District Health Board

Rest Home

A Report by the

Deputy Health and Disability Commissioner

(Case 18HDC02364)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Contents

Executive summary

1. This report concerns the care provided to an elderly man by a district health board (DHB) and a rest home in 2017. The man suffered a stroke at the DHB and received end-of-life care at the rest home.

2. Oversights in the man's care at the DHB, including a lack of timely review and escalation to a senior doctor, and the lack of documentation of a clinical assessment, resulted in a missed opportunity to treat his stroke with thrombolysis.

3. At the rest home, the man's agitation and pain were not assessed and managed adequately, Te Ara Whakapiri end-of-life planning was not initiated, and hospice or other services were not contacted for guidance.

4. The report highlights the importance of responding to a spike in workload and adjusting staffing levels after-hours, the significance of review and escalation to a senior doctor when a patient's condition deteriorates, the importance of appropriate DHB policies and systems to support staff to provide adequate after-hours care and treatment, and the importance of adequate pain and agitation management, and consideration of end-of-life requirements in an aged-care facility.

Findings

5. The Deputy Commissioner found the DHB in breach of Right 4(1) of the Code. She was critical of the inadequate review of the man's deteriorating condition, the lack of consideration for thrombolysis treatment and escalation to a senior doctor, the lack of documentation, and the inadequacy of DHB policies and systems to support staff to provide adequate after-hours care and treatment.

6. The Deputy Commissioner was critical that a Resident Medical Officer (RMO) did not review the man adequately, did not consider thrombolysis, did not escalate his care to a more senior colleague, and did not document a clinical review and purported contact with the medical registrar.

7. The Deputy Commissioner found the rest home in breach of Right 4(1) of the Code. She was critical of the overall assessment of the man's agitation and the management of his pain, and the lack of discussion with his family and his GP. The Deputy Commissioner was also critical of the rest home's documentation and follow-up of UTIs, and that Te Ara Whakapiri end-of-life planning was not initiated and the hospice consulted when the man's condition deteriorated.

Recommendations

8. The Deputy Commissioner recommended that the DHB provide a written apology to the family; use an anonymised version of this report as a case study; consider updating its stroke thrombolysis protocols and reviewing its stroke management pathway; and evaluate its mechanisms to identify and manage spikes in workload after-hours.

9. The Deputy Commissioner recommended that the RMO provide a written apology to the family.

10. The Deputy Commissioner recommended that the rest home provide a written apology to the family; develop a guideline for the timing of end-of-life conversations and protocols such as Te Ara Whakapiri; review its current process for end-of-life care; provide training on end-of-life care; provide its registered nurses with education on the assessment of patients following a stroke; document a plan for regular reassessment of patients who require increased surveillance; and consider training staff on the correct documentation and communication regarding specimens sent for analysis.

Complaint and investigation

11. The Health and Disability Commissioner (HDC) received a complaint from Ms B about the services provided to her father by a district health board and a rest home in 2017. The following issues were identified for investigation:

- *Whether the district health board provided Mr A with an appropriate standard of care between 24 Month1[1] and 18 Month2 2017 (inclusive).*
- *Whether the rest home provided Mr A with an appropriate standard of care between 18 Month2 and 16 Month5 2017 (inclusive).*

12. This report is the opinion of Deputy Commissioner Rose Wall, and is made in accordance with the power delegated to her by the Commissioner.

13. The parties directly involved in the investigation were:

Ms B	Complainant/consumer's daughter
District health board	Provider
Rest home	Provider

14. Further information was received from:

Dr C	Resident medical officer
RN D	Registered nurse
Dr E	Consultant stroke physician & geriatrician
Ms F	Facility Manager/Nurse Manager
RN G	Senior registered nurse
Ambulance service	Provider
Dr H	Medical Director
Dr I	GP
Dr J	GP

[1] Relevant months are referred to as Months 1–6 to protect privacy.

15. Also mentioned in this report:

RN K	Clinical Director

16. Independent clinical advice was obtained from a general physician & geriatrician specialist, Dr David Spriggs (Appendix A), and a registered nurse, Dr Karole Hogarth (Appendix B).

Information gathered during investigation

Background

17. Mr A, aged in his eighties at the time of events, had a history of stage 3 chronic kidney disease,[2] primary lung cancer, asbestosis,[3] pleural plaques,[4] COPD,[5] hypertension,[6] previous myocardial infarction,[7] and prostate cancer. On 24 Month1, Mr A was admitted to the DHB with a history of slurred speech and a left facial droop. This report concerns the care provided to Mr A for stroke[8] at the DHB and the subsequent end-of-life care he received at the rest home until his death on 16 Month5.

DHB

24 Month1 — admission

18. Mr A arrived at the Emergency Department (ED) at the public hospital by ambulance at 5.53pm on 24 Month1. His symptoms of slurred speech and left facial droop had occurred at 5pm and resolved en route to hospital, but they recurred at 6.40pm. A transient ischaemic attack (TIA)[9] was considered likely, and a non-contrast CT[10] brain scan without a CT angiogram[11] was performed, which at the time was in line with the imaging policy for acute stroke patients at the DHB. The scan found "[n]o acute intracranial haemorrhage".

19. Mr A was admitted to the acute stroke unit (ASU) under the care of the after-hours on-call physicians, as the DHB has no on-call stroke service/physician after-hours.[12] Mr A was examined at 7pm and assessed for thrombolysis.[13] He scored 1 on the National Institute of Health Stroke Severity Scale (NIHSS),[14] indicating a very mild neurological deficit. Mr A's

[2] At this stage, the person has decreased kidney function and moderate kidney damage.
[3] A chronic lung disease caused by inhaling asbestos fibres.
[4] Thickening in the lung linings, indicative of asbestos exposure.
[5] Chronic obstructive pulmonary disease (chronic obstruction of lung airflow).
[6] High blood pressure.
[7] A heart attack.
[8] Damage to the brain from interruption of its blood supply.
[9] A brief episode of insufficient oxygen to the brain, often characterised by temporary blurring of vision, slurring of speech, numbness, paralysis, or syncope (fainting). TIA may be predictive of a serious stroke.
[10] Computed tomography scan.
[11] X-ray imaging of blood vessels.
[12] Recently, the DHB implemented access to an after-hours tele-stroke service.
[13] Thrombolysis is the breakdown of blood clots using medication.
[14] A tool to quantify the impairment caused by a stroke.

symptoms had resolved almost completely, and he was diagnosed with a TIA with no indication for thrombolysis.[15] A plan was made to treat him with antiplatelet medication[16] and perform a swallow test,[17] and to monitor his vital signs by telemetry[18] overnight.

20. Mr A was given the charted aspirin and clopidogrel[19] at 7.30pm, and at 9pm he passed the swallow test and telemetry was commenced. At 11.30pm, Mr A's speech was noted to be clear. He was hungry and was given food.

24–25 Month1 — overnight deterioration

21. Registered Nurse (RN) D was Mr A's assigned nurse on the night shift. At 12.15am on 25 Month1, RN D heard Mr A coughing and choking. His speech was slurred and was coming and going, lasting for no more than 20–30 seconds, and he was incomprehensible. He had a left-sided facial droop and right-sided weakness. His symptoms resolved and then quickly returned. RN D paged the on-call house officer, Dr C.

First review

22. Dr C reviewed Mr A at about 12.45am, by which time Mr A's symptoms had largely resolved apart from a mild facial droop and "drifting" of his left arm. Dr C performed a full neurological screen, noting intermittent symptoms and an impression of TIA. Dr C prescribed intravenous (IV) fluids and a nebuliser for Mr A's wheeze, and RN D administered these. The plan was to continue four-hourly neurological observations.

23. After these events, in an email dated 14 Month6 to the DHB, Dr C stated:

> "I can not remember the patient very well.
>
> So he is not for thrombolysis from the admission.
>
> Med[ical] reg[istrar] suggested p[atien]t won't be thrombolysis normally if time frame is more than 4:30 hr from the first presentation. So in that case he won't be for thrombolysis anyways.
>
> But I couldn't remember whether I discussed with the reg[istrar] or not at that time."

24. In response to the provisional opinion, Dr C told HDC that when he wrote the email he did not have the benefit of having referred to his notes. In a later statement dated 7 November 2019, Dr C told HDC:

> "The medical registrar has suggested thrombolytic therapy is not normally given if the time frame is 4.5 hours after the first presentation (as per the record, the patient was

[15] The DHB's thrombolysis protocol indicates a significant neurological deficit (NIHSS score of greater than 4) in the inclusion criteria for thrombolysis.
[16] Medication to stop blood cells (platelets) from sticking together and forming a blood clot.
[17] A test to assess difficulty in swallowing and the risk of inhaling food or fluids.
[18] A device that continuously monitors electrical signals from the heart, and the respiratory rate and/or oxygen saturations, and automatically transmits the information to a central monitor.
[19] An antiplatelet medication.

> BIBA[20] at 17:53 on 24 [Month1], I have documented my review at 00:46 on 25 [Month1]). I did contact a medical registrar at the time of review between 00:30 to 01:00 despite not including the conversation (with medical registrar) in my documentation."

25. On reflection, Dr C acknowledged that he should have documented the conversation with the medical registrar on call during the review at 12.45am. He added that he recalled the conversation with the registrar only after he made the statement in 2017.

26. At about 1am, RN D notified Mr A's wife of the TIA event. RN D told HDC that she sat with Mr A until about 1.30am to observe him, until he indicated that he wanted to sleep, and then she visualised him every 15–20 minutes until 2.30am.

Stroke event

27. At 3am, RN D found Mr A reaching out his right arm and then right leg in very stiff extensions. Mr A had severe left-sided weakness, confusion, and a fluctuating Glasgow Coma Scale[21] score, and was pulling off his telemetry and trying to get out of bed. RN D told HDC that she called for assistance from a colleague, and at 3.12am paged Dr C, saying, "[Mr A] TIAs, now dense weakness L[eft] side, dysphasic.[22]"

28. Dr C told HDC: "I was paged at 03:12:15 on … 25 [Month1], this was not however, an emergency page and I did not see the patient due to another patient requiring my attention." RN D told HDC that she then paged Dr C a second time about ten minutes later. RN D stated that Dr C then rang to say that he would be down shortly.

29. RN D recalled that at about 4am she notified Mr A's wife that he was having another event. Mr and Mrs A's daughter, Ms B, told HDC that her mother was told that Mr A was still experiencing TIAs. Ms B questioned why her mother was not informed that her husband had experienced "a significant disabling stroke" when she was contacted at that time. RN D told HDC:

> "I cannot recall exactly what I said to [Mrs A] on the phone, as [Mr A] had not yet had a formal review and as such I was unable to give her a comprehensive update but wanted her to be aware that her husband was again having medical concerns. She replied that she would come in and see him in the morning."

30. In response to the provisional opinion, Ms B reiterated that the telephone call to her mother at about 4am indicated that Mr A was being monitored for further TIAs, but when Mrs A arrived at the DHB on the morning of 25 Month1, "she literally did not recognise her husband". Ms B felt that the DHB showed "absolute disregard in their communication with [Mrs A] and made no attempt to contact any other family member".

[20] Brought in by ambulance.
[21] A tool used to assess a person's level of consciousness.
[22] Impaired ability to understand or use the spoken word.

31. RN D said that the Duty Manager arrived on the ward, and she informed the Duty Manager of the current events, and that she was waiting for the on-call house officer, Dr C, and that Mr A required close monitoring and was confused. The Duty Manager recommended paging Dr C again, and he arrived shortly afterwards.

Second review

32. Dr C arrived at about 4am. RN D stated that she reported her findings to Dr C and left him to examine Mr A whilst she checked on other patients. Dr C was paged before he could write in the notes. RN D told HDC that Dr C spoke to her briefly before he left in response to the page, and said not to worry about the telemetry for now as it could go back on when Mr A was less confused.

33. In a statement dated 7 November 2019, Dr C told HDC: "I did not review the patient between 4:00am to 7:00am on 25 [Month1]." However, in July 2020, Dr C stated: "I arrived to [Mr A] and made a further clinical review after 04:00." Dr C said that "after reviewing the clinical notes and nurse's statement, [he] recall[ed] arriving to the patient" for the second review.

34. Dr C also stated:

> "[I]t is not in my usual practice to complete my clinical review without documentation. Even if I was called away because of an emergency, I would still come back afterwards and document my review and plan. I remembered that I was called away for another patient who required my immediate attention, and I continued caring for that particular patient who was very sick until past the handover time in the morning (0800). It was a particular[ly] busy night for me and unfortunately I forgot to document in [Mr A's] notes that I was called away because of [an] emergency."

35. Dr C told HDC that he did not complete his assessment of Mr A because of the heavy workload during the night shift. Dr C stated that he "had assumed that someone else would call for medical support but subsequently became aware that that did not happen". Dr C told HDC:

> "When I attended [Mr A] again after 04:00, I was then called away because of an emergency. I did not have enough time to complete a full assessment at that time, therefore I could not discuss with a senior doctor regarding consideration of thrombolysis or imaging study, but if I had of been able to complete this review I would have definitely considered thrombolysis and sought senior advice[23]."

36. The DHB told HDC that Dr C did review Mr A twice overnight, as would be expected; however, there is no documentation of the second review, and it is unknown whether he discussed Mr A's deterioration with the medical registrar on duty. Dr C also acknowledged that he should have documented the review.

[23] The decision to administer thrombolysis is made by the senior medical officer (SMO). After-hours, the decision is to be escalated to the medical consultant on call.

37. The DHB stated that the night of 24 to 25 Month1 was an exceptionally busy night for Dr C. The DHB said that there were no other concerns regarding Dr C's performance during his period of employment with the DHB.

38. Dr E, a consultant stroke physician & geriatrician at the DHB, reviewed the care Mr A received on the night of his stroke, and reported his findings to the DHB on 21 Month5. Dr E acknowledged that Mr A should have received an urgent medical assessment at 4am when he was noted to have developed new neurological symptoms, and that this assessment should have been documented fully.

39. Dr E said that thrombolysis was not indicated when Mr A was first admitted on 24 Month1, but that Mr A should have been re-assessed at 4am when his symptoms worsened. Dr E stated:

> "It was clear that during the night (somewhere between 00:46 hrs and 04:00hrs) [Mr A] had had a stroke … It is not clear from the documentation in the medical notes why [Mr A] was not assessed for thrombolysis at this stage … [Mr A] would've been within the 4½ hours time window for thrombolysis when he was noted to have the new symptoms at 04:00 hrs."

25 Month1–18 Month2

40. RN D told HDC that because of Mr A's confusion, he required one-on-one care until about 6am on 25 Month1, when he settled, and he was then monitored every 15 minutes. RN D said that she paged Dr C twice to update him on Mr A's status. RN D recalls that after the second page, Dr C telephoned to say that the team would need to review Mr A in the morning.

41. At 7am, RN D recorded in the nursing notes:

> "[On-call house officer] r/vd pt [reviewed patient] for r/v [review] by medical team & IV [fluids], remains confused, has pulled off telemetry and won't have it back on. Skin tear on leg caused when p[atien]t attempting to get out of bed, R) [right] neglect[24]."

42. RN D documented the review at the end of her shift at 7am, and is referring to the undocumented review by Dr C at around 4am.

43. At 9.30am, Mr A was assessed on the SMO-led ward round. It was noted that his symptoms had progressed at 4am and he now had a dense/severe stroke. The plan included a CT angiogram, a CT brain scan, and treatment with antiplatelet medication.

