A District Health Board

A Report by the

Health and Disability Commissioner

(Case 09HDC01357)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

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Names have been removed (except the experts who advised on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

Executive summary

1. Mr A, then aged 86, was admitted to hospital on 7 November 2008, following a fall at home. His daughter and carer, Mrs B, stayed with him during most of his month-long hospital stay. Following emergency department and orthopaedic review on 7 November confirming a vertebral compression fracture, Mr A was admitted under the general medical team's care the next day.

2. On 9 November Mr A was monitored and reviewed by a house officer, medical registrar, and surgical registrar. He underwent relevant investigations. Mr A developed a paraphimosis[1] due to his catheter, which was attended to by the surgical registrar once identified. Mr A had been experiencing constipation due to opiate pain relief medication, abdominal distension and dehydration. A diagnosis of pseudo-obstruction was considered. The treatment plan included Mr A having a nasogastric tube (NGT) on free drainage, to rest his bowel.

3. On 10 November Mr A was seen by the consultant physician who agreed with the surgical review plan. He steadily progressed, was moved to the medical ward on 14 November, and was able to be transferred to rehabilitation services a week later.

4. While some communication deficiencies were identified during Mr A's stay on the ward (predominantly concerning his pain relief regime, nutrition plan and eventual transfer to the medical ward) which the DHB apologised for and reflected on, the overall standard of clinical care provided to Mr A was reasonable in the circumstances and did not amount to a breach of the Code.

5. Mrs B raised concerns late on 13 November 2008 that, during an extremely busy shift requiring additional staff being seconded to the ward, her father was incorrectly given another patient's medication.

6. Despite sufficient DHB policies in place governing incident reporting, a series of nursing shortcomings and miscommunications meant Mrs B's concerns were not sufficiently looked into by DHB staff. The eventual DHB investigation did not establish whether or not a medication error occurred.

7. The DHB did not take appropriate steps to promptly and effectively look into and resolve Mrs B's complaint at the time of the events.

8. The HDC investigation established that it was possible that Mr A received his medication late, as he was not seen to receive it at the time it was recorded as having been administered. Mr A could not have received his own medication twice.

9. There was insufficient evidence to conclude that Mr A received another patient's medication.

10. Adverse comment is made about the DHB's systems with regard to medication administration and recording, and the procedures with regard to seconded nurses.

[1] A retraction and constriction of the foreskin behind the glans of the penis. This can become painful and swollen.

11. There was no explicit guideline relating to seconded staff administering medication, nor any specific requirement that the staff member who administers the medication must be the person who records it in the patient's records.

Investigation process

12. On 15 June 2009, the Commissioner received a complaint from Mrs B in relation to the care provided to her father, Mr A, by a district health board (the DHB).

13. After a period of assessment, an investigation was commenced on 19 November 2009. Relevant information was received from:

Mrs B	Mr A's daughter, complainant
Ms C	Mr A's grand-daughter
The DHB	District health board/Provider
Ms D	Registered nurse
Ms E	Registered nurse

Also mentioned in this report:

Dr F	Consultant physician
Dr G	On-call house officer
Dr H	Medical registrar
Dr I	Surgical registrar
Ms J	Registered nurse
Ms K	Charge nurse manager
Ms L	Quality manager for Adult Health Services
Mr M	Surgical services manager
Ward X	Surgical ward
Ward Y	Medical ward

14. The scope of the investigation was:

> *Whether the DHB provided an appropriate standard of care to Mr A between 7 November 2008 and 9 December 2008, particularly in relation to medication given to Mr A on the night of 13 November 2008.*
>
> *Whether the DHB responded appropriately to Mr A or his legal representative regarding concerns that he was given incorrect medication.*

15. Independent expert medical advice was obtained from Professor of Medicine Carl Burgess, Consultant Physician (attached as Appendix A).

16. Independent expert nursing advice was obtained from Ms Margaret McArtney, Registered Nurse (attached as Appendix B).

Information gathered during investigation

Background

17. Mr A, then aged 86, was admitted to a public hospital on 7 November 2008, following a fall at home. Mr A had hurt his neck and lower back. He had previously been reasonably independent and living with his daughter, Mrs B, his prime carer.

18. Mr A was sight and hearing impaired. English was his second language. Mrs B stayed with him for much of the time he was in hospital. She advised HDC that Mr A authorised her to act on his behalf with regard to this complaint.

19. For ease of reference, this report will consider, in turn, three key issues raised by Mrs B's complaint to HDC. These are:

- the standard of clinical care provided to her father on the surgical ward (Ward X) during his hospital stay,
- a medication administration issue that arose on 13 November 2008; and
- the appropriateness of the DHB's response once concerns were raised with staff about the medication issue.

Ward X standard of care

Complaint summary

20. In relation to the care provided on the ward to her father by the DHB, Mrs B specifically complained that:

- medical staff were slow to review, diagnose, and treat her father when his condition altered;
- her father's catheter site caused him pain and discomfort for days, eventually resulting in a paraphimosis;
- her father did not receive paracetamol pain relief as charted despite his high temperatures;
- her father did not receive appropriate dietary requirements; and
- she was not told when her father was transferred from Ward X to the medical ward (Ward Y) on 14 November 2008.

ED assessment — 7 November

21. Mr A had a significant medical history which included Crohn's disease (requiring a bowel re-section), impaired vision and hearing, ischaemic heart disease, episodes of atrial fibrillation, anaemia, and arthritis.

22. Following his fall at home Mr A was seen in the Emergency Department (ED) of the public hospital on Friday 7 November 2008. His existing medications were noted by staff.

23. Mr A's blood pressure was 180/75. An initial impression gained on examination was that his fall had been due to an arrhythmia or hypertension. Analgesia was prescribed for pain, an ECG was performed, and X-rays of the cervical and lumbar spine were completed. These confirmed Mr A had a compression fracture[2] of the L1 (lumbar) vertebrae. An abdominal film incidentally noted there was a mass in the bladder meaning a cystoscopy[3] would be required in future. The plan was to refer Mr A to the on-call orthopaedic registrar. Discussion was also held with the general medical team regarding his admission to its department for follow-up.

Orthopaedic review

24. The orthopaedic registrar's review on 7 November 2008 noted Mr A had tenderness around the L1 and L2 mid-line, but nothing was neurologically abnormal. An abdominal CT scan confirmed the L1 compression fracture. The treatment was analgesia, physiotherapy, and mobilisation. Mr A was given oxycodone in slow release form (OxyContin) and as immediate pain relief (OxyNorm). Mr A's difficulties with vision and his limited English were noted.

Medical team review — 8 November

25. Mr A was admitted to the ward in the early hours of 8 November 2008 under the care of the general medical team and Dr F (consultant physician), but as an outlier on Ward X (surgical) as there were no beds available in Ward Y (general medical) at that point. Mrs B stayed with her father while he was in hospital.

26. Mr A was reviewed by the medical team on the morning of 8 November 2008. They noted his bowels had not opened. He complained of an occasional cough but his chest was clear when examined. His abdomen was non-tender but slightly distended. He was able to lift his legs but still had pain in his back. His pain relief was continued. As opiate pain relief has the side-effect of constipation, he was prescribed laxatives as required. He was also started on bone protection medication.

27. Mr A was reviewed by the physiotherapist on the afternoon of 8 November 2008. He had some difficulty moving around the bed and breathing deeply due to his pain. His speech was noted as slurred and incomprehensible at times. Mr A was a smoker and normally produced an amount of sputum each day. Physiotherapy assisted with expelling this secretion, respiratory function, and maintaining mobility.

28. Mrs B also noted at this time that he was more drowsy and confused than usual. It was felt this was due to his analgesia. (Mrs B commented that her father's drowsiness was often linked to dehydration due to his previous bowel re-section.)

29. Nursing staff noted on 8 November that Mr A was dry and not drinking much, he was febrile (feverish), and he had decreased oxygen saturations. He was given saline nebulisers and increased humidified oxygen. He was also complaining of some non-radiating chest pain. The paged house officer felt (based on the admission chest X-ray) that the pain was secondary to a contusion from the fall. A review of his spinal CT scan confirmed the L1 compression fracture and also showed an enlarged prostate

[2] Usually due to trauma.
[3] Endoscopy of the bladder via the urethra.

and some bladder wall thickening – both suspicious of a bladder transitional cell carcinoma. Mr A's white cell count (WCC)[4] on admission was normal, but a C-reactive protein (CRP) blood test was elevated at 13 indicating inflammation.[5]

30. Despite intravenous (IV) fluids, Mr A's urine output was noted to be minimal on the afternoon of 8 November. Mr A had an indwelling urinary catheter (IDC) put in around this time (the exact time was not recorded in the notes). His temperature rose in the evening. Night nursing staff requested that the on-call house officer (Dr G) review Mr A due to continuing low urine output.

House officer review — 9 November

31. Dr G reviewed Mr A at 1am on 9 November 2008. IV fluids were increased from 100mls per hour to 250mls per hour and a second bag was charted at the same rate. Mr A remained febrile despite receiving paracetamol. Observations were a respiratory rate of 16 breaths per minute, a heart rate of 80–95, blood pressure of 170/110, and oxygen saturations were 97% on two litres of oxygen. A physical examination noted no obvious chest crepitation (crackling) or wheeze. Heart sounds were dual with good pulses, the abdomen was distended and soft non-tender, and bowel sounds were scant but present.

32. No clear diagnosis was made at this time. Dr G considered Mr A was febrile with an unknown cause, and that the decreased urine output was related to dehydration. He took further bloods, blood cultures, and ordered a urine specimen and a chest X-ray. Dr G placed a nine-step plan entry in the records which included prescribing IV Augmentin (antibiotic), and continuing paracetamol and IV fluids with an aim of 30mls per hour of urinary output.

33. Bloods taken at 1.20am indicated that Mr A's CRP was up to 161 and his WCC had risen to 13.3. The repeat chest X-ray result was similar to that at admission (some patchy shadowing in the right lung base but no lobe collapse). The urine culture showed no growth after two days incubation.

34. Later on in the morning of 9 November it was noted that Mr A's pulse had increased to 118 per minute, and his temperature had risen. He was continued on oxynorm and oxycontin for his pain. IV morphine was also used in a small dose prior to moving Mr A in his bed. A nurse noted that Mr A's bowels had not opened, complicated by his opiate medications, and that he had decreased mobility and dehydration. The prescription for laxatives was changed to specific regular times rather than intermittently to try and get his bowels moving.

35. By the afternoon of 9 November Mr A's heart rate decreased to 82. His blood pressure, which had been elevated, was 142/68. His oxygen saturation ranged between 95 and 97% on two litres of oxygen. His temperature varied between 37.5°C and 38.6°C. Nursing staff noted his abdomen was distended. Mr A developed haematuria[6].

[4] White cell count (WCC) can indicate infection when elevated. Normal range is 4–11 10E9/L.

[5] C-reactive protein (CRP) is a blood test which can indicate inflammation. Normal range is 0–5mg/L.

[6] Presence of blood in the urine.

36. Mr A required IV tramadol for pain relief. He was very drowsy and unable to be mobilised.

Recatheterisation difficulty

37. Mr A's urine output remained low. His indwelling catheter had been irrigated earlier in the day which showed no clots. Drainage improved for a short period following this. A bladder scan showed minimal residual urine. The nursing records indicate that at 3pm the on-call house surgeon experienced some difficulty re-catheterising Mr A, possibly due to stricture[7] or a prostate related issue.

38. In the early evening[8] medical registrar, Dr H, re-inserted the catheter and noted no problems. Mrs B commented that Mr A had no problems with catheters in the past, but once this one was inserted he continued to complain of pain. Mrs B was appreciative of one nurse listening to her concerns about this issue.

Medical registrar review — 9 November

39. Medical registrar Dr H noted in the records after 3pm on 9 November, increased temperature and heart rate, decreased blood pressure, some abdominal distension and general pain, diffusely tender bowel sounds, some nausea and dry retching, and that his bowels had not opened for three days. Mr A's creatinine level[9] was 121 umol/L and his WCC was 17. His urine did not show evidence of infection.

40. Dr H considered a bowel obstruction and queried the cause of his increased temperature as he did not seem to have a urinary tract infection. She noted an eight-point plan, including an urgent abdominal X-ray and further tests, and suggested a review by the surgical registrar. If the X-rays were satisfactory, he was to be given laxatives.

Further medical review — 9 November

41. Dr H reviewed Mr A again at 8pm, after his test results were available. She noted he was comfortable at rest. He remained febrile at 38°C. A few chest crepitations were noted. His abdomen was distended and generally tender.

42. The abdominal X-ray result noted dilatation of small bowel loops throughout the abdomen. (There was some prominence of the large bowel, but it was not dilated.) In a trauma setting it was thought this may represent a degree of ileus[10] rather than an obstruction. Follow-up was required.

43. Dr H considered that: Mr A's decreased urine output was secondary to dehydration, which was secondary to queried *pseudo-obstruction*[11]; his constipation was secondary to opioid analgesia; and pneumonia had developed in the right middle lobe. Dr H's

[7] A urethral stricture is a fibrous narrowing, usually resulting from injury or inflammation.
[8] The exact time is not recorded in the margin of the clinical records, but the entry sits between the nursing entry of 3pm and Dr H's review entry of 8pm on 9 November.
[9] An indication of renal function and hydration. Normal creatinine range is 60–105 umol/L.
[10] Paralysis of the intestinal muscles.
[11] The DHB response to HDC outlined that the term intestinal *pseudo-obstruction* denotes a syndrome characterised by a clinical picture suggestive of mechanical obstruction in the absence of any demonstrable evidence of such an obstruction in the intestine.

plan included: adding a further antibiotic (IV metronidazole); awaiting surgical review; stopping opioids; giving further stat doses of fluid if urine output was less than 30mls per hour; and contacting the on-call house surgeon if certain specified conditions arose.

