Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

A Decision by the Deputy Health and Disability Commissioner (Case 20HDC01240)

Introduction

1. This report is the opinion of Dr Vanessa Caldwell, Deputy Health and Disability Commissioner, and is made in accordance with the power delegated to her by the Commissioner. The report concerns a complaint from Mr and Mrs B about the care and treatment provided to their daughter, Ms A, by Te Whatu Ora Taranaki[1] at Taranaki Base Hospital in 2019.

2. The following issue was identified for investigation:

- *Whether Te Whatu Ora Taranaki provided Ms A with an appropriate standard of care on Days 2[2] and 3.*

3. The parties directly involved in the investigation were:

[1] Te Whatu Ora Taranaki was known as the Taranaki District Health Board at the time of Ms A's admission and the internal reviews of her care. "Te Whatu Ora" is used throughout this report to refer to Te Whatu Ora Taranaki and the Taranaki District Health Board.
[2] Relevant dates are referred to as Days 1–3 to protect privacy.

Ms A	Consumer (dec)
Mr and Mrs B	Ms A's parents

4. Further information was received from:

Dr C	General medical house officer
Dr D	Medical registrar
Dr E	Medical consultant
Dr F	House officer
Dr G	Medical registrar
Registered Nurse (RN) I	Registered nurse
RN J	Registered nurse

5. Dr H, Intensive Care Unit (ICU) registrar, and RN K are also mentioned in this report.

6. Having carefully considered all relevant information, the Deputy Commissioner found that systemic and organisational issues at the hospital resulted in a number of failings in the care provided to Ms A. The Deputy Commissioner concluded that this was a service delivery failure by Te Whatu Ora, which breached Right 4(1)[3] of the Code of Health and Disability Services Consumers' Rights (the Code). An adverse comment was made about the care provided to Ms A by a medical registrar in the Emergency Department.

How complaint arose

7. Ms A passed away in the High Dependency Unit (HDU) at Taranaki Base Hospital (the hospital) on Day 3. Ms A had attended the hospital's Emergency Department (ED) around 19 hours earlier after a referral by her GP, as she was feeling unwell[4] and had returned from undergoing radiation therapy overseas four days earlier.

8. Ms A's clinical findings indicated that she was seriously ill, but this was not recognised by the Medical team responsible for her in the ED. The acute nature of Ms A's condition was not identified until she was on a medical ward around 12 hours after her admission, by which time she was critically unwell. Sadly, she deteriorated rapidly once she was transferred to the HDU. A root cause analysis (RCA) undertaken by Te Whatu Ora concluded that a range of organisation-wide issues led to a delay in the timely detection and treatment of Ms A's sepsis.[5]

9. Mr and Mrs B are concerned about the quality of clinical care provided by Te Whatu Ora. They complained to HDC, and asked HDC to review the adequacy of the recommendations Te Whatu Ora made as a result of the RCA.

[3] Right 4(1) stipulates: "Every consumer has the right to have services provided with reasonable care and skill."
[4] The GP referral stated that Ms A was dehydrated post-radiotherapy and had nausea, vomiting, diarrhoea, apparent weakness and a pulse of 100 beats per minute.
[5] Sepsis is a medical emergency. It occurs when the immune system has an abnormal response to an infection and starts to attack organs and tissues, potentially leading to tissue damage, organ failure and death.

10. This report outlines the issues that led to the delay in Ms A's serious illness being recognised and treated, in order to consider the appropriateness of Te Whatu Ora's analysis of what went wrong in her case and its recommendations for improvement.

Summary of Ms A's admission

11. Ms A, aged in her forties, was living with metastatic colorectal cancer.[6] Her primary cancer remained in situ, and for several months she underwent chemotherapy to treat it. Ms A underwent supplementary Selective Internal Radiation Therapy (SIRT) overseas to target liver metastases with a view to extending her life.[7] She returned to New Zealand on Day 1, to stay with her sister, but continued to feel unwell post-procedure.

12. On Day 2, Ms A's local GP telephoned the on-call medical registrar at the hospital and referred Ms A there for medical review. The GP faxed a referral note to the hospital, which said that Ms A presented with dehydration post-radiotherapy, nausea, vomiting, diarrhoea, apparent weakness and a pulse of 100.

13. Ms A arrived at the hospital's ED at 1.05pm on Day 2. The record from her ED triage at 1.27pm noted "medical review — unwell" and a history of colon and liver cancer. Ms A was triaged as ATS category 3 ("potentially life-threatening or important time-critical treatment or severe pain").[8] The GP's faxed referral could not be located in the ED and it is unclear whether or not it was received. However, as the GP had also called ahead and arranged for Ms A to be reviewed by General Medicine,[9] she was not seen by ED doctors. A general medical house officer, Dr C, who was admitting patients in the ED, saw Ms A around 5pm.[10] Dr C was working alongside Dr D, a medical registrar, under Dr E, the on-call medical consultant, who was off site.

