# Private Hospital

# Registered Nurse, Ms B

# Registered Nurse, Ms C

## A Report by the

## Deputy Health and Disability Commissioner

## (Case 12HDC01041)

Health and Disability Commissioner
*Te Toihau Hauora, Hauātanga*

# Table of Contents

## Executive summary

1. On the evening of 28 February 2012, Mrs A, was admitted to a private hospital for a bilateral flexible ureteroscopy[1] and change of her ureteric (kidney) stents on 29 February 2012. Mrs A has a complex medical history, including chronic pain.

2. In January 2012, Mrs A was taking multiple medications, including a prescribed dosage of 20 milligrams (**20mg**) of the controlled drug methadone, once daily for her neuropathic pain.[2] The strength of the prescribed dosage of methadone was 5mg per millilitre of liquid (**5mg/ml**). Mrs A therefore took 4ml of liquid, which was administered by syringe via a PEG[3] tube. From 27 January 2012 onwards, Mrs A's dosage was reduced to 15mg.

3. Prior to admission, Mrs A completed Patient Health History documents. She attached a list of her medications. Mrs A's medication list (dated 20 January 2012) recorded that she was taking methadone 20mg once daily, but it did not record the strength or volume of her prescribed methadone dose. Mrs A presented to the private hospital on 28 February with a bottle of her prescribed methadone. Mrs A gave a copy of her medication list to the admitting nurses. The list had not been updated to reflect the reduction in her methadone dose to 15mg. The nurses proceeded on the basis that the dose was 20mg. It is unclear exactly how much methadone Mrs A took with her to the private hospital; however, the label on the methadone bottle clearly indicated that the strength of the prescribed methadone was **5mg/ml.**

4. Following the administration of Mrs A's methadone on the morning of 29 February 2012, the bottle of methadone that Mrs A had brought with her to hospital was noted to be empty. The charge nurse ordered more methadone from the hospital pharmacy according to the strength and volume of the bottle the hospital pharmacy held in stock. The methadone ordered was not individually dispensed and labelled for Mrs A. The strength of the methadone obtained from the hospital pharmacy was **10mg/ml.**

5. RN B was responsible for administering Mrs A's medications on the morning of 1 March 2012. RN B drew up the methadone for Mrs A from the hospital pharmacy bottle. RN B did not identify that the strength of the hospital pharmacy methadone was 10mg/ml. She also mistakenly read that the strength of the methadone that Mrs A had brought with her to hospital was 1mg/ml. As a result, RN B drew up 20ml of 10mg/ml methadone (meaning that she drew up a total of 200mg of methadone, instead of 20mg of methadone. In order for Mrs A to receive 20mg of methadone, RN B should have drawn up 2ml of the 10mg/ml methadone).

6. The medication was double checked and double signed by RN C prior to administration. RN C failed to identify RN B's error.

[1] A ureteroscopy is an examination of the inside of the kidney and ureter.
[2] Mrs A had a list of approximately 20 medications, including another controlled drug, OxyNorm, for pain relief.
[3] Percutaneous Endoscopic Gastrostomy — feeding tube.

**Findings summary**

7. RN B administered Mrs A 200mg of methadone instead of 20mg. This was a significant medication error, for which RN B accepted responsibility. RN B failed to exercise reasonable care and skill in the dispensing, checking and administration of methadone to Mrs A on 1 March 2012 and, accordingly, she breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code).[4]

8. RN C did not exercise reasonable care and skill in the checking of Mrs A's methadone prior to its administration and, accordingly, she breached Right 4(1) of the Code.

9. At the time of Mrs A's admission in February 2012, the private hospital's Controlled Drug Register did not comply with the Misuse of Drugs Regulations. The private hospital failed to provide services to Mrs A that complied with legal standards and, accordingly, it breached Right 4(2) of the Code.[5]

## Complaint and investigation

10. Mrs A complained to HDC about the care provided to her by a private hospital. The following issues were identified for investigation:

- *Whether RN C provided Mrs A with services of an appropriate standard.*
- *Whether RN B provided Mrs A with services of an appropriate standard.*
- *Whether the private hospital provided Mrs A with services of an appropriate standard.*

11. An investigation was commenced on 27 March 2013. This report is the opinion of Ms Rose Wall, Deputy Commissioner, and is made in accordance with the power delegated to her by the Commissioner.

12. The parties directly referred to in the investigation were:

| | |
|---|---|
| Mrs A | Consumer/complainant |
| Private hospital | Provider |
| RN B | Registered Nurse |
| RN C | Registered Nurse |

13. Information was also reviewed from:

| | |
|---|---|
| RN D | Registered nurse |

[4] Right 4(1) of the Code of Health and Disability Services Consumers' Rights states: "Every consumer has the right to have services provided with reasonable care and skill."
[5] Right 4(2) of the Code states: "Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards."

| | |
|---|---|
| Ms E | Senior clinical pharmacist |
| RN F | Registered nurse |
| Community pharmacy | Provider |
| Dr G | General practitioner |
| Ms H | Mrs A's former carer |
| Mr I | Pharmacist, another DHB |
| Medicines Control, Ministry of Health | |
| ACC | |

Also mentioned in this report:

| | |
|---|---|
| Ms J | Pharmacist |
| RN K | Registered nurse |
| RN L | Registered nurse |
| RN M | Charge Nurse |

14. Independent nursing advice was obtained from registered nurse Ms Dawn Carey (**Appendix A**).

15. Independent hospital pharmacist advice was obtained from Mr Simon Jamieson (**Appendix B**).

## Information gathered

### Background

16. Mrs A has a complex medical history, including a complex neurological condition, chronic pain, chronic lung disease, and the need for regular ureteric (kidney) stent changes. Mrs A uses a wheelchair due to her neurological condition. At times she experiences neuropathic pain.[6]

17. Mrs A was scheduled for a bilateral flexible ureteroscopy[7] and change of her ureteric (kidney) stents at the private hospital on Wednesday 29 February 2012. The surgery was expected to result in an overnight stay. Mrs A was admitted on the evening of Tuesday 28 February 2012.

*Methadone usage*

18. In January 2012, Mrs A was taking multiple medications, including a prescribed dosage of 20 milligrams (20mg) of methadone, once daily, for her neuropathic pain.[8] Mrs A was not required to pick up her methadone daily as she was taking it for pain relief only and utilised repeat prescriptions.

[6] Neuropathic pain (neuralgia) is a pain caused by problems with signals from the nerves. It is different from the common type of pain that is due to an injury. Traditional painkillers such as paracetamol, anti-inflammatories and codeine are not usually effective in relieving neuropathic pain.
[7] A ureteroscopy is an examination of the inside of the kidney and ureter.
[8] Mrs A had a list of approximately 20 medications, including another controlled drug, OxyNorm, for pain relief.

19. The strength of the prescribed dosage of methadone was 5 milligrams per millilitre of liquid (**5mg/ml**). Mrs A therefore took 4ml of liquid, which was administered by syringe via a PEG[9] tube.

20. Mrs A told HDC that although she was usually prescribed 20mg of methadone (4ml) she took only 15mg (3ml) first thing in the morning, usually at 8am. Her personal assistant/carer at the time, Ms H, helped her with the administration of her medications.

21. Mrs A's GP records and her local community pharmacy records for the relevant period confirm that on 12 January 2012 Mrs A had been prescribed 20mg (4ml) of **5mg/ml** strength methadone once a day.

22. However, pharmacy medication labels for 27 January, 10 February, and 18 February show that Mrs A's dosage had been reduced, and she was prescribed and dispensed 15mg (3ml) of **5mg/ml** methadone once a day. Mrs A was supplied with 150mg (30ml) of methadone at one time (enough for 10 doses of 3ml). The liquid was contained in a small pharmacy bottle.