Surgical review — 9 November

44. Mr A was comprehensively reviewed and examined by the surgical registrar, Dr I (on behalf of the general surgeon) at 11.40pm on 9 November. Taking into account Mr A's history of abdominal distension, X-ray results and nausea/dry retching, she considered the most likely diagnosis was pseudo-obstruction. Dr I's plan included recommending Mr A be nil by mouth with a nasogastric tube (NGT)[12] on free drainage, to rest his bowel, and that Mr A should be seen by the consultant. A digital rectal exam showed no faecal matter or blood or masses, but did reveal an enlarged firm prostate gland.

Paraphimosis issue

45. Dr I identified that Mr A had developed a paraphimosis. She immediately reduced the inflammation and instructed staff to monitor this and to keep the foreskin down, and to tape the catheter. No recurrence of the paraphimosis was recorded in the notes.

46. Dr H's notes did not indicate any presence of paraphimosis when she put the catheter in at around 3pm, nor when she reviewed Mr A later at 8pm. It is the usual practice of Dr H and the nurses to observe for this post-catheterisation. None of the Ward X staff can recall anything specific about the paraphimosis.

47. The DHB advised that the paraphimosis could have occurred as a result of the catheterisation and the foreskin being inadvertently retracted during or after this process. It acknowledged this was very uncomfortable for Mr A. The DHB expressed regret that it occurred and appeared to have remained unrecognised for a period of time.

48. The DHB apologised if staff did not follow up any concerns raised. The DHB subsequently requested a urology clinical nurse specialist provide an educational update session on paraphimosis.

Medical consultant review — 10 November

49. On 10 November 2008 at 10.30am Mr A was reviewed by the consultant physician, Dr F, and his team. Mrs B was present. Pseudo-obstruction and the treatment plan were explained. Active bowel sounds were noted, as was the slightly distended and tender abdomen. The incidental finding of a thickened bladder wall was again noted. The WCC and CRP remained elevated. The plan was to continue as per the surgical review team's plan.

[12] The NG Tube has two main purposes. First, it allows the intensive care staff to empty the stomach and prevent the build-up of fluids which may get into the lungs if the patient was to vomit. Secondly, the NG provides a way to give medication or food to a patient who cannot swallow. The end of the NG Tube may be connected to a feeding pump, a drainage bag, a suction device or closed with a spigot. The NG Tube is secured in place by tape. An NG Tube is necessary until the gastrointestinal tract is functioning normally or the patient is capable of swallowing.

50. Mr A's condition began to stabilise, although he still required analgesia. He was able to sit up during physiotherapy. Late on 10 November his abdominal pain was settling and there was little free drainage from his NGT. Mr A progressed steadily. On 11 November he was allowed some sips of water and fluids. The NGT was spigotted, and its removal was trialed. Mr A's creatinine level was back in normal range by 11 November.

NGT removal

51. On 12 November the NGT was removed altogether and it was decided that no further surgical review was required. Mr A had a bowel movement. Clear oral fluids were introduced (clear soups, jellies). He was also reviewed by the dietitian. Mrs B relayed her concern that Mr A was dehydrated to the dietitian. Staff were asked to check he was drinking sufficiently. Clear oral fluids were being tolerated and were continued. The dietitian planned to review Mr A in two days' time. Mr A was progressed to having free oral fluids.

Paracetamol regime

52. Review of the patient medication charts shows that on 7 November 2008, Mr A was prescribed "1g Q4h prn, max 4g in 24 hrs". This means Mr A was prescribed 1gm up to every four hours as required, with no more than 4gms (four doses of 1g) over 24 hours. In the ten days after admission, the maximum dose was given on 9, 10, 13 and 17 November 2008, with three doses given on 8, 12, 14, 15 and 16 November, and two doses on 11 November.

53. Mrs B was concerned that her father did not receive paracetamol pain relief as charted despite his high temperatures and the time between doses. The DHB explained in its submissions to HDC the rationale and regime for the paracetamol administration. It was prescribed as regular pain relief and charted under the regular medications area of the administration chart. Mrs B was not aware of this. The DHB indicated that this prescription may have been better suited for the non-regular (prn) portion of the medication administration chart.

54. Mr A's temperature had started to spike on the afternoon of 8 November and remained elevated until the morning of 10 November. Further spikes in temperature occurred in the afternoon and in the evening of 13 November, and on the morning of 16 November. The alternative use for paracetamol is to help bring down high temperatures. The DHB noted this is not always effective in some patients, and that antibiotics appeared to have more effect on Mr A's temperature than paracetamol. Mrs B disagrees that this was the case.

55. The paracetamol doses were given within a 30–60 minute time frame of Mr A's temperature having been taken. To obtain an even analgesic effect throughout the day it was administered every 4–6 hours providing adequate pain relief while ensuring that no more than 4gms were given in a 24-hour period.

56. The DHB concluded that it was regrettable that Mrs B was unaware of the rationale and regime for the administration of paracetamol to her father.

Pain relief alteration

57. In relation to Mrs B's concern about pain relief, the DHB responded that Mr A's opiate medication was withheld by the on-call house officer after a review at 10pm on 12 November, as Mr A was drowsy and disorientated. The house officer's plan included substituting tramadol for pain relief, reviewing blood results, and asking to be notified of any deterioration.

Further review

58. On 13 November, the physician reviewed Mr A again and noted his improvement. Mr A was confused but able to follow instructions. He was encouraged to continue to take oral fluid. Mr A was prescribed a three-day course of *slow K*[13] tablets (twice daily) due to a low serum potassium level. This was stopped once the level returned to normal.

Ward transfer and dietary plan

59. Nursing notes for 14 November (2.30pm) outlined that Mr A could have a "soft diet as tolerated", that he was eating well, sleeping well, and his bowels were open.

60. The notes indicate therefore that there was some confusion around the progression of Mr A's diet from 14 November onwards. This confusion appears to have been related to Mr A's quick transfer and handover from surgical Ward X to medical Ward Y on 14 November. For example, the nursing admission note to Ward Y at 7.30pm on 14 November stated, contrary to the earlier nursing note, that Mr A was on free oral fluids only, and that he should remain on them the next day.

61. Mrs B was not, at the time, advised by the charge nurse of the reasons for her father's ward transfer. The DHB apologised for this and any distress this oversight caused.

62. Mr A was not formally progressed to a soft diet on a doctor's instruction until the ward round of 17 November. Mrs B may have been incorrectly verbally advised by some staff that he could eat prior to 17 November as it was noted that she had brought in baby food for her father. Mrs B explained that she brought in food as none had arrived for him at meal times. By 21 November the dietitian noted that Mr A was eating porridge and yoghurt for breakfast and recommended continuation of a textured menu. The DHB acknowledged that the nutritional plan was not well communicated to Mrs B or Mr A.

Improvement and transfer

63. Mr A's oxygen was discontinued on 15 November. He still required analgesia (tramadol or paracetamol) and his bowels were now working. His urinary catheter was removed on 17 November and his temperature was normal by then. He developed gout on 18 November and was given prednisone and IV fluids. By 20 November his gout and back pain had settled and he was able to independently mobilise to the toilet. He was then able to be transferred for rehabilitation services.

64. Mr A passed away at home a few months later.

[13] Potassium supplement.

DHB conclusion — care on ward

65. Mrs B considered that her father's condition deteriorated and that her concerns about this were not acted on. In relation to the time taken to review Mr A, diagnose the pseudo-obstruction and provide treatment, the DHB responded that his symptoms and investigations did not reveal an immediate diagnosis. The DHB concluded that review of Mr A took place within an appropriate time frame, noting that weekends can incur delays, and that Mr A was unwell but not unstable or critically ill, receiving all his medications and treatments to address problems once he was reviewed.

Apology

66. The DHB apologised if the time taken to ascertain the cause of symptoms left Mr A in any prolonged discomfort. It considered that he received regular analgesia, IV fluids, and antibiotics in a timely manner. The DHB's view was that once confirmation of each diagnosis was reached, Mr A received appropriate treatment to counteract symptoms and, while this took two to three days, Mr A was made as comfortable as possible.

Medication administration issue

Complaint

67. In addition to her concerns about the standard of clinical care provided, Mrs B complained that around 10pm on 13 November 2008 her father, while on Ward X, was incorrectly given another patient's medication and that the details of this were placed in another patient's records.

68. Mrs B was not present on the ward at the time of the incident.

Ms C information

69. Mrs B's daughter, Ms C, stated that on Thursday 13 November 2008 she and her partner visited Mr A between 9pm and 10.40pm. Mrs B then went home at 9.30pm and returned at 10.40pm.

70. During the visit, Ms C recalled that Mr A's usual ward nurse, registered nurse (RN) Ms D, had entered the room to alter the bed position, and experienced difficulty with a lever. Ms C stated that between 9.40pm and 10.20pm a short, slim nurse of Indian descent in her mid-40s, dressed in a blue uniform, entered Mr A's room and took his blood pressure and temperature and recorded this in a file.

71. Ms C stated that when the "nurse in blue" administered medication to Mr A, she asked her what was being given. Ms C recalled it having a long name and being given intravenously. The nurse said it was "intravenous gastric something" — to sooth his stomach acids — and wrote some details in a file. The nurse also "injected something into his tummy". Ms C advised HDC, as outlined in her texts to her mother, that she could not recall if her grandfather's wristband identification was checked.

72. Mrs B and Ms C had at times given Mr A medication at home, including Pentasa[14] tablets. Ms C did not believe the medication given by the nurse in blue included Pentasa.

73. Ms C stated there was another woman there (a bureau health care assistant) who emptied Mr A's urine container and who told the nurse in blue that there was 700mls. This was written in a file. The health care assistant advised HDC that she could not recall any patients or events related to her placement on the ward.

74. The nurse left two tablets of paracetamol for Ms C to administer. Ms C text messaged her mother at around 10.15pm to ask if she thought it was ok to give Mr A the two paracetamol tablets. Mrs B text messaged back to say if the nurse had given them to her then it was "ok".

75. Mrs B returned to the ward at 10.40pm as Ms C and her partner were about to leave. As they left, Ms C told her mother that someone dressed in blue had given Mr A "something for gastric". Mrs B told her daughter she would query the matter with his usual nurse.

76. The next morning (14 November) between 8.28am and 11.46am, Mrs B and Ms C exchanged texts about the previous night. The texts indicate that Mrs B had begun to make her own enquiries into the matter with staff. She texted to Ms C that Mr A had "received another patient's medicine" and that "they're gonna look into it".

Subsequent issues identified

77. Mrs B advised HDC that at about 8pm she left the room for 20 minutes when RN Ms J came in to do the observations. When she returned the nurse was writing notes and then left the room. She did not see the nurse give Mr A any medication.

78. Mrs B commented that Mr A received his normal medications, which included paracetamol and an anticoagulant injection, at about 8pm. She was concerned he had either "doubled-up" on some medications or received another patient's medication. She noted that Mr A slept right through the night, which he did not normally do.

79. Mrs B alleged that Ms J, as well as other staff members, verbally verified to her the next day that "someone from downstairs" had incorrectly given Mr A another patient's medications.

80. In her initial correspondence to the DHB, Mrs B wished to know how this had happened, what the appropriate procedures for medication administration were, and why the charge nurse manager (CNM), Ms K, had not spoken with her about the incident. Mrs B felt there was an onus on the charge nurse to address her concerns. Mrs B expressed alarm that there was no reference to the incident in Mr A's clinical records. She also stated that she recalled seeing Ms J leaving the CNM's office in tears on 14 November, and interpreted this as indicating the nurse had been reprimanded in some way.

[14] Pentasa (Mesalazine) is an intestinal anti-inflammatory agent.

81. Mrs B, after subsequently looking through her father's records, saw that they incorrectly contained an entry on 4pm on 13 November 2008 for another patient. The entry (by a house officer) was very clearly crossed out and concluded with the comment "sorry wrong pt entry". Mrs B outlined in her complaint that she felt this, occurring only 5–6 hours prior, was indicative of common patient file mix-ups, and believed it was perhaps due to the storage of files on the ward.

82. Mrs B also recalled a night shift nurse coming into her father's room at 2am on 14 November to check on him, but noticed this was not recorded in his clinical notes. The DHB responded that not all patient interactions are recorded.

83. The DHB noted that some of the clinical entries, particularly relating to the night shift nursing, were written out of chronological order. It acknowledged this was not an acceptable practice and creates a confusing picture. The DHB also incidentally noted that the night nurse's clinical entry at 6am on 14 November 2008 was not signed and acknowledged this was also not acceptable practice.

DHB investigation

84. The DHB's Quality Manager for Adult Health Services, Ms L, conducted a thorough investigation and the Surgical Services Manager, Mr M, reported the findings to Mrs B in June 2009.

85. The DHB reported that the "nurse in blue" (RN Ms E) was a senior and experienced registered nurse (Level 3) from the Intensive Care Unit (ICU), who had been seconded to assist on Ward X from 7pm to 11pm during an extremely busy period on the evening of 13 November 2008.

86. On that shift, Ward X had 32 beds occupied and many patients with high acuities/complexities. There were nine admissions and six discharges. A nurse had called in sick leaving only five ward nurses (a Level 3 shift co-ordinator, three Level 2 RNs, and one Level 1 RN) and two health care assistants (HCAs). A further two bureau HCAs (one DHB and one agency) were also sent to assist with the heavy workload.

87. When interviewed by DHB staff, Ms E was unable to recall specific details of her four-hour stint on Ward X, given 5–6 months had elapsed between the incident and her being interviewed by the DHB. She could not recall Mr A, or administering any medications to any patients on Ward X on the evening of 13 November 2008.