44. The angiogram found: "Complete occlusion of [the] right internal carotid artery as well as distal right middle cerebral artery, with associated right MCA[25] territory infarction. No

[24] Reduced awareness of stimuli.
[25] Middle cerebral artery.

evidence of dissection." By this time, Mr A was outside the therapeutic window[26] for administering thrombolysis.

45. The plan of care noted that Mr A's restlessness and agitation were to be treated with haloperidol[27] and a low stimulus environment, and that Mr A was not for formal review on 26 Month1 unless his condition deteriorated. Mr A's family were informed, and it was documented that they were to be contacted if his condition deteriorated.

46. On 27 Month1, Mr A's care was handed over to the stroke physician, Dr E. Dr E reviewed Mr A at 9.45am and noted a severe stroke with dense left-sided weakness, left hemisensory loss,[28] and left hemineglect,[29] and continued the standard treatment.

47. Dr E stated that Mr A made steady progress with rehabilitation, although the overall prognosis was guarded owing to the severity of the stroke and his underlying lung cancer.

48. On 12 Month2, a meeting was held with Mr A's family and the stroke multidisciplinary team. Medical issues and progress with therapy were discussed, with a potential for improvement with rehabilitation. It was agreed that Mr A would be transferred to the rest home.

49. On 13 Month2, Mr A had a fall on the ward and suffered a forehead laceration. A repeat CT scan showed no new intracranial abnormality, and he was managed conservatively.

50. Mr A was transferred to the rest home on 18 Month2, and required hospital-level care. Ms B stated: "We elected to have [Mr A] transferred to be closer to his Church and family on 18 [Month2]." Sadly, Mr A died at the rest home on 16 Month5.

Further information

DHB

51. In a letter to Ms B dated 7 Month6, the DHB stated:

> "[T]he standard of care your father received during the night of his stroke did not meet his needs, the failure to consider the need for thrombolysis treatment did not meet the expected standards [and] we breached your father's right to proper standards of care on this occasion."

52. Dr E's report to the DHB dated 21 Month5 identified shortcomings in the care provided to Mr A in relation to the failure to consider thrombolysis treatment at 4am on 25 Month1, and the inadequate documentation. It was noted that a contributing factor was that there was no specialist stroke service operating after-hours.

[26] Time to onset established to be less than 4½ hours (the DHB "Thrombolysis in acute ischaemic stroke" protocol, section 4.6).
[27] A medication used to treat delirium and agitation.
[28] Loss of sensation on the left-hand side of the body.
[29] Reduced awareness of stimuli on the left-hand side of the body.

53. Dr E told HDC:

> "If a CT angiogram ha[d] been performed on arrival in ED at the same time as the non-contrast CT brain, it is likely that this would've shown a high-grade stenosis or near-occlusion of the right internal carotid artery.
>
> Such diagnostic imaging on arrival could have prompted the treating clinician to consider intensive antithrombotic treatment … It is possible that such intensive antithrombotic treatment and subsequent revascularisation (e.g. carotid endarterectomy[30]) could've prevented [Mr A's] subsequent severe stroke."

54. Since 2019, the DHB has provided access to CT angiograms 24 hours a day, 7 days a week for patients who have suffered an acute stroke with disabling stroke symptoms and good pre-stroke functional status, who may be suitable for reperfusion treatment. Dr E told HDC that discussions are continuing at the DHB about access to CT angiograms for patients with mild stroke symptoms and TIAs, to look for evidence of high-grade carotid stenosis/occlusion and inform whether medical and surgical treatments are appropriate.

55. Dr E stated that Mr A had a pattern of three TIAs in 24 hours (crescendo TIAs), which appeared to affect his right cerebral hemisphere. An ultrasound scan of the carotid arteries would be the standard of care, but this was not available out of hours.

56. The DHB told HDC:

> "Access to a medical registrar on-site and/or an on-call consultant is available at [the DHB] 24 hours per day and both junior doctors and nursing staff are empowered to seek senior medical help and assistance when required."

57. The DHB provides new staff with escalation processes and guidance as part of resident medical officer orientation and induction.[31] This includes formal handover meetings between junior medical staff and registrars between afternoon and night shifts, covering the identification of the sickest patients, prioritisation of workload, and ensuring that senior staff are aware of potential issues.

Dr C

58. Dr C expressed his deepest sympathy to the family for their loss. He stated that he has learnt a lot since being an on-call house officer. Dr C acknowledged that on reflection, he should have ensured that he contacted the Duty Manager on call and explained that he was being called away for an emergency, and that Mr A required immediate medical attention.

[30] Surgery to remove plaque build-up from inside a carotid artery in the neck, to restore normal blood flow to the brain and prevent a stroke.
[31] "Guidelines for Doctor's Evening Handover", the DHB, May 2014.

59. Dr C told HDC:

> "[Since these events] I document all clinical relevant information in my notes including time/date/place/people involved in review and other staff members that I have discussed with. I ensure that all the documentation is completed for every single patient I been involved in before I leave every shift I have worked on."

Policies

DHB

Stroke thrombolysis protocol

60. The "Thrombolysis in Acute Ischaemic Stroke Protocol ED.T3.1" was current in Month1. This was updated in Month5 as the "Thrombolysis in Acute Ischaemic Stroke" pathway, and has since been replaced by the "Stroke Thrombolysis and Clot Retrieval" protocol.

Medical responsibility for patient care policy and protocol

61. Policy 6.1.2 states that all patients admitted to the DHB must be under the care of a responsible consultant. Protocol 2, paragraph 4.2 of the policy regarding after-hours care states:

> "[I]f unexpected patient problems arise after hours junior staff should seek advice from the specialist on call but may choose to attempt to contact the responsible specialist."

Rest home

62. In 2017, the rest home provided rest-home and hospital-level care for up to 40 residents. The rest home is operated by a rest-home company, and the Village Manager is responsible for the overall management of the facility. At the time of events, the Nurse Manager, Ms F, oversaw all clinical matters.

Mr A's transfer

63. Mr A was transferred to the rest home on 18 Month2 requiring hospital-level care. Dr I provided GP reviews of Mr A at the rest home. Dr I had been Mr A's GP in the community and was one of the preferred GPs for the rest home. Mr A's wife held an activated enduring power of attorney for personal care and welfare for Mr A. Mr A's family members visited daily, and staff communicated with them regularly.

64. Mr A's discharge package accompanied him on transfer to the rest home, and included a discharge summary and physiotherapy handover information. His discharge prescription was faxed to a pharmacy, and a verbal handover was given to a nurse at the rest home. Completed interRAI assessments were available to the rest home.

Level of supervision

65. Mr A's notes on 18 Month2 record: "[B]oth daughters told us [Mr A] needs to have 1 person 24/7 with him."

66. Ms F told HDC:

> "I recall [Ms B] stating her father needed 1:1 care. I explained to [Ms B] that this would not be an option in the rest home in fact I also alluded to her that in my knowledge of the [region's] homes there would be no care home who would be able to offer her this. I mentioned that the Social Workers at [the public hospital] would not discharge into a carehome if a resident is requiring 1:1 care."

67. Ms F told HDC that there was no mention of 1:1 care for Mr A in the handover or discharge notes from the hospital, and that the admission to the rest home would have been declined, as the rest home is not able to provide this level of care. The rest home said that Mr A was assessed in hospital as requiring residential hospital-level care consistent with the care the rest home is contracted to provide. It was noted that Mr A's family said that he needed a person with him at all times, but this was not consistent with the information provided to the rest home by the DHB on handover.

68. Ms B told HDC that on 25 Month3, ACC requested a Support Needs Assessment, which was completed on 12 Month4. This recorded a medical need for 168 hours of attendant care per week. Ms F recalled seeing the correspondence from ACC and explaining to Ms B that this was not 1:1 care, but means that there is a registered nurse on site 24 hours per day, which equates to 168 hours of care per week.

Month2

Falls

69. The initial 21-day care plan was completed on the day of admission to the rest home, 18 Month2. The plan was discussed with Mr A's wife and daughter and signed. On this day, Mr A had three falls; twice he rolled from his bed, sustaining a skin tear, and later he was found on the floor.

70. A wound assessment and management plan was instigated for the skin tear. A falls risk assessment was completed on 19 Month2, and again on 6 Month5. Mr A was assessed as being a high risk for falls, and an impact mat was provided to reduce the risk of serious injury. On 25 Month2, Mr A had a fall from a chair.

71. The rest home commented that staff understand that a new resident is at a higher risk for falls and confusion owing to a change of environment during the initial period following admission. The rest home told HDC that staff were advised verbally at handovers and via documentation in the progress notes that Mr A had a high risk for falls. Mr A's room was close to the nurses' station and had signage providing an alert that he was a high falls risk, his bed was low to the floor with a landing mat when in the bed, and he was supervised closely while in his chair. The care plan was developed based on nursing assessment and informal conversations with various family members.

72. RN G told HDC that in keeping with the rest home's policy of no restraint:

> "Cot-sides were not deemed safe for this resident due to his agitation and it was decided that his bed on low, with a fall out mattress and sensor mats would be our

> best choice. This was discussed in full with family at [the] time of admission and throughout as it was of concern to us all that [Mr A's] stay was safe."

Call bell

73. At 11.50pm on 23 Month2, Mr A activated the call bell and was found "½ on & ½ off the bed trying to put the bellmat cord & call bell cord around his neck". The actions taken to minimise the risk of serious harm related to his inability to comply with safety recommendations owing to cognitive impairment, and included removing the call bell from reach and manually checking Mr A every 15 minutes.

74. RN G recalled that Mr A was unable to use his call bell. The rest home said that staff were aware that they needed to check him regularly and put frequent checks in place.

75. Ms B told HDC that because Mr A was unable to use a call bell, it was imperative that the rest home had an alternative appropriate monitoring device. She commented that the chair alarm was used over the first week, and for the remainder of Mr A's stay the alarm appeared as a courtesy gesture hanging off the back of his chair.

Month3

76. Dr I reviewed Mr A on 1, 8, and 16 Month3. On 1 Month3, Mr A was described as quite agitated at night, with some cognitive impairment, but no shortness of breath or pain. On 8 Month3, Mr A was calmer at night with quetiapine,[32] but was experiencing severe left-sided chest pain. Dr I checked that Mr A's chest was clear, noted that the lean in Mr A's posture after the stroke could be causing pain, and prescribed regular paracetamol.

77. On 16 Month3, Dr I met with family. Dr I recorded:

> "[Mr A] [c]an be agitated at times but we feel improving. Explained [to family that] with the area of his CVA[33] that the frontal lobe is affected and this can cause personality changes, confusion, depression. [Mr A] [s]ettles with family and [I] feel this is a huge thing they can do to help. [I] [w]ould prefer to manage agitation pragmatically with distraction rather than medication."

78. On 23 Month3, Mr A's care plan was completed by RN G. The plan documented Mr A's care requirements, goals, and interventions. Ms B recalled that the care plan was handed to the family to review and sign and, other than family-initiated wording alterations, no discussion took place. On 26 Month3, morphine was administered to Mr A for shortness of breath, and in Month4 and Month5 morphine was administered for pain relief.

79. The rest home told HDC that the care plan was completed a week late, and stated: "[Mr A's] needs and abilities were changing often — [the] long term care plan was difficult to complete and [we] needed to change aspects of it often."

[32] An antipsychotic medication.
[33] Cerebrovascular accident (stroke).

Month4 and Month5 — deteriorating health

80. On 13 Month4, Dr I reviewed Mr A and noted: "[Mr A] is not in pain but is in general deteriorating (more lethargic, more confused etc)." A plan was agreed with [Mr A's] wife to keep [Mr A] comfortable. The following day, morphine was administered for "increased pain", with good effect. Over the next few days, Mr A was administered variable amounts of morphine and clonazepam,[34] plus paracetamol.

81. On 20 Month4, Dr I recorded that he discussed Mr A's wife's concerns regarding Mr A's agitation, and that Ms B agreed that increasing medications that cause sedation should be avoided. On 24 Month4, 4mg of morphine was given for "acute pain all over Pain: 10", with good effect.

82. A pain assessment was completed by RN G on 3 Month5 for "sharp nagging pain in L/side". Pain management was noted as "paracetamol TDS regularly, 4mg morphine elixir PRN[35] 3hrly". It was documented that the morphine relieved Mr A's pain, and that Mr A was able to say when he was in pain.

83. On 4 Month5, RN G sent a fax to Dr I saying:

> "Family are concerned that [Mr A] has increased pain. Can you review and maybe increase his pain relief. I do not believe that he is at the syringe driver stage, as he continues to eat and drink. However he is getting regular pain in his legs."

84. Dr I reviewed Mr A on 6 Month5 and documented: "Using prn morphine more and often in pain." Dr I discussed options with Mr A's family and suggested the use of fentanyl patches, to which the family agreed.

85. On 9 Month5, Mr A's family were notified of his "[w]orsening condition". A note was made of the family's request to be notified at any time if his condition worsened. On 10 Month5, Mr A continued to be anxious and restless, and was given morphine for severe pain. The notes for the morning of 11 Month5 record that Mr A had "no pain apparent", and that he "seem[ed] to feel better up in [his] chair". In the early hours of 12 Month5, Mr A said that he had a lot of pain, and he was given morphine with good effect. At 3.30pm, Mr A was "in a lot of pain … 10/10", and morphine was given with good effect. He was administered morphine again that night for pain.

86. Dr I visited Mr A on 13 Month5 and recorded:

> "Started on Fentanyl[36] but still requiring morphine. I wonder how much of this agitation rather than pain. D[iscussed] W[ith] R[egistered] N[urse]. Will increase fentanyl over W[eek]E[nd] but staff to monitor ? pain v agitation as I wonder if would benefit from increased quetiapine."

[34] A medication used as a sedative or to prevent seizures and panic disorders.
[35] Pro re nata (as required).
[36] A skin patch for slow-release pain relief.

14 Month5

87. Ms B told HDC that she spoke to Ms F on 14 Month5 regarding concerns about the pain Mr A was experiencing. Ms B said that she believed that a UTI[37] could be causing the pain, and she recalls being advised to discuss this with a nurse. Ms B told HDC: "The family independently enquired with [a] Hospice on … 14 [Month5] however, they were unable to assist as there was no GP referral."

88. The rest home told HDC that on 14 Month5 Dr I was advised of the family's concerns regarding Mr A's agitation. Dr I suggested increasing the quetiapine for agitation and requested a urine test. The urine test performed at 4pm showed the presence of large amounts of blood and traces of protein. Mr A's daughter was present and was informed of the results. Dr I was faxed the results that afternoon. Ms B told HDC:

> "A Doctor should have been phoned rather than a fax being sent after 4.00pm … There was no opportunity for a Doctor to respond. [Mr A's] GP was out of town and [that] afternoon was not his scheduled hours of work. [The rest home] were aware of this."

89. The rest home told HDC that a urine test was completed for Mr A on two occasions, and on neither occasion was a UTI indicated. On 14 Month5, Mr A experienced pain on urination, and a urine test was performed to exclude a UTI. The rest home said that Mr A's cognition had not changed from his baseline, and that the pain could have been related to excoriated skin on his scrotum.

90. The rest home stated that the medical practice required no further action, as the urinalysis was not indicative of infection, and at least three signs and symptoms of infection were required to be present before commencing treatment for a UTI.

15 Month5

91. On the morning of 15 Month5, Mr A was noted to be "more unsettled", and he remained on the bed with his head elevated to aid his breathing. His family were notified of the change, and they visited. At 4pm, Mr A was noted to be agitated and was given 4mg morphine elixir with good effect. He was able to swallow soft yoghurt and fruit. At 6pm, his agitation was relieved with 2 drops of clonazepam.

