Registered Nurse, Ms D

A Hospice

A Report by the

Health and Disability Commissioner

(Case 05HDC05278)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Parties involved

Mrs A	Consumer (deceased)
Mr A	Consumer's husband
Mr B	Complainant
Mrs C	Consumer's daughter
Ms D	Provider/Registered nurse
Mrs E	General manager, a hospice
Dr F	General practitioner
Ms G	Team leader, a hospice
Ms H	Nursing manager, a hospice
Ms I	Palliative care nurse
Ms J	Palliative care nurse

Complaint

On 13 April 2005 the Commissioner received a complaint from Mr B, of the New Zealand Police, concerning the sudden death of 69-year-old Mrs A at her home in July 2004. Mrs A died after an incorrect dose of morphine was administered to her by registered nurse Ms D, a palliative care nurse employed by a hospice. Mr B advised the Commissioner:

> "This matter was investigated thoroughly by Police with regard to the criminal liability associated with [Mrs A's] death. The criminal aspect of this matter related to the omission of the Hospice nurse, [Ms D], to adequately set-up and check the Graseby Pump that administered the excessive dose of morphine. It is highly likely that this error caused the death of [Mrs A]. Liability therefore falls on [Ms D] who set up the pump and arguably her employer if she was expected to carry out unsupervised care that she was not qualified to provide.
>
> Several sections of the Crimes Act 1961 were reviewed. The most appropriate legislation was deemed to be the crime of 'Criminal Nuisance' Section 145 of the Crimes Act 1961. After the criminal investigation had been completed, the Police decided not to charge [Ms D] with any crime. It was felt that [Ms D's] action amounted to 'negligence' rather than 'recklessness' which is required by the Act. It is the view of the Police that a prima facie case against [Ms D] could not be established.
>
> [The family] are well aware that their loved one died prematurely as a possible result of [Ms D's] actions. They would like to see those responsible held accountable.

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

> I therefore request that this matter be investigated by the Health and Disability Commissioner's Office. Documentation relating to the Police investigation is available if required."

The Commissioner obtained the Police investigation file and, following careful review of the information, investigated the following matters:

Ms D
Whether Ms D took appropriate steps to ensure accurate administration of morphine to Mrs A.

The Hospice
Whether the hospice took appropriate steps to ensure Ms D, palliative care nurse, was competent to perform the duties for which she was employed.

An investigation was commenced on 18 May 2005.

Information reviewed

- Letter of complaint from Mr B, New Zealand Police
- New Zealand Police Investigation File, including:
  - Report from Mr B
  - Statement from Mrs C, daughter of Mrs A
  - Statements from Ms D
  - Statements from Mrs E
  - Statement from Dr F, General Practitioner
  - Sworn deposition from a Pathologist
  - Sworn deposition from an ESR Scientist
  - Statement from Ms G, Team Leader, the hospice
  - Statement from Ms H, Nursing Manager, the hospice
  - Statement from ex-colleague of Ms D, Ms I
  - Ms D's orientation to the hospice programme

- Responses from Ms D dated 8 June and 6 October 2005
- Responses from the hospice dated 26 May, 22 July and 7 October 2005.

Information gathered during investigation

Overview
On 27 May 2004, Mrs A was diagnosed with lung cancer. On 2 July 2004, she commenced respite care at her home from palliative care nurses working at the hospice. One of the nurses responsible for her care was Ms D. In the early stages of her illness Mrs A was prescribed oral morphine tablets to control her pain.

One day in July 2004, Mrs A was started on subcutaneous morphine administered by Graseby pump. Ms D began the medication at approximately 3.30pm and Mrs A died peacefully at approximately 7.10pm.

Background
Dr F was Mrs A's general practitioner. In his statement to the Police, Dr F advised that on 27 May 2004 he had a consultation with Mrs A in which he suspected she might have cancer. Tests confirmed his diagnosis of lung cancer with extensive metastases. Dr F referred her to a public hospital for specialist treatment but, after one oncology treatment, Mrs A suffered such a severe reaction that it was discontinued.

Mrs A was referred to the hospice for palliative care, with Dr F continuing to provide medical oversight. Dr F visited Mrs A at her home, to see how she and her family were coping. Mrs A was taking morphine tablets, 10mg twice a day with "top-up" doses of 10mg/ml of morphine elixir, to control her pain.

One morning, Mrs A's husband and daughter, Mrs C, were with her at home. Mrs C advised the Police that she rang Ms D, the palliative care nurse who was to visit that day, to say that her mother was very distressed with pain and nausea.