88. Ms E was able to appropriately describe to DHB staff safe medication administration practices, proper patient identification procedures, and compliance with all DHB policies and procedures.[15]

89. The DHB stated that Ms E was highly regarded, had certification in safe administration of medication and, as an experienced ICU nurse, had good knowledge

[15] Including the WDHB documents *Medicine Management & Administration* policy and *Competency in Medicine Management & Administration* procedures — both located in the DHB *Medicines & Administration Practices Manual.*

of pharmokinetics. She subsequently left the employment of the DHB and went overseas. When contacted by HDC, Ms E reiterated that she could not recall any specific patients from that time period, or administering medication to any patient. She did remember being questioned by DHB staff some months afterwards.

Seconded staff

90. The DHB advised HDC that ICU staff sent to assist in other clinical areas of the hospital are not assigned a patient load in case they are required to return to ICU at short notice. They normally assist ward staff with general patient care tasks such as patient recordings, hygiene care etc.

91. The DHB guideline document *Assisting on Wards*[16] states:

> "Unit nurses are not to be allocated responsibility for a group of patients as they may not be there for a whole shift but there to assist as required by the ward staff."

92. The DHB explained that ICU nurses "prefer" not to administer medication when assisting elsewhere in the hospital as they are not familiar with the patients and this is an added safety precaution. If asked by ward staff to do so, the seconded nurses will "usually negotiate not to administer medications".

93. There is no formal DHB policy document or guideline explicitly governing seconded staff administering medication to patients when assisting on wards.

Clinical records

94. Mr A's clinical records do not indicate that any medication was given to him around 10pm on 13 November 2008. There are (in addition to the doctors' reviews) three nursing entries in the running clinical notes for 13 November 2008 — at 4am, 2.45pm and at 11pm (the latter by Ms J at the end of her shift).

95. The 11pm entry by Ms J includes reference to "meds — given as charted". It also makes reference to Mr A's "daughter in most of shift" and that his grand-daughter and her partner had visited. The records make no reference to any discussion with Mrs B about a medication issue.

96. The ward medication charts indicate that Mr A received his medications on the evening of 13 November 2008 between 8pm and 8.30pm.

Pyxis Medstation® records

97. HDC reviewed all *Pyxis* Medstation[17] transaction records for 13 November 2008 for Mr A, and for all medications withdrawn from the Medstation for all patients on Ward X that day.[18]

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[16] The *Assisting on Wards* guideline is included in the DHB's *Clinical Practices Manual*, issued: June 2008, page 3 of 4.

[17] Pyxis Medstations® are an automated unit system used for the distribution and storage of medicine in clinical areas. They interface with the patient management system and pharmacy dispensing system. Access is maintained by the Pharmacy Department. In order to gain access to a Medstation, a staff

98. The transaction records indicate that no medication was removed from the Pyxis Medstation for Mr A after 8.07pm that evening. The transaction records also indicate that Ms E did not withdraw any medication from the Medstation for any patient at all on Ward X on 13 November 2008.

Medications administered on the evening of 13 November

99. The clinical notes indicate Mr A was subcutaneously administered his daily Clexane, an anticoagulant injection, at approximately 8.20pm. (Pyxis records show this was first removed from the Medstation at 8.06pm by Ms J.)

100. The medication record indicates that Mr A was intravenously administered eight-hourly Augmentin, a 1.2g antibiotic injection, at approximately 8pm. (Pyxis records show this was removed from the Medstation by Ms J at 8.07pm.)

101. The medication record shows that Mr A was administered orally:

- Diltiazem, 1 x 90mg capsule, recorded at approximately 8pm (removed from the Medstation at 8.06pm by Ms J);
- Pentasa, 3 x 500mg tablets, recorded at approximately 8.20pm (removed from the Medstation by Ms J at 8.07pm);
- Slow K, 2 x 600mg tablets, recorded at approximately 8.20pm (removed from the Medstation at 8.06pm by Ms J); and
- Paracetamol, 2 x 500gm tablets, recorded at 8.30pm (removed from the Medstation at 8.06pm by Ms J).

102. The Pyxis records for the evening of 13 November for all patients on Ward X show that there were seven types of medications taken from the machine after 7pm that were administered either intravenously or subcutaneously. As outlined above, Mr A's patient identifier from the Pyxis records shows two medications in these formats were withdrawn for him from Pyxis — Enoxaparin 40mg (Clexane) on one occasion (8.06pm), and Amoxycillin 1.2g (Augmentin) at 8.07pm. Neither of these were withdrawn by the seconded ICU nurse, Ms E.

103. Other patients on Ward X were also prescribed and had the above two medications taken from Pyxis in these amounts. On 11 occasions between 7pm and the end of the shift, Clexane 40mg was taken from Pyxis for patients other than Mr A. On one

member's authorised fingerprint is first scanned. Patient prescriptions are reviewed by a clinical pharmacist before being entered into the Medstation. Nurses are presented with a list of the patient's medications that have been validated by a clinical pharmacist. Nurses select the patient name from a list populated by the Patient Management System. A list of medication is displayed for that patient that has been checked by the pharmacist. A nurse keys in the medication required. A drawer opens and the nurse is requested to remove the required amount. Nurses are guided to the correct location drawer. Detailed records of all transactions are stored on the system. 98% of the medications required on the ward/unit will be available in the Medstation.

[18] HDC staff visited North Shore Hospital to view and discuss Medstation operation with the Pharmacy Manager.

occasion between 7pm and the end of the shift (9.39pm), Augmentin 1.2g was taken from Pyxis for a patient other than Mr A.

104. The only patient to have the combination of injectable Augmentin, injectable Clexane, and paracetamol tablets removed from Pyxis for them and administered on the evening of 13 November 2008 was Mr A at just after 8pm by Ms J.

105. Five other prescribed medications, for either intravenous or subcutaneous administration, were taken from Pyxis between 7pm and the end of the shift. These were for patients other than Mr A. These were omeprazole (Losec) bolus 40mg injection (at 8.37pm, 9.28pm, and 10.46pm), Ondanestron (for nausea) 4mg injection (at 8.17pm), Bupivacaine (a local anaesthetic) plain 20ml injection (at 9.55pm), Cefuroxime 750mg vial for injection (at 8.33pm and 9.20pm), and Heparin 0.2ml ampoule (at 7.37pm, 7.52pm, 8.53pm, 9.54pm).

106. Given that Ms E had said Mr A was given "intravenous gastric something" to sooth his stomach acids, HDC checked whether any other patient who received Losec also received the same combination of medication administration types. Of the patients that had injectable omeprazole (Losec) doses removed from Pyxis for them on the evening of 13 November, none had both injectable medication and paracetamol taken from Pyxis for them that evening in addition to the Losec.

Interactions with all Ward X patients

107. Given that Mr A's family considered that Ms E had incorrectly entered details into *another* patient's records, HDC requested that the records of all 32 patients on Ward X that day be reviewed for any entries made in the clinical records by the seconded ICU nurse.

108. This revealed that Ms E made entries in three patients' clinical progress records during her 7pm–11pm secondment on Ward X. These three entries appear to have been made, not unusually, at the end of her time on Ward X as the entries are short summaries of tasks she carried out headed "13/11/08 Nursing (1900–2300) hrs". One of the three patients record entries (for a female patient) states:

> "13/11/08 Nursing (1900–2300) hrs
>
> *Due meds* [emphasis added] and cares rendered. Patient comfortable in bed. Obs are fine."

109. Ms E did not make any entries in Mr A's running notes.

110. Review of the medication administration chart records for all 32 patients did not reveal any entries that could be identified by the DHB as having been written by Ms E.

111. In response to my provisional opinion, Ms E, in the absence of any recollection of events, could only speculate about what might have occurred. She stated that due to the busy shift it might have been possible that the administration of Mr A's medications was delayed. She commented that she might have been asked by Ward X

nurses to administer medication taken from Pyxis and signed for by those nurses, and might have done so if convinced administration protocols had been followed.

Ward nurse

112. The staff nurse on Ward X, Ms J, was a new graduate registered nurse in her first year of practice. She resigned from the DHB in August 2009.

113. Ms J had six patients allocated to her on 13 November 2008, three of whom had patient acuities of level four (meaning complex and/or seriously unwell).[19] This was acknowledged by the DHB as a very heavy workload for a first-year registered nurse. On 13 November, Ms J was on her second duty in a four-day stretch of rostered shifts.

114. Pyxis records indicate Ms J made a total of 25 withdrawals from the Medstation over the eight-hour period of her 13 November 2008 shift.

Acute patients

115. When interviewed by HDC staff, Ms J recalled it being a very busy middle shift (3pm to 11pm). Patient acuity was very high. One of her six patients required transfusion and monitoring, one had a stoma falling off, while another had an arterial bleed. It took a while for doctors to attend to some cases, and so she was required to help stem the arterial bleeding.

116. Ms J recalled that a student assisted her with the stoma case, performing observations while she attended to acute situations. She did not have a seconded nurse working with her. She recalled that the shift co-ordinator on the ward also had a patient load, and there were "not too many senior staff".

117. In Ms J's view, seconded staff would sometimes have a patient load, and occasionally would administer medication. She could not recall interacting with any seconded staff on this shift and she did not know any of the seconded staff.

118. Ms J considered, on reflection, that the ward "must have" been short-staffed for her to have had six patients. She recalled that Mr A was one of her patients and that he was waiting for rehabilitation. She did not have a lot of time to speak to Mrs B because she was dealing with the acute patients. Therefore, the medication issue that arose "wasn't really on [her] radar".

119. Ms J said she "couldn't recall the last time she gave Mr A medications" and did not see other staff administer medication to him. When asked if it was possible that one nurse had obtain the medication recorded by Pxyis but another nurse administered them she said it was "not likely but did happen on occasions". She could not remember asking any nurse to give medication to Mr A.

120. Ms J indicated that she felt well supported on the shift by her colleagues and available clinical coaches — but commented that she felt there were just "not enough people".

[19] The patient acuity scale used is: 1 (patient able to self-care), 2 (requires assistance with care), 3 (moderately complex care), 4 (high input complex care), 5 (special care), Watch (one-on-one aides with supervision).

Support systems

121. The DHB responded that every effort is made to support staff when patient acuity levels are high. An even distribution of workload is given in accordance with skill levels. When vacancies are not filled, the bureau can provide healthcare assistants to ease RN workload by providing basic patient cares. The DHB outlined that it is the CNM's responsibility to ensure rostering includes an even skill mix on each shift.

122. There must always be an appropriately skilled senior registered nurse in the co-ordinator's role when the CNM is not on shift (as was the case here). The DHB *Coordinator (RN) of ward/unit policy* defines this role and expectations relating to staff support and resource management.[20]

123. In summary, the policy outlines that, in the absence of a CNM, the shift coordinator: provides leadership, supervision and assistance to all staff on the ward in relation to patient needs and changing workloads; allocates workload on a shift; monitors how the team is coping with patient care demands; and liaises with the duty nurse manager regarding additional resource requirements. The shift coordinator is also a named nurse for a smaller group of patients to allow adequate time to monitor and support others.

Workload assessment

124. Actions to be taken to ensure safe patient care and staffing are outlined in DHB policy documents Assessment *of Workload — action if resources limited*[21] and *Safe staffing nursing — Adult Health Services*.[22]

125. These outline the assessment of workload using the patient acuity measurement tool, and appropriate allocation of the available staff to the existing demand, matching skill mix, clinical needs and team work structure. When resources are limited (such as staffing) potential problems are anticipated and contingency plans initiated.

126. At the time of the events complained of, the safe staffing policy in place, issued in April 2008, indicated that an associated document on a collaborative model of care (to support nurses to work together to support each other and to care for their patients) was still "under development".[23]

File storage

127. The DHB informed HDC that the patient record has two files. The main file consists of the majority of patient records (ambulance, ECC, admission to discharge, referrals, combined medical nursing and multidisciplinary records). The working file is for frequently accessed documents (medicine administration charts, fluid balance, drains, observations, risk assessment).

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[20] The *Coordinator (RN) of ward/unit policy* (pages 1–3) is included in the DHB's *Clinical Practices Manual*.

[21] The *Assessment of Workload — action if resources limited* policy (pages 1–6) is included in the *DHB Clinical Practices Manual*.

[22] *Safe staffing nursing — Adult Health Services* (pages 1–16) is included in the DHB's Adult Health Service Location A–Z.

[23] Ibid., p 4.

128. Mr A's Ward X single room had a slot for the working file. When required, nursing staff use the working file in the work area. The main clinical file is kept in the chart trolley located in the staff-only area behind the ward reception area. The locations are generally consistent throughout the inpatient general wards at the hospital.

13 November discussion

129. Ms J had little recall of any discussion with Mrs B on the evening of 13 November 2008. Ms J thought she may have said something to Mrs B, in relation to the alleged injection, along the lines of "it could have been Losec".[24] Ms J, on reflection, was unsure why she made an off-the-cuff comment, which she said was made based only on what Mrs B had told her. She later acknowledged that the comment was made without thinking and in the absence of anything to substantiate it.

130. The DHB responded that CNM Ms K and the General Surgery Unit Manager spoke at length to Ms J at the time of the DHB investigation regarding incident processes and actions she should follow in future to reassure patients in such circumstances.

Action taken — 13 November

131. Ms J indicated that she checked Mr A's medication charts and found nothing amiss and so concluded that Mr A had received his correct medications and that no error had occurred. As such, she did not fill out an incident form. She reflected to HDC that, in hindsight, she should have filled out an incident form and if she had been less busy she may have looked into the matter further.

132. The DHB responded that Ms J was aware of and had previously demonstrated good understanding and active use of the Incident Management System[25] — in keeping with graduate nurses' practice being, in its view, rather "pragmatic and rules-driven" as they transition from theory to practice.

Incident management policy

133. The DHB has a detailed incident management policy.[26] An incident is defined in the policy as an "event/circumstance that could have resulted in/did result in unintended or unnecessary harm to a person (consumers, visitors and employees), a complaint, loss or damage that is discovered on entry to the service or occurs during service provision, regardless of the outcome severity."

