Counties Manukau District Health Board

A Report by the
Health and Disability Commissioner

(Case 17HDC01382)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Contents

Executive summary

1. This report considers care provided to a woman in her sixties by Counties Manukau District Health Board (CMDHB). She had a number of co-morbidities and had suffered a major stroke.

2. The woman was admitted to a public hospital three times over a period of four months. During this period she developed pressure injuries, which were felt to be the result of a lack of repositioning. The woman was diagnosed with sepsis from an infected pressure injury, which required multiple surgical debridements. Postoperatively, the woman experienced cardiovascular instability and rapid deterioration, and palliative care was commenced. Antibiotics and observations were ceased and the woman died in the hospital.

Findings

3. The Commissioner was critical of the care provided to the woman by CMDHB, including a lack of appropriate pressure-wound prevention measures; inadequate staff management of her air mattress; inadequate co-ordination of care between nursing and medical staff; inadequate supervision of, and information provided to, the woman's family members when they were providing day-to-day cares; and inadequate information in the discharge summary provided to the rest home.

4. The Commissioner considered that the woman was let down by the care provided by numerous staff at CMDHB. Her pressure injuries were not managed appropriately, opportunities to prevent further pressure injuries from developing were missed, and she suffered unnecessary pain and distress. Accordingly, the Commissioner found CMDHB in breach of Right 4(1) of the Code.

5. The Commissioner also criticised the management of the woman's PEG site infection.

Recommendations

6. In the period since the events of this complaint, CMDHB has initiated and implemented a number of changes to its service. These changes include several educational initiatives to address the key issues arising from this matter, a thorough review of, and investigation into, the events, and an extensive review and update of relevant processes, policies and procedures in place at CMDHB. The Commissioner considered this appropriate in the circumstances.

7. Acknowledging the substantive change implemented by CMDHB, the Commissioner recommended that it provide a written apology to the family for the breach of the Code identified in this report.

Complaint and investigation

8. The Coroner's Office referred a complaint to the Health and Disability Commissioner (HDC) concerning the services provided by Counties Manukau District Health Board (CMDHB) to the late Mrs A at a public hospital.[1] The following issue was identified for investigation:

- *Whether Counties Manukau District Health Board provided Mrs A with an appropriate standard of care between 20 Month1[2] and 24 Month4 2016.*

9. This report is the opinion of the Health and Disability Commissioner, Anthony Hill.

10. The parties directly involved in the investigation were:

Mrs A	Consumer
Complainant/consumer's son	
CMDHB	Provider

11. Further information was received from:

Rest home	Provider
Dr B	General practitioner (GP)
Office of the Coroner	

12. Independent expert advice was obtained from a registered nurse, Jan Grant (Appendix A), and a consultant general physician, Dr Richard Shepherd (Appendix B).

Information gathered during investigation

Introduction

13. Care was provided to Mrs A between 20 Month1 and 24 Month4 at both a public hospital and a rest home. The focus of this investigation and report is on the care provided to Mrs A at the public hospital. There are no concerns with the care provided to Mrs A at the rest home.

Background

14. Mrs A, aged in her sixties at the time of these events, had a history of ischaemic heart disease,[3] left breast cancer, a non-STEMI heart attack,[4] and Type 2 diabetes.[5]

[1] The referral was made under section 64(1) of the Health Practitioners Competence Assurance Act 2003. Mrs A's family supported the complaint.
[2] Relevant months are referred to as Months 1–11 to protect privacy.
[3] Insufficient oxygen supply to the heart.
[4] A less common, milder type of heart attack that typically is not as damaging to the heart as the more common STEMI heart attack.

Public hospital admission — 20 Month1 to 25 Month2

15. On the morning of 20 Month1, Mrs A suffered a large right middle cerebral artery (MCA) stroke[6] and was admitted to the public hospital under the care of the Acute Stroke Team.

16. Despite thrombolysis,[7] Mrs A's prognosis was poor, and her initial clinical recovery was minimal.[8] Following emergency care, including computerised tomography (CT) scans,[9] she was transferred to the stroke ward on the same day as she was admitted.

Care on the stroke ward

17. Upon admission to the stroke ward, Mrs A was assessed as having a high risk of developing pressure injuries because of her increased BMI,[10] lack of mobility (she was bed bound), her age, and her Type 2 diabetes.

18. On 21 Month1, clinical documentation indicates that Mrs A's pressure area cares were completed.

19. On 23 Month1, Mrs A was transferred from the stroke ward to the Assessment, Treatment, and Rehabilitation Ward (AT & R ward).

Care on the AT&R ward

20. On admission to the AT&R ward, Mrs A was assessed fully. Her pressure injury risk assessment again indicated that she was at a "high risk" of developing pressure injuries. The documented nursing goals for Mrs A were to avoid development of any pressure injuries while in the AT&R ward; to have visual skin checks every day; to undergo regular repositioning; and to manage her incontinence. Mrs A was transferred to a bed with an air mattress to help reduce the risk of developing a pressure injury, and family who were present assisted with her cares.

21. After these events, Mrs A's family reported to CMDHB that the air mattress was alarming frequently without investigation by hospital staff, and that the mattress tubing was not connected for a total of five days.

22. CMDHB told HDC that only one of the five registered nurses who provided Mrs A with direct care during her admission to the AT&R ward recalled the air mattress alarming continually. This nurse unsuccessfully attempted to resolve the issue, but did not escalate the issue, and nothing was documented by staff regarding issues with the air mattress.

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[5] The most common form of diabetes, caused by the body not producing enough insulin to keep blood glucose levels within the normal range.
[6] Interruption to blood flow to areas of the brain.
[7] Treatment to dissolve dangerous clots in blood vessels, improve blood flow, and prevent damage to tissues and organs.
[8] Clinical documentation from this period suggests that Mrs A was not expected to recover from this acute episode of illness.
[9] X-ray scans that show detailed pictures of the organs and other structures in the body.
[10] Body mass index — a measurement of whether a person's weight is healthy.

23. Mrs A remained in the AT&R ward for the following few days, and documentation shows that she received regular pressure cares and position changes in bed, and that her skin was intact, with cream being applied to the pressure sore risk areas regularly.

24. Mrs A's family remained at her bedside 24 hours a day, and some family members who were there in a support capacity reported to hospital staff that they turned her regularly while she was in the AT&R ward.

25. On 27 Month1, while still in the AT&R ward, Mrs A was noted to have significant ongoing drowsiness. After her morning shower she was unable to be woken fully. She was sent for a further urgent CT scan of her head owing to her decreasing level of consciousness and ongoing headache. This showed extensive haemorrhagic transformation.[11]

Care on the general medicine ward

26. On the same day, Mrs A was transferred to the general medicine ward as there were no beds available on the stroke ward. She remained under the stroke team for care.

27. On admission to the general medicine ward, an initial nursing assessment noted that Mrs A's skin was intact. There is no record of a pressure injury risk assessment having been done on admission, as was required by CMDHB policy,[12] or a full assessment of Mrs A's skin integrity. Neither a skin integrity sticker nor a wound monitoring chart were completed.

28. On 29 Month1, it was documented that Mrs A's skin was intact during both the morning and afternoon shifts.

29. On 30 Month1, morning shift staff documented that Mrs A's left arm was swollen[13] and her sacrum area[14] was red, but her skin was intact. It was also documented that pressure area cares were done. The afternoon shift entry states that regular pressure area cares were done and that pressure was noted on the buttocks, so cream was applied.

30. Mrs A's family stated that on 2 Month2 they noticed "pressure points that had formed on [Mrs A's] heel and buttock". Mrs A's clinical notes also indicate that over the following few days she developed pressure injuries on her sacrum and on her left heel. Between 3 Month2 and 11 Month2 the nursing care plans contain inconsistent documentation regarding the pressure injuries. Some nursing shifts documented a pressure injury, while others documented that the skin was intact. All nursing shifts documented regular turns, although Mrs A's family reported to CMDHB that they were providing all of the cares other than the wound dressings.

31. After these events, Mrs A's family reported to CMDHB staff that they felt that some of the nurses on the general medicine ward were rough with Mrs A and hurt her when turning

[11] Areas of bleeding in the brain, common after suffering a stroke.
[12] Policy discussed further below.
[13] Mrs A's family told HDC that this was due to the placement of an intravenous line directly into her arm instead of the intended vein.
[14] The area in the lower middle of the back, directly above the tailbone.

her. They were also concerned that Mrs A was not being washed properly, and felt very upset seeing her treated this way. CMDHB confirmed to HDC that there was some friction between family and staff. The family took on more of the basic nursing cares,[15] and reported to CMDHB that they had lost faith in the level of nursing care being provided.

32. CMDHB told HDC that the registered nurses did not supervise Mrs A's turns (performed by family members) to ensure that she was being turned properly and regularly. There is no documentation of when and what cares were provided by Mrs A's family.

33. On 5 Month2, a doctor documented that the blisters on Mrs A's sacrum and left heel had broken. This is the only date on which there is documentation by the medical staff (as opposed to the nursing staff) that a pressure injury existed.

34. On 6 Month2, the nursing care plan documented a stage 2[16] pressure injury on both buttocks. Mrs A's family recall the nurses discussing whether they should send a referral to the wound specialist nurse for further wound management and advice; however, there is no documentation of such a referral having been created or sent.

35. On 9 Month2, the notes document that the dressings on Mrs A's sacrum were oozing and had a foul odour, but that there were no signs of infection.

36. On 10 Month2, Mrs A had a temperature of 38°C and was given paracetamol. However, there is no documentation that the care of her pressure injury was escalated.

37. On 12 Month2, the notes record that Mrs A had five broken skin pressure areas on her left buttock, and that the pressure injury on her left heel had increased in size to 5x2cm. When questioned by CMDHB, a registered nurse recalled changing Mrs A's wound dressings on 13 and 14 Month2, as she had noticed some oozing, but this was not recorded on the wound chart.

38. On 13 Month2, Mrs A's urinary catheter[17] was removed. It was not reinserted, and the use of adult nappies was commenced. Clinical documentation indicates that there were concerns about a potential urinary tract infection (UTI) at this point.

39. Mrs A was referred to Gastroenterology on 13 Month2 for insertion of a percutaneous endoscopic gastrostomy (PEG) feeding tube to allow for more active nutritional care. This was inserted on 20 Month2 while she was on the general medicine ward.

40. Mrs A remained in hospital over the following few weeks. From 21 Month2, family continued to assist with Mrs A's personal cares. Her skin was fragile, she required an adult

[15] Mrs A's family told HDC that they assisted staff as much as they could with her cares and sought help from staff whenever necessary.
[16] Pressure injuries are classified into stages according to wound severity, with stage 4 being the most severe. Stage 2 pressure injuries present as a shallow open wound with a red/pink wound bed and no slough, or an intact or open/ruptured serum-filled blister.
[17] A thin tube used to empty a patient's bladder.

nappy owing to bowel and bladder incontinence, and she required cream for a reddened groin area.

41. On 23 Month2, Mrs A's PEG site was reviewed medically, and a finding of "PEG clean site" was recorded. However, by 24 Month2 the PEG site was looking infected, and swabs were sent to the laboratory. There is no documentation of who requested the swabs, or of the specific concerns at the time. The swabs showed a *Staphylococcus aureus*[18] infection at the site, but the result was not received until after Mrs A was discharged from this admission, and no antibiotics were charted.

42. On 25 Month2, Mrs A was discharged from the public hospital to a rest home. Nursing documentation on this day notes: "[S]ite is leaking and offensive smelling." However, there is no evidence that this was escalated to medical staff. The electronic discharge summary did not document Mrs A's pressure injuries or potential PEG site infection. CMDHB acknowledged that this should have been included, and told HDC that the lack of documentation in Mrs A's discharge summary was a clinical oversight.

43. On 27 Month2, whilst at the rest home, Mrs A was reviewed by a doctor, who did not document any infection. However, five days later, on 1 Month3, Mrs A was referred to her GP for a suspected infection of her PEG site.