Ms D arrived at the family home at about 10am. This was her first visit but she was aware that Mrs A had end-stage cancer and her condition had deteriorated rapidly over the preceding few days. Ms D found Mrs A in considerable distress. Mr A had given Mrs A some oral morphine that morning but she was having difficulty swallowing. Ms D telephoned Dr F and it was agreed that Mrs A's medication would be changed to continuous subcutaneous infusion.

Ms D left Mrs A's home to collect the prescriptions from Dr F, deliver them to the pharmacy, visit other patients, and collect the equipment from the hospice. She arrived back at the family home around 3pm. As Ms D was assembling the equipment, Mrs C spoke to her about organising a night nurse to look after her mother. Mrs C went into her mother's bedroom, leaving Ms D to prepare the medication and pump.

Ms D began preparing the drugs for the Graseby pump. Mrs A was prescribed 30mg morphine, 20mg Maxolon (an anti-nausea drug), 1.5mg haloperidol (a sedative) and 4mg dexamethasone (an anti-inflammatory steroid). Ms D explained:

> "The first three of those drugs are regarded as incompatible when in concentrated form with the fourth drug, dexamethasone. Therefore, I had to prepare the other three drugs first in the main syringe, and then dilute them with normal saline, so that the dexamethasone could be added when the other drugs were diluted."

In explaining how the Graseby pump works, Ms D stated:

> "Pumps require a millimeter (mm) length of liquid in the syringe attached to the pump. In this case, 48mm of liquid was required to be delivered over 24 hours. That equates to 17.5ml of fluid in the 30mm syringe which I used. In order to get to that total I had to add enough saline to the first three drugs to make up 16.5mm so that when the 1mm of dexamethasone was added, there was the right total amount of fluid.
>
> I understand that I correctly calculated and mixed the drugs used and the number of mm per hour of syringe needed. Where there was a problem was in the setting of the actual rate of the pump.
>
> I was using a blue Graseby pump; I was unfamiliar with that particular model of pump. I had never set up a blue pump before or had any specific orientation on its use. I had refilled syringes on blue pumps, but that does not involve changing the settings. Hospice has more of the green pumps that the blue ones. I had used the green Graseby pump extensively in my practice."

Having prepared the medication, Ms D took the pump and prepared syringe into Mrs A's bedroom. She explained to Mrs A and her daughter that the medication would be administered over a period of 24 hours, as the pump was set to deliver 2.0mm per hour (whereas in fact it was set at 20mm per hour). She also explained how to turn off the pump for Mrs A's shower the next morning.

Mrs C stated that once the pump was set it made a whirling sound. She asked Ms D about the sound and was told that it was normal. Ms D said she had to "rush off", as she had to be back at the hospice by 5pm to arrange for the night nurse. Ms D left at approximately 4.40pm.

At 7.10pm that evening Mr A telephoned Dr F and told him that his wife had passed away. Dr F went to their home to certify her death. Mrs A's daughter asked him about the morphine pump, which he noted was empty. Mrs C thought that it was meant to run for 24 hours. Dr F examined the pump and noted that it was set to administer 20mm per hour. However, the sticker on the syringe recorded the correct dosage. Dr F ascertained that Mrs A had died quietly, slipping away while falling asleep, which to his mind would have been consistent with respiratory suppression from morphine overdose. Although the family had brought the pump to his attention, they were happy that Mrs A had slipped away peacefully while they were in attendance.

The following day Dr F informed the hospice team leader, Ms G, of the error with the morphine pump. He also notified the Coroner.

Ms G and the nurse manager, Ms H, collected the equipment from Dr F. They found that the syringe, which should have been half full, was empty. The line and syringe were still attached and in the pump, so the medication could not have drained out of the syringe accidentally. Ms G noted that the blue Graseby pump was set to deliver the medication at 20mm (rather than 2.0mm), which was "obviously incorrect" because the medication would be delivered too quickly.

Ms H and Ms G went to the family home. They offered their condolences to Mr A and Mrs C. Although Mr A was very upset at the death of his wife, he was pleased that she had died peacefully. Ms H advised them that the hospice would undertake a formal disciplinary investigation and notify them of the outcome. For patient safety reasons, Ms D was suspended from duty pending the inquiry. The matter was then referred to the Police for investigation.