134. The *Medicine Management & Administration* policy[27] outlines that "[p]atient safety is paramount. Where errors, omissions or near misses occur, these events must be discussed immediately with the health professional coordinating the unit/shift and the medical staff on duty to review the patient".

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[24] Omeprazole (Losec) bolus (40mg) is administered intravenously. Losec aids the reduction of gastric acid secretion. Mr A was not prescribed omeprazole.

[25] This includes familiarisation with the DHB's computerised incident reporting system *RiskPRO* — a system for categorising incident reports. A category exists for all medication and fluid-related incidents.

[26] The DHB *Incident Management Policy* (pages 1–14) is included in the DHB's Management Policy Manual.

[27] Page 4.

Steps that should have occurred

135. The DHB responded that following Mrs B's query about the possibility of incorrect medication being administered, the following steps should have been initiated by staff in line with policy:

1. eliciting information from the family about the incident;
2. advising the shift co-ordinator;
3. reviewing the medication charts;
4. discussing the issue with other team members on duty;
5. relaying information back to Mrs B; and
6. documenting the events in the clinical record and completing an incident form.

136. The DHB stated if an error is discovered, subsequent interventions and actions would be handed over to nurses and/or medical staff on the next shift. If an error occurs "after-hours", a CNM is left a note advising of the error. The completed incident form would act as a prompt for the CNM, Quality Advisor, and ward pharmacist to investigate further.

Note for CNM

137. Ms J advised HDC that at the end of her shift she wrote a brief note for her CNM, advising her of Mrs B's concerns and the absence of any irregularities in the medication chart, and that she probably left the note on the CNM's desk in the nurse's office. She could not recall the exact content of the note. (The note was not filed and no longer exists to view.) No mention of the note was made in the clinical records.

CNM — 14 November

138. After seeing Ms D's note the following morning, CNM Ms K reviewed Mr A's clinical records, but not any other patients'. She also found nothing amiss in Mr A's medication charts and concluded no error had occurred. No other staff member or shift co-ordinator raised any issue with her. The CNM believed the matter had been resolved the previous evening. Therefore, she did not seek out Mrs B to discuss the matter, as she did not believe anything out of the ordinary had occurred.

139. The DHB commented that the content of the information given and received in the note may have been misinterpreted. The CNM was not aware from the content of Ms D's note that Mrs B was concerned that her father received *another* patient's medication.

140. CNM Ms K told the DHB that had she been aware of this, she would have immediately contacted and spoken to each of the team members on duty on 13 November and followed the investigative steps outlined above that should have occurred, including discussion with Mrs B. In hindsight, the CNM said she regrets not pursuing this line of enquiry and is sorry for the omission.

14 November discussion

141. When queried by the DHB and HDC, Ms J denied discussing and verifying with Mrs B the next day that any medication error had occurred. In her view, no staff members would have indicated to Mrs B that an error occurred. The CNM has no recollection of any staff discussing a possible drug error on the ward. In addition, the consultant physician, Dr F, could not recall any discussion about an error, and his clinical entries in the notes make no reference to any discussion of an error.

142. Both Ms J and the CNM independently advised the DHB that no discussion between them took place on 14 November 2008 that resulted in Ms J being "in tears", taking into account that as neither of them believed an error had occurred, there was no reason for the CNM to speak to her ward nurse. Ms J reiterated this account when interviewed by HDC staff.

DHB conclusion — medication issue

143. The DHB concluded that the concerns raised by Mrs B were not appropriately followed through when first raised. An investigation close to the time of the events should have taken place to clarify if a medication error had occurred. It was the DHB's expectation that if doubt was raised about a medication error and staff were unable to substantiate that nothing occurred, an incident form should have been logged and an investigation commenced. This may have also been more reassuring for Mrs B. Prompt action would have allowed staff to be interviewed (and patient records reviewed) when able to remember events more clearly, rather than the situation of being left with many unanswered questions due to the length of time that elapsed and recall being limited.

144. The DHB did not doubt the information provided by Mrs B. However, based on the information it gathered, the DHB were unable to prove or disprove whether Mr A was administered another patient's medication on 13 November 2008. It outlined that there was no documentation in Mr A's clinical record or incident form completed; no other healthcare team members reported any knowledge of an error; and the nurses central to the matter did not believe an error had occurred.

145. The DHB also commented that the quality of the information and the effectiveness of communication with Mrs B and her grand-daughter may not have been ideal — creating some confusion, planting seeds of doubt, and undermining Mrs B's trust and confidence in staff.

Apology

146. The DHB apologised to Mrs B for the distress and anxiety caused and the loss of trust in its processes that occurred. The DHB acknowledged the potential harm and risk to patients if a medication administration error did occur. The DHB were reassured that Mr A suffered no harm, but acknowledged that this did not detract from the potential for harm.

Corrective actions

147. The DHB reported that all staff concerned reflected on the issues identified and learned lessons from the case, which have been incorporated into their practice.

148. The DHB responded to HDC that the implementation of a programme[28] throughout Adult Health Services would help address a number of the communication flaws highlighted by Mrs B's complaint.

149. The DHB also advised that another programme, *Releasing Time to Care*[29], which was rolling out on the wards, was launched in Ward X in late 2009.

DHB responsiveness to concerns once raised

Advocacy contact

150. Mrs B informed HDC that due to her father being transferred to another ward and not being approached by Ward X staff to discuss the medication incident, she first contacted an advocate from the Nationwide Health and Disability Advocacy Service on 14 November 2008 regarding her concerns.

Social worker contact

151. On 17 November 2008, Mrs B outlined her concerns to the Ward Y social worker following Mr A's handover from Ward X. They arranged to meet the following day. Mrs B was anxious as she was about to go overseas and wanted to be reassured about her father's care.

152. Mrs B met with the social worker on the morning of 18 November 2008. They discussed Mrs B's arrangements for her sister-in-law to help care for Mr A while she was away.

153. Mrs B, the advocate and the social worker met on 19 November 2008.

Letter to rehabilitation ward

154. On 2 December 2008, Mrs B, while overseas, wrote to the charge nurse of the rehabilitation ward regarding questions she wished to pose for a family meeting that was scheduled for 5 December 2008 regarding Mr A's ongoing rehabilitation. In the letter, Mrs B made reference to the concerns she had raised about the Ward X medication issue.

155. On 19 January 2009 Mrs B requested a copy of her father's medical records from the DHB.

Written complaint

156. On 29 January 2009 Mrs B complained in writing to the Quality Team, Adult Health Services, at the hospital. Her letter focused primarily on her concerns about the medication issue. The DHB acknowledged the complaint on 11 February 2009, advising that the Surgical Services Manager would be looking into the issues raised.

157. On 18 February 2009 Mrs B wrote to the DHB requesting her father's medical records for a second time. She received these on 3 March 2009.

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[28] This programme is intended to develop a culture of accountability, improve leadership, enhance communication, and reward good work by staff.

[29] The *Releasing Time to Care* programme is designed to increase patient satisfaction and safety and improve work satisfaction and efficiency.

Initial DHB response

158. On 12 March 2009 Mr M, Service Manager, Adult Health Services, sent Mrs B a one-page response letter summarising his investigation and concluding that he was unable to find any evidence to suggest that incorrect medication was administered.

159. On 18 March 2009 Mrs B contacted her advocate expressing how unsatisfactory she found Mr M's response letter. On 22 March 2009 she responded directly to Mr M's letter saying she was very unhappy with the findings, reiterating her concerns, and stating she would be taking the matter further. She advised HDC she felt let down.

DHB investigation

160. On 24 April 2009 Mr M wrote to Mrs B advising that following receipt of her letter he had discussed the matter with Ms L and that she was undertaking an independent review of the investigation.

161. Ms L's findings were reported to Mrs B on 9 June 2009. Ms L acknowledged that the letter to Mrs B of 12 March 2009 had not fully addressed her concerns.

162. Mrs B then complained to HDC and requested that her concerns about her father's overall clinical care on the ward also be considered by this Office.

Changes to complaints management process

163. As a result of the complaint, the DHB introduced a new complaints management process in May 2009. DHB quality advisors now "triage" (sort/prioritise) and co-ordinate any new complaints received. A new investigation report template is now used which individually itemises the issues that need addressing. The process also uses the Code of Health and Disability Services Consumers' Rights (the Code) as a framework to work from.

164. The new complaints management process requires appropriate timelines to be followed and complainants to be kept well informed, any urgent action required to be followed up quickly, corrective actions and proposed completion dates to be identified and any trends and system issues to be reviewed.

165. The DHB considers that the new process has ensured a consistent approach to complaints and is beneficial in ensuring thorough gathering of information in a timely manner. The process has received positive feedback. Other provider arms within the DHB have also accepted this process.

Opinion

Standard of care on the ward: No Breach – the DHB

166. Mr A was an octogenarian who suffered a fall at home. His resulting vertebral fracture, coupled with his existing co-morbidities, meant his clinical management in hospital was not going to be straightforward.

Assessment and review

167. My expert, Professor Carl Burgess, reviewed Mr A's clinical care. He believed the concerns regarding Mr A's presentation and illness were adequately managed by the DHB. He considered that Mr A was frequently monitored (including pulse, blood pressure, temperature, and oxygen saturations at two-hourly intervals) and that his input and output charts were up to date. When it was thought that Mr A may have pneumonia, following his chest X-ray results, Mr A was promptly started on antibiotics. It was noted that Mr A had developed a fever and although the cause was unknown, he had been started on antibiotics. My expert considered that this aspect of the care seemed to have been managed promptly.

168. Mr A's abdominal pain and distension was recognised but, as the DHB acknowledged, it took some time to confirm the diagnosis of pseudo-obstruction. Professor Burgess felt Mr A should probably have received laxatives earlier than he did. He concluded:

> "I feel that the investigations performed were adequate and were done in a timely fashion however the management of [Mr A's] constipation was probably inadequate as he required a fair amount of opiates and had developed constipation. The management of the pseudo obstruction was what one might expect in that a nasogastric tube was passed and he was put on further intravenous fluids."

Paraphimosis

169. It is difficult to determine exactly when the paraphimosis developed, and therefore the amount of time Mr A experienced discomfort, although Mrs B commented that she felt her father experienced discomfort from 8 November onward.

170. The clinical records indicate some difficulty for a house surgeon re-catheterising Mr A at 3pm on 9 November, but note no difficulty in re-inserting the catheter, or paraphimosis present, when the catheter was replaced after 3pm on 9 November by Dr H. When Mr A was reviewed again by Dr H at around 8pm, Mr A's condition was similar, although it is not known whether the genitalia was examined at that stage (the records have a focus on diagnostics surrounding Mr A's abdominal symptoms) or whether nursing staff examined the catheter later that evening — although it is usual practice for nurses to observe for this.

171. At 11.40pm the surgical registrar noticed the development of paraphimosis and immediately attended to it. The DHB apologised for any delay in identifying it. Professor Burgess considered the paraphimosis was appropriately reduced and managed once it was identified.

Paracetamol

172. Mr A was prescribed paracetamol 1gm up to every four hours as required, with no more than 4gms (four doses of 1g) over 24 hours. In the ten days after admission, the maximum dose was given on four of those days (9, 10, 13 and 17 November 2008) with three doses given on five of those days (8, 12, 14, 15 and 16 November) and two doses given on 11 November. Mr A was receiving the paracetamol in addition to

opiate pain medication. The DHB acknowledged that the paracetamol regime would have been better suited being classed as a non-regular medication.

173. As Mrs B was Mr A's support person it would have been appropriate for the paracetamol regime to have been discussed with her in order for her to communicate the rationale to Mr A.

174. In relation to the dosage, Professor Burgess commented:

> "This is not unusual particularly in older individuals and particularly in sick individuals where the maximum dose of paracetamol is usually set at 4gms per 24 hours. Furthermore, this is the usual recommendation on the packaging of paracetamol."

Nutrition progression

175. Once Dr I considered the most likely diagnosis was pseudo-obstruction, she recommended on 9 November that Mr A be nil by mouth with an NGT inserted. The following day, Dr F reviewed Mr A in Mrs B's presence. There was little free drainage from the NGT. The next day Mr A was allowed some sips of water and fluids, and the removal of the NGT was trialled.

176. Professor Burgess commented:

> "It is usual practise for individuals with pseudo-obstruction or bowel obstruction to be treated with intravenous fluids and initially have no fluid or food by mouth. The reason for this is because individuals with obstruction or pseudo-obstruction often vomit and may inhale their vomitus. Thus [Mr A] was not given any food by mouth once the obstruction had been diagnosed."

177. Mr A's bowel problem began to resolve. There then appeared to be some miscommunication of instructions for Mr A's nutritional progression to oral fluids and then a soft diet and his planned oral intake particularly when he was transferred from Ward X to Ward Y on 14 November 2008. During this time Mrs B began supplying her father with baby food. The DHB has acknowledged the progression was not well communicated to Mr A or his family. However, I note there was regular input from the dietitian service and by 21 November a healthy oral intake of textured food was occurring.

178. In general, Professor Burgess felt Mr A's nutritional requirements were met. He also commented:

> "Perhaps the movement of [Mr A] from a surgical ward to a medical ward during his care did impact on [Mr A] not being given oral input which had already been started in the surgical ward. I do not think that this impacted on [Mr A's] outcome in any way but it is always a problem when a patient with a surgical problem (intestinal obstruction) is nursed on a medical ward."

179. Professor Burgess concluded:

> "I believe that the care given to [Mr A] was apt and although it might have been slightly delayed because of access to the surgical registrar, the medical team were well aware of the most likely diagnosis of pseudo obstruction."

Summary

180. While some communication deficiencies have been identified in Mr A's clinical care on the ward, which the DHB has apologised for and reflected on, I am satisfied, based on my expert's advice, that the overall standard of clinical care provided to Mr A on the ward was reasonable in the circumstances and did not amount to a breach of the Code.