23. Mrs A's general practitioner records show that, on 27 February 2012, Mrs A received a repeat prescription for her methadone, recorded in her clinical records as "Methadone Hydrochloride 5mg Tab — 3 tabs, Once Daily — 90". The records from Mrs A's general practitioner note that the prescription was faxed to the pharmacy on 28 February 2012. The faxed prescription, received at the pharmacy, recorded the prescription as "Methadone 5mg [one] [three times a day] [one month]".

24. Mrs A advised HDC: "There was never a time I took any more than the one dose … at 8am each morning."

25. Pharmacy medication labels for 28 February show that, on this date, Mrs A was dispensed **5mg/ml** strength methadone, 5mg (1ml) to be taken three times a day. Mrs A was supplied with 150mg (30ml) of methadone.

**Methadone — controlled drug**

26. Methadone is a controlled drug pursuant to the Misuse of Drug Regulations 1977 (the regulations).[10] The regulations place restrictions on the prescribing, supply and custody of controlled drugs.

27. The regulations require persons authorised to deal in controlled drugs to maintain a Controlled Drug Register (CDR) in relation to all controlled drugs dealt in, possessed or dispensed by the authorised person. The CDR is to be in the form prescribed in Schedule 1 of the regulations. That form requires the recording of certain information regarding controlled drugs on the CDR, and requires that a separate page be used in the CDR for each name and form of a controlled drug (the form states: "1 kind and 1 strength only to each page". See Appendix C).

[9] Percutaneous Endoscopic Gastrostomy — feeding tube.
[10] Schedule 1B of the regulations.

28. In addition to a CDR, the regulations require hospitals to maintain a Main CDR and a Ward Book.[11] The Ward Book is to be in "like form" to the CDR.

29. It is an offence to fail to comply with the regulations.

**Private hospital policies**

30. At the time of these events, the private hospital had two policies relevant to the management of controlled drugs: the "Medication — Controlled Drugs — Management Of" policy; and the "Medication — Management of Patient's Own Medication During Inpatient Stay" policy.

*"Medication — Controlled Drugs — Management Of" policy*

31. The private hospital's "Medication — Controlled Drugs — Management Of" policy[12] requires that "[the private hospital's] employees must ensure the safe and appropriate management and administration of controlled drugs in accordance with the private hospital policy and the Misuse of Drugs Legislation".

32. This policy also states that, at admission, a patient's own controlled drugs (POCDs) either be returned to the patient's family or stored in a Controlled Drug safe, and for ward stock to be administered where possible. The section of the policy headed "Patient's Own Controlled Drugs" (POCDs) begins: "[C]ontrolled drugs belonging to the patient must be entered into the Controlled Drugs Register by the RN including the following details: date, name, form, quantity of the drug and name of the patient. The entry must be signed by two responsible persons." There is no reference to recording the strength of the drug.[13]

33. If the drug is to be administered to the patient, the policy states: "[A] separate page for each Controlled Drug is to be used headed with Patient and Drug name. All doses administered to be documented as for ward Controlled Drugs." The policy does not specify a separate page for each kind and strength of controlled drug. In response to the provisional opinion, the private hospital submitted that this requirement is explicit on the template form used for separate page recording.

34. The policy also requires that controlled drugs be stored in a locked Controlled Drug safe, and must be ordered from the private hospital pharmacy by a registered nurse on a Ministry of Health Private Hospital Controlled Drug Bulk Supply Order Form. This policy further requires that controlled drugs to be administered "must be checked and signed out of the Controlled Drug Register by two responsible persons", one of whom must be a the private hospital registered nurse, and the other to be the person administering the drug.

*"Medication — Management of Patient's Own Medication During Inpatient Stay" policy*

35. The private hospital's "Medication — Management of Patient's Own Medication During Inpatient Stay"[14] policy outlines in a flowchart appendix that, at admission,

[11] See Regulation 44(2).
[12] Issued January 2012.
[13] Page 11 of the policy.
[14] Issued March 2009 and in use at the time of Mrs A's admission. This policy has subsequently been revised and issued in June 2012, for review in June 2015.

"[c]ontrolled drugs are to be locked in CD [controlled drug] safe and documented in 'Patient's own meds' page of CD register".[15]

*The private hospital's practice with regard to controlled drugs*

36. The private hospital acknowledged that POCDs held in the drug safe must be recorded in the Ward Book but said that, at the relevant time, it was common practice to record all POCDs on a single page.

37. The private hospital stated that previous Ministry of Health Medicines Control audits of the private hospital[16] did not identify any problem with the practice of recording all POCDs on one page of the CDR, and that more recent spot audit reports of other hospitals[17] had identified the non-compliant practice as "low risk".

38. In contrast, the Ministry of Health advised HDC:

> "Hospital pharmacy audit records show that four hospitals of 13 audited over the current hospital pharmacy audit cycle (2012–2014) did not comply with Controlled Drug recording requirements for patients' own controlled drug recording on wards. Audit tools used in the current and past audit cycles contain the Misuse of Drugs Regulation requirement for separate pages for controlled drugs and their different strengths and are part of the audit for pharmacy services to hospital wards … the requirement for separate pages for different controlled drugs is not new."

**Hospital pharmacy screening — reconciliation**

39. On 20 January 2012 Mrs A compiled and typed a list of all her medications. A week prior to her 28 February 2012 admission to the private hospital, Mrs A completed her Patient Health History form and attached a copy of her medication list to the form. Those documents were received at the private hospital on 21 February 2012.

40. On 28 February 2012 Mrs A's Patient Health History form was screened by Senior Clinical Pharmacist Ms E. This process is in place to prioritise patients for medicine reconciliation and review. Mrs A was identified as a priority for pharmacist review because of her multiple medications and having a PEG tube requiring her medications to be crushed or in liquid form.

41. Ms E attempted to call Mrs A on the morning of 28 February to make sure that Mrs A had an adequate supply of her own medications to take to the hospital later that day. If Mrs A had not had an adequate supply, Ms E intended alerting the hospital pharmacy to arrange a supply, as not all Mrs A's medications would be on the ward stock.

42. Ms E passed on an alert to the Charge Nurse that Mrs A had a PEG tube and liquid medications that would need to be made up by the pharmacy if she did not bring her own.

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[15] Appendix 1 of the policy, "Process for handling Patient's Own Medication on Admission". Page 9 of the policy document.
[16] Pages from the private hospital audits from 2005 and 2009 were provided to HDC.
[17] 2012–2014.

43. At approximately 3.30pm on 28 February, Ms E contacted Ms H, who said that Mrs A could not come to the phone. Ms H relayed some information from Mrs A. Ms E asked whether Mrs A had enough medication, including methadone, for her hospital stay. Ms H told Ms E that Mrs A did have a sufficient supply, and that Mrs A took methadone for pain management only. Ms E asked whether any of Mrs A's medications had altered from the list she had provided, and was told that only one medication dosage had changed (gabapentin), and Ms E documented the change.

44. Ms E then provided a handover about Mrs A to the pharmacist who would be on duty the following day, Ms J. Ms E did not contact the Charge Nurse again, as she felt that there would be no problem with the supply of Mrs A's medications. Ms E was not on duty on 29 February.

45. Mrs A recalls that she took 15mg (3ml) of methadone on the morning of 28 February 2012. As noted above, Mrs A was prescribed and dispensed a further 30ml of methadone later on 28 February. However, neither Mrs A nor her carer can recall at what time Mrs A's dispensed 30ml bottle of methadone was picked up from the community pharmacy. Mrs A initially thought that it was picked up on the way to the private hospital in the late afternoon, but, on reflection, she advised HDC that that was probably incorrect. As discussed below, it does not appear that this bottle was taken to the private hospital.

**Admission — 28 February 2012**

46. Mrs A said that she arrived at the private hospital at about 6pm. The admission process was completed at around 9pm on 28 February 2012.