Cause of death
Mrs A's body was the subject of a post-mortem examination, and sample tissues were taken for analysis. The pathologist was unable to differentiate between the toxic effects of morphine and the effects of terminal cancer when determining the cause of Mrs A's death. He concluded that Mrs A's death was caused by disseminated small cell carcinoma of the lung and respiratory depression due to morphine. ESR analyses of the tissue samples indicated that morphine found in her system was consistent with the levels to be expected in a morphine overdose fatality. Uncertainties arose from the fact that her body had been embalmed before the specimens had been taken. The forensic scientist who interpreted the results could not rule out the possibility that Mrs A's death was partially or completely due to other causes and not related to the morphine overdose.

Subcutaneous pumps
Both blue and green Graseby pumps are designed to deliver fluid over a 24-hour period. The blue pump mechanism is set for mm per hour and the green pump is set at mm per 24 hours. The setting can only be changed with a screwdriver or similar tool. (A photo of each pump is attached as Appendix One and Two.)

Ms D said that she was aware of this "and so calculated the amount of medication needed to be given in an hour (2.0mm)". Ms D explained how she had set the pump:

> "The pump has two columns or dials of numbers, with a gap in the middle. I was aware that with the green pump when for example '1' and '0' was set, that was 10mm. It was not clear on the blue pump which column of numbers represented which numbers (10's, 1's, 0.1's). I thought the first column was the 1's and the second column was the 0.1's (ie that the columns had a decimal point between them).
>
> The amount you set the blue pump to administer is given over a much shorter period (ie 1 hour) than the 24 hours on the green pump. I thought the dials reflected this. I discovered later they did not. My intention was to set the pump at

> the appropriate rate of 2.0mm per hour (as I documented in the Multi-disciplinary Evaulation/Progress notes). From what I was told later, I inadvertently set it at 20mm per hour."

Ms D understands that the hospice decided to use only green pumps in future to prevent such confusion recurring. The hospice confirmed that it would continue to use green pumps only, but use the blue pumps for demonstration/learning purposes since both are used in the oncology department at the public hospital.

Ms D's qualifications
Ms D is a New Zealand registered nurse holding a current annual practising certificate. She qualified in 1971 and, apart from taking time off for her children, worked for 12 years at a public hospital in one city and eight years at another hospital. She was employed as a palliative care nurse in the Oncology Department at the public hospital in March 2003 and joined the hospice palliative nursing care team in May 2003.

Orientation
Ms D informed the Police that when she commenced working at the hospice she felt that she was undervalued. She said that no effort was made to examine her previous knowledge learned from over 20 years' nursing experience or explore her "knowledge gaps". She was made to feel a complete novice. If she asked questions she received a hostile response. Her preceptor was Ms J, who was on annual leave when Ms D commenced at the hospice, so Ms G was appointed. Ms D was assigned to the west team and Ms G was in the east team. According to Ms D, this made learning difficult. When Ms J returned she did not take up the role of Ms D's preceptor.

Ms D advised that her first performance appraisal after working at the hospice for three months came as "a complete shock". She was advised that she was not performing to an acceptable standard and it was suggested that she was not suitable for palliative care nursing. She felt the appraisal was unfair because it was based on a report written by Ms J, who had refused to preceptor her and who had not observed her practice. She negotiated with Ms H to take her "under her wing". Ms D felt this allowed her to demonstrate the skills she had gained in palliative care nursing. Ms D also advised the Police that she understood that Ms J had left the hospice "under a cloud".

Ms D claimed that her orientation did not specifically teach her about syringe drivers (Graseby pump) like the one she set up for Mrs A.

Ms G described the hospice orientation programme as consisting of a number of topics and skills. Each new staff member was assigned an experienced nurse to supervise their learning. Once the supervisor was satisfied that the orientee displayed the standard of skill required for a particular activity, both nurses initialled the new nurse's orientation booklet in the appropriate space. Before a nurse could use the

Graseby pump independently, she had to be able to confidently and correctly complete the procedure three times in the presence of the supervising nurse.

Ms G told the Police that, in Ms D's case, activities relating to setting up a new pump had been initialled, "presumably by [Ms D]", on 5 June 2003 but there is no counter-initial of the supervisor who endorsed her competency. In Ms G's experience it is unusual for a particular activity to be initialled without the supervisor's endorsement and she could not explain why that had happened in this case. Although Ms G had supervised and endorsed Ms D as competent to practise other activities, including drug calculation for subcutaneous administration, she cannot recall specifically supervising Ms D setting up a pump. If Ms G had supervised Ms D as required she would have endorsed the orientation booklet.