Readmissions to the public hospital — Month3 to Month4

44. On 2 Month3, Mrs A was readmitted to the public hospital owing to concerns that her PEG site was infected. During the admission, the PEG tube was removed and replaced with a nasogastric (NG) tube,[19] and nursing staff identified a stage 3[20] pressure area on Mrs A's buttocks. Subsequently, the wound care nurse specialist reviewed Mrs A's sacral wound on 5 Month3, and again on 8 Month3, and on 12 Month3 the nurse specialist debrided the wound[21] prior to Mrs A's discharge back to the rest home on the same day.

45. Clinical documentation from this admission includes a number of entries relating to Mrs A's pressure wound. Consultant ward round notes document a sacral pressure sore as a defined clinical problem with a requested plan for Pressure Sore Team review. Similarly, on 9 Month3 a "medical problem list" documents a sacral pressure wound. A nursing wound care consultant reviewed the wound on the day of discharge, documenting a stage 4 pressure area developing with debridement down to the bone performed. Despite this, the discharge summary from the public hospital from 12 Month3 did not provide detail about Mrs A's pressure wound status, or any follow-up advice or specific monitoring instructions for staff at the rest home.

[18] A common type of bacteria.
[19] A feeding tube that enters through the nose and travels to the stomach.
[20] Stage 3 pressure injuries present as full-thickness tissue loss. Subcutaneous fat may be visible, but bone, tendon, or muscle are not exposed.
[21] Removed dead or infected skin tissue to help the wound to heal.

46. When Mrs A returned to the rest home on 12 Month3, an "Accident/Incident Form" was completed, and noted that her sacral wound had deteriorated. A new wound management plan was developed.

47. On three occasions (16, 20, and 22 Month3) Mrs A was transferred to the public hospital for reinsertion of her NG tube, and on each occasion she was subsequently readmitted to the rest home, the last time being on 25 Month3.

48. On 12 Month4, rest home nursing staff contacted Dr B, Mrs A's GP, to advise him of the deteriorated sacral wound suggestive of an infection, and to seek his advice. Dr B was unable to respond that day owing to his high patient numbers.

49. On 13 Month4, rest home nursing staff again contacted Dr B with concerns that Mrs A's blood sugar levels were high, her sacral wound had deteriorated further, and she appeared intermittently drowsy and weak. On Dr B's advice, Mrs A was transferred to the public hospital again.

Final admission to public hospital — Month4

50. On 13 Month4, Mrs A presented to the Emergency Department (ED) with worsening malodour and discharge from her sacral wound, decreased levels of consciousness, and signs of sepsis.[22] Mrs A was diagnosed with sepsis from an infected pressure injury. It was felt that her sacral sores were caused by a lack of repositioning.

51. On 14 Month4, surgical debridement of the wound was undertaken, and the family was advised of Mrs A's high risk of perioperative mortality.[23]

52. On 16 Month4, further debridement was undertaken. Placement of a vacuum-assisted closure (VAC) dressing[24] was attempted but was unsuccessful. Postoperatively, Mrs A experienced cardiovascular instability, and deteriorated over the course of the next day. Palliative care was commenced.

53. Mrs A's antibiotics and observations were ceased on 20 Month4, and she died in the hospital on 24 Month4.

Further information from CMDHB

54. As part of a sentinel event review undertaken by CMDHB in relation to Mrs A's care, five registered nurses were interviewed. None of the nurses routinely checked with Mrs A's family as to what level of care they were providing. One nurse recalled discussing the importance of observing Mrs A's wound, and also of informing other nurses who were caring for Mrs A that they needed to view the wound. During the interviews, another nurse advised that she told the family that they could not do the dressings, as she needed to see the wound. There is no documented evidence of any conversations between staff and family with regard to Mrs A's pressure injury management or wound care.

[22] A serious infection that causes the immune system to attack the body.
[23] Death during an operation.
[24] A dressing system applied to the surface of a wound to assist healing.

55. According to the sentinel event review, when the pressure injuries were noted by hospital nursing staff, they were not documented clearly in the clinical notes, and do not appear to have been escalated to medical staff or the wound nurse specialist as would be expected. The documentation in the nursing care plan is inconsistent, and does not reflect the significance of the pressure injuries.

56. The sentinel event review also noted that during Mrs A's frequent admissions, there were missed opportunities to identify the developing sepsis through her deteriorating physiological state. The admissions focussed on the NG tube and the PEG feeding tube. The sentinel event report outlines that Mrs A had a complex fluctuating clinical picture of deterioration and then recovery, which resulted in a lack of overall monitoring of her nutritional intake, and a lack of intervention, over a four-week period, leading to her frailty and susceptibility to pressure injury development. This, combined with poor supervision of her turning, and the improper use of the pressure injury mattress, led to the development of the pressure injury.

57. Further, the sentinel event review stated that once the pressure injury was recognised, no appropriate prevention measures were implemented to prevent further deterioration. Mrs A's diabetes and poor nutritional status from the time of her admission on 20 Month1 until her death some three months later meant that she became very deconditioned and frail, and ultimately this compromised her ability to heal and recover from the pressure injuries.

58. As a result of this complaint, a need for more focussed education of nursing staff on the general medicine ward was recognised, and the following measures were implemented:

- Ongoing team staff meetings between 5 January 2017 and 28 June 2018 reiterated the importance of a registered nurse's accountability in assessment and documentation of pressure injury prevention.
- On 24 June 2018, the ward resource nurse for wound/pressure injuries provided one-on-one pressure injury and assessment education sessions for all the nursing staff.
- A weekly audit of pressure injury management was implemented in June and July 2018.
- The Charge Nurse added two more resource nurses to drive wound care training further.
- All staff on the general medicine ward were required to complete the Ko Awatea pressure injury training module by the end of August 2018.
- Six-monthly Fundamentals of Care peer reviews were commenced from December 2017.
- A quality review on the general medicine ward was commenced in August 2018, comprising the following:
    - An expanded nursing practice audit — undertaken by an independent educator.
    - A Safety Culture Survey — run by the Clinical Quality Risk Manager.

- Observation of care and Clinical Nurse Manager (CNM) support — performed by an independent CNM from another division.
- Gathering of quality data — run by the Clinical Quality Risk Manager.
- Oversight of staff management arrangements — run by an independent CNM from another division.
- Fundamentals of care peer review — CNM interview by an independent Clinical Nurse Director and educators.

59. When Mrs A was a stroke patient in 2016, she was an outlier in a non-stroke ward. The stroke team did not have a specific ward, and would visit their patients in different wards within the Medicines service. The stroke ward has now been transitioned from the Medicines service to the Adult Rehabilitation & Health of Older People (ARHOP) service, so that the patients are accommodated in the same ward and have access to better interventions and rehabilitation services.

CMDHB policies

60. A number of CMDHB policies are relevant to the events that occurred during Mrs A's care.

61. CMDHB's policy at the time of these events with respect to pressure injury risk assessment and management[25] included the following:

- A pressure injury risk assessment was to be completed within six hours of the patient arriving at the hospital/ward area, or at first point of contact within the community.
- A full visual inspection of the patient's skin integrity and completion of the pressure injury sticker/clinical documentation was required, and, if a pressure injury was found, it was to be documented in the clinical notes with a clinical description of the pressure injury and an explanation as to whether it was acquired in the hospital or the community. Also to be documented was the stage of the pressure injury, and, if it was stage 2 or above, a Wound Care Plan was to be completed.
- An incident form was to be completed if the pressure injury was hospital acquired and, if appropriate, ACC documentation was also to be completed.
- In partnership with the patient and whānau, an appropriate Bundle of Care as per the risk assessment score was to be developed and implemented, and documented in the clinical notes. The patient and family/whānau were to be given adequate information (verbal and written) about pressure injury risk and prevention strategies.
- Pressure injury risk reassessments were to be completed (and documented in the clinical record) when there was a change in the patient's physiological condition and stability. This could include an improvement or deterioration in clinical condition, and any equipment or surfaces that potentially could cause pressure or friction to the patient's skin when in use. Re-evaluation of the requirement of pressure-relieving equipment was to be made following reassessment.

[25] Entitled "Management and Prevention of CM Health Acquired Pressure Injuries (Adult)".

- Appropriate referrals were to be made to the multidisciplinary teams where indicated.
- As part of handover, staff were to ensure that the patient's pressure injury risk score and Bundle of Care interventions were communicated during shift handover, between the multidisciplinary teams, and when transferring patients across CMDHB departments and/or other services.

62. CMDHB's policy at the time of these events with respect to the transfer of care through the electronic discharge summary stated: "[A]ll health practitioners involved in the care of the patients are responsible for providing accurate information to others to enable safe transfer of care."

Response to provisional decision

Family of Mrs A

63. Mrs A's family were provided with an opportunity to comment on the "information gathered" section of the provisional decision. Where appropriate, their comments have been incorporated above.

CMDHB

64. CMDHB was provided with an opportunity to respond to the provisional decision. It accepted the findings made and the proposed recommendations, and advised that in some instances it has already taken steps to implement these recommendations, noting the following:

- CMDHB has previously provided a formal written apology to Mrs A's family as well as information around CMDHB's internal investigations and findings in the matter. However, CMDHB is prepared to provide a further formal apology to Mrs A's family in light of the findings of this report, and to answer any questions they may have about what happened, and provide further details as to the steps it has implemented (and will implement further) to ensure that this situation does not arise again for another patient.

- Since the events complained about, CMDHB has implemented a range of educational initiatives for the staff in the general medicine ward, as well as broader organisation-wide educational initiatives to address the key issues arising from this matter. These initiatives, and other steps identified by the Commissioner to address the issues, relate to skin assessment; plans for addressing risks relating to skin integrity; the management of pressure injuries; accurate assessment of the level of risk for patients; co-ordination of care; education guidelines for partnership of care with family members; management of infections; and the quality of discharge summaries. More specifically, the educational initiatives include the following:

  1. PEG tube care

  - Since 2019, CMDHB has launched an Enteral Device Study Day to improve staff knowledge on PEG tube care. This study day was offered twice in 2019, and will be offered three times in 2020 (one of these days has been completed but the second

day was postponed owing to the COVID-19 pandemic). During the study days, staff share learnings with one another from their preceptorship and in-service experience.

- In 2019, CMDHB ensured that the Nurse Educator was available for support and enquiries around PEG tubes, and in 2020 CMDHB initiated a process for a Clinical Nurse Specialist to support PEG care across the organisation through the Gastroenterology service.

2. Pressure injury care

- On 17 November 2017, CMDHB's Clinical Quality & Risk Manager provided a presentation to senior nurses on the Adverse Event Case study into the circumstances around Mrs A's pressure injuries and death.
- CMDHB now provides pressure-injury education through the eLearning site Ko Awatea Learn. In 2018, 130 staff had completed this module and, as at May 2020, 550 staff had completed the on-line training. It is now mandatory for new nursing staff to complete this module during their orientation for the general medicine ward, and the general medicine ward staff are expected to refresh their learning in this area.
- The medicine orientation book has been updated, and now includes competencies that must be met on pressure-injury prevention. The orientation book and training are completed by new nurses and their preceptor. Progress toward meeting all competencies is reviewed at the 90-day (3-month) performance review meeting with the Charge Nurse Manager.
- A Ward Pressure Injury Resource Nurse was appointed in 2018, with the role of educating colleagues on wound care at the bedside and documentation support. An organisational Wound Care Clinical Nurse Specialist for ACC Pressure Injury Prevention was recruited in May 2018.

3. General Health Standards of Practice

- The Counties Manukau Health Standards of Practice document is also included in the orientation book, and is reviewed with new staff, the Nurse Educator, and the Charge Nurse Manager.
- New nurses are made aware of the Partner in Care Communication tool AIIDET (Acknowledge, Introduce, Identify, Duration, Explanation, and Thank You) during their orientation period to the ward, and are provided with an AIIDET prompt card.

4. In September 2018, education sessions on The Call for Concern patient safety initiative were carried out for staff on the general medicine ward. This initiative enables patients and families to call for immediate help and advice when they are concerned that they are not receiving adequate clinical attention. The Call for Concern education folder is available for all staff, and education is provided to new staff and students by the preceptors. Information is available for patients and their families about The Call for Concern initiative via leaflets on the ward.