Medication administration issue: Adverse comment

Introduction

181. Mr A's family, obviously very familiar with issues relating to his ongoing health, including his medications, cared for and purposefully advocated for their much loved family member's welfare during his hospital stay. A patient's family is very often in the best position to provide information to those providing nursing or medical care, particularly in situations where patients cannot communicate effectively for themselves, as was the case here. Mr A had been living with his daughter Mrs B, who spent significant periods of time at her father's hospital bedside. In such circumstances, a strong and persistent enquiry about a medication administration issue from an informed and devoted family should have resonated with staff.

Medication error

182. Despite extensive investigations, this Office has been unable to determine conclusively whether a medication error occurred. The available evidence indicates:

- Mr A's medication was withdrawn from the Pyxis machine at around 8.06pm;
- Mr A's medication was recorded as being administered at around 8.30 pm;
- Mrs B left Mr A's room and did not see him receive his medication;
- The nurses involved were unable to recall the events.

183. As there were no further withdrawals for Mr A, it is clear he did not get his medication twice. However, it is possible he received his 8.30pm medication late.

184. The alternative explanation is that Mr A was administered another patient's medication at around 10pm. This has not been able to be discounted entirely, but seems unlikely. The following evidence was obtained:

- Ms E did not have an allocated patient load;
- Ms E did not withdraw any medication from the Pyxis machine;
- Ms E did not make entries in any patient medication administration charts;
- According to Ms C, Ms E told her that the intravenous medication she administered was intravenous gastric medication to sooth Mr A's stomach acids;

- Ms C stated that Ms E also injected medication into Mr A's stomach and left two paracetamol tablets for him;
- No other patient had the combination of Losec, injectable medication and paracetamol;
- The only patient to have the combination of injectable Augmentin, injectable Clexane, and paracetamol tablets was Mr A.

185. Ms E made summary entries in three patient files at the end of her secondment period, including the entry "due meds and cares rendered" in the record of one patient.

186. On balance it appears more likely that Mr A was given his medication late although, as Mr A would have received intravenous Augmentin and subcutaneous Clexane, it is difficult to reconcile the explanation that the intravenous medication was something to sooth his stomach acids.

187. In any event is clear that Ms E administered medication which had been drawn from the Pyxis machine by someone else and Ms E did not record that she administered it. I note the DHB guideline is not explicit about seconded staff administering medication.

188. The nurse who recorded the administration of the medication did not actually administer it. The DHB's policy document "medicine management and administration" states staff must consistently record what is administered clearly, completely and accurately at the time of administration. It does not specifically require that the person administering the medication must be the same person who records the administration.

189. The New Zealand Nurses Organisation's "Standards for the Administration of Medicines"[30] states: "The regulated nurse administering the medication … makes clear and accurate recordings of the administration of each individual medication administered or deliberately withheld ensuring that any written entries and the signatures are clear and legible. Documentation must be timely." Competency 2.3 of the Nursing Council of New Zealand's "Competencies for Registered Nurses"[31] provides an indicator: "Maintains clear, concise, timely, accurate and current client records within a legal and ethical framework."

190. It is of concern that the nurses on Ward X were not consistently complying with these standards.

Context

191. As my nursing expert Ms Margaret McArtney highlighted, it is important to acknowledge the working environment of 13 November.

192. It was the end of an extremely busy and challenging shift which involved care of 32 patients, many with high acuities and nursing care demands, who were about to be

[30] New Zealand Nursing Organisation *Guidelines for Nurses on the Administration of Medicines* (2007) Appendix one.
[31] December 2007.

handed over to the night shift staff. As such, nursing staff were under pressure. The staffing of Ward X on that shift had also been affected by a nurse's sick leave. As Ms McArtney, based on her experience, commented, "[r]ecruiting and retaining nursing staff is an ongoing challenge in the public hospital sector as is finding replacement staff to cover sick leave, particularly when it is at short notice."

193. Ms J was an inexperienced graduate RN in her first year of practice. She had a heavy patient load with high patient acuity, was attending to many associated acute situations arising with such patients, and had a student assisting her.

194. My expert has indicated that medication administration (25 withdrawals from Pyxis on her shift) was also a "significant part of her workload that day". Ms J, while stating she felt supported by colleagues that were available, commented on what she felt was a lack of staffing numbers, particularly more senior staff.

Nursing shortcomings

195. It has been identified that there were shortcomings in the response to Mrs B's concerns.

196. Ms J responded to Mrs B's initial concerns (which did not include all the detail from her daughter) and checked Mr A's medication charts. Based on this, she concluded that no error had occurred. Mrs B indicated she intended to follow up the details with her daughter the next morning. Ms J then left a note for CNM Ms K. Ms McArtney advised me that "[i]ideally [Ms J] should have completed an incident form" and that her peers would disapprove of her not doing so. She should have also recorded the events in the clinical notes. Ms McArtney was also of the view that "time pressure combined with a relative lack of experience influenced [Ms J's] decision making in this situation", and given these factors "her course of action was reasonable".

197. Clearly, CNM Ms K's interpretation of the note left by Ms J perpetuated miscommunication and influenced her sub-optimal actions the next day. She advised that she was not aware from the note that Mrs B's concerns related to her father receiving *another* patient's medication. No other staff had advised her of any concern. On that basis she too only reviewed Mr A's medication charts (not those of any other patients) and found nothing amiss. She therefore did not believe anything out of the ordinary had occurred, and did not pursue further lines of enquiry as she should have. Ms McArtney advised me, acknowledging that with the benefit of hindsight it is often easier to determine a correct course of action, that in her opinion it was the primary responsibility of the CNM on duty the next morning to complete an incident form and that her peers would have disapproved of this omission.

Systems

198. A DHB has a duty to "provide sufficient staff and robust systems to withstand fluctuating demands, and to ensure good communication between staff and with patients and their families".[32]

[32] Opinion 07HDC21742 (April 2009), pp. 4–5.

199. When shortcomings are identified on the part of multiple nursing staff, contributing organisational factors are relevant, such as: the adequacy of policy and procedure; the general working environment; team dynamics; and staff support systems.[33] I note the New Zealand Nurses Organisation *Guidelines for Nurses on the Administration of Medicines* draws on the passage "responsibility for accurate drug administration lies with multiple individuals and, more important, the organisational systems in place to support medicine administration".[34]

200. Ms McArtney's expert advice has discussed important issues in relation to seconded staff involvement in patient care, graduate nurses' workload, and the adequacy of staffing in this case.

Seconded staff assisting on wards

201. In its response the DHB explained that, ICU staff that are seconded to other clinical areas to provide assistance are routinely not assigned a patient load in case they are required to return to ICU at short notice. The DHB guideline *Assisting on Wards* gives direction about this redeployment.

202. In relation to seconded staff and medication administration, the DHB responded that it is a task that ICU nurses have indicated they "prefer" not to do when assisting elsewhere in the hospital as they are not familiar with the patients and that this is an "added safety precaution". If asked by ward staff, the seconded nurses will usually "negotiate" not to administer medications. However, the guideline does not specifically address the issue of seconded staff and medication administration.

203. In my view, the terms "prefer" and "negotiate" do not sit comfortably alongside an issue as important to patient safety as medication administration procedures, regardless of the knowledge and experience of any seconded nurse, or the degree to which a medication has potential for harm.

204. I put this issue to my expert, in the context of the potential to improve patient safety. Ms McArtney's view was that:

> "… presumably this preference has become common knowledge or has to be communicated informally each time a unit staff member goes to another ward. The risk is that not all staff knows of this preference or understands the rationale behind it. The informal nature of communicating this preference is likely to put staff in the wards and seconded unit staff in a situation where they have to agree together that the unit staff will or will not administer medications. This need to negotiate may come as a surprise to ward staff who already feel under pressure from staffing shortages and who are expecting assistance with meds administration. As an example looking at the Pyxis record provided for 13 November 2008 [Nurse Ms J] made 25 withdrawals over an 8 hour period. As a

[33] For a detailed analysis of systems issues contributing to a serious medication error in a New Zealand public hospital, see Opinion 03HDC14692, 14 October 2005.

[34] Cohen, M.R. (Ed). 2004. *Medication Errors: Causes, Prevention, and Risk Management* p 11.1, cited in New Zealand Nurses Organisation, 2007. *Guidelines for Nurses on the Administration of Medicines*, p 11.

> graduate nurse with 6 patients to care for she may have been disappointed to find that the ICU RNs preferred not assist her with medications administration which was quite a significant part of her workload that day. It also puts the ICU nurse in the position of having to explain their rationale for not administering medications. This may take time and could create tension. On the other hand ICU staff may feel obliged, because it is left to them on an individual basis, to assist with the administration of medications particularly when they see that staff are relatively junior and under pressure with their workload."

Adequacy of staffing, rostering and support

205. Ms McCartney advised that the numbers of staff (bearing in mind the nurse on sick leave), skill mix, and acuity on Ward X on the afternoon shift of the 13 November were of concern to management, and that "considerable effort" was made to second adequate numbers of staff to assist.

206. Four extra staff being redeployed (involving some ICU staff which was a "good strategy" due to their general nursing expertise) strongly suggested to my expert that a workload assessment was undertaken in line with DHB policy.

207. Ms McArtney advised that eventual nurse and HCA numbers were adequate to deal with the workload with a senior nurse (Level 3 RN) co-ordinating.

Summary

208. While I agree with my expert that there were sufficient DHB policies in place governing incident reporting, and that reasonable steps were taken in the circumstances to address the staff shortage and skill mix on the shift in question, I am concerned that staffing numbers, nursing skill mix, workload, and patient volumes affected nurses' abilities to effectively deal with a family's concern when it was raised.

209. This, when coupled with ward staff interactions with seconded staff, lack of an explicit guideline relating to seconded staff and medication administration and the completion of the medication record by staff who did not administer the medication, all had the potential to compromise patient safety.

Other issue — file storage

210. In relation to the positioning of the working file (ie the charts for observations, fluid balance, and medication) in Mr A's room, Ms McArtney advised it was "appropriate and practical for an acute ward where multiple staff needs access to these files round the clock" and there is a need to balance confidentiality against practicality and access.

211. In relation to the main patient file(s), Ms McArtney commented "the storage and positioning of the main patient file in a central area in the ward is appropriate and in my experience a common practice."

DHB responsiveness to concerns once raised: Adverse comment

212. I have been left with no conclusive evidence to prove or disprove that a medication administration error occurred. Investigation of this issue may have been impaired

because Mrs B's concern was initially dealt with in a perfunctory manner by DHB staff.

213. Mrs B took responsibility for bringing the matter to the DHB's attention and seeking answers. After speaking with her advocate, Mrs B mentioned her concerns about her father's Ward X care to the Ward Y social worker (on 17 and 18 November 2008). This was recorded in the clinical notes. She also made reference to her concerns, while overseas, in a letter to the rehabilitation ward charge nurse in early December 2008. She then requested her father's records in January 2009.

Sector standards

214. DHBs must comply with relevant service standards issued under the Health and Disability Services (Safety) Act 2001.[35] The Health and Disability Sector Standards set out basic responsibilities regarding consumers' rights, organisational management, service delivery, and safe environments. A complaints management process should be effectively linked to a quality and risk management system to facilitate feedback and improvements.[36]

Lost opportunities

215. The DHB's handling of the complaint was characterised by a series of lost opportunities to resolve it. Mrs B formally complained in writing to the DHB on 29 January 2009. The brief initial DHB response of 12 March 2009 was not adequate. In my view, it was unwise to initially exclude an error on the basis of the patient notes alone, when an informed family member had given a detailed account of the events as she perceived them and that account did not marry up with the notes.

216. The DHB acknowledged the inadequate response and Mrs B's frustration when Ms L stated:

> "I don't think that the [12 March] letter of response sent to [Mrs B] fully addressed each of the concerns articulated; and as a consequence has unintentionally created doubt in her mind about the veracity of information provided. As [Mrs B] writes, her trust in both our internal processes and in relation to further contacts with our services has been adversely affected."

217. On 24 April 2009 the DHB made a decision to review the matter and investigate further. Its findings were reported on 9 June 2009. Such delays can lead to the unsatisfactory situation that the information that is eventually obtained having an emphasis on the health professional's "usual practice" — the opportunity to proactively seek contemporaneous, and therefore more accurate, recollections of the events that unfolded was lost. The delay also hindered the HDC investigation.

218. I acknowledge that the eventual DHB investigation acknowledged the strong possibility that an error did occur (even though by that time it could not be proven or disproven), lessons were learnt from this case, the DHB apologised, and changes were

[35] Section 9(b), such as the Health and Disability Sector Standards NZS 8134:2008.
[36] See NZS 8134.1.1.13 and NZS 8134.1.2.3 respectively.

made to its complaints management processes.[37] However, at the time of the complaint the DHB did not take appropriate steps to look into or resolve Mrs B's complaint about her father's care.

Recommendations

219. I recommend, in light of this report and my expert's comments, that by **31 August 2011,** the DHB, as part of its quality improvement process:

- review its guideline document *Assisting on Wards*, consider including an explicit reference to seconded staff and medication administration, and report back to HDC;
- review its policy document *Medicine Management and Administration* and consider including an explicit statement that staff must only sign for the administration of medication which they themselves administer, and report back to HDC;
- report to HDC on the effectiveness of its revised complaints management process and its revised quality project structure;
- provide HDC with details of its nursing and midwifery quality programme review.

Follow-up actions

- A copy of the final report with details identifying the parties removed except the experts who advised on this case, will be sent to the New Zealand Nurses Organisation, the Nursing Council of New Zealand, the College of Nurses Aotearoa (NZ) Inc, DHBNZ, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

[37] In February 2011, the DHB updated HDC of more recent relevant changes made that have occurred amid considerable DHB organisational restructuring. These included: recruiting further staff involved in quality assurance; reconsideration of quality projects in light of the restructuring; and a focused nursing quality programme which is annually reviewed.