Ms D's orientation was also under the clinical oversight of Ms I. Ms I, who now resides overseas, provided the following statement to the Police:

> "I worked for [the hospice] for approximately three years. I was employed as a Palliative Care Nurse.
>
> Part of my duties was to orientate new nurses and provide palliative care in [the community]."

Ms I was shown a copy of Ms D's orientation programme, a booklet of 11 pages. Ms I confirmed that she had signed six pages of Ms D's orientation booklet signifying her competent in the particular competencies indicated. However, when it came to setting up "sub-cut pumps", Ms D had not been signed as competent in setting up a new pump. Ms I advised:

> "The setting up of a new pump is only done in the home with a patient. This can be a very complicated procedure."

In Ms H's statement to the Police she advised that, at the time of these events, she had been working at the hospice as a registered nurse for two and a half years and as nurse manager for 18 months. She confirmed that the hospice uses two types of pump: one that administers "millimetres/hour (the blue pump) … and the other millimeters/24 hours (the green pump)". Ms H said that this can cause confusion, and the issue was raised at one of the nurse managers' meetings. The policy operating at the time was that where possible a second person checks the rate on the syringe pump, but that "the policy has now been changed to: 'Ensure a second person checks the rate on the syringe pump prior to attaching it to the patient' ".

Subsequent events

Mrs E is the General Manager at the hospice, which is a non-profit organisation. Mrs E was employed in 2003 to restructure the management of the organisation.

Mrs E advised that the records showed that Ms D's orientation to the hospice was not easy for the other nurses working there, mainly because she had the type of

personality that conflicted with others. It appeared she did not wish to learn, and gave the impression that she knew everything about palliative care nursing and would seldom seek advice. Mrs E advised that Ms J did not leave the hospice "under a cloud". She left after working there for 12 years to continue her nursing studies at Master's level. Ms J has been assured that she can return to the hospice in the future.

Mrs E was surprised to hear that Ms D had not been certified as competent to set up a Graseby pump and that she felt unsupported during her orientation. Mrs E advised that if Ms D did not know how to assemble the equipment there were other palliative care nurses who could have helped. Ms D returned to the hospice to collect the equipment before returning to Mrs A, and had the opportunity to ask for help. Alternatively she could have called for help, as every palliative care nurse is supplied with a cellphone. The oncology ward at the public hospital, where Ms D was previously employed, uses both pumps. To ensure continuity of care the hospice will continue to use the green pump, but have a demonstration model blue pump for teaching purposes.

Mrs E advised that Ms H is no longer working for the hospice, and a clinical advisor has been employed. The clinical advisor has redesigned the competency programme (as part of the orientation programme), in particular the management of medicines used in palliative care nursing. Mrs E explained that now only experienced palliative care nurses are employed by the hospice, and 60 percent of the current nursing staff have palliative care qualifications.

Responses to provisional opinion

Ms D

In response to my provisional opinion, Ms D provided the following further information:

> "I wish to make the following comments regarding your Provisional Opinion.
>
> **Orientation Booklet**
>
> I was not aware that my orientation booklet was not completely signed off. I assume I would only have been allowed to finish my orientation and practice independently if the Hospice had checked that my orientation had all been completed satisfactorily.

Comments by [Mrs E]

[Mrs E] has said that it appeared I did not wish to learn, gave the impression that I knew everything about palliative care nursing and would seldom seek advice. I strongly disagree with that. I had wanted for some time to become involved in palliative care nursing. I was aware that it was quite different from the type of nursing I was used to (most recently cardiology). As a result I thought I should do an introductory period in the oncology ward at [the public hospital], before even venturing into hospice work.

I was very keen to learn about hospice nursing. I came from […], when evidence based practice was utilised and I was used to questioning the basis on which things were done. When I got to the hospice I often asked people 'why do you do this?'. I think people felt that this was questioning and doubting their practice, whereas I really just wanted to find out why and increase my knowledge.

I did used to go to […] with quite a lot of questions.

Regarding [Ms J] I was surprised to see [Mrs E's] comments that [Ms J] had left the Hospice after working there for 12 years as my understanding was that the hospice had not been open for anything like that long.

The reason I believed that [Ms J] had left the hospice under difficult circumstances was that she and another nurse were involved in a heated argument (which others outside the room including myself could hear). Both of the nurses separately st[or]med out of the meeting (one in tears) and both resigned shortly afterwards.

I knew that [Ms J] is undertaking some study, but she went straight from the hospice to work at [a public hospital].