65. CMDHB also told HDC that under its own initiative it undertook a number of other steps to correct any systemic failings that may have contributed to the inadequate care provided to Mrs A. These steps include:

- An investigation into the circumstances surrounding the development of Mrs A's pressure injuries and death, which resulted in a comprehensive sentinel event review. The review report made a number of key findings and recommendations.
- The implementation of a process by which senior doctors can easily review the discharge summaries completed by their junior staff. This is part of the clinical portal used by staff, which now includes a function through which consultants can review all electronic discharge summaries written by junior medical staff.
- A recent review and update of relevant policies regarding PEG insertion, use, and nursing management, and ongoing processes to ensure that controlled policies are reviewed regularly.
- Commencement of a quality review of the general medicine ward in August 2018, which was put on hold in October 2018 owing to a larger internal restructure within Medicine Services. Instead, a Medicine Nursing Oversight Group was established to provide ongoing leadership support and oversight of the quality of care provided.
- Implementation of The Care Compass initiative — this is a point-of-care measure of safety in which a snapshot is taken of five random patients every month, and specific patient safety indicators are measured, such as falls, pressure injuries, and medication safety. This was implemented in the General Medicine wards in November 2017, and subsequently was introduced across CMDHB.
- Monthly and yearly pressure-injury audits. Initially, the monthly audits were communicated to the Charge Nurse Manager, but the information is now collated as part of The Care Compass initiative. The annual audit involves auditing every patient in the hospital on a particular day for evidence of a pressure injury.
- Introduction of the Fundamentals of Care Programme in October 2017. This programme aims to ensure the consistent delivery of the "fundamental" aspects of care, and to remove barriers to achieving consistent care, and is based on a framework of nine fundamental or key elements of care standards. The standards are: communication, clinical monitoring and management, care environment, comfort and pain management, respect privacy and dignity, nutrition and hydration, safety and prevention, personal care, and self-care. These nine standards are audited every six months, including interviews of both patients and staff about the care being provided. There has been sustained improvement across all care standards during this time. Following each review, Charge Nurse Managers of the wards are asked to share their plans to improve areas that are identified during the review. Following implementation of the programme, total scores across all care standards increased from 76.5% in December 2017 to 84.1% in September 2019.
- Development of Plan of Care documents in 2017, which include a requirement that on admission to the ward, all patients will have a pressure-injury assessment and an

associated care plan identified within six hours. The Plan of Care documents are being revised to ensure that they continue to meet the needs of the organisation, including being patient focused.

- Ongoing consideration and development of a Food Diary for monitoring patient nutrition. Currently, a food chart is in use.
- Further development of the Stroke Services, which includes:
  1. Transitioning the Stroke Service in 2018 from the Medicines Service to the ARHOP service (so that patients have better access to interventions and rehabilitation services).
  2. Increasing the available stroke beds from 8 to 15, with the ability to flex to 20 beds when required.
  3. Introduction of a Charge Nurse Manager for the Stroke Ward, and recruitment of three Stroke Clinical Nurse Specialists.
  4. Commencement of the integrated stroke project (which was intended to decrease inpatient length of stay and streamline the patient journey from admission to rehabilitation).
- Development of a visiting policy for Whānau Participation and Key Support Person's role, outlining staff responsibilities and accountabilities when family wish to be involved in a patient's care.
- An update of CMDHB's eVitals electronic information management system to include photographs of pressure injures, to ensure consistency in grading, records of all risk assessments and Waterlow[26] assessments, and prompts for when a new Waterlow assessment is due.
- Implementation of a different brand of air mattress, which uses a dashboard to troubleshoot alarms and resolve any malfunctions promptly.
- A virtual wound clinic operated by wound care nurse specialists. All patients seen in the wards have their notes visible on the clinical portal, and are followed up post-transfer to aged residential care facilities.
- Development of a procedure specifically in relation to transfer of care to aged residential care facilities.

66. CMDHB believes that had all the above initiatives and changes been in place on presentation of a patient such as Mrs A, the outcome and experience for the patient and family would have been very different. CMDHB trusts that these steps convey that it takes this matter seriously, accepts its failures, and is committed to taking the steps necessary to prevent such failings from occurring again.

67. In response to the provisional decision, CMDHB noted that the brand of air mattress being used by Mrs A was known to alarm without reason, or because it had become only partly

[26] A type of assessment used to measure an individual's risk of developing pressure injuries.

deflated, and said that when the mattress became only partly deflated it still had some pressure-relieving capacity. CMDHB considers that it is not evident that the alarming mattress was a major factor in the inadequate care provided to Mrs A and the development of her pressure injuries.

68. Whilst CMDHB accepted the departures from accepted standards of care identified in the provisional report, it did not agree that any of them amounted to serious or severe departures.

69. CMDHB also noted that Mrs A did not experience inadequate or inconsistent care across all other care episodes provided by CMDHB, which was across a number of wards, and that the provisional report findings relate only to the care that was provided on the first admission.

70. Where appropriate, CMDHB's further comments on the provisional report have been incorporated into this report.

Opinion: CMDHB — breach

Introduction

71. The focus of this report is on the care provided to Mrs A at the public hospital.

Pressure-injury prevention on the general medicine ward

72. When Mrs A was admitted to the public hospital in Month1 she had suffered a major stroke and was suffering from multiple other medical conditions. On the wards where Mrs A was admitted prior to her admission to the general medicine ward on 27 Month1, pressure-injury risk assessments found her to be at a "high risk" of developing pressure injuries. However, an assessment of Mrs A's skin integrity was not completed on her admission to the general medicine ward. It was not until three days later on 30 Month1 that the presence of a "red sacral area" was noted, and four days after that on 4 Month2 a pressure injury risk assessment was completed.

73. My expert advisor, RN Jan Grant, advised that the assessment process for both skin integrity and pressure injury risk was inadequate, and not done in a timely manner when Mrs A was admitted to the general medicine ward. RN Grant further advised that timely and accurate documentation was not completed when Mrs A arrived on the general medicine ward, and would have shown that she was at a "high risk". RN Grant advised that this was a severe departure from accepted practice.

74. RN Grant noted that each time Mrs A changed wards, the same admission information and risk charts were collected, but the interpretation of the risk assessments was different in each ward. RN Grant identified a lack of continuity and consistency.

75. Further, the CMDHB policy on pressure injury risk assessment and management that was in place at the time of these events stated that a pressure injury risk assessment was to be completed within six hours of the patient arriving at the hospital/ward area, and that a full visual inspection of the patient's skin integrity and completion of the pressure injury sticker/clinical documentation was required, and, if a pressure injury was found, it was to be documented in the clinical notes with a clinical description of the pressure injury and an explanation as to whether it was acquired in the hospital or the community. This did not occur when Mrs A was admitted to the general medicine ward.

76. I accept RN Grant's advice regarding the inadequacy of pressure-injury risk assessment and management for Mrs A when she was admitted to the general medicine ward, and agree that had this been performed in line with the relevant policy, Mrs A would have been considered "high risk" on admission. This would have mandated closer monitoring and management of her deteriorating wounds.

77. With regard to the management of Mrs A's pressure-injury risk factors, RN Grant advised that the management plan for Mrs A during her stay in the general medicine ward lacked a systemic approach to care, and there was no proactive approach to preventative measures in relation to pressure-area cares.

78. RN Grant advised that given Mrs A's high nursing needs, staff involved in her care should have been following the set guidelines in place at the time regarding pressure risk assessment and management and escalation of care. RN Grant considers that the management plan was poor and was not proactive in the provision of preventative measures. RN Grant considers this a severe departure from acceptable practice.

79. I have taken into consideration RN Grant's advice, and am of the opinion that the assessment and management of Mrs A's risk factors related to skin integrity in the general medicine ward was suboptimal. I am critical that the relevant set guidelines were not followed, particularly given Mrs A's high nursing needs.

Management of air mattress in the AT&R ward

80. Whilst in the AT&R ward, Mrs A was provided with an air mattress to help in the prevention of pressure injuries. Mrs A's family reported that the air mattress was alarming frequently without investigation by hospital staff, and that the mattress tubing was not connected for a total of five days.

81. CMDHB told HDC that only one of the five registered nurses who provided Mrs A with direct care during her admission to the AT&R ward recalled the air mattress alarming continually. This nurse unsuccessfully attempted to resolve the issue, and did not escalate the problem. In response to the provisional decision, CMDHB told HDC that the brand of air mattress being used by Mrs A was known to alarm without reason or because it had become only partly deflated, and when the mattress became only partly deflated it still had some pressure-relieving capacity.

82. Nothing was documented by staff regarding issues with the air mattress.

83. RN Grant advised that it is the responsibility of hospital staff to check and evaluate the correct working of equipment provided to patients. In this case, the frequent alarming of the pressure mattress should have indicated to staff that there was a significant malfunction requiring investigation. RN Grant noted that there is no documentation to suggest that this was done. She considers that the use of the pressure-relieving mattress was poorly managed, and constitutes a serious departure from acceptable standards of care.

84. The air mattress was a key component in attempting to prevent pressure injuries during Mrs A's stay at the public hospital. I am critical that irrespective of the brand of mattress being used, despite clear indications that the air mattress was not operating correctly, staff did not investigate this adequately or escalate the issue.

Co-ordination of care

85. On admission to the stroke ward of the public hospital in Month1, Mrs A was identified as a high risk for pressure injuries. RN Grant advised that at this point, it would have been reasonable to request a specialist opinion from a wound-care specialist, which does not appear to have been done. Further, RN Grant advised that a specialist opinion should certainly have been obtained when Mrs A's injuries developed over a short number of days while in the general medicine ward. RN Grant considers that in light of Mrs A's multiple medical issues and compromised condition, a referral as soon as the pressure injuries developed would have been a requirement.

86. Clinical documentation suggests that medical staff at the public hospital did not expect Mrs A to recover from her initial stroke. RN Grant advised that when Mrs A began to recover from her initial stroke, input from the palliative care team may have been helpful to the family, both in achieving optimal comfort for the patient, and in supporting the staff providing her overall care.

87. My general physician expert advisor, Dr Richard Shepherd, also noted the lack of escalation to medical staff during Mrs A's admission dating from 27 Month1 to 25 Month2 with regard to her pressure wound and PEG site status.

Supervision of family members providing care

88. Mrs A's family members were involved in providing cares to Mrs A from the time of her admission to the AT&R ward, and increasingly took over her cares after she was admitted to the general medicine ward, as they lost faith in the level of nursing care provided. CMDHB confirmed to HDC that there was some friction between family and staff. CMDHB also said that the nurses did not supervise Mrs A's turns to ensure that she was being repositioned properly and regularly. There was no documentation of when and what cares were provided by Mrs A's family.

89. CMDHB policy at the time of these events indicated that staff needed to work in partnership with family and whānau with respect to the assessment and management of pressure injuries. Assumptions appear to have been made by staff that family were knowledgeable and able to carry out Mrs A's essential cares, including regular turning to

prevent pressure injuries developing. There is no evidence that family received appropriate information in order to do so, and no evidence of any instruction and assistance given to family members with respect to care.

90. RN Grant's opinion is that nursing staff did not accurately document the involvement they had with Mrs A's family in relation to education and assistance in providing cares, and in relation to how the shared role worked, and therefore did not adhere to policy regarding a partnership model. RN Grant considers this to be a moderate departure from accepted standards of care.

91. In my opinion, irrespective of whether the family were capable of providing cares to Mrs A, ultimately it was the hospital staff's responsibility to provide care to its patients, and in this case staff needed to ensure that Mrs A's family were provided with appropriate levels of information, and that the cares being carried out by her family were provided correctly. Cares should also be supervised appropriately and documented accordingly. This is inherent in the partnership policy outlined above, and I am critical that this was not adhered to.

Discharge summaries of 25 Month2 and 12 Month3

25 Month2 discharge summary

92. Mrs A was discharged from the public hospital to the rest home on 25 Month2. The electronic discharge summary did not document her pressure injuries or potential PEG site infection.

93. Dr Shepherd stated that despite the omissions on aspects of Mrs A's condition, which proved to be significant for her subsequent clinical course and illness, the 25 Month2 discharge summary likely did meet the accepted standard based on what was reasonably known at the time, because at the time of Mrs A's discharge, the pressure injuries and PEG site issues do not appear to have been escalated to medical staff. I note that the swab results showing that Mrs A's PEG site was infected were not available until after she was discharged on this date.