47. Mrs A's medication was not reconciled by the pharmacy on the evening of 28 February (Ms J completed Mrs A's medication reconciliation following Mrs A's surgery).

48. Two nurses — RN F and RN D — assisted with Mrs A's admission. Mrs A said that both nurses were present when they discussed her medication schedule with her. Mrs A had brought with her to the private hospital a copy of the list of the medications she was taking, which also included details of her allergies and side effects to medications. She had also brought her packaged medications, including her methadone, which she advised was in a typical pharmacy 50ml sized bottle.[18]

49. Mrs A gave a further copy of the medication list to the admission nurses. The medication list includes the entry: "Methadone **20mg** once 'morning' only", but does not refer to the strength of the methadone to be used. As stated, Mrs A's medication list had not been updated following the reduction in her methadone dose to 15mg on 27 January 2012. Accordingly, the nursing staff proceeded on the basis that Mrs A's methadone prescription was for a 20mg dose.

[18] Mrs A supplied HDC with an example of the translucent Multichem 50ml bottle she used. The bottle has volume scale markings on its outside in increments of 10ml; 4 ml of liquid in the bottle can be distinguished using the markings.

50. The Patient Health History form Mrs A had completed earlier and sent to the private hospital has a designated space for strength, dose and frequency of existing medications, but this was not filled in because Mrs A had attached her own medication list to the form.

51. Mrs A told HDC:

> "I discussed [with admitting nurses] the fact that I was only having 15mgs Methadone each 8am and said I did not need the full 20mgs Methadone as prescribed. I don't remember seeing the two admitting nurses post-op. The admitting nurses had my medication with them during our discussion. They read the medication list I gave them and compared it with the pharmacy labels on the individual medications and said all my medication would be locked away and given back to me at my discharge. They were highly professional nurses and I felt much more relaxed and confident that I was in a safe environment."

52. The private hospital's response to HDC stated that the nurse admitting Mrs A (RN D) entered Mrs A's controlled medications (methadone and OxyNorm) on to a controlled drug register (CDR) form under the heading "Patient's own meds".

53. There were multiple patients and multiple controlled drugs (and other prescription medicines) entered on the same CDR page.

54. The entry for methadone was written at 10.00pm and records "4mls" of volume on admission (which would equate to 20mg at the prescribed strength of 5mg/ml). The dose strength is not recorded on the CDR. The CDR was initialled by RN D and checked and initialled by RN F.

55. RN D told HDC that she cannot recall Mrs A but, based on her review of the records, she admitted Mrs A, went through the admission process, introduced Mrs A to her room, took baseline observations, and completed the CDR entries. The methadone and OxyNorm were checked by the two nurses, and the syrups were collected from Mrs A and placed in the secure drug cupboard.

56. RN F also told HDC that Mrs A's own medication was scheduled and entered into the "patient's own medication" record by RN D. RN F said that the methadone and OxyNorm were in syrup form and, as syrup is unable to be "counted", the "perceived volume levels" of the methadone syrup on admission (recorded as 4ml, ie, 20mg) was checked by her as the second person checking the balance, and she then signed for the medication.

57. None of Mrs A's own medications were prescribed or administered overnight.

**Pre-op — 29 February 2012**

58. On the morning of 29 February Mrs A was taken to the admissions unit by a registered nurse. The anaesthetist asked that Mrs A's methadone be retrieved so that she could receive her dose of 20mg at 8am as a pre-medication prior to surgery. The registered nurse stated that she took Mrs A's methadone to pre-op, and noted that the strength of the bottle that Mrs A had brought with her to hospital was 1mg/ml.

59. The private hospital told HDC that the nursing staff responsible for drawing up and administering Mrs A's methadone that morning considered that the bottle Mrs A had brought from home contained only 15mg, not what was believed to be the prescribed dose of 20mg. Accordingly, the anaesthetist agreed for 15mg to be administered. He changed the anaesthesia pre-operation record by crossing out "20mg" under "current medications to be given" and writing "15mg", which he and the two pre-operative nurses, RN K and RN L, initialled.

60. The "medication/fluid prescription chart" administration record for 8am on 29 February 2012 records "15mls" and is filled in as "Pre-Med". It is not initialled. No amendment was made to the CDR to reflect the dose of methadone administered.

61. The methadone bottle that Mrs A had brought to the hospital was empty following the administration of methadone on the morning of 29 February. It appears that the new bottle that Mrs A collected on 28 February had not been taken to the hospital, so further methadone needed to be obtained from the hospital pharmacy for Mrs A's next dose the following morning.

62. Charge Nurse RN M rang the hospital pharmacy and ordered more methadone for Mrs A for 1 March 2012.[19] For controlled drugs, the Charge Nurse (or a registered nurse) orders the required controlled drug from the pharmacy using the Ministry of Health Controlled Drug Private Hospital Order Form (H590) pursuant to expected need. The private hospital advised that, in this case, the controlled drugs process was followed.

63. RN M ordered methadone of strength 10mg/ml (200ml), which was the strength and volume of the bottle the hospital pharmacy held in stock. The methadone was ordered for ward stock, and not individually dispensed and labelled for Mrs A.

64. The private hospital advised: "The prescription was written for the dose of active ingredient, not as a volume dose of a specific branded product or of a specific dilution. Therefore the strength of the concentration of Methadone was not relevant to the order." The private hospital further advised that it would not necessarily be usual practice for replacement medication to be the same concentration as the patient's initial medication. It said: "The prescription on the drug chart did not include either the strength/concentration nor the volume dose of [Mrs A's] Methadone, just the weight of active ingredient to be administered." The private hospital stated that there is no procedure to alert staff if replacement medication differs from the initial medication.

65. The private hospital's pharmacy supplied the methadone as an original pack in the manufacturer's packaging with the usual manufacturer's label, which the private hospital stated is standard practice for supply of controlled drugs.

**Surgery**

66. Mrs A's surgical procedure went ahead on the morning of 29 February 2012, and she was in recovery by late morning. Mrs A's surgery and overnight stay were largely uneventful.

[19] The prescription and the order to administer the methadone was charted on Mrs A's medication chart by the anaesthetist as 20mg of methadone.

**Methadone administration error — 1 March 2012**

67. On 1 March 2012, RN B was responsible for Mrs A. RN B advised HDC that she checked on Mrs A at 6.30am to ensure she was comfortable, and returned to assess her observations at approximately 8am and to organise Mrs A for breakfast. RN B told Mrs A that she would administer her medications after breakfast.

68. Mrs A told HDC that on the morning of 1 March:

> "the Nurse prepared to administer my Methadone medication. She said that she was giving me 20mg Methadone. I told her that I was only taking 15mgs. She said that I was prescribed 20mg. I said that it didn't really matter. Seeing she had it ready I would have the 20mg to save her having to alter the dose. It was then that my Personal Assistant, who regularly gave me the Methadone every day since it was first prescribed, noticed that the content in the syringe was red instead of clear and said to the nurse that it was the wrong coloured medicine. I immediately looked at the dose and told the nurse that it was not my medication. The nurse said that it was the right medication, just a different brand. She immediately administered the drug."

69. Ms H advised HDC that a nurse came to administer Mrs A's medications on 1 March, near to the time of Mrs A's discharge. Ms H's recollection is that Mrs A queried the colour of the methadone before it was administered, but that the nurse said that it was "OK", and that it was the same medication.

70. RN C advised HDC that she was working the morning shift on 1 March 2012. She advised that it was a busy shift, and she was working it as an extra shift. RN C explained that, at approximately 9am, RN B asked her to check methadone elixir with her for Mrs A, and also to sign out the return of the patient's own medication stock of methadone and oxycodone, in preparation for Mrs A's discharge (the private hospital's "Medication and Intravenous Fluid Prescribing/Charting and Administration" policy requires all controlled drugs to be double checked and double signed prior to administration).