92. At 8.30pm, Mr A was given 4mg morphine and two drops of clonazepam, as he was restless and agitated. At 10.50pm, a nurse noted:

> "Rang [Ms B] to update as [Mr A] weakened and deteriorates quite fast … [Ms B] came to stay with her dad. Gave [Mr A] 2 drops [clonazepam] and 4mg Morphine @2330hrs. His breathing worsened."

16 Month5

93. At 12.15am on 16 Month5, Mr A's family asked for a doctor to review him. The progress notes state: "Rang GP was transferred to Health clinic. No GP on call advised to transfer to [the public hospital]." Ms B said that the family requested that an ambulance attend, and

[37] Urinary tract infection.

the call was made at 1.06am. The ambulance arrived at 1.12am and Mr A was assessed. His heart rate was 120 beats per minute, respiratory rate 40 breaths per minute, blood pressure 130/70mmHg, and temperature 38.8°C. The progress notes at 1.15am record: "[Mr A] actively dying family in agreeance."

94. The ambulance service told HDC:

> "[On arrival] the attending personnel recall [Mr A] appeared to be in obvious distress and pain. The aged care facility staff informed the attending personnel [Mr A] had several co-morbidities and was receiving palliative care. [Mr A] had been declining over the last few days and although the GP was aware of [Mr A's] decline, no end of life care plan had been established yet."

95. An intravenous line was sited by ambulance personnel, and at 1.30am Mr A was administered morphine 10mg, and at 1.41am and 1.50am he was administered a further 5mg of morphine. The ambulance service told HDC:

> "[Mr A] appeared more comfortable after the morphine was administered. After discussion with [Mr A's] family, the aged care facility staff and the ambulance service Clinical desk, [Mr A] was left in the care and comfort of the aged care facility at the request of his family."

96. The ambulance personnel said that they advised the rest home that they could be called again if further pain medication was required, and that Mr A should be reviewed by a GP in the morning. The ambulance departed at 2.38am.

97. Ms F told HDC that "following the ambulance office[r] administrating pain relief [Mr A] was peaceful". GP Dr J was called in to assess Mr A later in the morning, as Dr I was away. Ms B said that the family arranged for the GP review.

98. Dr J reviewed Mr A at 10.30am and recorded in the notes:

> "End of life care. Not taking anything orally overnight. Seen by ambulance early hours of this [morning] — given morphine. Has fentanyl patches. O/E [38] afebrile, R[espiratory] R[ate] 20/min,[39] P[ulse] R[ate] 60/min,[40] chest clear, abdo[men] soft, not unsettled at the time of exam. Last days care. Family full agreement. Morphine 5–10mg sc[41] up to 3 h[ou]rly. Fentanyl patches 25 mcg[42]/h[ou]r, 2 patches every 72 hours i.e. total 50 mcg/h[ou]r. GP to review …"

99. Mr A died at 11.05am on 16 Month5.

[38] On examination.
[39] Normal respiratory rate for adults ranges from 12 to 16 breaths per minute.
[40] Normal resting heart rate for adults ranges from 60 to 100 beats per minute.
[41] Subcutaneously (under the skin).
[42] Micrograms.

End-of-life care planning

100. Mr A passed away before his care plan could be updated following Dr J's review on 16 Month5.

101. Ms B stated:

> "I had one wish for my Dad that when his life came to a close he would die with Love, Care and Dignity … 12 hours prior to [his] death we were absolutely appalled, distraught and bewildered to discover there was no End of Life Care Plan in place. He had arrived at [the rest home] on 18 [Month2] and passed away on 16 [Month5]. Although he deteriorated quickly over his final month, at no stage was a plan discussed with our family."

102. The rest home told HDC:

> "[Mr A's] GP had visited 3 days before he died and was aware of gradual deterioration. However [Mr A] was still eating and drinking the night before he died. The only difference was increasing confusion. He was checked for infection. The need for a syringe driver and increased medications had been considered and discussed with other RNs and GP — there was not any real imminent concerns. RNs responded that even palliative specialist GP [Dr J] advised '3–10 days'. Usually RNs would instigate a Short Term Care Plan for [a] deteriorating resident. RNs felt that with more time they would have done this … as [we] always do."

103. RN G said that the rest home had a paper end-of-life care plan but this was not used for Mr A. the rest home stated that a palliative approach to care was initiated for Mr A on admission, and that preferences regarding burial and last rites were discussed, and a discussion had with Mr A's family regarding his condition and what to expect. The rest home commented that "Te Ara Whakapiri: Principles and guidance for the last days of life" were not initiated, as Mr A was not thought to be in the last days of life until his significant deterioration just before he passed away.

104. The rest home acknowledged that a "last days of life care plan may have been appropriate in place of [Mr A's] long-term palliative care plan from 15 [Month5] onwards", and that additional anticipatory prescribing would have assisted in Mr A's management from 15 Month5.

105. The rest home told HDC:

> "[Mr A] had multiple comorbidities and his changes in health status both when he had his stroke and when he passed away were sudden and no doubt devastating for those close to him. In hindsight a referral to hospice may have been beneficial to provide additional support for [Ms B] during a particularly difficult time."

Pain management

106. The rest home said that Mr A was receiving regular medication for pain, and this was reviewed regularly during his stay. Dr I and the nursing staff were assessing whether the

behaviour Mr A was exhibiting related to pain and/or agitation. Family visits, clonazepam, and quetiapine had been reported to have some effect in managing Mr A's agitation. His pain management was increased during his stay.

107. Multiple entries are recorded regarding differentiating between agitation and pain and avoiding over-sedation whilst maintaining comfort. The rest home said that regular analgesia[43] was prescribed and increased over time. Mr A was also prescribed analgesia for breakthrough pain, and PRN morphine. The rest home said that analgesia was largely reported to be effective and, if not, the nursing staff requested a review by Dr I and analgesia was increased. The rest home commented that pain relief, goals of care, and Mr A's changing condition were discussed with family members, Dr I, and nursing staff.

108. RN G said that the family visited daily, and she discussed Mr A's pain management with Ms B, and discussed changes with Mrs A. RN G said that she provided reassurance and education to the family about the end stages of disease pain and cares. RN G stated that frequently hospice involvement is used for pain management, but "it was not thought to be required in this instance".

109. Ms B told HDC: "I will never concur that my Dad was adequately medicated for his pain." The rest home acknowledged to Mr A's family that unfortunately Mr A's symptoms on 16 Month5 were distressing to observe, but said that all medication aimed at relieving his symptoms had been administered.

Paracetamol formulations

110. The formulation of paracetamol administered to Mr A varied, and he was given either tablets or a syrup. The rest home acknowledged that it would have been better to administer paracetamol in a consistent way, and to document this clearly.

Agitation

111. The rest home said that a stroke can cause cognitive impairment and cerebral irritation, and prior to his admission to the rest home, Mr A had experienced agitation and delirium while in the public hospital. The rest home's review of Mr A's care found that nursing staff felt that Mr A was often not in pain, but rather experiencing cerebral irritation/ agitation/restlessness, and that often clonazepam drops appeared to work better than analgesia.

112. The rest home said that staff felt that the agitation was multifactorial, and assessment of Mr A's agitation included a review of his hospital transfer notes on admission, discussion with family, auscultation of his lungs to assess for lower respiratory tract infection, medication review, use of behaviour charts to identify psychosocial triggers, monitored appetite and fluid intake, monitored bowel records, adding to the care plan that pulling at clothing could indicate a need for toileting, consideration of cerebral hypoxia, lung

[43] Medication for pain relief.

assessments, his cancer of the prostate, stage 3 kidney disease, and anaemia,[44] and consideration and treatment of his pain.

Actions taken

DHB

113. Since the events in Month1, the DHB has undertaken the following:

- Agreed a stroke imaging protocol with 24/7 access to CT angiogram.
- Updated the "Acute Stroke Thrombolysis and Clot Retrieval" pathway. This has increased the number of stroke patients accessing thrombolysis treatment.
- Implemented a "Stroke Clot Retrieval Transport" guide.
- Implemented a system for "in hospital" strokes to send a medical emergency alert to the on-call medical registrar and on-call house officer, to support the urgent review of inpatients anywhere in the hospital who have developed neurological signs and symptoms consistent with an acute stroke.
- Implemented a Rapid Access TIA clinic (Monday to Friday) with access to same-day diagnostics and specialist assessment/management.
- Reached an agreement with another DHB to access its after-hours tele-stroke service to provide additional specialist support from a stroke expert to aid decision-making about reperfusion treatment or a change to antithrombotic treatment. In response to the provisional opinion, the DHB stated that the likely start date is early 2021.
- Presented Mr A's case at one of the Medical Morbidity and Mortality meetings as well as education sessions, to raise awareness amongst medical and nursing staff about inpatient strokes and consideration for thrombolysis.
- Held a stroke workshop to upskill nursing staff, registrars, and physicians.
- Supported nursing staff in the Acute Stroke Unit to escalate concerns about any patient with deteriorating neurological findings or new symptoms directly to the medical registrar on call or the physician on call, if unable to contact the on-call house officer or there is a delay in response.
- Developed a TIA in-hospital management pathway (dated 2020), which outlines what to do when a patient with an acute stroke/TIA develops new/worsening neurological symptoms.

Rest home

114. In Month6, following a meeting with Mr A's family, the rest home completed an investigation. This included a reflection meeting with the registered nurses at the rest home, and a review with the Nurse Manager, Ms F. A Corrective Action Plan was implemented, which included:

a) Purchasing two syringe drivers to provide appropriate medications for end-of-life care.

b) Ensuring that the rest home has a stock of medications available for use at the end of life if required/prescribed.

[44] Mr A was receiving palliative "comfort care", including symptom management, for these conditions.

c) Ensuring routine use of an End of Life Care Plan, and using a Short Term Care Plan when a resident is needing palliative care.

d) Purchasing a safety monitor (as Mr A had been unable to use a call bell).

e) Holding weekly formal clinical meetings with the Nurse Manager, Senior Registered Nurse, and the Clinical Quality and Risk Manager to identify issues for new residents and their families, and to ensure that families are involved in care and decisions.

f) Making changes to the 21-day care plan when an admission has a palliative focus.

g) Discussing the Ceiling of Intervention form with the families of all residents.

h) Providing training on family distress.

i) Appointing a Nurse Educator in 2019 to further support ongoing education.

Responses to provisional opinion

Ms B

115. Mr A's daughter, Ms B, was given an opportunity to respond to the "information gathered" section of the provisional opinion. Where appropriate, Ms B's comments have been incorporated into the report.

116. In addition, Ms B commented that her mother did not receive a personal telephone call or offer of support from the DHB acknowledging the loss of her husband. Ms B described the great emotional and financial toll of Mr A's post-stroke condition and "the loneliness and associated grief (Mrs A suffered) of losing her soulmate of 58 years".

117. Ms B reiterated that there were long delays when the family requested attendance by rest-home staff for Mr A's cares. Ms B stated:

> "[A] proper End of Life Care Plan and appropriate anticipatory medications in discussion with our family could have enabled a peaceful family time of reflection. Our experience was one of 'absolute despair' and this will sit with each of us forever."

DHB

118. The DHB was given an opportunity to respond to the provisional opinion, and advised that it accepts the findings and recommendations. Where appropriate, the DHB's comments have been incorporated into the report.

119. The DHB stated: "The [DHB's] Stroke Service has come a long way in the last few years and these [improvements] have been mentioned in the HDC report."

120. The DHB commented that the updated "TIA In-hospital Management Pathway" includes consideration of an urgent CT carotid angiogram for patients with crescendo TIAs in the same arterial territory. The DHB stated: "This will help in the identification of any significant carotid stenosis in people experiencing crescendo TIAs as was the case with [Mr A]."

121. The DHB also said that it is planning to increase the number of beds in the ASU to accommodate the increase in the current and projected number of admissions with stroke. In recognition of the fact that many patients in the ASU become unstable and/or are complex, there is also a proposal to adjust the ratio of patients to registered nurses in the ASU from 6:1 to 4:1.

Dr C

122. Dr C accepted the criticism of his lack of record-keeping, and reiterated that he has learnt a lot since this time and is more "conscious and diligent" with his notes. Dr C told HDC that he has reflected greatly on his individual responsibility in Mr A's care.

123. Dr C expressed his concern about the criticism levelled at him for matters that he believes were beyond his control and experience at the time.

Rest home

124. The rest home was given an opportunity to respond to the provisional opinion. Where appropriate, the rest home's comments have been incorporated into the report. The rest home disagreed with a number of the findings and provided a peer review completed by GP Dr H.

125. The rest home disputes that there was inadequate assessment of Mr A's agitation, and Dr H commented: "[W]ith such a long history of delirium starting at a place of secondary care I do not feel it was unreasonable to limit any further investigations as to the cause of this."

126. The rest home considers that staff responded to Mr A's pain appropriately when the prescribed pain management proved ineffective. The rest home stated that Dr I assessed Mr A regularly, and Mr A's family were involved in the decision to take a palliative-care approach for Mr A.

127. The rest home acknowledged that the anticipatory prescribing was insufficient to cover Mr A's significant change in health status on 16 Month5. Dr H commented:

> "[W]ith the need for nine interventions on 14 [Month5] and ten on 15 [Month5] further medical advice should have been sought. In this, I would accept that the HDC findings are reasonable and should be accepted."

128. Dr H told HDC that both urine tests performed for Mr A were "not consistent for infection", and he was "happy that a UTI had been excluded [and] [t]here was no need to then send a specimen to the laboratory". Dr H agreed that sending the final urinalysis by fax to Mr A's GP could be considered a departure from best practice, but reiterated that this did not affect Mr A's well-being, as the result was negative. The rest home disagrees with the criticism regarding UTI testing, and told HDC:

> "It is not standard practice to send urine specimens to the lab without new symptoms consistent with UTI ... The urinalysis result showed no evidence of bacteria (as evidenced by no leucocytes) in [Mr A's] urine."

129. The rest home refutes that there were multiple staff deficiencies or systemic issues, and noted that Mr A's condition deteriorated at a dramatic rate.

130. Dr H commented that Te Ara Whakapiri has not been well promoted or supported in the region. The rest home's response and Dr H's review were considered by my nursing advisor, Dr Karole Hogarth, and her comments are included in the opinion section of the report.

Opinion: District health board — breach

Introduction

131. The DHB had a duty to provide services to Mr A with reasonable care and skill. This included responsibility for the actions of its staff on the Acute Stroke Unit, and an organisational duty to facilitate reasonable care.

132. Mr A was admitted to the DHB with probable TIAs. Guided by expert advice, I am satisfied that the assessments undertaken when Mr A presented to the ED on 24 Month1 were appropriate. Accordingly, the focus of the following discussion is on the care provided on the night of 24/25 Month1 when Mr A suffered a debilitating stroke in hospital. My clinical advisor, general physician and geriatrician Dr Spriggs, is clear that Mr A's care fell short of accepted practice on that night. I have serious concerns about the care provided to Mr A relating to the failure to complete a review, consider thrombolysis treatment, and escalate care to a senior doctor, and the failure to record a clinical assessment (especially given the context of a very significant deterioration in Mr A's health).

133. I have been faced with conflicting information provided by the on-call house officer that night, Dr C. However, I have been able to make sufficient findings of fact, using RN D's notes, statements, and recall of events, to form an opinion on the care provided to Mr A at the DHB. Dr C's recall of events was slight, and he created an area of uncertainty and risk by not recording any purported contact with the medical registrar at 12.45am and not documenting his review of Mr A at about 4am. These are concerning patient safety issues, and I cannot emphasise enough the importance of documentation to support patient care.