Appendix A: Independent expert advice — Physician

The following expert advice was obtained from Professor of Medicine/Consultant Physician Carl Burgess:

"I have been requested to provide expert advice in regard to the standard of care that was provided to [Mr A] during his admission to [hospital (the DHB)] between the 7th of November 2008 and 21st of November 2008.

[Documents to be reviewed were listed here by Professor Burgess. These have been omitted for the purposes of brevity.]

Before providing a response to the above questions it would be advisable to review the circumstances of this complaint. [Mr A] was admitted to [the] DHB on 7th November 2008 following a fall. He had tripped on getting out of bed to go to the toilet in the evening and he hurt his head and back. He was seen in the Accident and Emergency Department at [the] Hospital where a diagnosis of a compression fracture of L1 (Lumbar Vertebra 1) was made. He complained of severe back pain. He has a significant past history in that he is known to have Crohn's Disease and has had a right hemi-colectomy for this. He has also had a right retinal detachment and has bilateral macular degeneration. He also has a history of ischaemic heart disease and had a myocardial infarction some 20 years ago. He was known to have pernicious anaemia and also to have episodes of paroxysmal atrial fibrillation. He had no recall of the fall but had significant neck and lower back pain. It is noted that he had been taking diltiazem, Pentasa, soluble aspirin, questran-lite, GTN spray and eye drops. He was alert, he had normal power (limited by pain in his lumbar spine) and normal sensation in all his limbs. His reflexes were equal and symmetrical. He was tender around L1 and also tender in the cervical spine. His respiratory and cardiovascular systems were normal. His abdomen was soft and non tender. The initial impression was one of collapse ? due to an arrhythmia or postural hypertension. At the time when he was examined his blood pressure was elevated at 180/75. Analgesia was prescribed and an ECG was performed. X-rays of the cervical spine and lumbar spine were also performed. These showed an L1 superior end plate fracture. There was no abnormality in the cervical spine. It was noted on an abdominal film that there seemed to be an enlarged mass in the bladder and it was felt that a cystoscopy would be required in the future. A cervical collar had been applied initially but was now removed. The plan was for adequate analgesia and a referral to the orthopaedic registrar on call and there was also discussion held with the general medical team for admission for analgesia and follow-up.

The orthopaedic registrar reviewed the patient and noted that there was tenderness of both L1 and L2 regions in the mid line but there was no abnormal neurological findings. CT scan of the abdomen confirmed the L1 fracture and it was felt that the best treatment for him would be analgesia, and once comfortable, mobilisation and physiotherapy. The medical team were to review on admission. He was prescribed his usual medication which included paracetamol 1gm 4 hourly as required but it was noted that a maximum dose of 4gms per 24 hours was recommended. He was placed

on oxycodone both as a slow release compound (OxyContin) and also as an immediate relief agent which is known as OxyNorm. It was noted that [Mr A] had difficulty speaking English and was also unable to see because of his macular degeneration. He was looked after by his daughter Mrs B, who stayed with him whilst in hospital.

He was reviewed on the 8th of November when it was noted that [Mr A] had had some response to his analgesia, his bowels had not opened during the day and he complained of an occasional cough but his chest was clear on examination and his abdomen was soft although slightly distended. He could lift both legs but he complained of pain in his back. His regular analgesia was maintained and it was recommended that he use laxatives if required. He was commenced on bone protection medication, this being alendronate and vitamin D. He was reviewed by the physiotherapist on the 8th of November in the afternoon and it was noted that his speech was slightly slurred and incomprehensible and his daughter who was present noted that [Mr A] was more confused and drowsy than usual. It was noted that he was a smoker and normally expectorated several plugs of sputum per day. At the time his temperature was normal at 36.8°C and he seemed drowsy and not responding appropriately. It was felt that this probably related to his analgesia. His oxygen saturation was 93% on 3 litres of oxygen and respiratory rate was 18 per minute. The physiotherapist enabled [Mr A] to cough and produce brown thick secretions. It was noted that he had difficulty moving around the bed because of pain. It was recommended that he have regular analgesia, saline nebulisers and deep breathing exercises.

The saline nebulisers were given, he remained in bed during the rest of the day as he was too sleepy and also there was too much pain for him to be mobilised out of bed. He was reviewed later in the afternoon on the 8th of November and it was noted that the patient was complaining of some chest pain which was thought to be due to a contusion after the fall. It was noted that there was a small amount of atelectasis in the right lower lobe on a chest X-ray. At this time it was difficult to maintain his saturations and he required increased humidified oxygen. Review of his CT scan of the spine confirmed the L1 compression fracture and also showed enlargement of the prostate gland and several focal areas of bladder wall thickening which were suspicious of a bladder transitional cell carcinoma. It was also noted in the evening that his temperature had risen to 38.2°C. He had an indwelling catheter in his bladder. There was only a small amount of drainage. He was given a single dose of pamidronate for osteoporosis. He was reviewed in the early hours of the morning of the 9th of November where it was noted that he had decreased urine output over the last three hours and that he had been febrile from late afternoon. His blood pressure was 170/100 and temperature 38°C. He was saturating at 97% on 2 litres of oxygen. His heart sounds were dual and there was decreased air entry bilaterally but no obvious signs of crepitations or wheeze. His abdomen was distended and bowel sounds were present but were scant. A white cell count had been normal on admission and the C Reactive Protein (CRP) was 13 which is slightly above normal. As mentioned previously the chest X-ray showed atelectasis. No diagnosis was made at this time but the plan was to repeat the blood tests particularly the blood count and CRP and blood cultures were done. Paracetamol was prescribed and the patient was

prescribed intravenous Augmentin and was to continue with intravenous fluids and to aim for a urinary output of 30mls per hour. The next blood count showed that his haemoglobin was stable at 125 but his white cell count had risen to 13.3. His creatinine was 121 which was similar to what it had been on admission. His CRP was elevated at 161mg/L. The repeat chest X-ray was similar to the one taken on admission which showed some patchy increased shadowing in the right lung base only. There was no lobar collapse or consolidation. During the morning of the 9th of November it was noted that his pulse had increased up to 118/minute, temperature was 37.8°C and then rose to 38.5°C. He was still requiring analgesia with Oxynorm and Oxycontin. Intravenous Morphine was also used in a small dose of 1mg prior to rolling him across the bed. He was too drowsy and in too much pain for him to assist the physiotherapist.

By the afternoon his heart rate had fallen to 82/minute and BP which had been elevated, was now being recorded at 142/68. His oxygen saturation ranged between 95 to 97% on 2 litres of oxygen. His temperature varied between 37.5°C and 38.6°C. He was not taking much orally and it was noted by the nursing staff that his abdomen was distended. His indwelling catheter was irrigated. During this period the patient still complained of pain and required intravenous tramadol. He was very drowsy and he was unable to be mobilised because of the drowsiness. His abdomen was distended and there was a major problem in attempting to recatheterise him. He was reviewed by the medical registrar, [Dr H], at approximately 4pm in the afternoon. She noted the increasing abdominal distension and increase in his heart rate. She also noted that he had generalised abdominal pain with some nausea and some dry retching. It was noted then that his bowels had not been opened and it was thought that this was probably due to his opioid analgesia. His white count was elevated and urine did not show evidence of infection. A catheter was inserted with no complications. A small amount of cloudy urine was noted. The medical registrar suggested review by the surgical registrar and the order was that if there was no contrary indication, the patient should be given laxatives to try and open his bowel. The medical registrar reviewed the patient again at 8pm that evening and noted that [Mr A] was still febrile, the abdominal X-ray showed dilated loops of bowel but it was not felt that this was due to obstruction. Chest X-ray, as mentioned earlier, was unchanged. The impression of the medical registrar was that there was pseudo obstruction and that the constipation was secondary to opioid analgesia. Further antibiotic, in this case metronidazole, was added. The patient was reviewed by the surgical registrar that evening at 2340hrs. She reviewed the history and on examination noted a soft distended abdomen but there was a paraphimosis present. With the history of abdominal distension, X-ray findings and also the history of nausea and vomiting, she felt that the most likely diagnosis was pseudo-obstruction. She recommended the placement of a nasogastric tube on free drainage and she reduced the paraphimosis. She also noted an enlarged firm prostate gland.

On the 10th of November 2008, this patient was reviewed by the physician. At this stage his abdominal pain was still present when he coughed. It was thought that the problem was pseudo-obstruction. His abdomen was still slightly distended and X-ray showed dilated loops of bowel. He was maintained as nil by mouth and kept on nasogastric tube free drainage. His white count remained elevated as did his CRP. It

was noted also on the 10th that there was elevation in some of his liver enzymes. His temperature had returned to normal and it remained normal until the 13th of November when there was a small increase.

His condition stabilised and it was noted that the physiotherapist was able to get [Mr A] to sit up and assist with the production of sputum. He still required analgesia in the form of Oxynorm and Oxycontin. By late on the 10th of November it was noted that there was little free drainage form the nasogastric tube and his abdominal pain was settling. At this time the patient was on a nil by mouth regime from the surgical team. He was allowed sips of water and fluids from the 11th of November and the nasogastric tube was removed on the 12th of November. It was noted that he had had a bowel motion. He was reviewed by the dietitian on the 12th of November. Oral fluids were recommended. At this time he was responding to a combination of Oxynorm and paracetamol. He was also responding to the physiotherapy. His blood tests were improving and his CRP was falling and his white cell count had returned to normal by 12/11/08. He was reviewed by the physician on 13/11 who noted his improvement although [Mr A] was confused but seemed to follow instructions. He recommended a simple analgesia only and the Oxycontin was withdrawn. Although the patient was able to take oral fluids he needed to be encouraged to do so. A note in his clinical notes on 14/11/2008, notes that the patient was eating well and sleeping well and his bowels were open. He was still coughing up some whitish phlegm and he had one spike in temperature. It was noted that he did have some distension of his abdomen. His serum potassium was low at 3.1mmol/l and slow K tablets were prescribed. His Augmentin was continued. He was transferred from the surgical ward to the medical ward on 14/11/2008. It was noted that his bowels had been opened but he was also noted to be on fluids only. He was now taking his regular medicines and the oxygen was discontinued on 15/11/2008. He was eating baby food at this time, this having been brought in by his daughter. He still required analgesia, this being tramadol or paracetamol. His bowels were now working on a regular basis although the stool was rather loose. His temperature which had increased on the 15th settled by the 16th and by the 17th was normal. He was able to have his urinary catheter removed on 17/11/2008 and was eating small amounts in addition to fluids. He then developed gout for the first time on 18/11/2008. He was treated with prednisone for that and also given intravenous fluids. It was thought he might have been dehydrated despite him having intravenous fluids. By 20/11/2008 he was mobilising independently to the commode and his back pain was beginning to settle. His gout had settled and he was transferred for rehabilitation.

These are the circumstances surrounding this complaint.

My answers to the questions posed are as follows.

1. Please advise whether [Mr A] was appropriately monitored, assessed and reviewed by staff on the ward.

There is clear evidence that [Mr A] was monitored frequently whilst in the ward. Initially he was seen by medical staff and nursing staff. I note that his pulse, blood pressure and temperature and oxygen saturation were monitored frequently at 2 hourly

intervals. He was also assessed by the physiotherapists on a regular basis and was provided with pain relief. I note also that his input and output charts were kept up-to-date and there is very clear evidence exactly what nutrition this man received whilst in the wards.

2. *Please comment on whether [Mr A's] symptoms were appropriately investigated and managed leading up to the eventual impression of ?pseudo-obstruction.*

On admission to hospital [Mr A's] symptoms were those of pain in his back and also neck. He was initially assessed in the Emergency Department where there was concern that he may have caused damage to his cervical spine and/or lumbar vertebrae. On examination there was no sign of a neurological lesion but X-rays were taken of the neck and lumbar spine with an abdominal CT scan as well. The results of the X-rays showed that he had a fracture of lumbar vertebrae 1 (L1). The immediate problem was one of pain which limited [Mr A] to a marked extent so that he could barely roll over in bed. He was commenced on potent analgesics which included a controlled release form of oxycodone (Oxycontin) and an immediate release form of the same substance known as Oxynorm. He was also able to use tramadol which also has opiate-like activity. In addition, laxatives were prescribed for him but only to be used if required. He was then transferred to the Department of Internal Medicine for control of his pain and for gradual mobilisation. The orthopaedic surgeons had been involved and they noted that there was no role for surgery in [Mr A's] case. According to the notes control of [Mr A's] pain was difficult. He required frequent doses of Oxynorm on top of the Oxycontin and paracetamol which he was taking regularly. He was seen by the physiotherapist who noted that there was difficulty in managing this patient in that he was drowsy and in pain. He therefore could not really co-operate with the physiotherapist as one would hope. On the day following admission it was noted that [Mr A] had developed a fever. He was also disorientated for time and place and it was noted that his fluid intake was low. A chest X-ray was reviewed and it was noted that he had some shadowing at the right lower lobe and it was felt that he might have pneumonia and he was started on antibiotics. The antibiotics were started rapidly. He did not open his bowels on the 8th of November. On the following day, the 9th of November, it was noted that he had developed some distension of the abdomen and although the cause for his fever was unknown, he had been started on antibiotics. Therefore this aspect of his care seems to have been managed promptly. It was also noted that in addition to his other medicines, he was being given intravenous morphine (1mg) prior to him being moved by the nursing staff. It was also noted that he was taking in very little orally although his daughter who was present was feeding him. During the afternoon of the 9th of November he developed haematuria and his abdomen was distended. An attempt at catheterisation by the house surgeon was unsuccessful and the registrar ([Dr H]) reviewed the patient, noted that [Mr A] had generalised abdominal pain and had nausea and had had episodes of dry retching. She also noted that his bowels had not opened for three days and despite him being prescribed two laxatives, these had not been administered. She inserted a catheter with no difficulty. She felt that the abdominal distension was secondary to constipation and may have caused an obstruction. She requested a surgical review. [Dr H] revisited the patient some hours later and noted the generally

tender and distended abdomen. The patient was still febrile although the temperature after being 38°C, reduced to 37°C. She also noted that there was decrease in urine output and the diagnosis of ?pseudo-obstruction was made. Abdominal X-rays showed dilated loops of bowel. Diagnosis of pseudo obstruction was confirmed by the surgical registrar later that evening at 2340hrs. She also noted the paraphimosis (more of this below). Thus the abdominal pain and distension was recognised but it took some time to confirm the diagnosis. The patient should probably have been administered laxatives earlier in the course of his illness. Constipation is common with opiates particularly in elderly folk who are not moving round the bed and are not eating an adequate diet. I feel that the investigations performed were adequate and were done in a timely fashion, however the management of his constipation was probably inadequate as he required a fair amount of opiates and had developed constipation. The management of the pseudo obstruction was what one might expect in that a nasogastric tube was passed and he was put on further intravenous fluids.