12 Month3 discharge summary

94. Mrs A was again discharged back to the rest home after her 2–12 Month3 admission to the public hospital. Clinical documentation from this admission indicates that both nursing staff and medical staff were aware of Mrs A's pressure wound. Despite this, the 12 Month3 discharge summary does not detail her pressure wound status, provide any follow-up advice, or provide specific monitoring instructions for staff at the rest home.

95. Dr Shepherd advised:

> "Given that level of awareness by medical staff I would have to be critical of the absence of such clinically significant information in the Discharge Summary. In my view then that would have fallen mildly to moderately below the expected standard of Discharge Summary documentation."

96. CMDHB's policy at the time of these events with respect to the transfer of care through the electronic discharge summary stated that "all health practitioners involved in the care of the patients are responsible for providing accurate information to others to enable safe transfer of care".

97. I am critical that the discharge summary of 12 Month3 did not document Mrs A's pressure wound status or provide any follow-up advice or specific monitoring instructions to enable adequate continuity of care. This was important information to hand over to the provider responsible for her ongoing management, and not including it deems the discharge summary inaccurate.

Conclusion

98. As a healthcare provider, CMDHB is responsible for providing services in accordance with the Code of Health and Disability Services Consumers' Rights (the Code) — that is, the health services provided by CMDHB must be of an appropriate standard, and CMDHB must have in place adequate systems, policies, and procedures. CMDHB is also responsible for the actions of its staff.

99. I am critical of the following areas of care provided to Mrs A by CMDHB:

- A lack of appropriate pressure-wound prevention measures, including inadequate assessment of her skin integrity on her admission to the general medicine ward at the public hospital, a lack of pressure-injury risk assessment until approximately one week after her admission to the general medicine ward, and a lack of a management plan.
- Inadequate staff management of the air mattress used to try to prevent pressure injuries on the AT&R ward.
- Inadequate co-ordination of care between nursing and medical staff.
- Inadequate supervision and information provided to Mrs A's family members who were very involved in providing her day-to-day cares, including pressure-injury management.
- Inadequate information in the electronic discharge summary when Mrs A was discharged from the public hospital to the rest home on 12 Month3.

100. In my opinion, Mrs A was let down by various aspects of the care provided to her by numerous staff at CMDHB. As a consequence, her pressure injuries were not managed appropriately, and opportunities to prevent further pressure injuries from developing were missed. Mrs A suffered unnecessary pain and distress, meaning that an already difficult period was made more so for Mrs A and her family. It is important to ensure that a patient's end-of-life care is provided in a way that seeks to mitigate the upsetting circumstances for both the consumer and the consumer's family, and I consider that in this instance, that did not occur.

101. In light of the above deficiencies, I find that CMDHB did not provide Mrs A with services with reasonable care and skill and, accordingly, breached Right 4(1) of the Code.[27]

Management of PEG site infection — adverse comment

102. Mrs A's PEG site was reviewed medically on 23 Month2, two days before she was discharged back to the rest home. Clinical records describe a "clean site". A wound swab was taken on 24 Month2, but there is no documentation regarding who requested the swab (i.e., medical or nursing staff) or what the specific concerns were at the time. Nursing notes from 25 Month2 — the day on which Mrs A was discharged — state that the site was "leaking and offensive smelling". There is no evidence that this was escalated to medical staff. Mrs A was discharged back to the rest home before the swab results, which confirmed an infection at the PEG site, were made available to CMDHB staff.

103. On 2 Month3, whilst at the rest home, Mrs A was referred back to the public hospital for treatment of a PEG site infection.

104. My nursing advisor, RN Grant, stated that the treatment and management of the infected PEG site was a departure from accepted standards of care, and a prescription for antibiotics for the infected PEG site should have been provided by CMDHB staff before Mrs A was transferred to the rest home, in order to facilitate early treatment. However, RN Grant noted that it would be more appropriate to seek medical advice on this aspect of care.

105. Expert physician Dr Shepherd noted that the question of the "best timing" for the starting of antibiotics is challenging after the fact, and is subject to significant retrospective bias. He noted that a leaking PEG site, as documented for Mrs A on 25 Month2, does not necessarily mean that the site is infected. Dr Shepherd advised that the leaking itself may make the site "offensive smelling", as was also described in the clinical documentation of 25 Month2, but does not necessarily indicate the need for antibiotics.

106. Dr Shepherd explained that the clinical decision regarding the precise point at which to commence antibiotics is "not an exact science". In his view, most decisions lie somewhere in the middle of a continuum, and could not realistically be viewed as a clear-cut departure from accepted practice.

107. Dr Shepherd noted that in Mrs A's case, the documentation around swab taking, escalation of any potential infection concerns, follow-up requests to Mrs A's GP or to the rest home to monitor the site for potential evolving infection, and swab result review were "likely not done well". In saying that, he advised that this view is dependent on whether there was actually a problem at the time. Dr Shepherd noted that clinical documentation does not make this clear, and could be interpreted unreasonably by knowledge of the fact that Mrs A was indeed diagnosed with an infection at her PEG site subsequently.

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

108. Dr Shepherd also explained that a positive swab result would not necessarily mandate treatment if assessment of the site itself was felt to be clinically adequate. He noted that the doctor who reviewed Mrs A at the rest home two days after she was discharged from hospital did not identify a possible infection, and it was not until five days later that Mrs A was referred to her GP for a suspected infection of the PEG site. Dr Shepherd stated that in light of the above factors, on balance he would not regard it to be a significant departure from accepted standards of care that antibiotics were not charted for Mrs A before her 25 Month2 discharge from the public hospital. However, he indicated that issues around swabbing, its documentation, and adequate review of results may be a potential systems area for review by CMDHB.

109. I accept that given the sparse documentation, which does not outline the clinical reasoning for the decisions made, it is difficult to ascertain exactly what was known by CMHB staff regarding Mrs A's potential PEG site infection. I therefore cannot make a finding as to whether or not antibiotics should have been charted. I also accept that there were no clear signs to indicate that the site was definitely infected, and I note that the swab results confirming infection were not received until after Mrs A was discharged back to the rest home.

110. I am, however, concerned by Dr Shepherd's comments that the escalation of any potential infection concerns, follow-up requests to Mrs A's GP or to the rest home to monitor the site for potential evolving infection, and swab result review were "likely not done well", and I agree that documentation was lacking relating to swab taking. I am critical of these aspects of Mrs A's care, but otherwise accept Dr Shepherd's advice that there was not a significant departure from an appropriate standard of care.

Insertion of catheter — other comment

111. On 13 Month2, Mrs A's urinary catheter was removed. It was not reinserted, and the use of adult nappies was commenced. Clinical documentation indicates that there were concerns about a potential urinary tract infection at this point.

112. RN Grant noted that risks arise from the use of incontinence pads, particularly for patients with established pressure area wounds. However, Dr Shepherd advised that this clinical decision met the standard of care for a patient with Mrs A's history, and I accept his advice.

Recommendations

113. I recommend that CMDHB provide a written apology to Mrs A's family for the breach of the Code identified in this report. The apology is to be sent to HDC within three weeks of the date of this report, for forwarding to Mrs A's family.

114. In my provisional report, I recommended that CMDHB provide evidence of the measures taken as outlined at paragraph 58 of this report, including a detailed update on any

ongoing measures and the results of audits. I also recommended that it provide nursing and medical staff who were involved with Mrs A's care with PEG site management training, as well as training on the importance of complete and accurate discharge summary preparation and supervision of discharge summaries. Further, I recommended that CMDHB consider the advice from expert advisor Dr Shepherd that issues around swabbing, its documentation, and adequate result review may be a potential systems area for review by CMDHB.

115. I note the extensive measures (outlined by CMDHB in response to the provisional decision) taken by CMDHB since the events of this complaint, to improve the services being complained about. I consider these steps appropriate in the circumstances.

Follow-up actions

116. A copy of this report with details identifying the parties removed, except CMDHB and the experts who advised on this case, will be sent to the Health Quality & Safety Commission and the Technical Advisory Service and placed on the HDC website, www.hdc.org.nz, for educational purposes.

Appendix A: Independent advice to the Commissioner

The following expert advice, dated 18 April 2018, was obtained from RN Jan Grant:

"**Consumer:** [Mrs A]

Provider: [Public hospital] and [Rest home]

File Number: C17DHC01382

Date: 18.4.2018

I have been asked to provide an opinion on the care provided to [Mrs A]. I have no personal or professional conflict of interest in the case. My advice is based on a review of the documentation provided. I have read and agreed to the Commissioner's guidelines. I am a Registered Nurse with over 30 years of experience in Aged and Community Care. In that time I have had a variety of roles. I have been Manager and Director of Nursing of an aged care facility and in community care for 17 years. I have represented the NZNO and the Aged Care Sector on a number of national working parties. I have been involved in setting standards for Practice for Gerontology Standards. I have been a clinical tutor and guest speaker both here in New Zealand and overseas. I have had international papers published. My immediate past role was as Clinical Advisor/Rehabilitation Coordinator in the community. I am a designated assessor for ACC. I have post graduate qualifications in nursing and a Masters degree in management, with nursing ethics and research as a focus.

Background HDC received a complaint from [the Coroner] which raises concerns about the care provided to [Mrs A] (deceased) by [the public hospital] and [the rest home]. The complaint raises concerns about the coordination of care and the contributing factors that led to the development of pressure injuries and other issues. The period of complaint is from [Month1] until [Month4], during which time [Mrs A] was alternately in the care of [the public hospital] and [the rest home].

[The public hospital] [Mrs A] was admitted to [the public hospital] on the 20 [Month1] with a sudden onset of left sided weakness. Following emergency care, including CT scans, she was transferred to [the stroke ward]. Throughout her stay in [the public hospital], she was in a number of wards. She was transferred to [the rest home] for ongoing care on the 25 [Month2], approximately 5 weeks after her initial stroke. She had a number of acute readmissions to [the public hospital], including A&E. She passed away at [the public hospital] [in Month4]. 20 [Month1] — [the stroke ward] 23 [Month1] — [the AT&R ward] 27 [Month1] — [the general medicine ward] 25 [Month2] — Transfer to [the rest home] 2 [Month3] — Transfer from [the rest home] to [the public hospital]. Admission to [public hospital] 12 [Month3] — Transfer back to [the rest home] 16 [Month3] — transfer from [the rest home] to [the public hospital] and back to [the rest home] on the same day. 20 [Month3] — Transfer from [the rest home] to [the public hospital] and returned same day 22 [Month3] — Transfer from [the rest home] to [the public hospital] and back to [the rest home] at 0035hrs on 23 [Month3] 25 [Month3] — Transfer from [the rest home] to [the public hospital] and

back to [the rest home] on the same day 25 [Month3] — 13 [Month4] [the rest home] 13 [Month4] — Transfer from [the rest home] to [the public hospital] [Month4] — [Mrs A] passed away.