Second review

134. On the night of 24/25 Month1, Mr A was under the care of the on-call physicians on the ASU, as there was no after-hours on-call stroke service/physician at the DHB. At 3.12am, Mr A's assigned nurse, RN D, paged Dr C to attend as Mr A's condition had deteriorated. According to RN D's account of events, Dr C was paged a number of times and he arrived at about 4am. Dr C began to review Mr A, but shortly after his arrival he received an urgent page, and he did not complete his review or his documentation, and did not escalate Mr A's care to a more senior colleague. Dr Spriggs advised:

> "[F]ailing to seek senior assistance and record his assessment in the notes of a man who was clearly deteriorating neurologically is a severe departure from accepted standards.
>
> … [Dr C] should have returned to assess [Mr A] after the second emergency at about 0400, and made a full clinical assessment, recorded this in the notes and escalated the care. I … consider this to be a severe departure."

135. Dr Spriggs advised that it would be standard practice to have reconsidered Mr A for thrombolysis once the stroke was completed at 4am. I note that the DHB agrees with this. Dr Spriggs commented that Dr C should have noticed a significant deterioration in Mr A's neurological state, and recognised this as high priority and urgent work.

136. I note that the DHB has since introduced a medical emergency alert for "in hospital" strokes to support the urgent review of inpatients such as Mr A. It is clear that Dr C, as a relatively inexperienced junior doctor, should have called a senior doctor for advice. Accepting that there may have been other urgent work to do, Dr C should not have assumed that someone else would escalate the care of Mr A.

137. Dr Spriggs has commented that often the failure of junior doctors to seek assistance is not an issue with policy, but reflects the culture of the DHB at the time. Dr Spriggs also advised that the failure of Dr C to escalate care "may reflect the working culture and conditions within the DHB rather than any short fall by the doctor".

138. From the statements I have read from the DHB and Dr C, there is no sense that Dr C was reluctant to escalate care to a more senior colleague, but rather that he was rushed and overwhelmed with his workload that night. The DHB has commented that "it was an exceptionally busy night for the On-call House Officer, [Dr C]". I also note Dr C's comment:

> "I did not have enough time to complete a full assessment at that time, therefore I could not discuss with a senior doctor regarding consideration of thrombolysis or imaging study, but if I had of been able to complete this review I would have definitely considered thrombolysis and sought senior advice."

139. I accept Dr Spriggs' advice that the 4am review of Mr A was seriously inadequate.

DHB policy and systems

Policy

140. After-hours stroke thrombolysis is provided by a non-specialist medical team at the DHB. It is the responsibility of the DHB to have clear policy to guide staff. Dr Spriggs advised:

> "Once the stroke was completed at 0400hrs it would be standard practice to have reconsidered [Mr A] for thrombolysis. The policy at the time in [the public hospital] did not address the issue of timing with regard to thrombolysis in the context of crescendo TIAs."

141. Dr Spriggs reviewed the "Thrombolysis in Acute Ischaemic Stroke" protocol that was current at the time, and advised that it did not discuss strokes occurring in the hospital setting. He further advised that the subsequent updated pathway for thrombolysis in acute stroke, and the protocol for stroke thrombolysis and clot retrieval do not include a statement about "in-hospital" stroke.

142. I accept Dr Spriggs' advice that the protocol at the DHB at the time did not address thrombolysis in the context of crescendo TIAs and "in-hospital" stroke. I consider that the protocol at the time lacked sufficient context to guide staff, and note that the updated protocol could be improved to include a statement about "in-hospital" strokes.

Workload

143. The DHB told HDC that it "was an exceptionally busy night for the On-call House Officer, Dr C". RN D and Dr C both commented that shortly after arriving for his second review of Mr A, Dr C was paged and he left soon afterwards without completing or documenting his review. Dr Spriggs has commented that for an exceptionally busy night:

> "[I]t should have been possible for other staff, perhaps the duty manager or one of the registrars, to identify the spike in workload and the consequent inadequacy of staffing and escalate the problem to Senior Doctors on call."

144. I accept Dr Spriggs' advice that staff at the DHB should have identified the exceptional workload and escalated the problem to senior doctors. I consider this to be a systems failure at the DHB, which left Dr C struggling to manage and prioritise competing levels of urgent cases after-hours.

Conclusion

145. The DHB has acknowledged to Ms B that "the standard of care [her] father received during the night of his stroke did not meet his needs, [and] the failure to consider the need for thrombolysis treatment did not meet expected standards [and the DHB] breached [her] father's right to proper standards of care on this occasion".

146. I note Dr Spriggs' comment that currently the management of acute stroke is changing very rapidly. However, it is important that DHBs have policies and systems in place that support staff to provide adequate after-hours care and treatment. I am concerned that aspects of the care provided to Mr A were inadequate — in particular, the failure to:

- Review a deteriorating patient adequately;
- Consider thrombolysis treatment at the second review;
- Escalate care to a senior doctor at the second review, noting also the context of inadequate staffing to meet patient need; and
- Document a clinical assessment.

147. As a consequence, at about 4am an opportunity was missed to consider treating Mr A's stroke with thrombolysis.

148. Accordingly, I find that the DHB failed to provide services to Mr A with reasonable care and skill, and breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code).[45]

149. I acknowledge the progress and safety improvements that the DHB has taken since these events, including introducing a medical emergency alert for "in hospital" strokes to support the urgent review of inpatients, providing access to after-hours specialist support via the tele-stroke service, supporting nursing staff on the ASU to escalate care if the on-call house officer is unavailable, and developing various pathways and protocols for accessing thrombolysis and clot retrieval and for the management of TIAs/strokes. I have added additional recommendations below.

Other comments

First review

150. On the night of 24/25 Month1, Mr A was under the care of the on-call physicians on the ASU, as there was no after-hours on-call stroke service/physician at the DHB. At 12.15am, Mr A's assigned nurse, RN D, paged the on-call house officer, Dr C, to attend Mr A regarding the onset of slurred speech, a left-sided facial droop, and right-sided weakness. Dr C reviewed Mr A at 12.45am, by which time Mr A's symptoms had largely resolved. Dr C performed a full neurological screen, noting intermittent symptoms and an impression of TIA, with a plan to continue four-hourly neurological observations as Mr A needed some sleep.

151. My expert advisor, Dr Spriggs, commented that at this review there was no consideration of alternative antithrombotic treatment such as intravenous or low molecular weight heparin, and advised that management of the crescendo TIAs with heparin should have been considered. Dr Spriggs also advised that at that time, thrombolysis was probably not indicated for Mr A.

Opinion: Dr C — adverse comment

152. Dr C was the house officer on call on the night of 24/25 Month1. He was a second-year junior doctor at the time of events. There were a number of serious shortcomings in the care Dr C provided to Mr A — in particular, Dr C's inadequate review of Mr A at about 4am, the failure to consider thrombolysis, the failure to escalate Mr A's care to a more senior colleague, and the failure to document the second review and his purported contact with the medical registrar at 12.45am, which created an area of risk. These are concerning patient safety issues, and the maintenance of accurate records is a cornerstone of clinical practice.

153. Dr C's initial email statement provided to the DHB in Month6 was that he could not remember whether or not he discussed Mr A's care with the registrar at that time. In later

[45] Right 4(1) states: "Every consumer has the right to have services provided with reasonable care and skill."

statements, Dr C said that he did in fact discuss the case with the registrar. Dr Spriggs advised:

> "If [Dr C] had failed to contact the registrar, he should have recognised his lack of expertise in this situation and made that call. If however he had sought the registrar's advice he cannot be faulted for following that recommendation."

154. I have been presented with conflicting accounts by Dr C. If Dr C did not contact the registrar, I am critical that he did not do so. If he did contact the registrar and failed to document this, I am critical of his lack of record-keeping. I accept Dr Spriggs' advice that thrombolysis was probably not indicated for Mr A at the first review.

155. Dr Spriggs outlined the expected standard for review and documentation:

> "[T]here are times when a doctor is called away from a job due to an emergency requiring his/her attention. In such circumstances, it is expected that the doctor return to the initial task, complete the assessment and make an appropriate record."

156. Dr Spriggs advised that at 4am, Dr C should have made a full clinical assessment of Mr A, considered thrombolysis treatment, documented his assessment in the notes, and escalated the care to a senior doctor on call. Dr Spriggs considers that the failure to do so, especially as there was a very significant change in Mr A's status, was a severe departure from expected standards.

157. I am mindful that Dr C was a junior doctor at the time of events, and have considered carefully the adequacy of the systems at the DHB where he was working. I also note that no other concerns were raised about Dr C's performance during his time at the DHB. While I note Dr C's view, in response to my provisional opinion, that criticism has been levelled at him for matters that he believes were beyond his control and experience at the time, I remain critical of the standard of care that Dr C provided to Mr A that night, and believe that Dr C should reflect on his individual responsibility in this case.

158. However, I also remain mindful of the system failings at the DHB, which left Dr C struggling to manage and prioritise competing levels of urgent cases after-hours. The DHB has acknowledged that this was an "exceptionally busy night" for Dr C. Dr Spriggs advised that staff should have been able "to identify the spike in workload and the consequent inadequacy of staffing and escalate the problem to Senior Doctors on call". I accept Dr Spriggs' advice, and am critical that this did not occur.

159. I also note that the DHB protocol at the time of events did not address thrombolysis in the context of crescendo TIAs and in-hospital stroke. I consider that the policy lacked sufficient context to guide staff. I remain critical of Dr C's care, but have considered this in the context of him working as a junior doctor in a non-specialist medical team, at a hospital with no after-hours on-call stroke service/physician, in a system that failed to support him adequately.

Opinion: Rest home — breach

Introduction

160. The rest home had a duty to provide services to Mr A with reasonable care and skill. This included responsibility for the actions of its staff, and an organisational duty to facilitate reasonable care. The rest home also has a duty to comply with the New Zealand Health and Disability Services (Core) Standards, which state:

> "**Service Management Standard 2.2**: The organisation ensures the day-to-day operation of the service is managed in an efficient and effective manner which ensures the provision of timely, appropriate, and safe services to consumers."

161. Mr A transferred to the rest home for hospital-level care in Month2, following a severe in-hospital stroke at the DHB. I have a number of concerns about the care provided to Mr A from Month2 until his death on 16 Month5, relating to the inadequate assessment of his agitation, inadequate management of his pain, not involving the hospice or initiating Te Ara Whakapiri end-of-life planning, and inadequate assessment, documentation, and follow-up of UTIs.

162. There were deficiencies in the care provided to Mr A by multiple staff at the rest home, which, in my view, were systemic issues for which the rest home bears responsibility. These are outlined below.

Assessment of agitation

163. Following his stroke on 25 Month1, Mr A experienced agitation and restlessness. My nursing advisor, Dr Karole Hogarth, commented that cerebral irritation related to the stroke was a plausible explanation for this behaviour, but should not have been considered the only reason. In Dr Hogarth's opinion: "[I]f there had been some further assessment of the cause of agitation his safety risk may have been reduced. Further family involvement in this would have been advised."

164. Dr Hogarth considers the lack of a robust assessment of Mr A's agitation a moderate departure from accepted practice, as further assessment would have been useful. The rest home has said that staff felt that the agitation was multifactorial, and have described various assessments that were performed. I note that in response to the provisional opinion, the rest home and Dr H disagreed that there was an inadequate assessment of Mr A's agitation. Dr Hogarth reviewed the rest home's response and advised that Mr A's ongoing disorientation needed to be monitored and further investigated when it did not resolve. She advised that agitation should not be deemed irreversible, untreatable, or unmanageable, and reiterated the continuing need for review.

165. I agree with my expert that the robustness of the assessment of Mr A's agitation is the issue, and a series of assessments and examinations without an overall assessment of agitation and discussion with family was not sufficient. I am critical that a more robust assessment of Mr A's agitation was not done to support his care and safety.

Pain management

166. Staff documented that at times it was difficult to determine whether Mr A was in pain or whether he was agitated. Mr A's GP, Dr I, reviewed Mr A on a number of occasions and prescribed pain relief. In response to the complexity of the clinical presentation, initially Mr A was prescribed clonazepam for his agitation and paracetamol for pain relief, and then morphine for shortness of breath in Month3 and for pain relief in Month4 and Month5, and the fentanyl patches in Month5.

167. On 24 Month4, Mr A was given 4mg morphine for "acute pain all over 10", with good effect. Dr Hogarth stated:

> "This is the day that [Mr A] experienced severe pain which was noted by the family. It would have been useful at this time to begin conversations about engaging the hospice or pain clinic[46] to assist with management of both [Mr A's] pain and agitation, in conjunction with his physician."

168. As mentioned above, Mr A's family should have been involved in the assessment as to whether he was in pain or was agitated, to provide insight into his normal patterns. From 24 Month4, the family should have been involved in the ongoing management of his pain and agitation in conjunction with Dr I, and a conversation about the involvement of hospice should have been commenced. This was also an opportunity to engage Te Ara Whakapiri, the principles and guidance for the last days of life. I note that in response to the provisional opinion, the rest home considered that staff responded appropriately to manage Mr A's pain when the prescribed pain management proved ineffective. Dr Hogarth reviewed the rest home's response and advised that there was not consistently good care as far as assessment and pain relief are concerned. I accept Dr Hogarth's advice.

169. Dr Hogarth described the management of Mr A's pain as a mild to moderate departure from standard care and accepted practice, and stated:

> "[T]he lack of guidelines and family involvement in the management of [Mr A's] pain was not at the required standard of care. [Mr A] should not have been in pain and pain experts could have been involved in assessment and management especially once morphine and other opioids were required."

170. I agree with Dr Hogarth's comment that "[a]dequate pain relief is a right for all persons in care", and I am critical that the rest home did not involve family and Dr I adequately in the management of Mr A's pain, and did not involve the hospice or engage Te Ara Whakapiri after Mr A's condition deteriorated and his requirement for morphine increased on 24 Month4. I consider it plausible that Mr A's complex medical history, including stage 3 chronic kidney disease, primary lung cancer, asbestosis, pleural plaques, COPD, hypertension, previous myocardial infarction, and prostate cancer, in addition to his more recent stroke, meant that there was a reasonable likelihood that he would experience increasing levels of pain as his health continued to deteriorate.

[46] Or other services available in the area that are resourced to provide guidance.

End-of-life care planning

171. The care planning for Mr A was adequate on his admission to the rest home, but as Dr Hogarth commented, "this needs to be reviewed regularly and in light of any change in condition".

172. The rest home stated that Mr A was being treated palliatively, and he was not thought to be in the last days of life until a significant deterioration on 16 Month5. After Dr J's review that day, there was insufficient time to update the care plan. Dr Hogarth advised:

> "An end of life conversation can be initiated prior to deterioration in order for the patient to have a voice (if able) along with their family. I do not agree that [Mr A's] deterioration was too quick for this to occur."

173. I note that Ms B told HDC:

> "I had one wish for my Dad that when his life came to a close he would die with Love, Care and Dignity … 12 hours prior to [his] death we were absolutely appalled, distraught and bewildered to discover there was no End of Life Care Plan in place. He had arrived at [the rest home] on 18 [Month2] and passed away on 16 [Month5]. Although he deteriorated quickly over his final month, at no stage was a plan discussed with our family."

