arm was placed in a collar and cuff sling.

With the information I have been sent, there are hand written notes that are difficult to read, but documents 3 attempts to relocate the shoulder prior to the sedation, all stopping due to pain. During this time he was given 25 micrograms of fentanyl (opioid pain killer) at 1642hrs and 1705hrs.

[Mr A] was discharged at 1815hrs with a prescription for ongoing analgesia and advice to follow up with his GP and a physiotherapist together with a copy of his typed notes and X-rays.

Issues

1. What is the standard of care/accepted practice?
2. If there has been a departure from the standard of care or accepted practice, how significant a departure do you consider it is?
3. How would it be viewed by your peers?

1.1 The standard of care is to adequately assess a patient after such an accident in a timely manner, identify their injuries, give them appropriate treatment, including adequate analgesia, and treat any injury found, in this case a dislocated right shoulder. And to follow up on investigations performed, in this case the formal X-ray reports.

2.1 [Mr A] had to wait over 2 hours before being fully assessed. He was given a triage score of 3 (suggested wait of 30 mins), however, there was no mention of his pain score on arrival despite it being printed on the ED assessment form. When it was documented, he gave a pain score of 9/10, which would have made him a category 2 triage (wait of 10 mins). Emergency departments in New Zealand are extremely busy and a wait of 2 hours for such an injury is too long, but not unusual for a triage category 3 patient in our environment. However, the analgesia given was completely inadequate for his pain level for such a time. The duration and level of pain is a major departure from acceptable care. If he was adequately analgesed, then the wait, while being suboptimal, is acceptable.

2.2 The 3 attempts at relocating the shoulder, all aborted because of pain is inappropriate. Firstly, there is no formal documentation of any of these attempts, so I am unable to determine which method was attempted. There are several accepted techniques to relocate shoulders, some of which require minimal analgesia. However, if a clinician has failed and had to stop because of pain, then that merits escalation of treatment. The two small doses of fentanyl, are, just that, too small to adequately analgese. Also, as the Clinical Nurse Specialist had failed once, I feel that the Emergency Physician should have become involved in [Mr A's] care at this point, and not have had two further attempts made. As an Emergency Physician, if one of my team is unable to perform a procedure, I would expect to get involved in that person's care. This is not a hard and fast rule, but common sense. If someone fails at something, then the next time it is attempted, I would expect a more senior clinician to become involved. In my opinion, the 3 attempted reductions with inadequate analgesia is a major departure from acceptable care.

2.3 There is no mention in the clinical notes of the assessment of the function of the Axillary nerve. This is a nerve that is commonly injured in anterior shoulder dislocations. This should be fed back to the department.

2.4 The review of the formal X-ray report is stated to have been done by the Emergency Department consultants. However, the abnormalities documented by the reporting radiologist were not, as far as I can tell, passed onto the patient or the patient's own doctor. This is a major departure from standard of care. If an abnormality is seen on X-ray and it is not appreciated at the time, then it is essential that it is followed up in a timely manner. In this case, as [the ED] did not have [Mr A's] own General Practitioner's details, then [Mr A] should have been contacted to inform him of the findings and either get a copy of the report to himself, to show to his General Practitioner, or sent directly to his GP so that appropriate follow up is arranged."

The following further advice was received from Dr Barrington-Onslow:

"This is my response to questions on the specifics of medical care of [Mr A] for the Heath and Disability Commissioner. (Case C15HDC01723).

1. Initial Triage
    a. I have stated my issues with this in point 2.1 of my original report dated April 2016. I will make no further comment as it will be the pervue of an expert nurse review.

2. Waiting Time
    a. In my opinion, a wait of two hours before being assessed for such a painful injury is too long. However, emergency departments in New Zealand tend to be under resourced with staff for the work they are expected to do, so it is, unfortunately, not unusual for this to occur.
    b. Analgesia. This was not satisfactory, which the institution has acknowledged. [The] Emergency Department utilises [Clinical Nurse Specialists], and I would suggest determining their processes for the prescription of analgesia. I would like to know if it is the responsibility of the [Clinical Nurse Specialist] or of the Emergency Doctors, because, whoever was responsible, did not, in my opinion, provide adequate pain relief.

3. Initial Relocation Attempts
    a. There were no formal notes to reflect the three attempts that appear to have been made by the [Clinical Nurse Specialist] to relocate [Mr A's] shoulder. Again, advice is sought from a Nursing expert. However, there were no notes regarding the technique used and this is a significant departure from standard care.

4. Successful Relocation
    a. This was performed to the appropriate standard of care with the use of procedural sedation and a documented relocation technique. A minor critique

was that there was no mention of assessment of the Axillary nerve either prior to, or post relocation. This nerve always has to be assessed in shoulder dislocations as it is often injured.

5. Follow Up Instructions

   a. [Mr A] was advised to follow up with his General Practitioner and a physiotherapist which is appropriate, but [the] Emergency Department did not have the General Practitioner's details.

6. Abnormal Results

   a. The formal radiologist report of [Mr A's] shoulder X-rays suggested that there was an abnormality on the films.

   b. This information was not passed on to either [Mr A] or his General Practitioner by [the] Emergency Department.

   c. This is, in my opinion a major deviation from the standard of care. The reason is that, if an abnormality is found, then it needs to be assessed in a timely manner. This allows for the potential of further review and investigations, as well as appropriate treatment if there is an ongoing issue."

The following further advice was received from Dr Barrington-Onslow:

"I have received emailed correspondence in response to my original report regarding this case.

My comments are as follows.

1 I wish to remove the term Nurse Practitioner from my original report as I am informed that the public hospital does not employ Nurse Practitioners.

2 Regarding the response by [Dr B], I agree that I have never encountered an Orthopaedic surgeon operating 'immediately' on such an injury, but confirmation would be required from an Orthopaedic specialist.

3 The further information from [CNS C] does not alter my opinion regarding [Mr A's] care.

4 The Letter by [the] (General Manager of Clinical Services and Transformation) has acknowledged my concerns, and the Department has adopted a formal method of informing patients of issues with their X-rays that are not appreciated at the time they are seen."