71. RN C advised HDC:

> "The patient's Methadone bottle was in the Dangerous Drugs cupboard. Our check revealed a concentration of 1mg/ml,[20] this requiring 20ml for the prescribed 20mg. On opening the bottle we found it to be empty. A replacement bottle had been brought into stock specifically for [Mrs A]. [RN B] then drew up what we checked as 20ml, not realising that the new stock was in fact 10mg/ml …
>
> We checked both [Mrs A's] Methadone (empty) and oxycodone bottles and signed for their return to her."

[20] Mrs A advised HDC that she had never taken methadone at a strength of 1mg/ml. HDC's review of the community pharmacy's labelling records provided show that the labels for Mrs A's prescribed methadone indicate a strength of 5mg/ml, not 1mg/ml as asserted by the private hospital nursing staff. The community pharmacy also advised HDC that it had no record of Mrs A having ever been prescribed or dispensed methadone of 1mg/ml strength.

72. RN C had no further involvement in Mrs A's care.

73. In respect of the preparation of methadone that morning for administration to Mrs A, RN B advised HDC:

> "We then proceeded to check [Mrs A's] due dose of Methadone. The strength on the bottle, which [Mrs A] had brought from home, was 1mg/ml,[21] and she was ordered 20mg …
>
> After both checking the charted dose and the strength on the bottle, I went across the room to get a selection of syringes, as all the medication [had] to be drawn up and put down the [feeding] tube with flushes in between.
>
> When I went to draw up the Methadone we noted that the bottle was empty. It was most unusual for there to be an empty bottle in the drug cupboard, but I assumed that someone thought it should be returned to [Mrs A], as she had brought it in. We took down a similar brown bottle of Methadone, which I later discovered had been ordered by the charge nurse the previous day, and was located in the cupboard with the old bottle.
>
> [RN C] and I were focussed on what we were doing, but I believe that we had a sense of urgency as we were both very busy. In our urgency the mistake we made was that we did not check the strength of the new bottle which although larger we assumed was the same strength as the former. No other patients have ever received this on our ward (to my knowledge). We had already checked the strength of the old bottle and were both thrown into some confusion when we found that [the] original bottle was empty."

74. RN B said that Mrs A did not question the medication when she went to administer it. RN B submitted that her practice "is to not continue to administer in circumstances where a patient or their support people are raising issues about what is being given". RN B further stated: "I would take such a question seriously and would stop and investigate. I would certainly not make a trite comment in response and/or ignore the patient's concern." RN B maintained that neither Mrs A nor her caregiver said anything in front of her to alert her to the colour or quantity of the medication being different to that which Mrs A had taken previously. In response, Mrs A reiterated that she queried the colour and volume of the liquid.

75. RN B stated that when Mrs A left the hospital at approximately 10am, she was alert and oriented.

### Mrs A's discharge and subsequent events

76. Mrs A was discharged home at 10.30am on 1 March 2012.

77. At 1pm on 1 March, Ms H telephoned the charge nurse stating that she was having difficulty rousing Mrs A. Ms H told HDC that she was advised that it might be the pain relief affecting Mrs A, and that she should let Mrs A sleep. Ms H said that she

[21] As per footnote 21.

called a second time and was told that if she was worried she should call an ambulance. The charge nurse called back a short time later and was told that Mrs A had not improved. Ms H then called an ambulance and Mrs A was transferred to a public hospital.

78. Mrs A was admitted to hospital. Her condition was later attributed to central nervous system depression secondary to methadone overdose. This admission resulted in seven days of hospitalisation. Mrs A said that she has subsequently experienced burning, cold sweats and shaking, and has gone on to experience significant health issues and further periods of hospitalisation, as her symptoms returned.

**Subsequent actions**

*The private hospital*

79. The private hospital advised HDC that subsequent investigation into the cause of the medication error established that "both nurses followed the correct procedure for checking medication accuracy prior to administering, the error in dose made by [RN B] was in fact not picked up by the RN [C] when she completed her check". The private hospital also stated:

> "The clinical notes indicate on the sheet of patient's own medications attached to 'Patient Health History' that [Mrs A] was taking 'Methadone 20mg once morning only'.
>
> …
>
> The bottle of aqueous Methadone brought in by [Mrs A] only contained sufficient for a 15mg dose. We understand that the Methadone brought in by the patient was at a concentration of 1mg per 1ml.[22]
>
> Aqueous Methadone is not a drug normally kept on the ward so pharmacy was contacted to supply a bottle. This was supplied at a concentration of 10mg per 1ml.
>
> …
>
> [T]he volume administered to the patient appears to be the same as normal, the overdose being that the strength of the drug administered was ten times that which [Mrs A] was used to taking. The difference in strength of the two sources of aqueous methadone may have been a contributing factor to the giving of an incorrect dose."

80. The private hospital has commenced a Medication Safety Review Project, in line with the national medication safety campaign led by the Health Quality and Safety Commission. As part of that review, an audit tool was developed and rolled out across inpatient wards to assess current knowledge, and to help form the basis of a Medical Safety Programme for the private hospital.

[22] See above, footnote 21.

*RN C*

81. RN C advised HDC that she accepted that there had been a medication error and that this was a departure from the standard of care expected of a registered nurse. RN C stated:

> "I was told on the Monday [5 March] that [Mrs A] had been administered 20mls (200mg) of the Methadone, rather than 2mls (20mg). The second bottle from the hospital pharmacy was stronger. We gave the same volume as would have been given of [Mrs A's] supply.
>
> Narcotic elixirs are not used on a regular basis on this ward and staff are therefore not familiar with them. The only elixir we do use is Panadol and a normal adult dose of that would be 1g or 20mls, which is perhaps why the 20ml given to [Mrs A] did not raise an alarm.
>
> …
>
> Please convey once again my sincere apologies to [Mrs A]. I would like to assure her that this error has not been taken lightly by me. It has had a profound effect on me.
>
> …
>
> I have thought a lot about what happened with the medication checking process and how we could help stop the same sort of thing happening again. [RN B] and I have run a teaching session so our colleagues could learn about what went wrong … We agreed to make the medication room a 'focus zone' to minimise disruptions whilst medications are being organised. I have worked my way through the Hospital's Medication Competency Workbook."

*RN B*

82. RN B also advised HDC that she accepted that there had been a medication error and that this was a departure from the standard of care expected of a registered nurse. She further stated: "I was horrified to discover that [Mrs A] had been given 20mls (200mg) of the Methadone, instead of 2mls (20mg). Although the volume given was the same as would have been given if it had been [Mrs A's] supply."

83. RN B advised HDC that she has "spent a lot of time reflecting on what happened and on [her] practice more generally". She advised that she has shared her learnings with her ward colleagues, and also commented that the medication room has been made a "focus zone". RN B has also completed the Hospital's Medication Competency Workbook.

**Additional information — the private hospital**

84. The private hospital's Chief Executive Officer provided an opinion from the Chief Pharmacist of another DHB, Mr I, and a statement from the private hospital's pharmacy manager which attached previous audit information it had requested and obtained from the Ministry of Health.