3. Please advise whether [Mr A's] paraphimosis was recognised in a timely manner, and appropriately reduced and managed once identified.

[Mr A] was catheterised during the afternoon of the 9th of November 2008. According to the notes there was no problem in inserting the catheter. The patient was reviewed some 3–4 hours later where it was noted that he was generally tender in his tummy but was comfortable at rest and there was still abdominal distension. Unfortunately no mention is made of examination of the genitalia and there is no nursing note whether the catheter was examined later. The surgical registrar made the diagnosis of paraphimosis and immediately reduced it. Therefore the response to the second part of the question is yes, the paraphimosis was appropriately reduced and managed once identified. It is difficult to know how long the paraphimosis had been present. Plainly it was not present when [Dr H] placed the catheter some time on the afternoon of the 9th of November and his condition seemed similar when she saw him 3–4 hours later. It is possible that it might have been present then but it is also possible that it may very well have developed following that visit but before the surgical registrar visited.

4. Please comment on the adequacy of [Mr A's] paracetamol administration and his nutritional management.

There was concern from [Mr A's] daughter that [Mr A] did not receive sufficient paracetamol. He had been prescribed paracetamol 1gm, 4 hourly at home. On the prescription chart in the hospital although it was written as 1gm 4 hourly, there was a maximum dose of 4gms in 24 hours. This is not unusual particularly in older individuals and particularly in sick individuals where the maximum dose of paracetamol is usually set at 4gms per 24 hours, furthermore this is the usual recommendation on the packaging of paracetamol. Scrutinising [Mr A's] medication chart it seems that he was given 4gms on the 9th of November and on the 10th of November.

In regard to his nutritional management it is usual practise for individuals with pseudo obstruction or bowel obstruction to be treated with intravenous fluids and initially have no fluid or food by mouth. The reason for this is because individuals with

obstruction or pseudo-obstruction often vomit and may inhale their vomitus. Thus [Mr A] was not given any food by mouth once the obstruction had been diagnosed. On the day before the diagnosis of obstruction, [Mr A] had been offered food and had been given juice, coffee and water by mouth. The nasogastric tube was left insitu from the 9th to the 11th inclusive. On the 12th [Mr A] was given apple juice, coffee and soup. This continued through the 13th to 15th of November. He had also been given some ice-cream. Protein drinks were also administered to him. He had little to drink on the 18th and from the 19th onwards he seems to have had a fair amount of juice, coffee, milk, Fortsip and lemonade. He was also eating. It is not unusual for patients in this circumstance to have a very low calorie input. It is also noted in the notes that from the 16th of November [Mr A] was eating, initially food bought in by the family and then later hospital food. In general, I believe his nutritional requirements were met.

5. *Are there any systemic issues of concern that impacted on or contributed to the appropriateness of [Mr A's] care?*

In general I felt that the care for [Mr A] was adequate. Perhaps the movement of [Mr A] from a surgical ward to a medical ward during his care did impact on [Mr A] not being given oral input which had already been started in the surgical ward. I do not think that this impacted on [Mr A's] outcome in any way but it is always a problem when a patient with a surgical problem (intestinal obstruction) is nursed on a medical ward.

6. *In your view, have the concerns raised about [Mr A's] care been adequately addressed.*

The response from the District Health Board I think answers most of the concerns raised about [Mr A's] care. In essence much of this happened in a very short space of time from 7th to the 9th of November 2008. [Mr A] is an elderly man who is obviously rather frail. Managing such patients is exceptionally difficult, particularly when one takes into account the fact that they have many co-morbidities. In essence this is one of the major problems facing Internal Medicine today. However I believe that the care given to [Mr A] was apt and although it might have been slightly delayed because of access to the surgical registrar, the medical team were well aware of the most likely diagnosis of pseudo obstruction.

7. *Please outline any recommendations you may have to address concerns raised by this complaint.*

In essence I believe that much of the complaints and concerns regarding [Mr A's] care have been addressed. In regard to the paraphimosis it is obvious that the nursing staff should have been more aware of checking the catheter after it had been placed. As I have mentioned earlier I believe that the concerns regarding [Mr A's] presentation and illness were adequately managed. There may be debate about further nutritional management, however it would be unusual to feed [Mr A] intravenously for an illness that is likely to be very short-lived.

Carl D Burgess MD FRACP FRCP, Professor of Medicine/Consultant Physician"

Appendix B: Independent expert nursing advice

The following expert nursing advice was obtained from Registered Nurse Ms Margaret McArtney:

"In order to provide an opinion to the Commissioner on case number 09/01357, I have read and agree to follow the Commissioner's Guidelines for Independent Advisors. My opinion is based on my expertise as a registered nurse.

I have over thirty years experience in nursing. I have held nursing leadership positions for most of my career, including Charge Nurse, Clinical Nurse Specialist, Nurse Consultant, and Nurse Advisor and Nurse Leader. I have ten years experience in cardiac care. I lectured in nursing for a number of years. I held the position of Nurse Consultant in assessment treatment and rehabilitation services for a number of years with a special interest in stroke and care of the elderly. My previous nursing role (2004–2009) was that of Nurse Leader for Medicine and Cancer Services in a large public hospital. I currently work part time in an operational role managing a large medical outpatient department in a public hospital. I also undertake project work for the Operational Development and Patient Safety Service of a large DHB. I have a Bachelor of Nursing and a Masters of Arts (Nursing). I have no conflict of interest in relation to this case.

Expert advice requested

To provide independent expert advice about whether [the] District Health Board staff responded appropriately to [Mr A's] family representatives regarding concerns that he was given incorrect medication.

Background

[Mr A] (DOB [1922]) was previously reasonably independent and lived with his daughter, [Mrs B], who was his prime carer. He was admitted to [hospital] on 7 November 2008 (a Friday) following a fall in which he sustained a compression fracture of a lumbar vertebra. He had a past history of Crohn's disease that had required a bowel resection, severely impaired vision, poor hearing, ischaemic heart disease and arthritis. His recovery was complicated by a pseudo-obstruction of the bowel, with IV fluids and nasogastric tube (NGT) drainage commenced on 9 November 2008 and NGT removal on 12 November 2008. He also developed a pneumonia requiring intravenous antibiotics from 9 November 2008. There were some problems with constipation, gout and urinary output but [Mr A] was discharged to the rehabilitation unit on 2 December 2008 and was home on 9 December 2008.

[Mr A] had a urinary catheter (IDC) inserted, probably on the afternoon of 8 November 2008 although this is not recorded. Urine drainage was poor and he was noted to have haematuria at 1500 hrs on 9 November 2008. Irrigation at this point showed no clots and drainage improved for a short period following irrigation with a bladder scan showing minimal residual urine. However, when output again decreased the house officer attempted replacement of the IDC which failed. The medical registrar successfully reinserted the IDC at about 2000hrs on 9 November 2008 after

assessing [Mr A's] abdominal distension. Surgical review was requested and a diagnosis of likely pseudo-obstruction was made by the registrar at 2340hrs the same day. The registrar also noted [Mr A] to have developed a paraphimosis and reduced this. There was no recurrence of the paraphimosis documented.

[Mr A] was admitted under the care of the medical team but as outlier to [Ward X] (surgical) as there were no beds in [Ward Y] (general medical). He was transferred to [Ward Y] once a medical bed became available there on 14 November 2008.

Expert Advice to the Commissioner

1. Please comment on the sequence of events and the appropriateness of the steps taken by nursing staff once [Mr A's] family had raised concerns that a medication error may have occurred, with reference to relevant DHB policy and professional nursing standards where applicable.

I reviewed [Mr A's] clinical notes for the period of his admission to [Ward X] (7 November–14 November 2008) with particular reference to the entries in the clinical notes for the afternoon shift of 13 November and the morning and afternoon shift of 14 November. There is no reference in the clinical notes of that period to the concern raised by [Mrs B] ([Mrs B]) that [Mr A] may have been administered the wrong medications, nor is there a record of the staff response to the concerns. I am relying on the recall of [Mrs B] and her daughter.

[Documents reviewed by Ms McArtney listed here. This has been omitted for the purposes of brevity].

Sequence of events between 10.40pm and 11pm on the afternoon shift, 13 November

- The concern that a medication error may have occurred was raised by [Mrs B] in the last 20 minutes of the nursing shift which finished at 11pm.
- According to [Mrs B] she arrived back in the ward at 10.40pm. On arrival she was told by her daughter who had been with [Mr A] during [Mrs B's] absence that [Mr A] may have been given medications by 'someone in blue' in the time that [Mrs B] was away from the ward (9.20pm–10.40pm). [Mrs B] queried this with [Mr A's] named nurse ([Ms D])
- [Ms D] checked the medications chart and found that there was no record of any medication being administered at that time.
- [Ms D] reported this back to [Mrs B].
- [Mrs B] indicated that she would seek further clarification from her daughter in the morning. Sometime before the end of the shift [Ms D] left a note for CNM [Ms K] outlining the concern raised by [Mrs B].
- No further action was taken by [Ms D]. She did not document [Mrs B's] concern or her response to it.

Sequence of events on the morning shift 14 November

- CNM [Ms K] read the note and checked the medications administration chart and came to the same conclusion as [Ms D] that there was no entry to substantiate [Mrs B's] concern therefore no medications had been given. The CNM took no further action and did not give any feedback to [Mrs B]. The CNM did not document [Mrs B's] concern or her own actions in the clinical notes.
- [Mrs B] spoke to her daughter via text messaging and confirmed her daughter's recollection that [Mr A] had medications administered by 'someone in blue' while [Mrs B] was away from the ward.

2. Comment on the sequence of events and the appropriateness of the steps taken by nursing staff

Context — afternoon shift 13 November

In my opinion it is important to consider the context in which this issue was raised by [Mrs B]. The sequence of events on the afternoon shift of 13 November occurred within the last 20 minutes of what I understand was a busy nursing shift. The end of a busy shift can pose a number of challenges for the nursing staff. [Ms D] and the other staff in the ward would have been busy completing all the tasks and documentation that need to be undertaken in preparation to hand over 32 patients to the night staff. [Ms D], a graduate nurse, was caring for 6 patients, a number of whom had high acuity therefore high demand for nursing care. In my opinion time pressure, combined with a relative lack of experience, influenced [Ms D's] decision-making in this situation. [Ms D] did the right thing in checking the medications chart and giving feedback to [Mrs B]. [Mrs B] indicated that she would clarify events further with her daughter in the morning.

The situation was not resolved for either [Mrs B] or [Ms D]. [Mrs B] indicated that she wanted to further clarify events with her daughter in the morning and [Ms D] was concerned enough that some follow-up was needed, therefore she left a note for the CNM. Ideally, [Ms D] should have completed an incident form. Taking into account the context and the fact that she left a note for the CNM it is my opinion that peers would mildly disapprove of her action in not completing an incident form.

In my opinion [Ms D] should have recorded [Mrs B's] concerns and her response to [Mrs B] in the clinical notes. This is a fundamental of good nursing practice and provides a permanent record of events. A note to the CNM, while useful as an addition to a clinical notes entry, is a risky form of communication as this event clearly demonstrates. Peer disapproval would be high for failing to document [Mrs B's] concerns.

Taking into account that the CNM was busy on the morning of 14 November, it is my opinion the CNM failed to act appropriately in response to the note. At the very least the note would have indicated that [Mrs B] had a concern. [Mr A] had been in the ward for a week when the concern was raised by [Mrs B]. She was clearly devoted to

her father and spent much of her time at his bedside and was vitally involved in his care. Any concern raised by [Mrs B], should have been addressed in the first instance by meeting with her as soon as possible after the event. This would have allowed her to express her concerns to the CNM and for the CNM to outline the process of investigation. This level of communication with patients and families is best practice in nursing and is an expectation at the CNM level. It is the first step in the process of sharing information and is also the first step in resolving conflict.

The CNM did not record in the clinical notes that [Mrs B] had raised a concern and that she had checked the medications charts. Peer disapproval would be high for the CNM's response to the note and her failure to meet with [Mrs B].

3. Would you have expected an incident form/investigation to be completed given the concerns raised by the family in these circumstances?

I acknowledge that with the benefit of hindsight it is often easier to determine the correct course of action. However, [Mrs B] was clearly very familiar with every aspect of her father's care and spent significant amount of time at his bedside. Any concerns from her, whether they could be substantiated or not, should have triggered an incident form.

[Ward X] was busy on the afternoon of 13 November. As noted in the section above, [Ms D] was a graduate nurse at the time. The concern was raised by [Mrs B] late in the shift. [Ms D] reached the conclusion, without the benefit of a full investigation, that a medication error had not occurred, therefore she concluded that no further action was needed other than leaving a note for the CNM relaying [Mrs B's] concerns. It is likely that [Ms D] recognised that the issue was unresolved for [Mrs B] and this was a factor in her decision to leave the CNM a note. Given the time pressure and her relative inexperience her course of action was reasonable.