174. Dr Hogarth advised:

> "An end of life plan is essential in palliative care. The change in [Mr A's] pain levels; the requirement for morphine to control this; and his general decline as documented; should have initiated a conversation with family to determine the end of life wishes for [Mr A] and his family.
>
> … [T]his should also have initiated the Te Ara Whakapiri guidelines which outline the plan for clinical care and the family and patient wishes. This guideline in conjunction with advice from outside agencies and his physician regarding pain management may have resulted in [Mr A's] death being a peaceful, family time of reflection, rather than a paramedic-IV morphine involved, deterioration."

175. Dr Hogarth considers this to be a moderate departure from standard care and accepted practice. In response to the provisional opinion, the rest home provided a review by Dr H. I note his comments that Te Ara Whakapiri has not been well promoted or supported in the region. I thank Dr H for providing a local perspective. Dr Hogarth has reviewed this and acknowledges that this does need to be more widely promoted as guidance during last days of life. In view of this, I will be writing to the Ministry of Health raising this as an area the Ministry may wish to consider for further work.

176. I accept Dr Hogarth's advice, and am particularly concerned that rest home staff were not more proactive in their end-of-life planning for Mr A. The delay in initiating end-of-life planning and protocols resulted in the emergency services being called to provide adequate pain relief for Mr A, which was distressing for Mr A and his family.

Assessment of UTIs

177. Ms B told HDC that she thought that an untreated UTI caused her father pain in the last days of his life. The rest home stated that Mr A experienced pain on urination, and that a urine specimen was taken to exclude a UTI, and a urinalysis showed large amounts of blood and traces of protein. The rest home said that Mr A's cognition had not changed from his baseline, and that the pain could have been related to excoriated skin on his scrotum. The rest home commented that no further action was required, as the urinalysis was not indicative of infection, and at least three signs and symptoms of infection were required to be present before commencing treatment for a UTI. I note that the rest home reiterated this comment in its response to the provisional opinion.

178. Dr Hogarth advised that "further assessment was warranted though [Mr A] was afebrile, his mental status was impaired and a UTI could have been ruled out". She also advised that "there were other points in [Mr A's] care where this assessment could have occurred earlier to rule out as a cause of his confusion".

179. After considering the rest home's response to the provisional opinion, Dr Hogarth remained critical of the inconsistency of the assessment processes and non-adherence to guidelines regarding UTI diagnosis, and considers this to be a mild to moderate departure from expected standards. I agree with this advice, and consider that the rest home needs a more consistent approach to the assessment and documentation of UTIs to ensure that follow-up is actioned and completed.

Conclusion

180. In my view, the rest home had the ultimate responsibility to ensure that Mr A received care that was of an appropriate standard and complied with the Code. Dr Hogarth stated:

> "There have been several deviations from policy in this case beginning with: end of life planning; medication administration; referral to physician timing; documentation of tests e.g. urine specimens; assessment of agitation and pain. In this instance the deviations from policy resulted in a less than satisfactory experience with the service provided by the rest home to [Mr A] and his family."

181. I agree and conclude that there were deficiencies in the care provided to Mr A. In my view, these were systemic issues for which the rest home bears responsibility. I note the rest home's view that it does not believe there were systemic issues; however, as outlined in detail above, the following issues occurred in the care provided to Mr A and show a pattern of care deficiencies:

- An inadequate overall assessment of his agitation and discussion with his family;
- Inadequate involvement of family and Dr I in the management of Mr A's pain;
- Not involving the hospice or pain clinic[47] after Mr A's condition deteriorated on 24 Month4;

[47] Or other services available in the area that are resourced to provide guidance.

- Not initiating Te Ara Whakapiri end-of-life planning after Mr A's condition deteriorated on 24 Month4; and
- Inadequate assessment, documentation, and follow-up of UTIs.

182. I strongly emphasise to health providers the importance of initiating end-of-life conversations and instigating end-of-life protocols once a patient has been assessed for palliative care and prior to a patient's deterioration, to enable the person to have a voice (if able) along with their family.

183. In light of the issues identified, I consider that the care provided to Mr A by the rest home was inadequate, and resulted in Mr A's pain and agitation not being managed optimally, the hospice not being involved, and Te Ara Whakapiri end-of-life planning not being initiated. I agree with my advisor that Mr A's death should have been a peaceful, family time of reflection. Accordingly, I find that the rest home did not provide services to Mr A with reasonable care and skill, and breached Right 4(1) of the Code.[48]

184. I acknowledge that since these events, the rest home has taken a number of actions, including purchasing syringe drivers (for delivery of medication) and a safety monitor, ensuring a stock of medications for end-of-life requirements, ensuring the routine use of end-of-life care plans for palliative care consumers, and training and education.

Level of supervision — no breach

185. Mr A was admitted to the rest home from the DHB requiring residential hospital-level care. Ms B said that she expected her father to receive 1:1 care, as an ACC Support Needs Assessment indicated a medical need for 168 hours of attendant care per week. The rest home said that there was no mention of 1:1 care for Mr A in the handover or discharge notes from the hospital, and that this is not a level of care that is offered by the rest home. The rest home stated that 168 hours of care per week means that there is a registered nurse on site 24 hours per day, which is provided by the rest home.

186. Dr Hogarth concurs with the rest home that the 168 hours equates to full-time hospital-level care with the presence of a registered nurse 24 hours a day. Staffing levels and rosters were reviewed by my expert, and she concluded that "the level of supervision for a hospital level care patient in aged residential care is at the level required under the guidelines".

Other comment

Paracetamol administration

187. There was variability as to how paracetamol was administered to Mr A. Dr Hogarth advised:

> "The variability in the administration of paracetamol should have been discussed by the RNs and a guideline for administration added to [Mr A's] care plan for consistency.

[48] Right 4(1) states: "Every consumer has the right to have services provided with reasonable care and skill."

> I would not consider that there has been a departure from the expected standard of care except that the rationale for the variation in administration should have been conveyed to the family."

188. I note that the rest home acknowledged that it would have been better to administer paracetamol in a consistent way, and to document this clearly. I agree with my nursing advisor and recommend that in future, staff decide on a consistent medicine administration method, document this, and communicate it clearly to the consumer's family.

Call bell

189. On 23 Month2, Mr A was found with the call bell cord around his neck, and there was concern for his safety. The cord was removed, as Mr A was unable to operate the call bell safely to summon assistance. Ms B has commented that an alternative monitoring device should have been provided.

190. In my view, the rest home appropriately removed the cord owing to the safety risk, and implemented regular manual checks. A chair alarm was also provided, and, at the time, no alternative monitoring device was available. While acknowledging Ms B's concern about this, I am not critical in this respect, and note that the rest home has since purchased a safety monitor that will address similar concerns should they arise in the future.

Recommendations

191. I recommend that the DHB provide a written apology to Mr A's family for the deficiencies of care identified in this report. The apology is to be sent to HDC within three weeks of the date of this report being issued, for forwarding to Mr A's family.

192. I recommend that the DHB undertake the following, and report back to HDC within three months of the date of this report being issued:

a) Use an anonymised version of this report as a case study, to encourage reflection and discussion during stroke and TIA education sessions at the hospital.

b) Consider updating the stroke thrombolysis protocols to include a statement about in-hospital strokes.

c) Consider reviewing the TIA in-hospital management pathway (dated 2020) and ensure that it is up to date with changes in best practice regarding the use of the ABCD2 Tool.

d) Evaluate the DHB's mechanisms to identify and manage spikes in workload after-hours on the ASU, and report back to HDC.

193. I recommend that Dr C provide a written apology to Mr A's family for the deficiencies in the care he provided, as identified in paragraph 156 of this report. The apology is to be

sent to HDC within three weeks of the date of this report being issued, for forwarding to Mr A's family.

194. I recommend that the rest home provide a written apology to Mr A's family for the deficiencies of care identified in this report. The apology is to be sent to HDC within three weeks of the date of this report being issued, for forwarding to Mr A's family.

195. I recommend that the rest home undertake the following, and report back to HDC within three months of the date of this report being issued:

a) Develop a guideline for the timing of end-of-life conversations and protocols such as Te Ara Whakapiri being initiated, which for palliative care patients should be prior to deterioration.

b) Review the current process for end-of-life care, including timing of conversations and protocols, predictive prescribing by GPs, and the use of the new syringe drivers. A summary of the actions taken to address any significant findings from the review should be shared with HDC.

c) Provide training for all staff on:

- the reviewed end-of-life care process
- medication administration options for patients who have difficulty swallowing, the documentation requirements, and communication with family.

d) Provide education sessions for registered nurses on the assessment of patients post stroke, including the causes of agitation, the impact on patient safety, and staff and other resident stress.

e) Document a plan for regular reassessment of safety for patients requiring greater surveillance, in conjunction with family input, as part of care planning.

f) Consider providing training or supervision of staff to ensure that when specimens are sent for analysis, this is documented correctly and the physician notified in a timely manner.

Follow-up actions

196. A copy of this report with details identifying the parties removed, except the experts who advised on this case, will be sent to the Health Quality & Safety Commission, Stroke Foundation New Zealand, and the Ministry of Health (HealthCERT), and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

197. I will be writing to the Ministry of Health to suggest further promotion and support for Te Ara Whakapiri nationally.

Appendix A: Independent advice to the Commissioner

The following expert advice was obtained from Dr David Spriggs, a general physician and geriatrician:

"**Complaint:** **[Mr A]**
Your Ref: **18HDC02364**

I have been asked by the Commissioner to provide expert advice on the care provided to [Mr A] during his admission to [the public hospital] on 24 [Month1] and his subsequent care on 25 [Month1].

I practise as a General Physician and Geriatrician at Auckland District Health Board and am vocationally registered in Internal Medicine. I have been a Fellow of the Royal Australasian College of Physicians since 1993. I have no conflict of interest in regard to this case and have read and understand the Commissioner's guidelines for independent assessors.

I have been provided with:

1. Letter of complaint
2. [The DHB's] response dated 7 March 2019, 7 [Month6] & 21 [Month5].
3. Clinical records from [the DHB] covering the period [Month1]–[Month2].
4. [The DHB] thrombolysis protocol in place at this time.

My instructions from the Commissioner are to review the documentation and advise whether I consider the care provided to [Mr A] at [the public hospital] was reasonable in the circumstances, and why.

In particular, I should comment on:

1. The appropriateness of the assessments undertaken when [Mr A] presented to ED on 24 [Month1].
2. Whether [Mr A] should have been assessed for thrombolysis between 12am and 7am on 25 [Month1].
3. Any other matters that I consider amount to a departure from accepted standards of care.

BACKGROUND:
[Mr A] was admitted to the Emergency Department at [the public hospital] at 1753hrs on 24 [Month1]. He had been playing bowls in the afternoon and noticed some general incoordination. He drove home and his wife noticed some difficulty with speaking and a left facial droop at about 1700hrs. These symptoms rapidly resolved and on arrival in the Emergency Department the signs were no longer present. However the symptoms recurred at about 1840hrs.

[Mr A] had a background of a probable lung cancer diagnosed in 2015, no active intervention was planned. He also had a history of myocardial infarct, hypertension,

polymyalgia rheumatica and obstructive airways. His drugs included aspirin, blood pressure drugs, frusemide and prednisone.

In the Emergency Department he was assessed by [a doctor] who made a clinical diagnosis of TIA developing into a stroke. [Mr A] was referred to General Medicine for assessment for thrombolysis.

[Mr A] was assessed by [a doctor] from the General Medicine Department. The timing of this assessment is not clear. He reviewed the history. He notes that by 1900hrs there was near complete resolution of the neurological signs. His assessment was that there was a 'faint dysarthria' but no other focal neurological signs were present during his examination. He noted that the CT scan did not show anything acute. [Mr A's] blood tests were also normal apart from some reduced renal function which was longstanding. [The doctor] prescribed some aspirin and clopidogrel at 1933hrs. These are signed as given by the nursing staff but no time is recorded. [The doctor] records 'no indication for thrombolysis, low NIHSS, resolved symptoms, ?earlier onset today'. [The doctor] arranged for admission under the medical services.

At 0015hrs on 25 [Month1] there is a note from [RN D]. [RN D] records that at midnight [Mr A] had the onset of slurred speech which became incomprehensible with a left sided facial droop. She called the House Officer, [Dr C]. [Dr C] reviewed [Mr A] at 0046hrs. His note described the left facial palsy and slurred speech and says 'however nurse reports Sx [symptoms] comes and goes (sic)'. Neurologically there is a brief exam which only showed slight left facial droop and no limb weakness.

Over the course of the night there is the contemporaneous nursing report from [RN D]. I note that she also subsequently submitted a further reported dated 28 [Month6]. In this report she states that [Mr A's] speech 'was intermittently unintelligible and his right arm was very mildly weak, he had a facial droop, all of these would resolve and quickly come back'. At 0030hrs [Mr A] is reported as being assessed by the House Officer 'by the time OCHO (On Call House Officer) had arrived all symptoms had largely resolved with left arm drifting only and mild facial droop'. She says that [Mr A] felt that he had almost returned to normal. [RN D] goes onto say that 'I then visualised the patient every 15–20 minutes until approximately 0230hrs'. She then reduced the assessments to half hourly and he was well until 0400hrs 'I went to check patient, his bed was wet and he was reaching for his bottle'. At that stage [Mr A] was extending his left arm and leg. She does not comment about the right side. [Mr A] was 'very confused with dense weakness in his arm'. [RN D] paged the House Officer. There is no record of the House Officer assessment in the clinical notes. From the nursing notes I understand that [Mr A] was reviewed by the House Officer but he 'was paged before he could write in the notes'. It is uncertain what the signs were at that stage. [Mr A's] wife was phoned to inform her of what had happened. In the contemporaneous notes [RN D] says that there was some right sided neglect.

[Dr C's] only response has been in an email of 14th [Month6]. He states that he does not remember the patient very well and 'I couldn't remember whether I discussed with the reg or not at the time'.

The next clinical note is at 0930hrs from the Consultant Ward Round. [A consultant] reviewed [Mr A] noting the progression of the neurological signs at 0400hrs. [The consultant] found a dense left hemiparesis, slurred speech and expressive dysphasia with left sided neglect. [The consultant] felt that this represented a right middle cerebral artery stroke. He also noted the comorbidities with acute on chronic kidney disease. [The consultant] arranged a CT angiogram and CT brain. He made some changes to the antihypertensive medication introducing amlodipine and started a statin.

The next clinical entry is at 1500hrs from [a nurse]. She comments on 'left facial droop and right (illegible) hemiplegia'. She had been in touch with [Mr A's daughter].

At 1720hrs the [on-call house officer] reviewed the CT scan which showed a complete occlusion of the right internal carotid artery. This was discussed with [the consultant] and it was felt that [Mr A] was out of the time window for thrombolysis. The chest x-ray continued to show the mass in the right lung. [Mr A] was agitated and haloperidol was prescribed.

At 1850hrs [Mr A's] resuscitation status was reviewed by [the registrar] and she felt 'full escalation of care no longer appropriate'. The family were informed.

I have not reviewed the rest of [Mr A's] care at [the public hospital] as this is beyond the scope of my instructions from the Commissioner.

On 21 [Month5] an internal review process by [Dr E] was completed. [Dr E] notes that [Mr A] was 'admitted with crescendo TIAs which then progressed to a severe and disabling ischaemic stroke'. He feels that thrombolysis was not indicated when [Mr A] was admitted to the Emergency Department. However 'at 0400hrs it is my view that he should've (sic) been assessed for intravenous thrombolysis at this time'.