85. The Chief Executive Officer made the following submissions in response to the second provisional opinion:

- The private hospital took reasonably practicable steps to ensure that staff managed controlled drugs in a safe and lawful fashion.
- Dr G's advice indicates that in 2011 it was common practice in some public hospitals to manage the record in the "(technically unlawful)" way that occurred at the private hospital. Dr G stated that it was not uncommon for multiple POCDs to be entered onto a single page in hospital controlled drug registers, and that the private hospital's policies on the management of POCDs do specify the documentation requirements for records in the controlled drug register. Dr G noted that the private hospital policy was not followed by the registered nurses completing the transactions and that this was not related to the policies.
- The pharmacy manager's submission summarised the history of a progressive shift in the practice of storage and recording of POCDs. Non-compliance with the strict requirements of the regulations has nationally been longstanding and widespread. The separate page requirement appeared to become a focus of Ministry of Health pharmacy audits during the current (2012-2014) cycle. The private hospital's recording of POCDs has never been identified as an issue in prior audits despite specific questions relating to separate page recording.
- The separate page requirement arises in an oblique manner via a bracketed direction appearing on a template form in a schedule to the regulations. The template form was drafted at a time when storage and recording of POCDs appears not to have been contemplated. The private hospital goes to great lengths to comply with the extensive body of medicines related regulation, however this is a technical requirement that has come into play by improvements in medication reconciliation and POCD management.
- The private hospital accepts that 'in strict terms, POCDs held in the hospital safe must be recorded in the ward book and are captured by the separate page requirement [of the Regulations]' in that the Controlled Drugs Register must set out the name and form of controlled drugs with one kind and one strength only to each page.
- The recording of all POCDs on one page of the CDR has since been identified as unacceptable. The *Management of Patient's Own Medication During Inpatient Stay* policy is to be amended accordingly. Other amendments to the policy are proposed, in particular more explicit cross referencing with other policies. The *Medication — Controlled Drugs — Management Of* policy is also under review and will be amended to include reference to drug strength on page 11, not just page 12.
- The private hospital is revisiting its policy and practice in order to bring it into alignment with the Regulations and revised sector expectations.
- The requirements for recording POCDs for storage were not met and the failure to document administration of POCDs to Mrs A runs counter to the policy requirement — which were both practitioner shortcomings.

- The private hospital accepts that the strength of Mrs A's Methadone solution was not identified in the CDR at admission. However the *Medication — Controlled Drugs — Management Of* policy identifies what information must be recorded by staff in the CDR, including strength of the solution (while noting that reconciliation focuses on identifying the correct medication and dose a patient has been prescribed, and recording these in the patient's medication chart).

## Opinion: RN B — Breach

86. At the time of these events, the private hospital nursing staff believed that Mrs A was prescribed 20mg of the controlled drug methadone (4ml of liquid methadone at a prescribed strength of 5mg/ml), once daily, for neuropathic pain. In fact, Mrs A routinely took 15mg (3ml of liquid methadone at a prescribed strength of 5mg/ml) each morning.

87. Mrs A was admitted to the private hospital on the evening of 28 February 2012, for surgery the following day. Prior to her admission, Mrs A completed a Patient Health History form, to which she attached a list (dated 20 January 2012) of her medications. The medication list recorded that she was taking methadone 20mg once daily, but did not record the strength or volume of her prescribed methadone.

88. Mrs A's medication list of 20 January 2012 was not updated following the reduction in her methadone dose to 15mg on 27 January 2012. Accordingly, nursing staff proceeded on the basis that Mrs A's methadone prescription was for 20mg.

89. When Mrs A presented to the private hospital on the evening of 28 February she took with her a bottle containing her prescribed methadone. While it has not been able to be clearly established how much methadone Mrs A brought with her, the evidence indicates that the admitting nurses had checked the pharmacy labels (which refer to the strength) on Mrs A's medications and that the methadone bottle brought in contained enough for one further dose (perceived to be 4mls syrup by the admitting nurses and documented on the CDR as such). At pre-op, the anaesthetist, RN K and RN L documented that 15mg from the methadone bottle was given to Mrs A. The bottle was then empty after Mrs A received the medication on the morning of 29 February.

90. RN B and RN C have both disputed that they misread the strength of the methadone label. However, I remain of the view that the weight of evidence favours a finding that the label on the methadone bottle brought to the private hospital by Mrs A indicated that the strength of the prescribed methadone was 5mg/ml and not 1mg/ml.

91. Charge Nurse RN M ordered more methadone from the hospital pharmacy to ensure that methadone was available for Mrs A the following morning (1 March 2012). According to usual practice, RN M ordered the methadone for ward stock according to the strength and volume of the bottle the hospital pharmacy held in stock. This

meant that the methadone ordered was not individually dispensed and labelled for Mrs A. The strength of the methadone obtained from the hospital pharmacy was 10mg/ml.

92. RN B was responsible for administering Mrs A's medications on the morning of 1 March 2012. RN B drew up the methadone for Mrs A that morning from the hospital pharmacy bottle. RN B did not identify that the strength of the hospital pharmacy methadone was 10mg/ml. RN B also mistakenly read that the strength of Mrs A's methadone that she had brought with her to hospital was 1mg/ml. As a result, RN B drew up 20ml of the methadone of strength 10mg/ml (meaning that she drew up a total of 200mg of methadone to administer to Mrs A, rather than a 20mg dose of methadone). In order for Mrs A to receive 20mg of methadone, RN B should have drawn up 2ml of the methadone of strength 10mg/ml. This was a significant error by RN B.

93. According to private hospital protocol, the medication was double checked and double signed by RN C prior to administration. RN C failed to identify RN B's error. This does not mitigate RN B's error; however, it was a missed opportunity to identify the error.

94. Both nurses have referred to some of their other commitments on that shift, and described being very busy. However, in my view the busy shift does not, in itself, mitigate RN B's error in drawing up the wrong dose of methadone to administer to Mrs A.

95. On 1 March RN B administered 200mg of methadone to Mrs A, instead of 20mg.[23]

96. Mrs A told HDC that Ms H noticed that the colour of the methadone RN B was about to administer was red, instead of clear. Mrs A said that Ms H said to RN B that it was the wrong coloured medicine. Mrs A said that she looked at the dose and told RN B that it was not her medication, but that RN B said it was the right medication, and immediately administered the drug.

97. Ms H told HDC that it was Mrs A who queried the colour of the methadone before it was administered, and RN B confirmed that it was the right medication. RN B stated that Mrs A did not question the medication prior to administration.

98. I am unable to resolve the discrepancy in accounts between Mrs A, Ms H, and RN B, in respect of whether RN B was questioned about the colour of the methadone prior to its administration. However, I would be very concerned if either Mrs A or her carer had questioned RN B and she failed to address that concern.

99. My expert advisor, RN Dawn Carey, advised me that the actions of RN B "severely departed from the standard of care expected of a RN when dispensing, checking and administering a medication".

[23] I note Ms Carey's advice that within the Medsafe methadone datasheet a daily maximum of 80mg of methadone is referred to.

100. In my view, the administration of medications is a basic nursing competency. On the morning of 1 March 2012, RN B administered Mrs A 200mg of methadone instead of 20mg. This was a significant medication error, for which RN B has accepted responsibility. In these circumstances, I find that RN B failed to exercise reasonable care and skill in the dispensing, checking and administration of methadone to Mrs A on 1 March 2012 and, accordingly, RN B breached Right 4(1) of the Code.

## Opinion: RN C — Breach

101. On the morning of 1 March 2012, RN B asked RN C to check the methadone to be administered to Mrs A, in accordance with the private hospital protocol requiring all controlled drugs to be double checked and double signed prior to administration.

102. RN B had drawn up the methadone for Mrs A that morning from the hospital pharmacy bottle. RN B did not identify that the strength of the hospital pharmacy methadone was 10mg/ml, and also mistakenly read that the strength of the methadone Mrs A had brought with her to hospital was 1mg/ml. As a result, RN B drew up 20ml of 10mg/ml methadone (ie, a total of 200mg of methadone) to administer to Mrs A. In order for Mrs A to receive 20mg of methadone, RN B should have drawn up 2ml of the 10mg/ml methadone.

103. During the checking process, RN C failed to identify RN B's error in drawing up 200mg of methadone instead of 20mg. RN C incorrectly identified that the strength of methadone Mrs A had provided was 1mg/ml (it was in fact 5mg/ml), and also failed to identify that the strength of the hospital pharmacy methadone was 10mg/ml. This was a significant error by RN C, and a missed opportunity to identify the error prior to administration of the medication to Mrs A.