In my opinion this was the primary responsibility of the CNM who was on duty the following morning to complete an incident form. Peer disapproval would be high for failing to complete an incident form.

The main aims of incident form/reportable event process is to provide a structured, transparent and systematic approach to the investigation of incidents. In this instance a family member raised a concern and a perfunctory investigation was carried out by both [Ms D] and the CNM. The opportunity to find out what happened and to allay [Mrs B's] concerns was lost.

The reportable events process investigates issues in depth. While it does not always come up with a definitive answer and equally may not resolve the issue for all parties concerned, it does demonstrate that a thorough investigation has been undertaken and can result in important learning and insights that lead to systems improvements.

It is important to note that [Mrs B] was encouraged to lodge a complaint. This is good practice. However, it put the onus on her to seek answers. The incident form/reportable events process allows the organisation to act quickly and proactively

on both the staff and the patient's behalf, therefore taking responsibility for finding out what happened.

3. In relation to the six steps outlined by the DHB that should have immediately occurred as soon as [Mrs B] raised her concerns about incorrect medication — do you consider these to be an appropriate system for dealing with such concerns (had they been followed)?

Steps 1–6 are not an appropriate stand alone process for investigating concerns/issues. [The DHB] reportable events policy is in place to provide the appropriate process. Steps 1-6 are a good example of how issues were investigated in an ad hoc manner prior to the introduction (nationwide) of the reportable events process.

4. In your view, was it appropriate for first year graduate nurse [Ms D] (in the last month of her graduate programme) to have 6 patients allocated to her on the afternoon shift — half of which had a patient acuity of 4?

Matrix for staffing decision making (ICN May 2010) – Applied to [Ms D's] patient allocation on 13 November 2008	
Patients	Primary accountability for 6 patients on an afternoon shift
Intensity of Unit and care	3/6 patients were high acuity (level 4)
Context	Surgical ward. [All but two] beds occupied. Mainly high acuity patients. High number of admissions and discharges over the day. Staff vacancy due to sickness. RN 3 Coordinating the shift. Eventually adequate number of staff on shift to give support to [Ms D]. Low staff skill level.
Expertise	Graduate nurse (competent level of practice) with 10 months experience
Nursing model of care delivery	Unclear if patient allocation model or team nursing in place on [Ward X] in November 2008

In my opinion it was not appropriate for a graduate nurse with ten months' experience to have primary responsibility for 6 patients, 3 of whom had high acuity, in an acute surgical ward, particularly if the nursing care delivery model is patient allocation rather than team nursing.

Patient allocation is a method of organising nursing care in which a nurse is allocated to care holistically for all the needs of a patient on a shift. Patient allocation has the tendency to direct the nurse to 'go it alone' with their patient group. This can be an isolating and stressful model for graduate nurses and is very dependent on good supervision and support from the co-ordinator and informal support from the rest of

the team. A nurse patient ratio of 1:4 is optimal in this model, particularly for a nurse in the first year of practice in the acute care setting.

If [Ms D] was working in a team model and had an HCA dedicated to work with her and structured input from one of the ICU RNs she would have been more likely to be confident as the lead nurse for her patient group of 6 and also had a better chance to maintain patient safety.

From my review of the documents I have come to the conclusion that it is likely that a mixed model of nursing care delivery was in place i.e. patient allocation with some support from other members of the team as requested or as directed by the shift coordinator. If the model on that particular shift was patient allocation or a mixed model then [Ms D] should have had 4 patients to care for, 2 with medium acuity and two with high acuity.

I acknowledge that the staffing numbers on the floor on that shift were adequate and that there was a senior nurse coordinating. I also recognise that considerable effort had been made to second adequate numbers of staff in to support the ward team. Recruiting and retaining nursing staff is an ongoing challenge in the public hospital sector as is finding replacement staff to cover sick leave, particularly when it is at short notice.

5. Based on the information available, do you consider there were adequate systems in place to support and monitor less experienced nursing staff on [Ward X] at this time, particularly with high patient acuities and a varied mix of nursing skill and experience?

I acknowledge that there was eventually adequate numbers of nurses and HCAs on the ward to manage the workload, including an RN 3 coordinator and that [Ms D] felt supported by her colleagues. I also acknowledge that management had made a good effort to second staff in for additional support. Based on the information available I believe a more structured system of team nursing would have supported [Ms D]. It is not clear that she had an HCA dedicated to work with her who could relieve her of some of the basic tasks such as fetching and carrying, changing linen, stocking of shelves, moving beds etc. that inevitably erode into the tome needed to care for complex patients.

6. Given the DHB response that [all but two of the] beds on [Ward X] were occupied on 13 November 2008 (with six admissions and nine discharges that day) please comment on the adequacy of staffing and the rostering of skill mix on the afternoon shift — namely one shift co-ordinator, four nurses, two health care assistants, which was then followed by two further HCAs and two nurses seconded from ICU to later assist — governed by DHB policy.

The staffing on the afternoon shift was compromised by a sick leave vacancy. It is my opinion based on experience that finding staff to cover sick leave, particularly if it is at short notice, can often be very challenging. It is clear that the staffing numbers, skill mix and acuity on [Ward X] the afternoon shift of the 13 November were of concern to management i.e. CNM and the Duty Manager and as efforts were made to

improve the numbers and two further HCAs and 6.5 hours of [Ms E's] input were added to the existing staffing. The fact that 4 extra staff were redeployed strongly suggests that a workload assessment was undertaken in line with *Assessment of Workload – Actions where resources are limited.*

[The] DHB *Safe Staffing Nursing – Adult Health Services* practice guideline *identifies* that a collaborative model of care should be implemented to support nurses to help each other. This appears to be a common sense approach rather than a fully developed model. Based on the information available I am not able to give an opinion on whether this model was in place on the afternoon shift of 13 November.

Staff	Numbers	Skill level	Hours worked
RN Coordinator	1	3 (supported by Duty Nurse Manager)	8
RNs	4	2 (supported by experienced RN coordinator on site (given this was November each of the RNs in this group was likely to have a minimum of 10 months experience as an RN)	32
RNs (ICU)	2 (see hours worked)	2 & 3 (directed by Coordinator to RNs/patients requiring additional support)	6.5 between the two
HCAs	4 (see hours worked)	Able to carry out basic patient cares (eg mobility, food and fluids, basic hygiene, basic elimination cares under direction of RN)	32 (if all 4 worked a full shift
Total	11 staff equating to slightly less than 10 for the whole shift. Based on the premise that the two seconded HCAs worked a full shift		

The numbers of staff was adequate. The skill level was low, evidenced by the number of graduate nurses, HCAs and seconded ICU staff in the mix. This mix, combined with high patient acuity and high patient flow, posed a risk to patient safety and staff role satisfaction. The presence of a RN3 coordinator in this mix was a redeeming factor. The RN coordinator, who was a senior nurse, had the responsibility to coordinate and supervise the team bearing in mind skill mix, patient acuity and patient movement over the shift and to provide hands on support for the staff where and when she identified a need. Based on the documentation she also had small patient allocation. The four graduate nurses had primary responsibility for patient care in the ward.

If they each had an HCA allocated to them in a structured model to assist with basic cares and tasks and the two ICU nurses took direction from the coordinators to support the new graduates appropriately, then the workload was manageable.

If, on the other hand, each of the staff on the ward that shift were working independently and not in a team then [Ms D] and the other graduate nurses would is likely to feel the stress of the workload.

Based on [Ms D's] recollection of events [interview with HDC staff member] she felt that although she has 6 patients she was adequately supported by her colleagues.

Bringing in the ICU staff was a good strategy. While they may not have had the particular expertise related to the patient population in [Ward X] and they did not take an allocated patient load they clearly provided high level support including their general nursing expertise, good assessment skills and good clinical judgment all of which are transferable to any setting

A safe skill mix for this number of patients and this level of patient acuity would be 1x RN3, 3x RN2, 2xGN, 2x HCAs. Realistically this skill mix is often very difficult to achieve.

7. Given that, routinely, ICU staff that are seconded to other clinical areas to provide assistance are not assigned a patient load in case they are required to return to ICU at short notice, and that medication administration is a task that ICU nurses have indicated they prefer not to do when assisting, do you consider that the DHB clinical practice guideline document *Assisting on Wards*, issued June 2008, adequately addresses issues pertaining to medication administration by seconded staff? In your view, would the document and patient care in general benefit from more explicit reference to this?

In [the CEO's] communication to the HDC on 22 February 2010 he states that ICU staff would prefer not to administer medication to patients and will usually negotiate not too. The *Assisting on Wards* guideline aims to give clear directives and guidelines regarding redeployment of unit staff and yet the guideline does not specifically address unit staff preference not to administer medications in wards that they are seconded too, presumably this preference has become common knowledge or has to be communicated informally each time a unit staff member goes to another ward. The risk is that not all staff knows of this preference or understands the rationale behind it.

The informal nature of communicating this preference is likely to put staff in the wards and seconded unit staff in a situation where they have to agree together that the unit staff will or will not administer medications. This need to negotiate may come as a surprise to ward staff who already feels under pressure from staffing shortages and who are expecting assistance with meds administration.

As an example looking at the Pyxis record provided for 13 November 2008, [Ms D] made 25 withdrawals over an 8-hour period. As a graduate nurse with 6 patients to care for she may have been disappointed to find that the ICU RNs preferred not assist her with medications administration which was quite a significant part of her

workload that day. It also puts RNs in the position of having to explain their rationale for not administering medications. This may take time and could create tension.

On the other hand ICU staff may feel obliged, because it is left to them on an individual basis, to assist with the administration of medications particularly when they see that staff are relatively junior and under pressure with their workload.

I recommend that WDHB review the practice guideline document *Assisting on Wards*, to make the unit staff role more explicit. Any change in the guideline should be communicated widely to the various wards/services likely to be affected.

9. Please comment on the system of storage and positioning of patient records and files in relation to the nurses/doctor station and patient beds on [Ward X] as outlined in the DHB response of 22 February 2010.

In my opinion the storage and positioning of [Mr A's] working files (charts) in his room was appropriate and practical for an acute ward where multiple staff needs access to these files round the clock. The charts usually consist of the observation chart, fluid balance chart, medication chart and a range of other charts depending on the individual patient's problems/needs. The issue of maintaining confidentiality of the information has to be balanced against practicalities. The charts usually have a cover sheet.

It is important to have these charts available by the bedside for medical staff on ward rounds and available to nursing and allied health staff as they interact directly with patients. Patients have multiple interactions with staff over a 24-hour period resulting in multiple entries in the working file. Keeping these charts in a central place presents a number of challenges in terms of access.

It is common practice, based on my experience, for a nurse to gather up the charts for her/his group of patients at the end of a shift and take them to the nurses station to enable easy access to information for the end of shift report. The files would also be needed to be taken from the bedside to dispense medications. Other staff may also remove them for a range of reasons. It is the responsibility of each staff member to return the right charts to the bedside.

In my opinion the storage and positioning of the main patient file in a central area in the ward is appropriate and in my experience a common practice. This file is different from the charts in its function. There is often more than one file for each patient. This file contains multiple patient assessments, plans and reports. It would be impractical for this file to be stored at the bedside and maintaining confidentiality of information would be very challenging.

All charts and files are labelled but the risk of human error in relation to a chart being put back in the wrong place is constant when charts and files are constantly being used by a large multidisciplinary team around the clock.

11. In your view, were the concerns raised by [Mrs B] about [Mr A's] medication issue adequately addressed overall by the DHB?

8. Please comment generally on the appropriateness and timeliness of [the] DHB's response to, and overall management of, [Mrs B's] complaint that she and her family considered that her father had received someone else's medication in error.

It is my opinion that [the] DHB did not meet the expected standard of care in addressing [Mrs B's] concerns about [Mr A's] medication issue. The incident form/reportable event process was not implemented at the appropriate time or subsequently. It is not possible to know if a prompt investigation via the incident form/reportable events process would have proved or disproved that a medications administration error had occurred. However, a prompt and thorough investigation would have averted much of the subsequent frustration and lack of trust felt by [Mrs B] towards [the] DHB. The initial response from the manager ([Mr M]) did not adequately address the concern raised by [Mrs B] adding to her frustration. Ultimately [Mrs B's] concerns that her father had received medications in error remains unresolved for her and this became a protracted and painful process for [Mrs B].

I acknowledge that overall and over a period of time [the] DHB made a considerable effort in recognising where they went wrong and attempting to put it right.

10. Are there any systemic issues of concern that impacted on or contributed to the appropriateness of DHB staff actions in relation to the concerns raised by [Mrs B]?

Based on the information available there was a robust reportable events policy in place. In my opinion the failure to implement an incident form/reportable event process in a timely manner was a lapse in judgement on the day by a graduate nurse and a CNM rather than a systems failure.

It is also my opinion that the failure of the CNM to communicate with [Mrs B] was lapse in judgement on the day rather than a systems failure.

In my opinion, given that there is always going to be unplanned staff shortages and relatively large numbers of graduate nurses and nurses in their second year of practice plus unlicensed health care assistants in the staff mix, [Ms D] appeared to be 'going it alone' in her decision-making. Her course of action may have been more appropriate if she was under less pressure and was supported by a small team that she could use for guidance and problem solving. I recommend that [the] DHB looks at developing a robust nursing care delivery model that enables staff to support each other on each shift in a structured way. I have suggested a team model as one way of achieving this.

12. Please outline any recommendations you may have to address concerns raised by this complaint?

I have made a recommendation in section 10 above regarding a more structured nursing care delivery model to support less experienced staff.

I have recommended that [the] DHB review their policy *Assisting on Wards* (see section 7 of this report).

I do not have any additional comments.

Margaret McArtney RN MA”