[Mrs E] says that if I did not know how to assemble the equipment other nurses could have helped, including when I picked the equipment up (pages 7–8). However, during my orientation I was not told by any of the nurses that there was any difference between blue and green pumps.

At the point I saw [Mrs A] I had experience in setting up green pumps, but did not know there was any difference between the two colours. No one had told me that there was any difference.

In any event when I went back to the hospice to pick up the gear, there were no other staff nurses who could have come out to the [family] with me.

My focus was on getting urgent relief to [Mrs A], who was in distress. I was also trying to deal with the family's other issues (incontinence products and night nurse assistance). When I went into the hospice, I picked up the necessary equipment and put it in the box we used to transport gear. I picked up a box with the pump in it, without seeing what colour it was. Therefore it was not until I was out of [Mrs

A's] house, that I opened the box and saw that I had a blue pump. Once I was setting up the pump I thought I had correctly figured out what the columns of numbers meant and therefore did not think I need[ed] to seek assistance.

I was not aware … at the time of any nurse checking drugs or the settings on pumps with other nurses prior to going out to see my patients. This was not something I ever saw or was told about in my orientation. I know after this time the policy was changed so we had to check before we went out.

Opinion: No Breach — [the hospice]

I disagree that the hospice provided me with reasonable orientation. I am not saying that other people at different times did not get a reasonable one, but I believe that mine was very different from the others due to various situations that were occurring at the time. Even just after I finished my orientation, new staff were receiving a much more structured orientation.

During my orientation I went out with at least 13 different nurses, who I am happy to name if that would assist. Sometimes I was simply left in the hospice offices by myself for the day if I couldn't find anyone to take me out with them. It seemed like it was part of everyone's (and therefore no individual's) responsibility to orientate me.

In practice much of my orientation to particular clinical techniques was to watch one of the nurses carry out the procedure, rather than have them watch me (after seeing them first).

When I had my first performance appraisal after three months, it was a shock to me to see that I was not considered to be performing satisfactorily. I was having external supervision at the time, and took the issue to my supervisor. She said that it should not have come as a shock, if I had been receiving adequate feedback along the way. But I was not. I think that especially during the orientation period I should have been given considerable feedback, but that was not the case.

I disagree that using a pump to administer can only be learned in a clinical setting (page 7). Obviously it is important to practise in a clinical setting under supervision, but in my experience at […] the first stages of obtaining new technical skills can be learnt in other ways. At […] we had equipment demonstrated to us in the lab. We then had an orientation workbook, which showed pictures and diagrams of equipment and asked us to write description of practices and answer questions. These were then checked by a nurse educator. By contrast the hospice orientation book had only check boxes, which did not give the supervisor much opportunity to actually access what the nurse being supervised knew.

Recommendations

I spent a considerable amount of time and energy reviewing my practice in the weeks and months after my involvement with the [family]. It has affected both how I practise myself and also how I teach others.

I was open with other hospice staff about the mistake I made, in an attempt to try to ensure that it never happened again. Several of my colleagues phoned me at home or wrote to me, expressing their support and commenting that my error was one which could have been made by any of them given the circumstances at the time."

Ms H

In response to my provisional opinion, [Ms H] provided the following information:

"I am writing on behalf of [Ms D] as I feel there are some inconsistencies in relation to the letter [Ms D] has recently received.

I was employed by [the hospice] as a Nurse Manager from August 2001 until October 2004. During my time at [the hospice] I undertook several initiatives that were required in order to maintain safety standards that were very much lacking within hospice. One of my initiatives was to ensure the preceptors had training before they could orientate new nurses to the organisation, this was very new to hospice and unfortunately [Ms D] did not have the support that she should have had for various reasons.

I offer you my own CV and the initiatives I undertook to ensure that hospice had safety measures in place.

When [Ms D] made her mistake we were some way along in getting our house in order, I gave my recommendations to [Mrs E] and those were that [the hospice] had to take some of the responsibility for [Ms D's] mistake, these were:-

1. That we should change from one system of syringe drivers in order that mistakes would be lessened, I ensured that all blue syringe drivers were returned to the suppliers and that only green pumps would be used forthwith. It would appear from your letter that the use of two different pumps are now back in use, this is a backward step if that is the case.
2. I also ensured that all pumps should be checked before setting the rate by another staff member.
3. I ensured that [Ms D] undertook further training in the use of syringe drivers.
4. That [Ms D] undertook a course of drug calculations before she could return to using syringe pumps.

Errors at [the hospice] did happen and I instigated the use of incident and accident reporting and that when reported, nurses should not be blamed and shamed but

that investigations should be undertaken to see how these incidents happened so that further incidents could be avoided.