104. Both nurses have referred to some of their other commitments on that shift, and describe being very busy. However, in my view, the busy shift does not, in itself, mitigate RN C's error in inadequately checking the methadone prior to its administration to Mrs A.

105. As a result of these errors, RN B administered 200mg of methadone to Mrs A on 1 March 2012, instead of 20mg.

106. My expert advisor, RN Dawn Carey, advised me that the actions of RN C "severely departed from the standard of care expected of a RN when dispensing, checking and administering a medication".

107. I agree with Ms Carey that the checking of medications is a basic nursing competency. In my view, on the morning of 1 March 2012 RN C did not exercise reasonable care and skill in the checking of Mrs A's methadone prior to its administration and, accordingly, RN C breached Right 4(1) of the Code.

## Opinion: The private hospital — Breach

108. The Misuse of Drugs Regulations 1977 (the regulations) require that a separate page be used in the Controlled Drug Register (CDR) for each name and form of controlled drug (one kind and one strength only to each page).

109. The private hospital submitted that its "Medication — Controlled Drugs — Management Of" policy reflected this requirement, by providing that controlled drugs administered to patients require a separate page for each controlled drug headed with the patient and drug name. However, I note that the policy did not provide that each kind and strength of controlled drug should be on a separate page, as per the regulations. In response to the provisional opinion, the private hospital submitted that this requirement is explicit on the template form used for separate page recording.

110. The private hospital's "Medication — Management of Patient's Own Medication During Inpatient Stay" policy did not reflect the requirement of the regulations that a separate page be used in the CDR for each kind and strength of controlled drug. Furthermore, the policy did not provide guidance on what details were to be recorded, and it does not make the distinction between a patient's own controlled drugs (POCDs) that are being stored for safe-keeping and those that will be used for administration to the patient (however, I accept that such details are covered in the associated "Medication — Controlled Drugs — Management Of" policy).

111. The private hospital stated that, at the time of these events, it was common practice to record all POCDs on a single page. In Mrs A's case, there were multiple patients and multiple controlled drugs (and other prescription medicines) entered on the same CDR page headed "patient's own medication". This practice is not in keeping with the regulations, which stipulate the use of a separate page for each type of controlled drug.

112. Dr G and my independent expert advisor, hospital pharmacist Mr Simon Jamieson, both identified this shortcoming. Mr Jamieson advised:

> "The [private hospital's] Controlled Drug Register (the CDR) does not match the Misuse of Drugs Regulations, which requires a separate page for each form and strength of controlled drug. In this case, there were multiple controlled drugs (and other prescription medicines) entered on the same page, with the concentration (strength) for some drugs left blank."

113. Mr Jamieson also noted that it was difficult to identify from the CDR in this case what drugs were administered to some patients. He said that it was unclear whether Mrs A's OxyNorm liquid was administered, and noted: "If a separate page had been used for each drug/form/strength then there would be more clarity as to what was administered."

114. In relation to the "Medication — Management of Patient's Own Medications During Inpatient Stay" policy, Mr Jamieson advised: "To comply with legislation, a separate page should be used for each drug/form/strength. A page in the controlled drug book labelled 'Patients Own Meds' is not appropriate."

115. Mr Jamieson concluded that he "would consider the policies for recording patient own CDs to 'not be of the appropriate standard' and consider this departure to be moderate".

116. The private hospital was entitled to expect RN C and RN B to comply with existing hospital policy and individual professional nursing standards. However, as this Office has previously commented,[24] providers have a responsibility to have appropriate policies and processes in place to minimise potential harm to patients and to provide services in accordance with the Code. I consider that the private hospital did not have appropriate policies and processes in place in respect of its management of controlled drugs at the time of Mrs A's admission in February 2012, as set out above.

117. The private hospital has submitted that its failure to comply with the Misuse of Drugs Regulations 1977 by failing to record each form and strength of stored POCDs on a separate page was a reasonable action in the circumstances, as same-page recording does not create substantial clinical risk and was common practice in some public hospitals. I do not accept this submission for two reasons. First, Mrs A's methadone was not stored to be returned to her on discharge; rather, it was brought into the hospital and stored for administration to her. Secondly, I do not accept that it is ever a reasonable action to fail to comply with the law. In my view, it is no excuse to say that some other providers also behave unlawfully.

118. I remain of the view that the private hospital's failure to comply with its legal obligations as set out in the regulations is concerning, and its policies with regard to controlled drugs that applied at the time of Mrs A's admission in February 2012 were substandard. I therefore conclude that the private hospital failed to provide services to Mrs A that complied with legal standards and, accordingly, it breached Right 4(2) of the Code.

119. I also note that, prior to Mrs A's admission to the private hospital on 28 February 2012, Mrs A was asked to complete the Patient Health History form, which included information about her current medications. While the form had a designated space for existing medication strength, dose and frequency, Mrs A did not complete that part of the form and instead attached to the form her own medication list. Mrs A's medication list identified that she was prescribed 20mg of methadone and she took it once daily in the morning, but it did not identify the strength of her methadone dose. I am concerned that the strength of the dose was not identified and addressed by multiple staff at the private hospital on Mrs A's admission and during the medication reconciliation process.

## Recommendations

120. RN B and RN C have each provided HDC with apologies, which have been forwarded on to Mrs A.

[24] Opinion 11HDC00710, 28 June 2013.

121. In my provisional report I recommended that RN B and RN C undertake further training in safe medication dispensing, checking and administration, and report to HDC within three months of the final report that such further training had been undertaken. In response, RN B and RN C confirmed, via correspondence from their employer, the continuing education they have undertaken since the error. The following was completed within three months of the error:

- The private hospital's Medication Administration Workbook.
- Attendance at an in-service session on Medication Administration Errors.
- Leading of a session with colleagues that shared their experience and learning from the incident.

122. In addition, HDC was advised that RN B now holds a current expert portfolio under the Nursing Council of New Zealand approved Professional Development Programme run by the private hospital.[25] RN C has over the last three years held an expert portfolio, and submitted another expert level portfolio, validated in June 2014.

123. RN B has attended the private hospital's Annual Update Programme, which has a section on medication management. RN C attended in June 2014. RN B and RN C have also completed intravenous and medication administration competencies.

124. RN B and RN C have both completed modules on medication administration and safety through an organisation-wide project.

125. I recommend that the private hospital:

a. Apologise to Mrs A for its breach of the Code. The written apology should be sent to HDC within three weeks of this report being issued, for forwarding to Mrs A.
b. Complete its review of policies and procedures at the private hospital in respect of storage and administration of controlled drugs to ensure accurate compliance with legislative requirements and sector expectations, and report to HDC on the outcome of the review, within three months of the final report being issued.
c. Update me on the progress and effectiveness of the adoption of drug room 'focus zones' and the roll out of the Medication Safety Programme. This update should include provision of data on medication errors.

[25] The private hospital has a Nursing Professional Development Recognition Programme. It integrates Nursing Council of New Zealand competencies for relevant scopes of practice for an Enrolled Nurse, Registered Nurse and Senior Nurse. All nurses must achieve the *Competent* level for their chosen pathway. Professional recognition exists for nurses who choose to demonstrate *Proficient* or *Expert* practice.

## Follow-up actions

126.
- 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 District Health Board and the Nursing Council of New Zealand, and those organisations' designated recipients will be advised of the names of RN B and RN C.