On 07/08/19 [the DHB's Chief Executive] sent a letter to [Mr A's] daughter). [The Chief Executive] acknowledged that 'the standard of care your father received during the night of his stroke did not meet his needs, the failure to consider the need for thrombolysis treatment did not meet the expected standards. I am deeply sorry that we breached your father's right to proper standards of care on this occasion'.

Training sessions with regard to thrombolysis for staff have since been arranged. These have occurred on [three occasions]. Other training sessions are planned in October 2019.

OPINION:

When [Mr A] was admitted to [the public hospital] on 24 [Month1] he was suffering from a transient ischaemic attack. During his first 6 hours in the hospital he had

further neurological episodes most of which were short lived and resolved completely. The House Officer was called to review him at about midnight. The House Officer, [Dr C], did not seek further advice from a senior doctor. Dual anti-platelet treatment had already been administered. At 0400hrs [Mr A] completed his right carotid artery occlusion with subsequent severe stroke. The medical assessment at that stage is not recorded. I note various conflicting comments in the notes about which side of the body is affected. Likewise a description of his speech impairment is variable. I am unsure whether this represented a dysarthria alone or whether he also had a dysphasia (this would be unlikely unless he was left handed).

At 0030hrs the on-call house officer should have called a senior doctor. [Mr A] was suffering frequent recurrent TIAs, called 'Crescendo TIAs'. At that stage it would be usual practice to have considered whether or not heparin either in the form of low molecular weight heparin subcutaneously or intravenous heparin would have been indicated. While the evidence for heparin in crescendo TIAs is absent it is considered standard practice. In the absence of any comment from [Dr C] it is not possible to say why the registrar or consultant were not contacted at this time.

Once the stroke was completed at 0400hrs it would be standard practice to have reconsidered [Mr A] for thrombolysis. The policy at the time in [the public hospital] did not address the issue of timing with regard to thrombolysis in the context of crescendo TIAs.

In the absence of appropriate assessment, it is not possible to say with certainty that thrombolysis would have been indicated at 0400hrs.

There is no recorded clinical assessment by the House Officer as he was called away. This was probably [Dr C]. Again we have no indication from him as to why there is no contemporaneous clinical assessment and record, and why a senior doctor was not consulted. It is recognised that there are times when a doctor is called away from a job due to an emergency requiring his/her attention. In such circumstances, it is expected that the doctor return to the initial task, complete the assessment and make an appropriate record. Sometimes this is recorded as 'written in retrospect'.

By 0930hrs when [Mr A] was reassessed at the Consultant Ward Round, I agree that the time window for thrombolysis had passed. I do not think that earlier imaging of his carotid arteries on the night of 24 [Month1] would have made any difference to his clinical care.

I note the letter of apology from the Chief Executive and the increased training in thrombolysis for cerebral infarction following this event. I am aware that the management of acute stroke generally has changed since [Mr A's] admission now to include clot retrieval and this has been part of further training at [the DHB].

I note, however that neither [Dr E] nor the CEO acknowledge or address the issues of the House Officer a) failing to seek senior advice b) being called away and c) failing to keep a contemporaneous record. I do not know if these issues have been addressed.

SUMMARY:

1. The assessments undertaken when [Mr A] presented to Emergency Department on 24 [Month1] were appropriate. The management with dual anti-platelets would be in keeping with usual standards of care.

2. Between midnight and 0700hrs on 25 [Month1] [Mr A's] care fell short of standard practice. The House Officer should have called a senior doctor. Management of the crescendo TIAs with heparin should have been considered after midnight and at 0400hrs the opportunity to consider thrombolysis was missed.

   I am not sure what policies are in place for escalating care. Nor do I know what the culture of escalation was at [the public hospital] at that time. It is sadly not uncommon that house officers feel reluctant to phone their registrar or consultant overnight. The Commission has commented on these issues before.

   I believe the departure from the standards of care in both these circumstances to be moderate and may reflect the working culture and conditions within [the DHB] rather than any short fall by the doctor.

   The failure to make a contemporaneous record of the clinical assessment at 0400hrs is a severe departure from standards especially as there was a very significant change in the status of the patient. However, I have no information about the workload of the doctor concerned on the night shift of 24th–25th [Month1].

   I do not know if [Dr C] is aware of the current review and whether he has been asked for further comment.

3. i) I note confusion over the neurological signs. In particular which side of the body was involved. It is important that staff are encouraged to record the signs accurately.

   ii) I note the response from [the DHB] to the family and this seems appropriate with regard to the acute stroke management. The management of acute stroke is changing very rapidly at present. I note that [the DHB] is currently undertaking significant re-education of staff to keep them up to date with new developments.

   iii) [The DHB] has not acknowledged:

      a) the failure to consult a more senior doctor

      b) the failure to keep appropriate records.

   [The DHB] has not attempted to determine why these failings occurred. Therefore no corrective action seems to have been taken.

Please get back to me if you require any further information.

Yours sincerely,

David Spriggs, MBChB, FRCP(Lond), FRACP, MD
General Physician and Geriatrician
General Medicine, Auckland District Health Board"

The following further advice was received from Dr Spriggs:

"**Complaint:** **[Mr A]**
Your Ref: **C18HDC02364**

I have been asked to provide further advice on the care provided to [Mr A] by the [DHB] in [Month1]. I had previously provided the commissioner with a report dated 03/09/2019. I have no personal or professional conflict of interest in this case and I am aware of the HDC's guidelines for independent advisors.

I have been provided with the following documents:

1. [The DHB's] responses dated 26 September 2019, 4 November 2019 and 13 November 2019. These include statements from [Dr C] and [RN D].
2. Policies, procedures and guidelines relating to:
   a. The supervision of junior doctors
      i. Policy No: 6.1.2 Medical Responsibility For Patient Care
      ii. Policy 6.1.2 protocol 1 Medical Responsibility for Patient Care — Delegated Responsibilities of RMOs: When to call the consultant on call
      iii. Policy 6.1.2 protocol 2 Medical Responsibility for Patient Care Admission, Handover of Responsibility & Care Management
      iv. Policy 6.10.2 Clinical Communication
      v. Policy 6.10.2 Protocol 1 Clinical Communication Standards.
   b. Thrombolysis
      vi. ED.T3.1 Stroke thrombolysis protocol (dated March 2013)
      vii. Thrombolysis in Acute Ischaemic Stroke Pathway 9034 7/17
      viii. Stroke Thrombolysis Clot Retrieval Pathway Dec 2018.
3. A copy of the RMO certificate of service for [Dr C]
4. Phone/pager record medical house officer night of 24–25 [Month1]

I have been asked to review the documentation and advise whether I consider the care provided to [Mr A] at [the public hospital] was reasonable in the circumstances and why.

In particular I have the following instructions to consider:

1. The appropriateness of the care provided by [Dr C]. Please include in your consideration the lack of urgent medical assessment, lack of escalation and lack of documentation at 4am on 25 [Month1], when [Mr A] developed new neurological symptoms. Whether thrombolysis should have been considered by [Dr C] at this point. If there are differing versions of events presented to you please provide an answer that covers off all scenarios.
2. Whether [Mr A] should have been assessed for thrombolysis by [Dr C] between 12am and 7am on 25 [Month1].
3. Comment on the adequacy of policies, procedures and guidelines existing at the time. Also comment on the adequacy of any updated versions. This is in relation to policies about:
   a. The supervision of junior doctors
   b. Thrombolysis.
4. Any other matters that you consider amount to a departure from accepted standards of care and if so why.

I will not review again the clinical scenario however with the new documentation. I will make the following additions to my original report.

The statement from Staff Nurse [RN D] of 27/10/19.

[RN D] confirms that she was the staff nurse looking after [Mr A] on the night of 24/25 [Month1]. Around midnight she found [Mr A] choking and coughing, she confirms that she called the on call house officer (OCHO) [Dr C] who assessed [Mr A]. By the time [Dr C] had arrived [Mr A] had improved significantly from the neurological point of view. [RN D] states that the patient had been given aspirin and clopidogrel by this time. The frequency of neurological observations were increased, the house officer prescribed a nebuliser and did not leave any other specific instructions.

[RN D] continued to review [Mr A] regularly at about 0300hrs she found [Mr A] behaving in an unusual way trying to climb out of bed, he appeared disoriented and confused. She rang for assistance, attended to his personal cares and found that he was developing a left sided neglect. She paged the on call house officer. This page is recorded in the pager report at 03.12hrs. Subsequently as [Mr A's] neurological deterioration continued, [RN D] states that she again paged the house officer who responded saying 'he would be down shortly'.

At about 0400hrs [Mr A] had not yet had a formal review. The unusual movements started again. [RN D] was supported by the Duty Manager. [RN D] states that the house officer was again paged and that 'it was not long after this that the OCHO arrived'. [RN D] says that the house officer made a further clinical review. [RN D] was not present at the time as she was looking after other patients. The house officer suggested that the telemetry machine and blood pressure cuff were removed. The

house officer 'speedily ran down the corridor with a pager in his hand' as he had apparently been called to see another patient. Subsequently [RN D] paged the on call house officer to 'update him on [Mr A's] status'. Later in the morning around 0630hrs [RN D] again paged [Dr C] who telephoned to say that [Mr A] would be reviewed by the team in the morning.

The statement from [Dr C] of 07/11/19.

[Dr C] confirms that he was the house officer working that night looking after [Mr A]. [Dr C] states that he had reviewed [Mr A] clinically at about 0046hrs on 25 [Month1]. He goes on to say 'I did contact a medical registrar at the time of review between 0030 to 0100 despite not including the conversation (with medical registrar) in my documentation. The advice was to continue monitoring as I have documented in my notes'. This is in contrast to his statement in an email of 14 [Month6] where he states 'I couldn't remember whether I discussed with the registrar or not at the time'.

Later in the morning [Dr C] states that he was contacted about 0400hrs. He goes on to say 'I did not review the patient at this time'. He acknowledges that he had been paged at 0312hrs 'this was not however, an emergency page and I did not see the patient due to another patient requiring my attention'. As he had not assessed the patient, he had not written any records. He goes on to say that he had to 'prioritise review requests during the night shifts due to heavy workloads'. He acknowledges the importance of clinical documentation and he states 'it is my usual practice to complete the clinical documentation (written in retrospect) when I have completed other tasks before I finish my shift'. He states that since his time as an on-call house officer he is 'more conscious (sic) and diligent with my notes'.

I have been provided with the RMO certificate of service. There may be an error with regard to the years of service. According to this document [Dr C] started his employment at [the DHB] [and] spent [a number of] months in general medicine … I suspect that … this event took place during a[n] … attachment in General Medicine.

I have been provided with the phone/pager record for the medical house officer on the night in question. This records the pages sent to the house officer. This record starts at 2320hrs it includes a page request with regard to [Mr A] sent at 0015hrs, this does not reflect the possible deterioration in his neurological state at that time. There is another pager request at 0312hrs stating [Mr A] had 'now dense weakness l(eft) side, dysphasic'. It appears that the pager was not used after 0316hrs. The night shift handover report for the night in question is also included in the documents available to me but does not mention [Mr A].

I have also reviewed the policy with regard to medical responsibility for patient care. This is a standard document. It states in paragraph 4.2 'if unexpected patient problems arise after hours junior staff should seek advice from the specialist on call'.

The protocol for thrombolysis in acute ischaemic stroke dated March 2013 had been reviewed by me in my previous report. To reiterate, this protocol did not discuss

strokes occurring in the hospital setting. Subsequently [the DHB] has developed a pathway for thrombolysis in acute stroke from [Month5] and a further protocol for stroke thrombolysis and clot retrieval. Neither of these protocols includes any statement about 'in-hospital stroke'.

OPINION:

1. The appropriateness of care provided by [Dr C].

   With regard to the care provided at about 0046hrs there was no consideration of alternative antithrombotic treatment such as intravenous or low molecular weight heparin. [Dr C] stated in 2017 that he did not contact the registrar and in his more recent report he says he sought registrar advice. If [Dr C] had failed to contact the registrar, he should have recognised his lack of expertise in this situation and made that call. If however he had sought the registrar's advice he cannot be faulted for following that recommendation.

   Later in the morning there are also conflicting accounts of [Dr C's] involvement. If his account is correct, in that he was paged only once and gave low priority to [Mr A's] deteriorating status and he did not assess the patient clinically, he should have recognised that with the documented new hemiparesis, as stated on the pager message, [Mr A] required clinical assessment urgently.

   If [RN D's] account is correct in that [Dr C] was paged a total of 4 times over the course of the morning and [Dr C] made a clinical bedside assessment of [Mr A] but failed to write in the notes, [Dr C] can be criticised for failing to record his clinical assessment and once again failing to seek senior advice on the management of a clearly unstable neurological patient.

2. I believe that [Mr A] should have been assessed for thrombolysis by [Dr C]. I believe that assessment was done at about 0046hrs but there are conflicting accounts of whether the registrar was consulted. At that stage thrombolysis was probably not indicated but further anti-thrombotic treatment may have been required.

   There are also conflicting accounts of whether [Dr C] assessed [Mr A] subsequently in the morning around 0400hrs (see above) when further assessment for thrombolysis was definitely indicated.

3. a. The policy with regards to junior doctors seeking senior advice at [the DHB] is satisfactory. The Commissioner has previously commented on the failure of junior doctors to seek assistance and that this is often not an issue with the policy but reflects the culture of [the DHB] at the time.

   b. The current protocols are satisfactory. However, I believe it would be helpful for the protocols to include a statement about in-hospital strokes.

4. The pager record for the night in question finishes at 0316hrs in the morning. There is a page about [Mr A] at 0015hrs which is not clinically relevant. The only other

record of a pager about [Mr A] is at 0312hrs. The pager record does not include any pages or texts with regard to [Mr A's] condition after this time. I note [RN D] states that she paged [Dr C] on several occasions after this. It is unlikely that there were no clinical messages after 0316hrs, for the last 4½ hours of the shift. I wonder if this report is incomplete. A complete record might confirm or refute [RN D's] assertion that she paged [Dr C] on several occasions. If the pager record is accurate, it does not support [Dr C's] comment about 'heavy workloads'.

SUMMARY:

1. I believe that [Dr C's] peers would consider his departure from standard of care in failing to seek senior assistance and record his assessment in the notes of a man who was clearly deteriorating neurologically is a severe departure from accepted standards.

   If he had not assessed [Mr A] around 0400hrs and had decided that a new hemiparesis was not requiring urgent assessment based on one text message then this, too, is a severe departure from accepted standards of care.

2. The response from [the DHB] of 26/09/19 fails to address the issues with regard to ensuring RMOs escalate the care of unstable patients appropriately and keep contemporaneous records.

Please do not hesitate to contact me should you require any further assistance.

Yours sincerely

David Spriggs, MBChB, FRCP(Lond), FRACP, MD
General Physician and Geriatrician
General Medicine
Auckland District Health Board"

The following further advice was received from Dr Spriggs:

"Complaint: [Mr A]
Your Ref: C18HDC02364

On the 17th July you requested further advice on the care of [Mr A] by [the DHB] and [Dr C] on the night of 24/25th [Month1].

I have reviewed the following documents from [the DHB]:

Guidelines for Night Doctor Handover process

The TIA pathway.

The response from [the DHB] dated 6th July 2020

The response from [Dr C] dated 2nd July 2020.

Your instructions were to review this information and

1. Advise whether this changes your previous advice from August 2019 and May 2020, in particular any level of departure from expected standards regarding [the DHB] and [Dr C]. If you identify a departure from the expected standard of care, we would appreciate you quantifying the departure as mild, moderate or severe.
2. Review and comment on the policies/documents provided. Do you have any recommendations for improvement?
3. Any other matters that you consider amount to a departure from accepted standards of care or you wish to comment on.