I do hope that all the blame will not be given to [Ms D] and that [the hospice] must share some of the responsibility."

Code of Health and Disability Services Consumers' Rights

The following Right in the Code of Health and Disability Services Consumers' Rights is applicable to this complaint:

RIGHT 4
Right to Services of an Appropriate Standard

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

Opinion: No Breach — the Hospice

The hospice as a health care provider had a duty to Mrs A to provide her with palliative care services with reasonable care and skill, in compliance with the Code of Health and Disability Services Consumers' Rights (the Code). This means that the nurses it employs are qualified and experienced in the type of nursing care they provide. To achieve this purpose each new member of the nursing team had to be competent in the skills required of a palliative care nurse. To ensure they are competent, each new nurse is issued with a booklet listing the activities required, and assigned a designated supervisor to oversee their learning. The supervisor is responsible for ensuring the new nurse correctly assembles the equipment to the required standard three times before certifying the nurse competent to perform the task unsupervised.

Ms D experienced difficulty during her orientation to the hospice, which could have impacted on her competence. In her view she was not given the benefit of her past learning and experience, and at least there was some question about whether (in the opinion of one of the senior staff) she was suitable for this type of nursing. Ms D said that during her orientation she went out with "at least 13 different nurses" and sometimes she simply remained in the hospice for the day because there was no one to take her out. Ms D continued her employment with the hospice for a further 14 months before she administered Mrs A's morphine using a blue Graseby pump.

None of the senior nurses currently employed at the hospice explained why Ms D had not been certified competent to use the blue Graseby pump. I was advised that using a pump to administer medicines subcutaneously can only be learned in the clinical setting, and to that extent senior nursing staff had to rely on the new nurse taking the initiative and seeking guidance before attempting the procedure unsupervised.

Ms D disagreed that drug administration can only be learned at the bedside and suggested ways her clinical skills could have been assessed without the need to administer drugs. In any event, she was not aware that she had not been certified competent, as her orientation booklet was kept with her employment records. I note that she had been taught pump administration in theory. It appears that drug calculation, and filling the syringe with the variety of medication Mrs A had been prescribed, required assessment at the bedside.

Ms H was responsible for Ms D's orientation. She acknowledged that there were a number of safety standards lacking, which she was in the process of rectifying as nurse manager. One such standard was training preceptors to appropriately mentor nurses new to hospice care. In her opinion the hospice must take some of the blame for Ms D's mistake, because she was not given adequate support during orientation.

It appears that Ms D's orientation to the hospice was less than satisfactory. Ms D negotiated with Ms H to supervise her practice after her first unsatisfactory performance review. To what extent Ms D's orientation impacted on her clinical performance 14 months later is difficult to assess. It seems probable that some additional learning would have taken place in the interim. Ms D said that she did not know there was any difference between blue and green pumps, yet she worked in the oncology department at the public hospital, where both types are used, and knew that each pump delivered at a different rate.

I accept that having two types of pump could be confusing, and for this reason it was important that appropriate training was completed. I also accept that the policy operating at the hospice did not *require* two nurses to check the infusion rate before it was attached to the patient. Ms D submitted that she felt unable to approach other nurses with questions in relation to setting up the pump, because she had received a "hostile response" to her questions during orientation. It is disappointing that Ms D was unable to remedy this situation with management in the intervening 14 months.

Having reviewed Ms D's orientation, I am satisfied that the hospice takes orientation of new staff seriously and undertakes significant steps to ensure their competence. I accept that the hospice expected each new nurse to be proficient in the complexities of palliative care nursing, and its orientation programme reflects this expectation. In Ms D's case the reason that her competency in subcutaneous pump administration had not been countersigned by her supervisor has not been established. It is obviously important that the hospice checks that all competencies have been met (and have been signed off by the supervisor) before a nurse is permitted to undertake palliative care tasks that demand specific competencies. Nevertheless, I am satisfied that the hospice

orientation programme was appropriate when Ms D joined the staff, and that senior members of staff, such as Ms H, were readily available to any nurse who sought help.

Accordingly, in my opinion the hospice met its duty of care to Mrs A in its orientation of Ms D, and did not breach Right 4(1) of the Code.

Opinion: Breach — Ms D

Morphine administration
When Ms D visited Mrs A for the first time, it was clear that Mrs A's oral mediation was no longer adequate, and Ms D arranged with Dr F to change Mrs A's medication to a subcutaneous pump infusion. Ms D went back to the hospice to collect the equipment, and arranged for another nurse to see her remaining patients.