The assessment of skin integrity on admission to [the general medicine ward], [the public hospital] on the 27 [Month1] [Mrs A] transferred to [the general medicine ward] on 27 [Month1]. She had previously been in [the stroke ward] and [the AT&R ward]. Nursing staff on [the general medicine ward] completed a nursing care plan on the 28 [Month1]. This two page assessment has been documented by morning staff and afternoon staff. The only comment under 'Integumentary' on the morning shift is: ***'skin intact'.*** The comment entered by the afternoon shift staff is ***'skin intact, back massage given'.*** Following admission, [the general medicine ward] staff have entered comments on a Continuum Page. This requires the same information as the Initial Admission form. Documentation is made daily and on the 29 [Month1] it states***: 'skin intact'***. This is documented by both morning and afternoon shifts. On the 30 [Month1] morning shift staff documented: ***'Swollen L arm, Skin intact, Red sacrum area, PAC done'.*** The afternoon shift entry states: ***'reg pressure cares, pressure on buttocks, cavion wipes applied'.*** Other assessment areas include General Appearance, Cardio-Respiratory, Neurological, Integumentary, Endocrine, Gastrointestinal, Renal/Urinary, Musculo-skeletal, Pain, Medications, Ongoing Assessments, Nutritional Plan and ADLs. A pressure area risk assessment was completed … at 1000hrs. The total score was 12 and identified the patient as ***'At risk'.*** This showed a ***lower 'risk' assessment*** than the pressure area risk assessment completed on the 20 [Month1], at the time of her initial admission. A wound assessment and monitoring chart was completed on the following dates: 3 [Month2], 5 [Month2], 11 [Month2], 16 [Month2], 19 [Month2], 19 [Month2], 21 [Month2]. These all took place while [Mrs A] was in [the general medicine ward]. However, no assessment of skin integrity appears to have been completed on her admission to [the general medicine ward] on the 27 [Month1]. The only assessment was the **'Initial — On Admission'** which states ***'skin intact, back massage given.'*** The presence of a ***red sacral area*** was noted on 30 [Month1], 3 days after her admission. However, it was not until the 4 [Month2] that a pressure injury risk assessment was completed. The results of this, as I previously stated, gave a score of 12, which indicated 'at risk', despite the previous risk assessments from [the stroke ward and the AR&T ward] stating she was high risk, with scores of 18–19. In my opinion, the assessment process for both Skin Integrity and the Pressure Injury Risk Assessment was very inadequate and not done in a timely manner. [Mrs A] had multiple medical concerns, she was unable to move because of her stroke, was incontinent and had just recovered from the Norovirus. She was unable to eat and required full nursing cares. [The stroke ward and the AR&T ward], where [Mrs A] had been prior to transferring to [the general medicine ward], had each completed Pressure Area Risk Assessments and found her to be a 'high risk'. This should have, in my opinion, 'red flagged' the nursing staff of [the general medicine ward] to initiate full preventive pressure area cares, in areas of both assessment and interventions, from the time of her admission to the ward. Timely and accurate documentation, in my opinion, would have shown that an accurate assessment of her needs would have put her at a high risk on admission. This

was not done. It is my opinion that this departure from acceptable professional standards would be viewed by my peers as a severe departure from practice.

Initial management plan to address any risk factors related to skin integrity As previously stated the management plan for [Mrs A] during her stay in [the general medicine ward], lacked a systematic approach to care. There was no pro-active approach to preventive measures in relation to pressure area cares. The policy 'Management and Prevention of CM Health Acquired Pressure Injuries' and the associated guidelines outline the process and action required. The action goes through 7 steps. Steps one and two relate to the initial assessment and in my opinion were not completed in either a timely manner or to an adequate professional standard. No pressure injury sticker was completed although the sticker was in the clinical notes. It is my opinion that a patient with such high nursing needs, especially a major CVA as well as multiple other medical conditions, should have alerted staff to follow set guidelines. The management plan was poor and was not proactive in the provision of preventive measures. It is acknowledged that [Mrs A] had acute medical issues but this should not excuse staff from following policy and procedures. In my opinion, the documented policies and procedures were not followed. I believe this would be viewed as a severe departure from acceptable standards by my peers.

Management of pressure mattress The use of a pressure mattress does not of itself prevent pressure injuries. It does, however, support nursing, medical and multidisciplinary staff in providing care. A pressure mattress had already been in use in [the AT&R ward]. It was appropriate that [Mrs A] was provided with a pressure relieving mattress on the 29 [Month1], but it is my opinion that this should have been initiated as soon as [Mrs A] arrived on the ward. I believe if accurate assessment and correct risk analysis had been completed on admission to [the general medicine ward], [Mrs A] would have been identified as a very high risk patient and appropriate interventions commenced. Detailed in the report from [the public hospital] '**Incident Investigation**', it is noted that family reported that, when the air mattress was provided, it was alarming frequently. Staff attended and turned the alarm off without investigating or finding the cause. It appears that no attempt was made to replace the mattress with a better functioning one. Family reported that the air tubing was not connected for a total of 5 days. Family members were providing cares for [Mrs A] in conjunction with nursing staff. It is the responsibility of staff to check and evaluate the correct working of equipment provided. In this case, the frequent alarming of the pressure mattress should have indicated to staff that there was significant malfunction, requiring investigation. It appears that this was not done. It is my opinion that the use of the pressure relieving mattress was poorly managed and would be viewed as a serious departure from acceptable profession standards.

Reassessment of skin integrity at each point of readmission, including emergency department presentations [the stroke ward] — Admission 20 [Month1]/Transferred to [the AT&R ward] on 23 [Month1] Following [Mrs A's] first admission on the 20 [Month1], a pressure injury assessment was completed at 1330hrs. The total rating was not listed but the total figure of 18 indicates a High Risk. The second part of this

information, the bundle of care prevention, was not ticked and was not commented on. Clinical notes show that the skin integrity assessment form had been completed and this identified a haematoma on the patient's right arm. It identified there was no pressure area present on admission. Skin integrity was noted in the acute assessment plan with the plan to 'prevent pressure injuries'. The Nursing care plan from the morning shift on the 21 [Month1] documents that skin was intact and PACs done. The afternoon shift notes that the skin was intact, an air mattress was in use and PACs maintained. The nursing care plan from the 22 [Month1] documents that there was a haematoma on the right arm. On the 23 [Month1] documents show that skin was intact.

[The AT&R ward] — Admission 23 [Month1]/Transferred to [the general medicine ward] on 27 [Month1] [Mrs A] was transferred to [the AT&R ward] on the 23 [Month1]. On admission the pressure injury risk assessment was completed at 1400hrs and received a score of 19, this score identifying a high risk. All of the interventions in relation to cares required are ticked. It states that a pressure relieving mattress had been ordered. The nursing clinical notes on the day of admission note that a skin assessment had been undertaken and that skin was intact. Notes also include that an air mattress was ordered and that regular repositioning was done. The afternoon notes state [Mrs A] was transferred to a bed with an air mattress, PACs were given and that her family assisted with cares. Night staff reported that an air mattress was in situ. Entries in the clinical notes on the 24 [Month1], 25 [Month1] and 26 [Month1] state that personal cares had been attended to and PAC given. It is also noted that nursing staff worked with family in the delivery of nursing cares. Clinical notes from [the AT&R ward] clearly outline assessment and cares delivered in relation to pressure area cares.

[Hospital] Admission 2 [Month3]/Discharged to [the rest home] on 12 [Month3] [Mrs A] was admitted to [a ward] on 2 [Month3] from [the] A&E, following her acute admission there from [the rest home]. The transfer letter from [the rest home] outlines the evidence of an infected PEG site. It also notes her pressure injuries. The Nursing staff of [the ward] carried out a falls assessment and a pressure injury risk assessment on the 2 [Month3] and again on the 4 [Month3]. The results of each of these assessments indicate a very high risk. On 2 [Month3] the nursing care plan states**: *'Pressure area stage 3 noted, dressed … needs air mattress'.*** On the 3 [Month3] the nursing care plan notes wound care. On the 5 [Month3] [Mrs A] was seen by the Wound Care Nurse Consultant. His notes describe the severity of the wound and his recommended action plan — that being for the Wound Care Team to review on the following Monday. On the 8 [Month3] the Wound Care Consultant documented that the Team had discussed the management of the wound with the Registered Nurse. From the 8 [Month3] nursing staff attended to the dressings and documented their findings and treatment. The Nurse Wound Care Consultant visited again on the 12 [Month3] and described **a stage 4** pressure injury. His notes state that the previous plan had not been followed, that the wound contained purulent fluid and was 100% necrotic tissue. At this time debridement was undertaken. The wound was

packed with Aquacel rope and covered with combine dressing. Notes state that [the rest home] would be contacted re dressing plan. Discharge was completed and [Mrs A] returned to [the rest home] (on the 12 [Month3]).

Summary In the time [Mrs A] spent in each of [the three wards], she was assessed for pressure area risk. All of these assessments appropriately indicated that she was a high risk patient. The need for a pressure mattress and pressure area cares were recorded in the clinical records. A pressure mattress was used in [two of the wards]. [One ward] involved the Wound Care Specialist although it seems that the recommended care plan was not always correctly followed. In my opinion, the staff of these wards did recognise that this patient was high risk although the management of this degree of risk was somewhat limited and of relatively short duration given that she spent only a short time in each of [the stroke ward and the AR&T ward]. She spent 10 days in [one ward] with involvement of the Wound Care Specialist within several days of this admission and with continuing input from the Wound Care Nurse. In my opinion, the pressure area care in [the three wards] was acceptable.

Re-admissions to [the] A&E On the **20 [Month3]** [Mrs A] was readmitted to [the] A&E. The emergency assessment form states that the reason for readmission was to check the placement of the naso-gastric tube. It also notes that the patient had a pressure sacral area. The ongoing assessment notes, written at 1930hrs by nursing staff, state that ***'dressing on sacrum changed, rest home informed they will need to repack and dress wound in am, pt obs checked, pt febrile 38.8, heavy blanket removed, cool flannel to forehead. Doctor informed. CSU sent to lab, dipstick showed positive for blood, nitrate and leukocytes. A&E Doctor to rv, not to send back to rest home yet'.*** Although there is no other medical entry following the above nursing entry, a dose of cefuroxime was given, the temperature was measured again and was recorded as having improved. A discharge letter had been written at 1726hrs. [Mrs A] was returned to [the rest home] with the discharge letter and a course of antibiotics. **22 [Month3]** Re-admitted to [the public hospital] to check placement of NGT. Clinical notes not available. **25 [Month3]** Readmitted to [the public hospital] at 0449am, NGT reinserted and sent back to [the rest home]. Notes do not identify the pressure injury. **13 [Month4]** Transferred from [the rest home] to [the public hospital] admitted [with] septic shock.

Summary Following the original placement at [the rest home], with the initial admission taking place on 25 [Month2], the subsequent readmissions to [the public hospital] did not place high emphasis on the wound injury and its deteriorating state. The Wound Care Specialist did see the wound 3 times when [Mrs A] was in [one of the wards]. By this time it was documented as Grade 4, debridement was undertaken and there is documentation to indicate the wound was being dressed, although it seems that the Wound Care Specialist's care plan was not being followed exactly. There seems to have been no provision for the Wound Care Specialist Nurse to follow up the progress of the pressure injuries at [the rest home]. On the various readmissions back to [the] A&E, the focus was on the NGT placement. During the admission to A&E dated 20 [Month3], nursing staff noted an elevated temperature and put in place measures

to correct this, including a check for the likelihood of urinary tract infection. However, from the clinical notes, although the sacral pressure wound was redressed, it was examined for a possible cause of infection, eg no swab was taken. It also seems that she was not examined for other causes of infection such as pneumonia. It is of interest that the nurse's notes from this A&E visit advised not to send the patient back to [the rest home] until a medical review had taken place. There is no note made of a medical review in the clinical letter. Discharge had already been arranged and a discharge letter written. [Mrs A] was transferred with a script for antibiotics to treat a urinary tract infection. It is my opinion that advice from medical staff would clarify the responsibility in relation to discharges and readmissions to A&E and that the focus of attention was largely on the placement of the NGT. In my opinion it would be a reasonable thing for a patient with an elevated temperature and a number of possible areas for infection to have been examined more fully by medical staff prior to discharge back to the [rest home]. As there is no documentation in the clinical record of a medical review prior to discharge, it is not known if this took place.

Ongoing monitoring of skin integrity during all periods of care including wound monitoring chart entries Application of the internal policy and guideline documents on pressure wound management Policies and procedures are robust. They direct staff to manage and implement nursing cares for patients identified at risk of developing pressure injuries. The ***'Guideline: Adult Pressure Injury Waterlow Risk Assessment'*** policy clearly states that the Purpose is ***'… to support and guide CM Health nursing/midwifery staff in the utilisation of the Waterlow Pressure Risk Assessment Score and Adult Pressure Relieving Equipment Decision Tree, in order to comprehensively assess and, through monitoring, interventions and patient and family education, contribute to an environment to minimise patient harm from pressure injuries'.*** There are 7 action steps in the guidelines. Steps one and two outline assessment, step 3 outlines the partnership with patient and whānau, step 4 is to identify when the patient's condition changes, step 6 is to ensure appropriate referrals are made to other multidisciplinary team members and step 7 is to ensure communication amongst teams and other areas of care.