This response is in addition to my previous report from the 29th May 2020.

Response from [the DHB]

[The DHB] have amended the processes with regard to 'in-hospital strokes'. The new system from 2019 is to send a medical emergency alert to the on-call Medical House Officer and Registrar. I assume that the system applies on all adult wards not only the Acute Stroke Unit. Nurses within the Acute Stroke Unit are supported to escalate directly to the medical registrar on call or to the Physician on call any patient who is deteriorating. [The DHB] has agreed with [another] DHB to access their after-hours tele-stroke services and this will start from July 2020.

With regard to the record of the paging activity for the House Officer on the night of 24th and 25th [Month1], it seems that there were two methods of paging the House Officer [Dr C]. The first was non-urgent ward calls. For the night in question, there were 19 jobs requiring the attention of the House Officer. The system self-purges after 3 months and these records are no longer available. The second method was urgent requests. A record of these was sent to the HDC for the first part of the night finishing at 0316 Hrs. By that stage, 14 pages had been sent. Again further records have now been deleted.

Response from [Dr C]

In his response to the HDC dated 2nd July, [Dr C] acknowledges that he has reviewed my report from 29th May.

[Dr C] states that he did indeed review [Mr A] at about 0400 Hrs. This is in contrast to his previous statement from the 7/11/19 when he says 'I did not review the patient'. In his more recent statement, [Dr C] states that the review of about 0400hrs was brief. 'I left promptly (ran down the corridor before I could complete my clinical assessment on [Mr A]) because I had been called to see another patient'. [Dr C] recalls that this was a 'particular busy night for me' and he acknowledges that he forgot to document his findings in [Mr A's] notes. He 'had assumed that someone else would call for medical support but subsequently became aware that it didn't happen'. This account would be much more in keeping with that of [RN D] in her response to HDC's enquiry of 27/10/19.

When asked about consideration for Thrombolysis, [Dr C] has said that following his first assessment at 0046 he had asked the medical registrar's advice and followed that advice. This was discussed in my previous report.

After the second review at 0400, [Dr C] 'did not have enough time to complete a full assessment at that time, therefore I could not discuss with a Senior Doctor regarding the consideration of thrombolysis or imaging study'.

[Dr C] acknowledges the inadequacy of his documentation as previously commented on.

TIA in-hospital management pathway

This is dated 11th June 2020.

This is a standard pathway.

I note however that [the DHB] still recommends the use of ABCD2 Tool. This is no longer recommended by the National Institute for Clinical Excellence in the UK from 2019.

https://www.nice.org.uk/guidance/ng128/chapter/Recommendations

While this scoring system is still in use in other DHBs in New Zealand I'm uncertain whether [the DHB] has reviewed this advice from NICE and chosen not to make the recommended change.

Opinion

[Dr C] has given conflicting information to the Commissioner. Initially he stated that he could not recall whether or not the registrar was contacted at 0046hrs and subsequently he's stated that he did indeed talk to the registrar. Similarly he has stated that he did not assess [Mr A] at 0400hrs and subsequently said he did make an assessment, if very briefly.

My original opinion in my report from the 29th May has not altered with regard to his assessment at 0046hrs.

If [Dr C] had assessed [Mr A] at 0400hrs as stated by [RN D] and [Dr C] in his most recent response, then [Dr C] should have noticed a significant deterioration in [Mr A's] neurological state. This should have been considered high priority and urgent work. Accepting that there may have been other urgent work to do, [Dr C] should not have assumed that someone else would escalate the care of [Mr A].

[Dr C] should have returned to assess [Mr A] after the second emergency at about 0400, and made a full clinical assessment, recorded this in the notes and escalated the care. If his account of the care of [Mr A] in his most recent response is correct, I still consider this to be a severe departure from accepted standards.

[The DHB] has revised its handover policies and hopefully this will improve the safety of patients particularly out of hours.

Sadly there is no complete record of the pager activity in the night in question that allows a judgement about how busy that night was.

If it was a very busy night for the House Officer but the work load was considered normal, then it would be appropriate for [the DHB] to consider increasing support for an overworked junior doctor overnight.

If, however, this was an exceptionally busy night, over and above the usual workload, then it should have been possible for other staff, perhaps the duty manager or one of the registrars, to identify the spike in workload and the consequent inadequacy of staffing and escalate the problem to Senior Doctors on call. I am unsure if there is a recognised mechanism for this within [the DHB].

Please do not hesitate to contact me for further assistance.

Yours sincerely,

David Spriggs MBChB, FRACP,FRCP(Lond),MD
General Physician and Geriatrician
Auckland City Hospital"

Appendix B: Independent advice to the Commissioner

The following expert advice was obtained from Associate Professor Karole Hogarth, registered nurse:

"HDC REPORT

REFERENCE: C18HDC02364

COMPLAINT: [MR A] (DECEASED)/[rest home]

1. Thank you for the request to provide clinical advice regarding the complaint from [Ms B] in relation to the care of [Mr A] at [the rest home].

In preparing the advice on this case to the best of my knowledge I have no personal or professional conflict of interest. I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

2. I registered as a nurse in 1989. Upon registration I was appointed to a new graduate position at Waikato Hospital and worked in orthopaedics, surgical and post-natal wards for the first year. I then received a permanent position in the burns and plastics unit at Waikato hospital. Following 2 years' experience in this environment I moved to Saudi Arabia in 1992 working as an RN in the Burn Unit in Dhahran. Upon completion of my contract I moved to England and worked as an RN for an agency providing nursing care in hospitals and community settings. I then moved into a permanent night shift position at BUPA Hull and East Riding, a private hospital in a small community in 1995. On return to New Zealand in 1998 I attended the University of Otago undertaking a combined degree in Zoology and Anatomy completing First Class honours in both in 2001. I worked as an RN in Dunedin at Redroofs Rest home as an RN and casual as a RN at Dunedin Public Hospital during this time. Following the completion of my undergraduate degree I was invited to enrol in a PhD which I did following a further year of travel where I worked as an RN for the Australia blood service in Sydney. While undertaking my PhD in 2004 I was appointed to an academic role 2 days a week at Otago Polytechnic teaching anatomy to Occupational Therapy students. I then expanded my teaching into Bioscience for Nursing and Midwifery students. My PhD research looked at the role of oxytocin in the development and progression of prostate diseases which I completed in the Anatomy Department at the University of Otago in 2009. I was then offered a full-time position in the School of Nursing at Otago Polytechnic teaching sciences where I am still currently employed as Head of Nursing. I am also a Justice of the Peace for New Zealand having completed the requirements for this role in 2016 and reaccreditation in 2018.

3. The Commissioner has requested that I review the documentation provided and advise whether I consider the care provided to [Mr A] at [the rest home] was reasonable in the circumstances and why.

With particular comment on:

1. The appropriateness of the level of care and supervision provided to [Mr A] at [the rest home], and the communication with [Mr A's] family about this.
2. The adequacy of the management of [Mr A's] pain.
3. Whether there was timely assessment for a potential UTI.
4. The adequacy of end of life care planning and actual end of life care provided to [Mr A].
5. The adequacy of staffing levels at [the rest home].
6. The adequacy of relevant policies and procedures in place at [the rest home].
7. Any other matters in this case that warrant comment.

For each question I am asked to advise:

a. what is the standard of care/accepted practice?

b. if there has been a departure from the standard of care or accepted practice, how significant a departure do I consider this to be (mild, moderate, severe)?

c. how would it be viewed by peers?

d. recommendations for improvement that may help to prevent a similar occurrence in future.

4. In preparing this report I have reviewed the documentation on file:
   1. Updated letter of complaint (from complainant, [Ms B], to [the rest home]) and enclosures.
   2. [The rest home's] response to complainant dated [2017].
   3. [Ms B's] response to [the rest home] dated [2017].
   4. [The rest home's] initial response to HDC complaint dated 28th February 2019 and enclosures.
   5. Clinical notes from [the rest home] covering the period 18th [Month2] to 16th [Month5] (inclusive).
   6. [Ms B's] comments on [the rest home's] initial response to HDC complaint.

5. Background

Chronology as per file

CHRONOLOGY	
18 [Month2]	[Mr A] discharged from [the public hospital] to [the rest home]. Discharge summary — [Mr A] required hospital-level care. Initial 21 day care plan completed and signed off by [Mr A's] daughter [Ms B]. [Mr A] fell out of bed three times that afternoon/overnight. Progress notes record that [Ms B] and sister told staff that [Mr A] needed to have someone with him 24/7.
19 [Month2]	Bell mat removed as [Mr A] was 'constantly activating it by playing with the cord'. Fifteen minute checks commenced.
23 [Month2]	[Mr A] found half out of bed trying to put the alert mat cord and call bell cord around his neck. Incident report records that the call bell and bell mat were removed from his reach and that they were to carry out manual checks every 15 minutes for [Mr A's] safety.
1 [Month3]	Review by GP [Dr I]. Commenced on quetiapine at night.
5 [Month3]	[Mr A] complaining of sharp stabbing pain in left upper rib. Paracetamol given and GP review requested.
8 [Month3]	Review by [Dr I]. Noted to be 'better at night with quetiapine', however 'several times has complained about "severe" L sided [chest pain]'.
14 [Month3]	[Mr A's] family requested a meeting with [Dr I] re: [Mr A's] drowsiness.
16 [Month3]	Family met with [Dr I]. [Dr I] noted that agitation could be related to his CVA/stroke because frontal lobe is affected.
23 [Month3]	Long term care plan completed for [Mr A] ([the rest home] notes this is a week later than it should have been completed).
25 [Month3]	Referral sent for ACC Support Needs Assessment.

CHRONOLOGY	
28 [Month3]	Progress notes record that [Mr A's] family advised staff that [Mr A] was experiencing severe chest pain.
5 [Month4]	[Mr A] noted to be flushed in the face. Family requested GP review for following morning.
12 [Month4]	Assessment visit by ACC Support Needs Assessor.
13 [Month4]	Review by [Dr I]. [Dr I] noted that [Mr A] was deteriorating in general. Plan: aim to keep comfortable.
19 [Month4]	Request sent to [Dr I] for further morphine to be charted.
20 [Month4]	Review by [Dr I] re: agitation. Plan: not to increase medications just yet as 'RN feels issue [in relation to agitation] over WE was current meds not being used' and 'would prefer to avoid increasing meds and sedating'. Discussed with [Mr A's] wife and [Ms B].
24 [Month4]	[Ms B] told HDC she has video footage from this date indicating [Mr A] was experiencing severe pain and discomfort. [Ms B] stated that [Mr A's] explanation of the pain indicated the possible presence of a UTI.
29 [Month4]	ACC Support Needs Assessment completed. Report concluded that [Mr A] required 24 hour supervision. The report also noted that [RN G] stated that [Mr A] was receiving palliative care.
4 [Month5]	Request for GP review sent to [Dr I]: 'Family are concerned that [Mr A] has increased pain. Can you review and maybe increase his pain relief.'
6 [Month5]	Review by GP [Dr I]. Commenced Fentanyl patches.
13 [Month5]	Review by [Dr I]. Increased Fentanyl. [Dr I] questioned whether [Mr A] was requiring morphine for agitation rather than pain, discussed with RN and requested that staff monitor agitation as [Mr A] may benefit from increased quetiapine.
14 [Month5]	[Ms B] approached Facility Manager [Ms F] due to concerns about

CHRONOLOGY	
	the pain [Mr A] was experiencing. Urine test showed large amounts of blood with trace proteins present.
16 [Month5] 12.15am	Progress notes record that [Mr A's] family wanted a doctor to come and review. RN rang health clinic and was told that there was no on-call doctor. RN rang ambulance for transfer to [the public hospital].
1.15am	Ambulance attended and assessed [Mr A] as not requiring transfer to hospital. Progress notes record [Mr A] 'actively dying family in agreeance'. Ambulance officer administered 5mg IV morphine and 10mg intramuscular morphine to [Mr A's] thigh. Advice to patient included discussion with [Ms B], [Mr A] to remain in rest home for comfort cares and GP to be called in morning.
10.30am	After hours GP Dr J reviewed [Mr A], apparently advised family that he had been on-call … but had not been called. Plan: morphine 5–10mg every three hours. Increased Fentanyl to 25mcg patches, two every 72 hours. GP to review …
11.05am	[Mr A] passed away.

My comments are confined to the care provided by [the rest home].

6. The appropriateness of the level of care and supervision provided to [Mr A] at [the rest home], and the communication with [Mr A's] family about this.

a. What is the standard of care/accepted practice?

From the information I have been provided, considering the daily summary of care by the nursing and healthcare team at [the rest home], what is documented would be the expected standard of daily care as far as activities of daily living.

There is a significant amount written about [Mr A's] agitation and behaviours, which were documented as being discussed with the family but this could have been explored further with family involvement, to get to the source of the agitation once it became obvious that it was not just in relation to transfer from [the public hospital].

Cerebral irritation related to his MCA infarct is plausible but should not be concluded as the only reason.

Other areas to explore were:

- Inhalation injury — due to his reduced swallowing reflex, post CVA and possibility of chest infections, pneumonia. This was documented as a potential for ongoing concern by the physician on discharge from hospital.
- Urinary tract infection — especially given his incontinence and at times verbalisation.
- Polypharmacy — [Mr A] was on several medications with potential for interactions.
- Pain — difficult to distinguish from agitation.
- Other — constipation, frustration, boredom, hungry, thirsty.

The level of supervision is what would be expected in the hospital level care of an aged residential facility. The assessment requiring 168 hours per week of care was misleading for the family who believed that this meant one on one care, but this is not the normal practice in this environment. The 168 hours should have been put in context in that this is full time hospital level care with the presence of a Registered Nurse 24 hours a day. Expectations of one on one care may have been due to [Mr A] being under safety watch at [the public hospital] following a fall. This was handed over to staff at [the rest home], but it was not indicated that this was warranted following transfer and as per [RN K] had been discussed with family prior to admission. Further assessment of his agitation while at [the public hospital] is not documented in transfer notes provided.

Though this is the expected level of care [Mr A's] safety was still at significant risk as documented by the number of falls and skin tear injuries he sustained. It appears that staff followed procedure to initiate safety proceedings especially in the early weeks of admission. This included attempts to orientate [Mr A], initiating 15-minute checks, setting up floor bell mats, removing the call bell, which was a strangulation risk, discussing with family to some extent. Some family advised interventions were put in place e.g. whiskey to settle at night. As above if there had been some further assessment of the cause of agitation his safety risk may have been reduced. Further family involvement in this would have been advised as they know his behaviour patterns best and may have been able to communicate to a deeper level with [Mr A].

b. If there has been a departure from the standard of care or accepted practice, and how significant departure this is?

From the information given I would consider that there is a moderate departure from accepted practice and care of [Mr A]. This is really to do with the robustness of the assessment of [Mr A's] agitation. Further assessment would have been useful once his agitation failed to settle following transfer.

The level of supervision for a hospital level care patient in aged residential care is at the level required under the guidelines. The safety assessment could have been more robust given that he had been under watch prior to transfer.

c. How would it be viewed by your peers?

I believe that my colleagues in practice and education would agree that the monitoring and assessment of [Mr A] meets most acceptable standards from the information provided. Though a plan for further assessment of [Mr A's] agitation would have been advised.

d. Recommendations for improvement that may help to prevent a similar occurrence in the future.

Some further in-service provided to RNs on the assessment of patients post CVA and the causes of agitation and the impact on patient safety, staff and other resident stress would be useful to enhance practice.