Subcutaneous pumps are set to deliver the prescribed dose of medication, diluted in a syringe, at a particular speed. The rate setting apparatus is covered with a clear plastic shield so that once the rate is set, the cover is secured into place. If Ms D had been uncertain about the rate of delivery she could have set the rate at the hospice, checked it with one of the senior staff, and replaced the cover. This would have secured the setting until she arrived at the family home.

In this instance, Ms D calculated Mrs A's drug dosages correctly, diluted the medication in the required amount of saline, and set the pump to deliver the medication over what she thought was 24 hours. She explained what she had done to Mrs A and her daughter, and also explained how to disconnect the pump before bathing the following morning. What Ms D did not realise was that the pump was set to deliver the medication at 20mm per hour instead of 2.0mm an hour.

Ms D was not familiar with blue pumps, despite having worked in the oncology department at the public hospital. She apparently did not know there was any difference between the two colours, because "no one had told her the difference". Yet she was aware that one delivered fluid at a 24-hour rate and the other at an hourly rate.

Ms D had not initiated a subcutaneous infusion on a patient, and had not been shown how to do so during orientation. She returned to the hospice to collect the equipment but did not set the rate, check it with an experienced nurse and lock it in place before leaving the hospice, or ask a senior nurse to accompany her back to Mrs A. Ms D apparently did not notice any other nurses at the hospice, and it was not until she arrived back at Mrs A's home that she found she had a blue pump. Nevertheless, it would have been a simple matter to telephone for instruction or assistance.

It is unfortunate that Ms D was not certified as competent to set up a subcutaneous pump during her orientation. There are two types of Graseby pump, which could be

confusing to some nurses. However, Ms D had had 14 months to rectify any gaps in her knowledge and could readily have ensured that Mrs A's medication was delivered at the correct rate. In my opinion, her failure to ask for assistance before setting up the pump amounted to a failure to provide services with reasonable care and skill, and so constitutes a breach of Right 4(1) of the Code.

Recommendation

Accordingly, I simply recommend that Ms D provide an apology to Mr A and his family for breaching the Code of Health and Disability Services Consumers' Rights in relation to her care of Mrs A. This letter is to be sent to the Office of the Health and Disability Commissioner for forwarding to Mr A.

I am satisfied that Ms D has reviewed her practice and taken extra tuition in the use of syringe drivers and drug calculation, and will not be required to undertake further training.

Follow-up actions

- A copy of this report will be sent to the Nursing Council of New Zealand, the New Zealand Police, the District Health Board, and the District Coroner.

- A copy of this report, with details identifying the parties removed, will be sent to Hospice NZ, the Australian and New Zealand Society of Palliative Medicine, and the Chief Medical Officers of the District Health Boards, with the recommendation that, where practicable, palliative care services move towards using one type of pump for the administration of subcutaneous medication.