Summary: As previously stated the application of the policies and guidelines in [the general medicine ward] were not followed. The assessment process was not accurate in assessing the level of risk. Staff did not demonstrate any partnership with family and whānau. The sacral pressure injury and later the left heel pressure injury developed on [the general medicine ward]. The multidisciplinary team e.g. the Wound Care Specialist nurse was not consulted in a timely manner. It is my opinion that this departure from acceptable documented standards would be viewed as a severe departure by my peers.

Supervision and education of family members who provided hands-on care Clinical notes from [the general medicine ward] show a lack information on the interface between family and staff. Family were very involved in cares and it appears that there was always a family member present. Assumptions appear to have been made by staff that family were knowledgeable and able to carry out essential cares, including

regular turning to prevent pressure areas. No statements, apart from interviews with [the public hospital], were presented, hence it is difficult to say what communication took place. There were family meetings with medical staff to discuss outcomes and care needs, and these are clearly recorded in the clinical notes. Clinical records show that on a number of occasions other staff met with family e.g. 21 [Month1] Stroke Nurse Specialist. The guidelines of Adult Pressure Injury step 3 clearly state that staff need to work in partnership with family/whānau. There is no evidence that this family received adequate information. It would be expected that nursing staff would document the involvement of family and their ability to provide the care required. It would also be expected that any instruction and assistance given to family members with respect to care would be documented. The family's statement documented in the [the public hospital] report indicates that the family felt '*abandoned'.* They stated that they had *'lost faith in the level of nursing care provided'.* Although these statements are second hand there is certainly a thread that shows that staff did not work in partnership with whānau. There are several exceptions and this relates to the night staff. Entries on the 24 [Month2] and 25 [Month2] are far more informative and outline what staff did to provide care with and for family. I have not viewed the roster for [the general medicine ward] and hence cannot comment on staffing numbers. It is also noted that other members of the multidisciplinary team have written thorough notes. Their notes show that they discussed issues with family. A family meeting was held on [the general medicine ward] on the 6 [Month2]. This meeting is well documented. It is my opinion that nursing staff did not accurately document the involvement they had with family in relation to education and assistance in providing cares, and in relation to how the shared role worked. It is my opinion that this would be viewed as a moderate departure from acceptable standards of practice.

Assessment and monitoring in relation to risk of urinary tract infection (UTI) Management of any identified UTI, including in [Month2] The decision to use an adult nappy rather than reinsert the urinary catheter on 13 [Month2], in relation to the associated risks to skin integrity Clinical notes show that the IDC was removed following a visit from [a doctor] on the 13 [Month2] while [Mrs A] was in [the general medicine ward]. In his clinical notes the doctor states this was discussed with the son. Nursing entries on the 14 [Month2] state that the pad was dry and changed. The morning and afternoon shifts on the 14 [Month2] state in the continuum plan that [Mrs A] was incontinent of urine. [A] letter to the coroner states that [Mrs A] developed a temperature of 38 degrees and that at this time she was treated with antibiotics. There are no clinical notes which indicate that once the UTI was treated that staff considered reintroduction of the IDC to assist with skin protection. [Mrs A] was discharged to [the rest home] with continence pads. She continued to be incontinent of both bowel and bladder. It is a medical decision to reintroduce an IDC taking into account all her multiple medical and nursing challenges, but I would expect nursing staff to identify concerns in relation to skin integrity and to discuss their concerns with the medical staff. There is a risk of urinary tract infection with every indwelling catheter. However, there are also risks arising from the use of incontinence pads, particularly with patients with established pressure area wounds. The decision to reinsert a catheter is not a clear one, but should be discussed by medical and

nursing staff, and with family, before a decision is ultimately made. A medical review would clarify this situation.

Assessment, monitoring and management of the percutaneous endoscopic gastrostomy (PEG) tube Treatment and management of the infection of the PEG site identified on 24 [Month2] A PEG tube was inserted on the 20 [Month2] while [Mrs A] was in [the general medicine ward]. Clinical notes from the Gastroenterology Registrar state that there were no complications. She was seen by the Dietician on the same day and she documented very clearly requirements for feeding. Also included in the clinical notes was the advice that nursing staff were to follow the new PEG protocol. Nursing notes from the 21 [Month1] document that ***'Pt was good and comfortable throughout shift. Family assisted with turns and cares. PEG feed running at 30 mls/hr. 50ml flush twice was done during the night. Nil concerns noted'***. Around the 22 [Month2] [Mrs A] became unwell. Investigation showed acute pulmonary emboli. Her PEG feeding continued and she developed re-feeding syndrome. She was seen by medical staff on the 23 [Month2]. The management plan was to continue the feeding regime, check bloods, continue the morphine pump and review dose if indicated, ?? to sight patient and for comfort cares if further deterioration occurred (unclear as I was unable to read this entry in the clinical records). Nursing staff continued to document in the continuum page of the care plan on the 23 [Month2] but there was no evaluation or direction as to PEG cares. Night staff documented on the 24 [Month2] that patient had slept well, the PEG wound dressing was changed and that PEG feeding continued. The continum page of the afternoon shift states that the PEG site was very smelly and that there was a purulent discharge. A swab was sent to the lab, and the site cleaned. On the 25 [Month2] the night staff have documented in the clinical notes that the son came to the nursing station asking for help. When the nurse went with him to assist with turns the son pointed out the pressure area on the left heel. He also advised there was a pressure area on the sacrum which the nurse did not sight. The notes also documented that the PEG site was leaking and this was offensive smelling. At this time the nurse cleaned the site and placed gauze around the PEG. It does state that the PEG was patent and flushing well. There was an additional comment added at 0620hrs which stated that the patient was turned and the linen changed. At this time the sacral dressing was changed and the PEG site cleaned. The notes for the night shift are thorough and describe the care the nurse provided. The continuum page of the 25 [Month2] does not mention the PEG site, but does state ***'PA on heel (Lt) and sacrum'.*** The policy for management of a PEG was not included in the documents I have viewed. A Percutaneous Endoscopic Gastrostomy was inserted on 23 [Month2] and a feeding regime commenced. [Mrs A] was transferred to [the rest home] on 25 [Month2] The infected PEG site was identified and documented prior to her transfer to [the rest home]. Swab results showed a *Staphylococcus aureus* infection. No antibiotics were charted. No information given to private hospital either written or verbal. It is my opinion that the treatment and management of the infected PEG site would be viewed by my peers as a severe departure from acceptable standards. It is recommended that further medical advice be sought in relation to why antibiotics were not charted prior to her transfer.

The decision to discharge on 25 [Month2] and each subsequent discharge or transfer thereafter. The call to discharge is a medical decision made in conjunction with the multidisciplinary team and family and their ability to find a suitable placement. As documented a social worker was involved to assist family and to offer advice and liaise with the ward. All subsequent discharges were back to [the rest home]. The management of [Mrs A] would have been challenging in long term care because of her multiple medical problems, and the management issues around the pressure injuries, feeding and hydration, and maintaining her comfort levels at all times. Transfer of information is crucial to assist both the patient and family as well as staff. A phone call from the [general medicine ward] nursing staff to [the rest home] to alert them of the many issues, and possibly an invitation to visit [the public hospital] to view and discuss what care was required, could well have been helpful in this situation. Three days before discharge to [the rest home], [Mrs A's] condition deteriorated. She was diagnosed as having pulmonary emboli, the PEG site had become infected and a pressure wound had developed on her left heel, in addition to the already established sacral pressure wound. Her condition was unstable and, in my opinion, at the very least [the rest home] should have been given a correct account of the condition of this patient prior to transfer. This would have given them an opportunity to put plans in place to manage this patient's complex needs. A prescription for antibiotics for the infected PEG site should have been provided to facilitate early treatment. This decision to discharge is again a medical decision and Medical advice should be sought.

Quality of the discharge summary and discharge advice given on 25 [Month2] and at each discharge or transfer thereafter The discharge information given to [the rest home] included 3 relevant letters and information. Medical discharge letter which outlined medical and historical information. Included with this was medication discharge information. There was no notification of pressure injuries nor of the PEG site infection. Services for Older People — this letter gives no history and indicates a referral for private hospital transfer HC assessment completed on the 14 [Month2]. This assessment list consists of very brief statements under different assessment headings. This is the only visible documented information on [Mrs A's] pressure injuries. On page 4 of the assessment it states that the sacrum and left heel had a pressure area. Also, on that page, under treatments and procedures, it lists pressure area dressings as one of the treatments. In my opinion, the medical letter which detailed [Mrs A's] history and treatments should also have included information concerning the sacral and left heel pressure injuries and the infected PEG site. It is also common for nursing staff to write a nursing handover, particularly in a case as complicated as this one. A verbal handover is the minimum requirement in straightforward handovers, but [Mrs A] had multiple problems of a serious and complex nature, and because of this a detailed written nursing handover should have been provided. Further information of [the public hospital's] policies and procedures regarding discharge/transfer would clarify their usual practice. It is my opinion that the omission of the full nursing/medical picture would be viewed as a moderate to severe departure from acceptable standards.

Coordination of Care Evidence from the clinical file shows that the multidisciplinary teams were consulted in the medical management of [Mrs A]. Responses from Medical staff to the Coroner show the treatment pathway and the multiple medical complications [Mrs A] faced following her initial CVA. The multidisciplinary team involvement is also documented in the clinical notes. There is well documented evidence in the clinical notes that the Speech Therapist, Physiotherapist and Diabetic Nurses were involved in assessment and provision of care. Their notes are clear and appropriate. An exception is the involvement of the Wound Care Specialist and the Palliative Care team. Staff should have referred in a more timely manner to the Wound Care Specialist. Once she had been identified as high risk it would have been reasonable to request a specialist opinion. This should certainly have happened once the injuries developed over a short number of days while in [the general medicine ward]. Taking into consideration [Mrs A's] multiple medical problems and compromised condition a referral as soon as the pressure injuries developed would have been a requirement. A Palliative Care referral could also have been completed in a more timely manner. The clinical notes show that Medical staff did not expect [Mrs A] to recover from her CVA and her other acute episodes of illness. Input from the Palliative Care Team at this point may have been helpful to family, helpful in achieving optimal comfort for the patient, and in the supporting staff providing the care in both the public and private hospital settings. [Mrs A's] stay involved a number of wards at [the public hospital]. Hence, different staff attended to her care in each ward. Each change of ward led to the same admission information and risk charts being collected but the interpretation of the risk assessments was different in each ward. There appears to be a lack of continuity and consistency. There seems to have been little communication between one ward and another to compare findings and discuss management options. I am unsure of the policies and procedures in relation to [the public hospital] but a recommendation would be that assessment tools, nursing care plans and interventions, and evaluations of such care are transferable with the patient to ensure a more consistent approach. As this would all take place within the same facility, phone or face to face discussion should be easy to achieve. This should also include family/whānau discussions and the extent of the support and education provided to family members so that they may better care for their relative, should be documented. [The rest home] should have received full and accurate information about this complex patient and been given the opportunity to visit [the public hospital] to assess the situation for themselves. Community based follow up, eg from the Wound Care Nurse Specialist, could have been arranged.

Summary [Mrs A's] transition of care was through a number of [the public hospital] wards, a [rest home] and short-term A&E visits. Her multiple medical conditions and her various unexpected events made her a complex case with respect to nursing and medical care, and in relation to other members of the multi-disciplinary team. Her many comorbidities contributed to the rapid development of pressure area injuries. The sacral pressure area injury quickly deteriorated to a stage 4 wound. In my opinion the nursing staff in [the general medicine ward] of [the public hospital] were responsible for poor assessments and lack of adequate intervention and treatment.

They failed to work with and support the family who were providing much of the care. It is also my opinion that throughout [Mrs A's] stay staff assessed quite differently when assessing the risk of development of pressure injuries. Many of the questions asked are outside my scope of practice and do not relate to nursing issues. I recommend that an opinion is sought from Medical Staff for these issues.

I would recommend that: There is a consistent approach to pressure injury management and assessment. Goals for care are clearly documented and evaluated and reassessed on a daily basis. Patients transferring from one ward to another, do so with completed assessment tools which are then used to ensure consistency and flow of information. Partnership policies and procedures are implemented to demonstrate a family's willingness and knowledge to participate in care of family members. Tools are developed to demonstrate that staff has been involved in assisting, teaching and evaluating care needs and implication of such. Accurate and detailed nursing discharge information is sent at each discharge to the next place providing care.