A documented plan for regular reassessment of safety for patients requiring greater surveillance, in conjunction with family input, would be advisable as part of care planning.

7. The adequacy of the management of [Mr A's] pain

a. What is the standard of care/accepted practice?

Adequate pain relief is a right for all persons in care. The assessment of this in conjunction with carers and family was essential to ensuring the appropriate medication, at the appropriate level was administered. Part of the complexity in [Mr A's] case is that it was documented that it was difficult to determine if he was in pain or agitated. He was prescribed clonazepam (agitation) and paracetamol (pain) initially both of which had effects as desired as was documented.

On 14th [Month4] morphine was administered due to 'increasing pain' as noted in the medication administration notes though what had changed was not documented in his notes. The morphine did have good effect. Over the next few days there were variable amounts of morphine and clonazepam administered, plus paracetamol which was given TDS most days.

24th [Month4] 4mg given at 1512 for 'acute pain all over 10', 'good effect pain 0'. This is the day that [Mr A] experienced severe pain which was noted by the family. It would have been useful at this time to begin conversations about engaging the hospice or pain clinic to assist with management of both [Mr A's] pain and agitation, in conjunction with his physician.

Once morphine was prescribed for pain this was administered variably in conjunction with other medication. This is part of the nursing assessment process for pain and is documented in nursing notes. As stated on several occasions and as highlighted by the

physician it was difficult to assess whether [Mr A] was in pain or agitated. Family could have been involved in this assessment providing insight to normal patterns.

One of the main side effects of opioids is sedation (along with constipation, nausea) which many patients and families find less than desirable so it is a trade off which is where the assessment of the RN is important. Discussions with the patient and family are key to knowing their wishes.

Paracetamol was prescribed as 500mg 2 tablets, it is standard practice to give the form as prescribed. There was some variability as to how this was administered as the family have described. In a clinical situation this will depend on the ability of the patient to swallow the tablets which can vary over the day, the palatability, and the person administering. Ideally [Mr A] would have been prescribed paracetamol elixir to avoid having to crush tablets a registered nurse could easily have addressed this. However, paracetamol elixir is not well tolerated by some people, (sweet, sickly, large volume). Therefore, it appears at times that the tablets were crushed. It would have been useful to have some guidelines as to how this was then given i.e. over food, in food, for consistency.

b. If there has been a departure from the standard of care or accepted practice, and how significant departure this is?

Following the prescription of morphine for [Mr A's] pain, it would have been prudent to discuss with family the ongoing management of his pain and agitation. This could have been in conjunction with his physician and other services as mentioned above who are experts in pain management. As he was assessed to be in palliative care at this stage this was an opportunity to review medication and engage Te Ara Whakapiri (the last days of life) which are clinical guidelines and outline the standard of care. This can be nurse initiated.

I would consider this a mild–moderate degree of departure from standard care and accepted practice.

The variability in the administration of paracetamol should have been discussed by the RNs and a guideline for administration added to [Mr A's] care plan for consistency.

I would not consider that there has been a departure from the expected standard of care except that the rationale for the variation in administration should have been conveyed to the family.

c. How would it be viewed by your peers?

I believe that my colleagues in practice and education would find the lack of guidelines and family involvement in the management of [Mr A's] pain was not at the required standard of care. [Mr A] should not have been in pain and pain experts could have been involved in assessment and management especially once morphine and other opioids were required.

d. Recommendations for improvement that may help to prevent a similar occurrence in the future.

As indicated by the facility they have identified that this is an area where strengthening was needed to ensure that this does not occur again in the future and have since purchased infusion pumps for delivery of medication as needed e.g. end of life pain relief.

Where there are guidelines available e.g. Te Ara Whakapiri, there needs to be a protocol for initiation of these to be enacted to minimise delays in care.

8. Whether there was timely assessment for a potential UTI

a. What is the standard of care/accepted practice?

As part of the assessment of [Mr A's] agitation it would have been prudent to assess for potential other causes rather than the assumption that this was due to cerebral irritation which does not preclude a UTI. As mentioned in number 6 above further investigation may have provided evidence of an alternate cause.

As per the Frailty Care Guides (Health Quality & Safety Commission NZ) the Criteria for UTI diagnosis (pg125), further assessment was warranted though [Mr A] was afebrile his mental status was impaired and a UTI could have been ruled out (or in).

Urinary tract infection | Te pokenga ara mīmimi

Is the resident symptomatic?

Urinary tract infection is the most common bacterial infection in residents in residential care facilities. Asymptomatic bacteriuria is not treated with antibiotics, except in certain circumstances, eg, prior to surgery where it may increase post-operative risk. There is no discernible benefit to the resident (when there is bacteria in the urine without symptoms) and there are risks of antimicrobial resistance and drug reactions.

Definition of urinary tract infection

- Include only symptomatic UTI
- Surveillance of asymptomatic bacteriuria is not recommended because this represents a baseline status for many residents

Symptomatic UTI: one of the following criteria must be met

1. Non-catheterised:
   Evaluate for symptomatic UTI by adding up points of signs/symptoms present: the resident needs to score 3 or more from signs and symptoms:
   - Fever > 37.8°C, or repeated readings of > 37.2°C, or 1°C above normal from any site and/or chills
   - New or increased burning or pain on voiding
   - New flank or suprapubic pain or tenderness
   - Worsening of mental or functional status
   - Deteriorating renal function (may be due to multiple reasons).

Assessment for UTI in confused, agitated patients should be a normal part of assessment. Along with the other potential reasons for behaviour changes which may or may not be related to in this case [Mr A's] CVA. Nursing staff did dipstick his urine as documented though there is some confusion about whether a sample was sent to the laboratory for culture and sensitivity. If a sample was sent where was the follow up for the result?

Other reasons that [Mr A] should have had further assessment for UTI was his incontinence and his behaviours such as pulling and plucking at clothing which as the family noted indicated that he needed the toilet.

b. If there has been a departure from the standard of care or accepted practice, and how significant a departure this is?

I would consider this a mild–moderate departure from the accepted standard of care.

This is mainly due to the inconsistency of the assessment processes and non-adherence to guidelines e.g. Criteria for UTI diagnosis.

c. How would it be viewed by your peers?

I believe my peers in practice and education would agree that there are gaps in the assessment of [Mr A's] care.

d. Recommendations for improvement that may help to prevent a similar occurrence in the future.

There is a need to have more cohesion of assessment and documentation to ensure that follow ups are actioned and completed. Some retraining or supervision of staff to ensure that specimens sent are documented correctly to ensure that notification to a physician is made in a timely manner.

9. The adequacy of end of life care planning and actual end of life care provided to [Mr A]

a. What is the standard of care/accepted practice?

The care planning that was completed for [Mr A] on admission was adequate at the time considering his current health status. This however needs to be reviewed regularly and in light of any change in condition.

An end of life plan is essential in palliative care. The change in [Mr A's] pain levels; the requirement for morphine to control this; and his general decline as documented; should have initiated a conversation with family to determine the end of life wishes for [Mr A] and his family. As discussed above this should also have initiated the Te Ara Whakapiri guidelines which outline the plan for clinical care and the family and patient wishes. This guideline in conjunction with advice from outside agencies and his physician regarding pain management may have resulted in [Mr A's] death being a peaceful, family time of reflection, rather than a paramedic-IV morphine involved, deterioration.

b. If there has been a departure from the standard of care or accepted practice, and how significant a departure this is?

I would consider this a moderate degree of departure from standard care and accepted practice due to the delay in initiating protocols resulting in the intervention from emergency services that should not have been needed.

c. How would it be viewed by your peers?

I believe my peers in practice and education would agree that this would be a departure from the accepted standard of care and was distressing for the family.

d. Recommendations for improvement that may help to prevent a similar occurrence in the future.

Once a patient has been assessed for palliative care, protocols and conversations need to occur in a timely manner with family input. Development of a guideline for the timing of these interventions with the rationale for implementation would be a useful addition for staff training.

10. The adequacy of staffing levels at [the rest home]

a. What is the standard of care/accepted practice?

The staffing levels indicated on the roster are what would be accepted as normal practice for this number of clients in a facility. An example of like facility staffing:

Residential — minimum

- 1 RN — best practice
- 1 HCA per 8–10 residents — depending on the residents' needs

Hospital — minimum

- 1 RN
- 1 HCA per 5 residents — depending on the residents' needs

When reviewing the rosters, the staffing provided by [the rest home] over the period indicated was adequate as per the guidelines. There were occasions with the night preceding [Mr A's] death being one of them, where agency registered nurses were in attendance, this is also common practice.

b. If there has been a departure from the standard of care or accepted practice, how significant a departure do I consider this to be (mild, moderate, severe)?

The roster shows adequate numbers of staff have been rostered on for the period in question.

I do not see any departure from the accepted standard of care.

c. How would it be viewed by peers?

I believe that my colleagues in practice and education would find this acceptable practice.

d. Recommendations for improvement that may help to prevent a similar occurrence in future.

None.

11. The adequacy of relevant policies and procedures in place at [the rest home]

a. What is the standard of care/accepted practice?

From the documentation provided, [the rest home] has the required policies and procedures in place within its service. There however, must be an assurance to patients and families that these policies are referred to and adhered to, to ensure the care of residents.

There have been several deviations from policy in this case beginning with: end of life planning; medication administration; referral to physician timing; documentation of tests e.g. urine specimens; assessment of agitation and pain. In this instance the

deviations from policy resulted in a less than satisfactory experience with the service provided by [the rest home] to [Mr A] and his family.

b. If there has been a departure from the standard of care or accepted practice, how significant a departure do I consider this to be (mild, moderate, severe)?

I would consider this a moderate departure from the accepted standard of care.

c. How would it be viewed by peers?

I believe that my colleagues in practice and education would find that the loose use of policies is a deviation from the normal standards of care.

d. Recommendations for improvement that may help to prevent a similar occurrence in future.

I would suggest some further training for staff especially around the end of life care planning and how it is implemented especially considering the new syringe drivers purchased to provide pain relief in palliative care cases. A cohesive approach to this indicates a caring inclusive decision-making process that ensures a peaceful, pain free death.

Inservice for RNs and caregivers around the administration options for patients who have difficulty swallowing and the documentation around this is also advised. There also needs to be an avenue to communicate this to family with the rationale.

Some clearer documentation around tests that are sent outside the facility e.g. to the laboratory is needed.

References

Health Quality & Safety Commission. 2019. Frailty Care Guides. NZ Government.

Levett-Jones, T. & Searl, K. 2018. The Clinical Placement (4th Ed). Elsevier, NSW, Australia.

MacLeod, R., MacLeod, A., & Brincat, J. 2016. The Palliative Care Handbook: Guidelines for clinical management and symptom control (8th ed). Wellington: Ministry of Health.

Ministry of Health. 2010. New Zealand Clinical Guidelines for Stroke Management. Wellington: Ministry of Health.

Ministry of Health. 2016. Designated Auditing Agency Handbook: Ministry of Health Auditor Handbook (revised 2017). Wellington: Ministry of Health.

Ministry of Health. 2017. Te Ara Whakapiri Toolkit: Care in the last days of life. Wellington: Ministry of Health.

NZ Formulary. Morphine Sulphate. Retrieved from https://nzf.org.nz/nzf"

The following further advice was received from Associate Professor Hogarth:

"HDC REPORT — ADDENDUM

REFERENCE: C18HDC02364

Review of the letter and documents submitted by [the rest home] in regard to the care of [Mr A]. My comments are related to the response and the documents provided, the original file was not provided for this review.

In reply to the letter from [RN K] I have made comment on the responses numbered 2a–g, 4, 5, and 7.

2. a. Agree as per original advice.

b. Agree with this summary but there were gaps in the assessment of [Mr A's] agitation which could have been addressed and investigated further in conjunction with the family. UTI and constipation are mentioned in the response letter, was there exploration of other possibilities as per my original advice?

c. [Mr A], as stated in the response, did not 'receive any serious injuries from any event at [the rest home] Care Home'. He did however have several falls with skin tear injuries any of which could have had a serious outcome. There were a number of incidences that could have been avoided especially as he had been assessed as a high falls risk. There were a number of safety measures instigated by staff as recognised in my original advice and described by [RN K].

d. The fact that [Mr A's] condition changed to the point of requiring increased morphine is indicative of the need for further assessment. The SSBAR tool is very useful however I do not recall there being examples of this tool being used for assessment of [Mr A] in the original case notes (the document is dated 2019 so may be a new assessment tool). If it had been used, I would have expected that there would have been a response initiated such as a conversation with the physician re pain relief; a conversation with the family re end of life wishes.

e. An end of life conversation can be initiated prior to deterioration in order for the patient to have a voice (if able) along with their family. I do not agree that [Mr A's] deterioration was too quick for this to occur, there were missed opportunities for the Hospice to be involved.

f. As per my original advice a plan re the form of paracetamol administered, it would have provided continuity and mitigated any concerns from the family if this was part of the medication administration guidelines.

g. I have no further comment on this. See original advice.

4. Assessment of UTI was completed in [Month5] as per the report, there were other points in [Mr A's] care where this assessment could have occurred earlier to rule out as a cause of his confusion.

5. This may have been misunderstood by [Ms B]. I would not expect a nurse to stay past their shift to write a further report other than what is noted in progress notes unless there had been a significant issue.

7. There is evidence supplied by [the rest home] that indicates adequate staff training around a number of areas. This is part of ongoing professional development and consistency of services provided.

On review of the letter from [RN K] above I do not have any changes to make to my previous advice regarding the care of [Mr A]. Therefore, I reiterate my advice from my review of this case as submitted on the 22nd November 2019.

Associate Professor Karole Hogarth

KJ Hogarth"

The following further advice was received from Associate Professor Hogarth:

"HDC REPORT — ADDENDUM

REFERENCE: C18HDC02364

Review of letters submitted by [RN K], Clinical Director, [the rest home] and [Dr H] regarding the care of [Mr A] (deceased). My comments are related to the response documents, the original file was not provided for this review.

On review of these letters, I do not have any changes to my previous advice regarding the care of [Mr A]. [RN K] and [Dr H] do not offer any further information that would alter this advice.

[Dr H] does make a point regarding the external services available to facilities who are concerned for patients and require advice. This does differ nationally and if the Hospice and Pain Clinic in the area cannot be contacted for advice (not necessarily appointments) there may be services available in the area that are resourced to provide guidance.

I agree that from staff accounts that there was no intent to cause further pain and suffering to [Mr A] and the care provided was considered with some inclusion of the family in discussions. However, the family did not find this adequate hence their need to take their concerns further. As described in [RN K's] response there is evidence of good care and concern for [Mr A] though not consistently as far as assessment and pain relief are concerned.

[Mr A's] ongoing disorientation did need to be monitored and further investigated when it did not resolve. My point was that as per the DSM-5 and WHO ICD-11, delirium is multifactorial and transient and the ongoing disorientation and family concerns do not preclude the continuing need for review and it should not be deemed irreversible, untreatable or unmanageable.

The use of Te Ara Whakapiri Toolkit ([Month2]) does need to be more widely promoted as guidance during last days of life. It is an excellent resource, is clear, holistic with a range of flow charts for ease of assessment and to assist with decision making. At the time of [Mr A's] care this was a new resource from the MoH and I would have expected this to be picked up and implemented by care providers nationally.

Therefore I reiterate my advice from my original review of this case as submitted on the 22nd November 2019 and my response to the request for further advice submitted on the 2nd July 2020.

Dr KJ Hogarth

KJ Hogarth

16th December 2020"