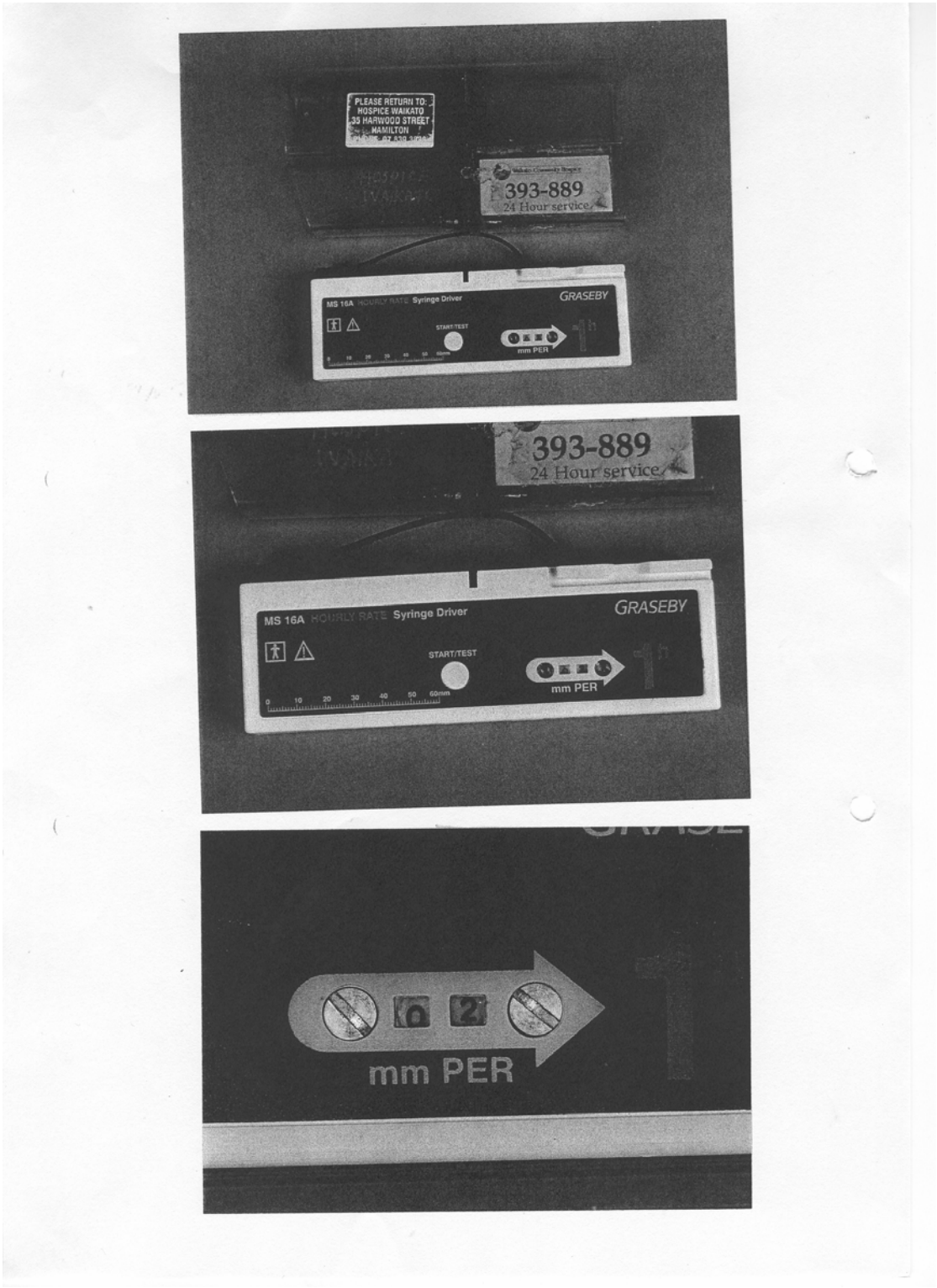
- A copy of this report, with details identifying the parties removed, will also be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

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

Appendix 1 (green pump)

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

Appendix 2 (blue pump)



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

Addendum

Recommendation: *A copy of this report, with details identifying the parties removed, will be sent to Hospice NZ, the Australian and New Zealand Society of Palliative Medicine, and the Chief Medical Officers of the District Health Boards, with the recommendation that, where practicable, palliative care services move towards using one type of pump for the administration of subcutaneous medication.*

In November 2005, and during the subsequent six months, the Commissioner wrote to all 21 District Health Boards (DHBs), Hospice New Zealand, and the Australian and New Zealand Society of Palliative Medicine. He drew attention to the recommendation relating to the need, where possible, to standardise the type of pump in use, in order to reduce the potential for error. He sought details of any action being taken in the light of his report.

In response, 15 of the 21 DHBs said they use only one type of Graseby pump, the blue model (MS 16A). However, many of these DHBs also advised of educational, policy, or training initiatives that had been taken to heighten staff awareness of the issues following the Commissioner's report. One large DHB reported that it had experienced similar incidents to that highlighted in the report. It had therefore removed the pumps from general use three years ago. In the areas where the pumps were still being used, it was requiring staff to complete competency training, and it was not going to resume wider use of the pumps until all registered nurses had signed off on this training.

Six DHBs indicated that both types of pump were in use in different parts of their services. In some regions, the blue pump was being used in one hospital, and the green one (MS 26) in another. Elsewhere, the type of pump depended on the department, or whether it was being used in the hospital or for community-based palliative care. Three of the DHBs who were using two types of pump said that they were phasing out one pump as they replaced equipment. All indicated that they had considered the concerns, and in many cases they had instituted protocols or new labels, or made other changes to reduce the potential for error.

Hospice New Zealand responded by advising hospices of the risks involved in holding and using different types of Graseby pump. It drew attention to a national training course for nurses, and asked the manufacturer, Graseby International, to consider developing a standard pump with a single scale setting. The company replied that this would be considered as part of its product development process.

The Society of Palliative Medicine also indicated support for the Commissioner's recommendation.