[Rest home] Nursing clinical notes from admission on 25 [Month2] identify pressure areas on the sacrum, left heel and right groin. An Accident and Incident form was completed on the day of admission due to staff identifying the sacral pressure area. Staff have described the wound area as 6cm in width and 8cm in length with eschar noted on the wound and red areas surrounding the wound. On the 26 [Month2] an initial wound assessment and treatment was documented. Also documented from the 26 [Month2] was a wound evaluation chart. This chart documents and evaluates the appearance of the wound at each dressing change. This was done daily with staff noting the wound size, wound bed, clinical signs of infection if any, exudate, wound margins and the dressing applied. Each dressing change was signed by the registered nurse who completed the dressing and assessment. The wound evaluation form also includes an area for pain relief and evidence from the completed form shows that on 18 [Month3] morphine was required to provide adequate pain relief. The wound evaluations charts show that the wound deteriorated. A nursing care plan was documented on the 28 [Month2] with very thorough information and objectives to address the care and treatment of the pressure areas. This plan was client focused and clearly outlines requirements for care. It identified that [Mrs A] was to be turned and re-positioned 2 hourly and there is evidence from the turn chart that this was done. The care plan also included how to prevent pressure areas and notification was made to check continence pads at each repositioning and to ensure the skin was washed. On admission on 26 [Month2] two photographs were taken of the sacral wound. Three photos were taken on the 28 [Month2] and again on the 23 [Month3].

Nutrition Requirements From the clinical notes reviewed [Mrs A's] nutritional requirements were documented on admission. She was Nil by Mouth (NBM) with a Percutaneous Endoscopic Gastrostomy (PEG) tube. Clinical notes show that she was having 60 ml/hr of the prescribed nutritional product. The registered nurse completed a Nutritional Requirement form on the 25 [Month2]. On the 29 [Month2] she was reviewed by [the] Dietitian. Her instructions were clearly documented in relation to type of feed, time and preparation for feeding. Included in the documentation was an

information sheet which lists important points. On the 26 [Month2] a Wound Assessment was completed which identified a pressure sore on the left abdomen. This appears to be the peg site. A Wound Evaluation chart documents that dressings of the wound were undertaken daily. They also show that the dressing of this site was painful and [Mrs A] required morphine before this treatment could be done. Clinical progress notes include entries from the Dietician on 29 [Month2]. She was seen again on the 30 [Month3]. Advice was sought via email on the 5 [Month4]. Speech Language Therapist input was requested and took place on the 29 [Month3]. Medical staff visited on a regular basis and [Mrs A] was seen by the Doctor on 27 [Month2], 29 [Month2], 3 [Month3], 17 [Month3], 19 [Month3], 24 [Month3], 2 [Month4], 7 [Month4] and the 9 [Month4] all visits are documented in the clinical notes. There is evidence in the clinical notes that the Doctor was consulted on a number of occasions when blood sugar levels were high and medical intervention was needed.

Assessment of skin integrity on admission on 25 [Month2] Assessment of skin integrity on admission in my opinion met acceptable standards. [Rest home] letter dated […] indicated a **stage 2** pressure area. Although the copy of the photographs is not as clear as the originals, I would question that the sacral wound is not a stage 3 as clearly both slough and full thickness tissue loss are present.

Monitoring and management of skin integrity and any identified pressure wounds at admission on 26 [Month2] Staff assessed accurately, documented desired outcomes and interventions and evidence is available to show that interventions were followed. Evaluation of the interventions is noted on each occasion. Monitoring and management of skin integrity and identification of pressure area in my opinion meets acceptable standards.

Reassessment of skin integrity at each point of readmission. Readmission dates include first admission 25 [Month2]–2 [Month3]. Second admission from 12 [Month3]–16 [Month3]. Two 24 hours visits on the 22 [Month3] and 25 [Month3] and final admission to [the public hospital] of the 13 [Month4]. A new wound assessment was undertaken on the return on the 13 [Month3]. Wound evaluation continued.

Ongoing monitoring of skin integrity during all periods of care including wound monitoring chart entries Evidence is available to show that staff assessed the wounds daily. Turn charts are available. Family was involved in cares such as turning. Staff supported family when needed.

Assessment, monitoring and management of [Mrs A's] diabetes condition Evidence is available to show staff monitored BSL. Nutritional requirements were documented in the care plan. A private dietician was involved in assessment and planning of feeding regime. Family opinion was listened to and concerns were acted on. Medical staff input was requested when needed.

Assessment, monitoring and management of nutrition Drug charts/BSL monitoring forms were not provided in the documentation viewed. Clinical progress notes show

that concerns were identified and Dietician/Medical referrals were made when appropriate.

Treatment and management of the PEG site including the infection identified on 24 [Month2] Peg site was identified as being painful with exudate leaking from the wound on the 27 [Month2]. A wound assessment chart was completed. Daily wound evaluations undertaken. Swab requested by Dietician on the 29 [Month2]. Antibiotics started on 1 [Month3]. Pain relief was required at each dressing and was administered accordingly. It is noted that [the rest home] were not notified of the swab results of a *Staphylococcus aureus* infection, identified while [Mrs A] was in [the general medicine ward]. Had they been notified, antibiotics could have been started earlier.

Involvement of the multi-disciplinary team and coordination of care Clinical progress notes demonstrate a multi-disciplinary team approach. Medical staff, dietician and speech language therapists were involved in assessment and ongoing planning of support and care. Gerontology Nurse Specialist support and advice was sought. Documentation from the multidisciplinary team is clear and information provided to nursing staff appropriate and timely.

Timeliness and appropriateness of discharge to [the public hospital] at each point of transfer Quality of reassessment of condition, care plan and treatment plan at each point of readmission Clinical progress notes clearly documented reasons for admission to [the public hospital]. Clinical notes documented on readmission on the 12 [Month3] summarized care requirements. Nursing assessment noted base-line recordings. I have not viewed documentation written to [the public hospital] on all admissions.

Summary of Care at [the rest home] [Mrs A] was admitted to [the rest home] with multiple medical and nursing challenges. She was in a frail condition, dependent for all cares and required feeding by a nasogastric tube. Sacral and left heel pressure areas had already developed and the previous PEG site was infected. [The rest home] was not fully informed of her pressure injuries and PEG infection on admission. Her family were supportive and were involved in her care. Evidence is documented to show that [the rest home] requested reviews if her medical condition warranted it, or if this was asked for by her family. Evidence from the clinical notes showed that staff carried out assessments, interventions and evaluations which were appropriate and certainly within current professional practice. A multidisciplinary approach to care was evident. However [Mrs A's] condition continued to deteriorate over the time she was at [the rest home] and multiple admissions were made to [the public hospital]. These admissions in my opinion were appropriate and needed. [Rest homes] do not have the diagnostic equipment, medical staff on call or immediate access to expert assistance such as the dietician, wound care specialist and speech language therapist as happens in the public system. I do not view the deterioration of [Mrs A's] condition to be any fault of [the rest home] or its nursing staff. I am of the opinion that the staff and the multidisciplinary team at [the rest home] did meet their obligations in relation to

professional standards. I am of the opinion that there is not a breach of accepted practice.

Jan Grant."

The following further advice was received from RN Grant on 12 September 2019:

"**Consumer:** [Mrs A]
Provider: [Public hospital] and [rest home]
File Number: C17DHC01382
Date: 12.09.19

I have been asked to review my previous advice in light of a letter from the Counties Manukau District Health Board. The letter is from [the CEO] and dated 24th June, 2019.

In relation to the decision to use incontinence products rather than the alternative insertion of an indwelling catheter, I accept the medical officer's opinion and find this acceptable practice.

In relation to the management of the PEG site:

In my initial advice I have stated that in my opinion [Mrs A] was transferred back to [the rest home] with an infected PEG site. This was clearly documented in the hospital notes. No antibiotics were charted for this and no information was provided to the private hospital in relation to this. I accept that staff was aware of the infection and that dressings were undertaken while in [the public hospital].

The Adult Enteral Feeding Plan was documented by the Dietitian.

My initial advice was that this was a severe departure from acceptable standards. [The CEO] has noted in her letter that [Mrs A] was seen by the House Officer and that he was to complete the feeding summary with a copy to be sent to the private hospital. At this time it would have been appropriate to note the infection and provide some guidance to the private hospital.

I believe that my peers would see the failure to do this would now be viewed as a moderate departure from acceptable standards.

In relation to pressure injuries and the quality of information given to [the rest home]:

On discharge on the 20th, and as stated in my previous advice, I believe there was an entry in the notes to indicate that [Mrs A] was to be reviewed before discharge back to [the rest home]. The frequency of re-admissions from [the rest home] to Counties Manukau must have demonstrated the complexity of cares and needs for [Mrs A].

In relation to family communication with Counties Manukau Health, [the CEO] states that it was clearly documented throughout the clinical notes that family were present

most days and did not raise concerns. [The CEO] states that there were discussions with family to inform them of the prognosis, care and treatment plans.

In my initial opinion (page 8) I have stated that I was of the opinion that there was a lack of documentation in relation to the involvement that nursing staff had with family. I have not changed my opinion of the nursing staff's involvement but do note that other members of the multidisciplinary team did document thoroughly in the clinical notes. I do view the lack of accurate and through documentation as a moderate departure from acceptable standards.

Jan Grant RN"

Appendix B: Independent advice to the Commissioner

The following expert advice was received from Dr Richard Shepherd:

"**Independent Medical Advice to the Commissioner**

Date: 13/04/2020

Complaint: [Mrs A]/Counties Manukau DHB

Your Ref: 17HDC01382

My name is Dr Richard Shepherd. I have been asked to provide an opinion to the Commissioner on case number 17HDC01382 regarding the care, the late [Mrs A] received from Counties Manukau DHB during her episodes of care in 2016. I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

I am a Consultant General Physician and Rural Hospital Specialist employed by the Waikato District Health Board. I graduated from Otago Medical School in 1997 with Bachelor of Medicine and Surgery (MBChB). I have attained fellowships with the Royal New Zealand College of Urgent Care, the Division of Rural Hospital Medicine and the Australasian College of Physicians. I have subspecialty interests in nephrology, emergency medicine and palliative care. I have completed the Auckland University Postgraduate Diploma of Community Emergency Medicine, the RACP Clinical Diploma in Palliative Medicine and the Otago University Certificate in Physician Performed Ultrasound. I have no conflicts of interest to declare in this case.

I have been requested by the Commissioner to provide expert advice on the following issues:

Please review the enclosed documentation and advise whether you consider the care provided to [Mrs A] by Counties Manukau DHB in 2016 was reasonable in the circumstances, and why.

Please note that expert advice has also been obtained from a nurse expert. Please limit your advice to comment on:

1/ The reasoning behind/quality of the discharges back to [the rest home].

2/ The decision to insert a urinary catheter in [Month2] given the clinical picture, and the appropriateness of the removal of the catheter during [Mrs A's] UTI.

3/ The failure to chart antibiotics for [Mrs A's] PEG site infection.

For each question I have been requested 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 it is in my view.

c) How would the departure be viewed by my professional peers?

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

Sources of information reviewed in the preparation of this report:

Counties Manukau Adverse Event Comprehensive Case Review Report [2016]

Counties Manukau Clinical Notes 20 [Month1] to 24 [Month4]

[Rest home] Nursing Home Clinical Notes 25 [Month2] to 22 [Month4].

Advice to the Commissioner:

1/ The reasoning behind/quality of the discharges back to [the rest home].

In my overall opinion I would regard the second discharge back to [the rest home] 12 [Month3] as likely falling mildly to moderately below the accepted standard of documentation for a Discharge Summary. I would anticipate my colleagues adopting a similar view.

In setting out that view I would highlight the following:

Defining the standard of care with respect to Discharge Summaries is often set by local DHB Clinical Guidelines and Policy. I did not have access to the specific Counties Manukau Policy.

In general the minimum details that should be included in a discharge summary might be considered:

- the principal diagnosis and any new diagnoses,
- any operations performed, significant results of investigations done and results pending,
- a brief summary of the patient's management,
- ACC number if an ACC case,
- Discharge medications and all medication changes, including any drugs started, altered or stopped during the admission,
- a follow up plan detailed enough for the general practitioner (GP) or accepting doctor to provide ongoing care, and
- what the patient has been told and any specific instructions given to them.