- 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 College of Nurses Aotearoa (NZ) Inc., the Health Quality and Safety Commission (HQSC), the Director-General of Health, and HeathCERT (Ministry of Health) and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

## Appendix A — Independent nursing advice to the Commissioner

The following clinical advice was obtained from in-house nursing advisor registered nurse Ms Dawn Carey:

> "Thank you for the request that I provide clinical advice in relation to the complaint from [Mrs A] about the care provided by Registered Nurses whilst she was an in-patient at [the private hospital]. In preparing the advice on this case to the best of my knowledge I have no personal or professional conflict of interest, although I do know the RN who admitted [Mrs A] to [the private hospital] in a professional capacity. I wish to assure the Commissioner that I have not had discussions with this RN about this case or her role at [the private hospital]. From the forwarded clinical notes it seems that the RN who is known to me did not subsequently care for [Mrs A] during her post operative period, which is the time period that the medication error and corresponding complaint concerns. I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.
>
> I have read the information on file: complaint from [Mrs A]; responses from the private hospital including clinical notes, basic medication competency workbook, medication administration audit, correspondence between the private hospital and [Mrs A]; correspondence from [a law firm]; correspondence from ACC.
>
> [Mrs A] was admitted to [the private hospital] on 29 February 2012 for bilateral flexible ureteroscopy and change of ureteric stents. She has an extensive medical history and is wheel chair bound due to neuropathic pain.
>
> Her established medication regimen included methadone 20milligrams (mg) once daily. On 1 March 2012 whilst still an in-patient [Mrs A] was administered methadone 200mg by [RN XX][26]. [Mrs A] reports that she and her visitor drew attention to the methadone before it was administered by [RN XX], commenting on the different colour and the quantity but were dismissed by the RN who she felt was overconfident. As the error was unrealised [Mrs A] was discharged home the same day.
>
> At approximately 1pm on 1 March 2012 [Mrs A] was transferred via ambulance to [a public hospital] as her caregiver could not rouse her. She was subsequently admitted to hospital due to central nervous system depression secondary to methadone overdose. This admission required seven days hospitalisation. Subsequently, [Mrs A] has gone on to experience significant health issues and further periods of hospitalisation.

[26] I am unable to decipher this RN's handwriting further and as there is no printed accompaniment of the surname, I will refer to this RN by initials 'XX', as needed in my advice.

Within New Zealand, methadone is classified as a B3 Controlled Drug[27], which means there are legislative requirements concerning who can check and administer this medication within a hospital environment. Whilst this process seems to have been followed in principle, neither of the two RNs involved adequately checked nor noted the concentration of the methadone elixir they were drawing up. The concentration within the bottle they were using was 10mg per millilitre (mg/ml) which should have alerted the staff to dispense two millilitres (mls) of medicine thus giving [Mrs A] 20mg of methadone. Unfortunately 20mls (200mg) of methadone was dispensed and administered to [Mrs A]. Within the methadone datasheet a daily maximum of 80mg methadone is referred to[28].

The private hospital acknowledges the error and has completed an internal review and Sentinel investigation. This has resulted in a raft of measures at an individual RN level and hospital level. The two RNs directly involved in the checking and administration process have had disciplinary measures taken against them, they have completed further training, and they have shared their experience and the learning involved with their colleagues. This has benefited wider nursing practice with the ward drug room now being agreed as a 'focus zone' area.

[The private hospital] has also commenced working with the Health Quality and Safety Commission (HQSC) as part of the National Safety Campaign to reduce medication errors. Across [the private hospital's] inpatient wards existing staff knowledge concerning medication and the safe administration is being assessed. In their response, [the private hospital] report that these results will form the basis of a Medication Safety Programme for [the private hospital].

Within the [the private hospital] response I note that an apology was sent to [Mrs A] and a subsequent home visit was also made. There is also evidence of further communications between [Mrs A] and [the private hospital].

Comment: In my opinion, the prompt investigation of the circumstances involved in this error was appropriate. Considering the seriousness of this error, I agree with the actions of [the private hospital] in relation to the two RNs. In my opinion one of the most important steps is the RNs discussing this error and the subsequent learning with the wider staff team. I consider that the adoption of drug rooms as 'focus zones' should be implemented across [the private hospital] inpatient areas and that it would be appropriate for the Commissioner to be kept informed as to the progress of this implementation and ongoing significant medication error statistics.

I also consider the collaboration with HQSC and the future Medication Safety Programme roll out plan as appropriate. Reading the offered apology and notes

[27] New Zealand Parliamentary Library, *Drug classification under Misuse of Drugs Act 1975* (Wellington: NZ Parliamentary Library, 2003). Retrieved from http://www.parliament.nz/NR/rdonlyres/2AE01057-E733-49B1-8500-BA6F4D8F6917/9045/0310DrugClassification3.pdf

[28] GlaxoSmithKline, *Methadone Syrup data sheet 29 March 2007* (Wellington: Medsafe, 2007). Retrieved from http://www.medsafe.govt.nz/profs/datasheet/m/Methadonesyr.htm

from the visit to [Mrs A] it appears that [the private hospital] are genuine in their apologies although I can appreciate that it can seem inadequate to [Mrs A].

Concerning the discrepancy about whether [Mrs A] and her visitor called attention to the colour and volume of the methadone before it was administered I feel unable to completely resolve this issue. [M]ethadone does come in different coloured liquids regardless of the concentration … In relation to the volume, unfortunately there was no difference whilst there should have been e.g. 2mls should have been administered versus the 20mls which occurred.

Distractions, unfamiliarity with medications and lack of concentrated focus are known 'human factors' that are contributory issues that lead to errors. Within healthcare these can have devastating results and a phenomenal impact on the continuing health of the individual and their trust within the system that is meant to care for them. The error within this complaint could have resulted in death and it did result in significant health costs to [Mrs A].

As a RN peer, I consider the practice of [RN XX] and her RN colleague to have severely departed from the standard of care expected of a RN when dispensing, checking and administering a medication.

I consider the actions post error by [the private hospital] to be appropriate and adequate in relation to analysing the causative factors and preventing a similar error occurrence. I consider their approach as an employer of [RN XX] and her colleague to be appropriate and adequate."

**Further advice**

RN Carey provided the following additional advice:

"Thank you for the opportunity to provide further clinical advice. This advice is to be read in conjunction with my previous proffered clinical advice on this case.

The administration of medications is a basic nursing competency. Registered nurses are accountable for ensuring all health services they provide are consistent with their education and assessed competence, meet legislative requirements and are supported by appropriate standards.[29] Safe medication administration is an indicator that sits within Nursing Council of New Zealand (NCNZ) competencies 1.1 and 2.1[30].

An awareness of medication safety and risk of errors have been the focus of numerous initiatives and publications — 5 R's of medication safety campaign; Health Quality and Safety Commission medication safety fact sheet — over the last five years within New Zealand and internationally.

[29] For example the Health Practitioners Competence Assurance Act (2003); the Medicines Act (1981) and associated Regulations; the Misuse of Drugs Act (1975) and associated Regulations.
[30] Nursing Council of New Zealand (NCNZ), *Competencies for registered nurses* (Wellington: NCNZ, 2007).

…

I have reviewed the photocopies of [the private hospital's] Controlled Drug Register (CDR) pages 115 and 116, that pertain to the recording of [Mrs A]'s Controlled medications — Methadone and Oxynorm — that she brought with her to [the private hospital]. In my clinical opinion, these entries do not reflect the legislative requirements as the strength of the medication is not recorded and each medication is not recorded on a separate sheet in the CDR. I would suggest a legal opinion is sought.[31]

I have also reviewed a photocopy of page 132 of [the private hospital] CDR. This page pertains to the receipt of Methadone Elixir strength 10 milligrams (mgs) per millilitres (mls) with a total volume of 200 mls and the recorded administration of 20mls of Methadone Elixir to [Mrs A] at 9.10 am on 1 March 2012. In keeping with the legislative requirements this entry records the 'Name of the Authority' and the signature of the administrator and checker."

[31] HDC sought expert advice from hospital pharmacist Mr Jamieson (Appendix B) which included his comments on legislative requirements.

## Appendix B — Independent pharmacist advice to the Commissioner

The following advice was provided by hospital pharmacist Mr Simon Jamieson:

"I have been asked to provide an opinion to the Commissioner on case number C12HDC01041. I have read and agree to follow the Commissioner's Guidelines for Independent advisors.