A clear concise summary is often regarded as superior to a wordy document with too much detail of the history, examination findings and investigations and 'everything else' that happened during the admission.

Defining the standard of care for clinical discharge decision reasoning is more difficult. Defined criteria led discharges are seldom appropriate in circumstances other than clear clinical pathway conditions. This would not be applicable to [Mrs A's] circumstances.

In general the appropriateness or safety of a discharge is a clinical decision made by the responsible Senior Medical Officer. Many factors may be weighed and considered.

These may include the diagnosis, clinical stability, potential to deteriorate, comorbidities, functional status, social supports, home environment and advice from the multidisciplinary support team. Differing clinicians will have differing opinions and thresholds with no one 'right' answer.

1/ Discharge Summary 27 [Month1] to 25 [Month2] Following Stroke:

This is a detailed discharge summary spanning 4 pages including the period 27 [Month1] to 25 [Month2].

Overall it summarizes significant events during [Mrs A's] admission with a stroke. On the face of things it would appear to meet and even exceed the accepted standard of documentation for a Discharge Summary.

This was however a long and complex multifaceted admission and holes can always be identified after the fact when it becomes more clear what proved to be relevant and what was not. By its very nature a 'Summary' cannot include everything.

The Discharge Summary does not include any information regarding [Mrs A's] pressure wound or PEG site status, or mention the outstanding PEG site wound swab taken on 24th [Month2]. Both these proved to be potentially very significant for her subsequent clinical course and illness — though at the time of her discharge those issues do not appear to have been escalated to medical staff.

The last medical notes recorded on 23 [Month2] noted *'PEG in situ clear site'.* There is no record in the medical or nursing notes of any escalation to medical staff regarding [Mrs A's] sacral wound or any PEG site infection concerns during her admission.

There does appear to be variable documentation within the nursing proforma notes regarding her wound. Such entries were at times inconsistent, brief and do not appear to have reflected the severity of the pressure injuries compared to the photo documented at [the rest home] on 26 [Month2] — the day following her discharge from hospital. I would anticipate this would form part of the Nurse Expert's advice.

There is no documentation in the medical or nursing notes supplied to me regarding the taking of a wound swab on 24 [Month2] or by whom that was requested — medical or nursing staff. On 25 [Month2] the nursing notes record *'PEG in situ Left side abdomen — site is leaking and offensive smelling. Site cleaned and gauze in place'.*

I would anticipate at the time of discharge 25 [Month2] a nursing staff Discharge/Transfer of Care handover form would have been completed anticipating that would have included information regarding her wounds/PEG site and potentially the outstanding wound swab (which may have been done and sent by nursing staff without specific medical input). I did not have access to these, again anticipating the Nursing Expert advisor may have commented on those nursing aspects of care.

Overall then in my opinion the Discharge Summary likely did meet the accepted standard of medical documentation and discharge reasoning based on what was reasonably known by the medical staff at the time of her discharge. I would anticipate my colleagues would not differ significantly.

[Mrs A's] case was a complex one with a fluctuating clinical picture of deterioration with palliative approach then unexpected recovery. Interactions with the family who assumed some nursing care activities further likely added to confounding her nursing care and the potential escalation of issues to medical staff. Such Nursing issues appear to have been a significant focus from the *Counties Manukau Adverse Event Comprehensive Case Review Report [2016].*

2/ Discharge Summary 2 [Month3] to 12 [Month3] Admission with PEG site infection:

This Discharge Summary does not detail the pressure wound status, provide any follow-up advice or specific monitoring instructions for the GP or nursing facility.

The Consultant ward round notes document a sacral pressure sore as a defined clinical problem with a requested plan for Pressure Sore Team review. A later medical problem list on 09 [Month3] similarly documents a sacral pressure wound. A nursing wound care consultant reviewed the wound on the day of discharge on 12 [Month3] documenting a stage 4 ulcer developing with debridement down to bone performed.

Given that level of awareness by medical staff I would have to be critical of the absence of such clinically significant information in the Discharge Summary. In my view then that would have fallen mildly to moderately below the expected standard of Discharge Summary documentation. Again though, the level of escalation to medical staff regarding the severity of the sacral wound appears to have been lacking. This further complicates consideration of the *reasoning* behind the appropriateness to discharge at that stage. Given [Mrs A's] complex medical comorbidities and prognosis, it is unclear to me whether escalation of treatment would have in fact been deemed medically appropriate and therefore delayed discharge at that stage. The discharge summary does not specifically detail ceilings of care and prognostic discussions. A not for resuscitation order was however in place in her clinical notes.

3/ Discharge Summaries 20 [Month3] and 25 [Month3] from the Emergency Department.

Overall in my opinion these Discharge Summaries are reasonable and would meet the accepted standard given the focused nature and short period within the emergency department of the presentations. The discharge summary from 20 [Month3] did document [Mrs A's] sacral pressure injury which was reviewed, swabbed and redressed. Her GP was requested to follow-up the results. No change in therapy was felt necessary.

The DHB adverse event review does comment regarding potential 'missed opportunities in the ED' to reassess the wound opportunistically. This would refer to the 25 [Month3] Discharge. In my view this was however a brief visit for a specific

emergent problem — reinsertion of a nasogastric tube at 4:49am with discharge at 9:35am. I would struggle to be overly critical of not reviewing the sacral wound in that setting unless specific concerns and review requests had been identified by those involved in her long term care who had referred her to the Emergency Department. [Mrs A's] thresholds for care, intervention and consultation in my opinion were not best managed by an Emergency Physician unfamiliar with her complex case in the early hours of the morning. Ideally such issues could perhaps have been clearly defined during her Admission 2 [Month3] to 12 [Month3] and been flagged in her discharge summary.

2/ The decision to insert a urinary catheter in [Month2] given the clinical picture, and the appropriateness of the removal of the catheter during [Mrs A's] UTI.

In my overall opinion I would regard the decision to insert and remove a urinary catheter likely met the accepted standard of care. I would anticipate my colleagues adopting a similar view.

In setting out that view I would highlight the following:

In defining the standard of care for urinary catheter insertion in [Mrs A's] setting:- this would be anticipated following presentation with a significant acute stroke resulting in loss of mobility, potential urinary retention issues and advantages for fluid balance monitoring. Due to the risk of infection with ongoing use, removal would be considered as stroke recovery and return to managing activities of daily living occurred. A clinical balancing decision may be necessary weighing leaving a urinary catheter in place long term for patients confined to bed (particularly if a sacral wound was present), versus removal in the setting of a urinary tract infection.

In [Mrs A's] case a urinary catheter was inserted at the time of her initial presentation with a significant stroke. It was removed on 21 [Month1] but reinserted on 22 [Month1] due to a failed trial of passing urine with urinary retention documented by bladder scanner. The urinary catheter was later removed again on 13 [Month2] with [Mrs A's] clinical record documenting *'remove catheter'* though no explicit reason was given. It appears at this stage there was concern over a urinary tract infection with an antibiotic commenced. Following catheter removal ongoing urinary incontinence was documented in the nursing notes.

Overall documentation around [Mrs A's] potential urinary tract infection was sparse. There is little detailing the results of her urinalysis and the weighing of removal of the catheter due to infection concerns versus the risk of aggravation of her sacral wound pressure area in the setting of ongoing urinary incontinence. That aspect of her care documentation could perhaps fall mildly below the *ideal standard* of documentation. I would however acknowledge such detail is often managed on an assumed clinical basis and is rarely, if ever explicitly stated in clinical medical notes. Only in retrospect, with identification of subsequent issues and knowledge of the outcome, would such issues likely be brought into the spotlight.

Overall then, I would regard the decision to initially insert the urinary catheter, its trial of removal and then reinsertion, would fit within standard practice and the accepted standard of care. The lack of clinical decision making detail within the clinical notes would make weighing the decision to remove vs retain the urinary catheter in the setting of suspected infection challenging. In my opinion, that decision would be a matter of differing clinical opinion and practice. It would likely be subject to individual clinicians weighing the nuances of [Mrs A's] circumstances at the time. It would be extremely unusual to expect such documented clinical reasoning in the clinical notes. I would not therefore regard that as a clear significant departure from the accepted standard of care or documentation. Again it is easy to be wise in retrospect.

3/ The failure to chart antibiotics for [Mrs A's] PEG site infection.

In my overall opinion I would regard Counties Manukau likely met the accepted standard of care around the charting of antibiotics for [Mrs A's] PEG site infection. Other related aspects of the care around that however were likely not done well. I would anticipate my colleagues adopting a similar view.

In setting out that view I would highlight the following:

It would be an accepted standard of care that the clinical suspicion of a PEG exit site infection would likely lead to a swab being taken to identify the possible pathogen. A clearly infected PEG site would also be expected to result in the prescribing of broad spectrum antibiotics.

[Mrs A's] PEG site was medically reviewed on 23 [Month2]. At that stage it was documented as *'PEG clean site'.* A wound swab was taken on 24 [Month2] but there is no documentation of this being performed, who requested the swab or what the specific concerns were at the time. A nursing notes entry on the day of discharge 25 [Month2] stated *'site is leaking and offensive smelling*'. This does not appear to have been escalated to medical staff if the nurse involved had felt an infection was likely. There is nothing explicitly stated in the notes to say that. Medical staff would have been responsible for prescribing antibiotics if agreeing there was an indication to do so.

[Mrs A] was admitted to [the rest home] on 25 [Month2]. She was reviewed as a new admission by a doctor at [the rest home] on 27 [Month2] who recorded *'PEG leaking'.* There was no comment regarding infection. Antibiotics were started some 5 days later on 1 [Month3] with a nursing entry stating *'referred to GP for infected PEG site'.* She was referred to the hospital inpatient gastroenterology service the following day for treatment of her infection.

Overall [Mrs A] did develop a PEG site infection. She was subsequently prescribed antibiotics, and treated adequately for that PEG site infection. The question of the 'best' timing for the starting of those antibiotics is challenging after the fact and subject to significant retrospective bias. A leaking PEG site may not necessarily be infected — leaking may in of itself make the site *'offensive smelling'* yet not necessarily indicating the need for antibiotics. A continuum can be expected from no

infection, to early signs of possible infection, to frankly infected, to clinically unwell with sepsis. The degree of leaking may be similarly considered. The clinical decision of at exactly what point to commence antibiotics is not an exact science. In my view, most decisions lying somewhere in the middle of that continuum could not realistically be viewed as a black and white departure from accepted care.

In [Mrs A's] case the documentation around swab taking, escalation of any potential infection concerns, follow up requests to the GP to monitor the site for potential evolving infection, and swab result review was likely not done well. That view however *is* dependent on *if* there was actually a problem at the time. The clinical notes do not make that clear and may be unreasonably interpreted by knowledge of what was to come some 8 days later.

The [rest home] Doctors assessment of the PEG site on 27 [Month2] did not document infection concerns and did not result in the prescribing of antibiotics. It is difficult to be clearly critical of the *'failure'* to chart antibiotics at the time of [Mrs A's] discharge from hospital given that assessment. I would therefore anticipate concerns were likely low at the time of discharge from hospital 25/ [Month2]. The exact circumstances are however not known.

I am not aware of Counties Manukau Guidelines around swab test authorisation and whether this must be authorised by a named doctor or can be authorised and actioned independently by nursing staff. Again though a 'positive swab result' later reviewed by the GP, would not necessarily mandate treatment if assessment of the site itself was felt to be clinically adequate; — as it appeared to be on the GP assessment of 27 [Month2].

In my opinion, retrospective bias could be a significant confounder in considering a departure from the standard of 'failing' to chart antibiotics in this situation. On balance I would not regard a significant departure from the standard of care likely occurred.

Issues around swabbing, its documentation, and adequate result review may be a potential systems area for review. This was not commented on in the *Counties Manukau Adverse Event Comprehensive Case Review Report [2016].*

[Mrs A] was given IV antibiotics for her admission with an infected PEG site 2 [Month3] to 12 [Month3] and discharged on oral antibiotics. I would consider that met the required standard of care also.

Dr Richard Shepherd Date: 13/04/2020
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