My qualifications and experience are:

Bachelor of Pharmacy (BPharm, Otago University)

- Registered Pharmacist with the Pharmacy Council of New Zealand (RegPharmNZ)
- Member of the Pharmaceutical Society of New Zealand (MPS)
- Overseas member of the Royal Pharmaceutical Society of Great Britain
- Past executive member of the New Zealand Hospital Pharmacists Association (NZHPA)
- Current member of the New Zealand Hospital Pharmacists Association (NZHPA)
- Post graduate diploma Health Informatics (PGHealInf, Otago University)

I have been working as a pharmacist since qualification in 1995, with 2 years experience as a community pharmacist and 16 years as a hospital pharmacist having worked in both New Zealand and the United Kingdom. Most recently I have been in post as Pharmacy Team Leader, Nelson Hospital since May 2006.

The Deputy Commissioner has requested comment on:

- The [private hospital's] Controlled Drug Register (CDR), pages 115 and 116, that pertain to the recording of [Mrs A]'s controlled medications, Methadone and Oxynorm — that she took with her to [the private hospital]. In your view does this CDR and its entries reflect the legislative requirements regarding the format and recording of strength of prescribed controlled drug medications in a hospital CDR? Please refer to the appropriate standards/legislative requirements where appropriate.
- The standard and appropriateness of CDR documentation templates, and the associated policies and systems in place at [the private hospital] relating to the management of controlled drugs.

If you consider that the above was consistent with expected standards and requirements, please explain your reasoning. If you consider they departed from expected standards in any way, please advise whether you consider the departure is mild, moderate or severe.

Sources of Information
Misuse of Drugs Regulations 1977, 44(2)(b) and form1 schedule 1; http://www.legislation.govt.nz

Brief Factual Summary

The legislative requirements for recording of controlled drugs in hospital appear to not being followed specifically for patient own controlled drugs. There appears to be conflicting advice in two different [private hospital] policies with regards this recording which could cause confusion dependent on which policy is read.

Opinion of specific questions posed by Commissioner

**Does this CDR and its entries reflect the legislative requirements regarding the format and recording of strength of prescribed controlled drug medications in a hospital CDR?**

The [private hospital's] CDR pages 115 and 116 do not match the Misuse of Drugs Regulations requirement to have a separate page for each form and strength of controlled drug. Rather there are multiple controlled drugs (and other prescription medicines) entered on the same page, with the concentration (strength) omitted for some drugs and it is difficult to follow what has been administered to some patients (for example page 116, lines 1–3 we can only assume Oxynorm liquid was administered to [Mrs A] but the only entry on the out column is a mL entry). If a separate page had been used for each drug/form/strength then there would be clarity as to what was administered.

**The standard and appropriateness of CDR documentation and associated policies and systems in place relating to the management of controlled drugs.**

Policy — Medication — Management of Patients Own medications during Inpatient Stay — issued March 2009.

- To comply with legislation a separate page should be used for each drug/form/strength so this section will need rewriting. A page in the controlled drug book labelled 'Patients Own Meds' is not appropriate.
- I suggest adding to the policy an example of entering patients CDs into and out of the page (using a separate page for each CD as per legislation).
- To comply with legislation, a separate page should be used for each CD drug/form/strength. Patients own CDs whether being used only for storage or for active use can be written in and out on admission/used during inpatient stay/on discharge. Even though a separate register is not required by legislation I would suggest a dedicated patient own CD register can be useful for some hospitals. Keeping track of patients own CDs using this method may require the use of a separate index page with patient's names matching the page their CDs are written on.

Policy — Medication — Controlled Drugs — Management of

- Page 11, heading: Patients Own Controlled Drugs, bullet point 4: should add 'strength' to 'date, name, form, quantity' section
- Page 12, heading: Patients Own Controlled Drugs Cont'd, consider referring to the Patient Own Medication policy Appendix or make same appendices in the CD policy for example on how to write up patients own drugs.

Policy — Medication — Medication and Intravenous Fluid Prescribing/Charting and Administration
- Robust policy

Systems
- Systems are robust
- It is common practice in hospital to prescribe a dose (e.g. Methadone 20mg) and expect the nursing staff/administrators to use the strength/concentration that is available to them, and calculate the dose needed.

I have been asked to comment as to whether it was common practice in some public DHB hospitals to exempt patients own drugs from recording and documentation requirements at the time of the incident. My personal experience is that I am aware there may have been variations in practice in other hospitals through anecdotal reports, but cannot comment on what that practice variation might be because I have never seen it for myself. I cannot comment if it was common for multiple patient own controlled drugs, with multiple formulations and strengths to be entered on a single page in a controlled drug register. My own experience is that the hospital I work at has been historically compliant with the legislative requirements for dealing with patients own CDs. The best source for practice variation information would be Medicines Control.

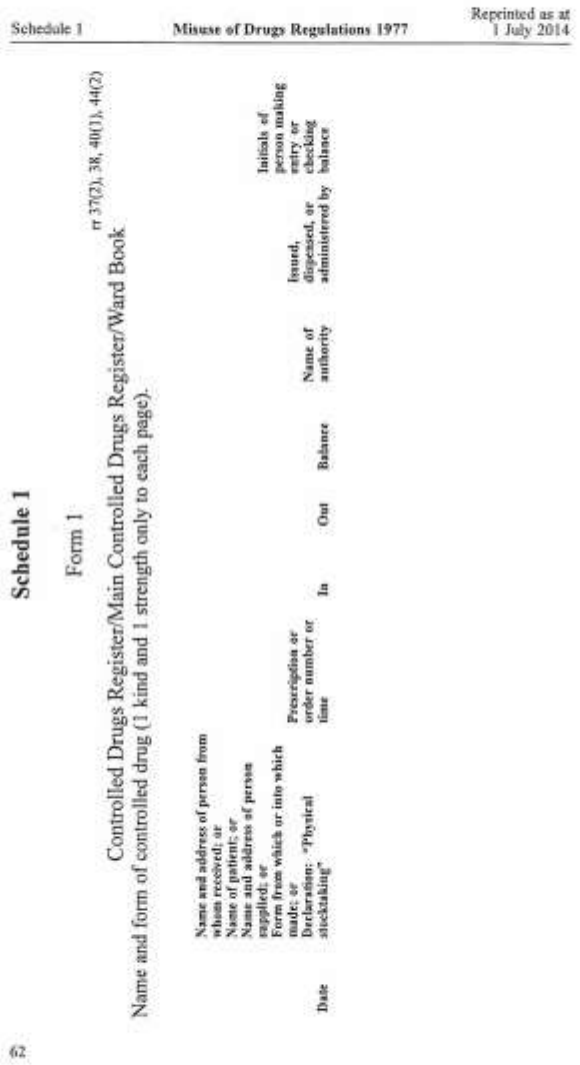
I would consider the policies for recording patient own CDs to 'not be of the appropriate standard' and consider this departure to be moderate.

Reasoning in reaching opinion
I reached this opinion based on the legislation, my own clinical practice and the recent review of our own hospital's practice by Medsafe.

Yours sincerely

Simon Jamieson"

# Appendix C — Schedule 1 of the Misuse of Drugs Regulations 1977



Schedule 1 Misuse of Drugs Regulations 1977 Reprinted as at 1 July 2014

**Schedule 1**

Form 1

rr 37(2), 38, 40(1), 44(2)

Controlled Drugs Register/Main Controlled Drugs Register/Ward Book

Name and form of controlled drug (1 kind and 1 strength only to each page).

| Date | Name and address of person from whom received; or Name of patient; or Name and address of person supplied; or Form from which or into which made; or Declaration: "Physical stocktaking" | Prescription or order number or time | In | Out | Balance | Name of authority | Issued, dispensed, or administered by | Initials of person making entry or checking balance |
|---|---|---|---|---|---|---|---|---|

62