14. Blood was collected from Ms A for testing at 5.05pm. She received intravenous (IV) medication including pain relief and anti-nausea medication at 5.32pm, and IV fluids at 5.54pm. A CT scan of her abdomen and pelvis was ordered. Ms A's parents and sister, who had been at the hospital with her, were based locally and went home around 8pm. While not presenting as particularly unwell on examination, Ms A's blood tests, including two highly elevated lactate results of 12mmol/L,[11] indicated critical illness. Dr C consulted with

[6] Metastatic cancer is the spread of cancer cells from the site of a primary cancer to another part of the body. A metastatic cancer is the same type of cancer as the primary cancer.

[7] SIRT is used to destroy liver tumours. Tiny radioactive beads are sent directly to the tumour through the liver's arteries. The beads give off radiation over a very small area, damaging the cancer cells and making it hard for them to reproduce, while reducing the amount of radiation reaching the rest of the liver and the body.

[8] The Australasian Triage Scale (ATS) has five triage categories, from triage category 1 patients, who are very urgent, through to triage category 5 patients, who are less urgent. Each triage category has a specified maximum clinically appropriate time within which medical assessment and treatment should commence. For patients categorised ATS 3, the maximum time to treatment is 30 minutes.

[9] Specialty that deals with diagnosis and non-surgical treatment of internal diseases in adults, particularly complex illnesses.

[10] "House officer" denotes a doctor within the first two years of employment following registration.

[11] Lactate is usually present in low levels in the blood. An increased lactate level (above 2mmol/L) can serve as a marker in all stages of shock and may help to detect patients who are in early stages of deterioration.

Dr D and Dr E about his clinical impression of Ms A and her blood results, but no clear diagnosis was reached. Dr C decided to transfer Ms A to a general medical ward once a bed became available.

15. Ms A was transferred to a medical ward at approximately 10pm, before having the CT scan at around 10.15pm. The scan found severe ascites,[12] and was negative for a liver abscess or peritonitis.[13] Between 12am and 2.15am on Day 3, Ms A was documented as having two very short episodes of unconsciousness, including bowel and bladder incontinence during the first episode. Dr F, the on-call overnight house officer who had been paged by nursing staff, rang the ward's emergency bell during the second episode of unconsciousness at 1.15am, where Ms A recovered consciousness after 30 seconds. She had a weak pulse, and during most attempts to get a reading, the nurses and Dr F found Ms A's blood pressure unreadable. Ms A was recorded as looking very dry and having ongoing pain and cool extremities, and her temperature dropped to a low of 33.4°C at 12.50pm. Dr F ordered increased IV fluids and consulted with Dr G, the overnight medical registrar, at around 2am. The doctors decided that Ms A should be transferred to the HDU.

16. Ms A was transferred to the HDU at 2.20am. Dr H, an Intensive Care Unit (ICU) registrar,[14] asked Dr G to attend to review Ms A as well, as she was "exceptionally unwell". At 4.30am, Ms A was given antibiotics for the first time, to treat presumed abdominal sepsis. She was later given vasopressor medication to maintain her heart rate and blood pressure. Dr G made contact with the doctor who had carried out Ms A's SIRT therapy overseas, who felt that her presentation was not consistent with a SIRT complication. Dr H's attempts to contact Ms A's DHB2 oncologist and the on-call DHB2 oncologist were unsuccessful. Given the lack of information about Ms A's prognosis, an ICU anaesthetic consultant also attended at the request of Dr H.

17. Ms A's family returned to the hospital around 4.30am, and spoke to the ICU anaesthetic consultant with Ms A. It is documented that Ms A's blood pressure started to drop at 5.20am, and that she went into cardiac arrest at 5.28am. Ms A was resuscitated, requiring intubation and ventilation, but unfortunately, she did not respond to supportive treatment. The records show that Ms A was extubated, following a discussion with her family around 8am. Ms A passed away at 8.20am. Te Whatu Ora's RCA indicates that her death was due to sepsis.[15]

Information gathered

18. In addition to comments about Ms A's case, Te Whatu Ora provided HDC with information including a Serious and Sentinel Event root cause analysis (RCA) report of Ms A's overall

[12] A collection of fluid within the spaces in the abdomen.
[13] Inflammation of the peritoneum, which is the tissue lining the inner wall of the abdomen and covering and supporting most of the abdominal organs.
[14] Taranaki Base Hospital operates a combined HDU/ICU.
[15] Ms A's cause of death is pending on her death certificate, as it is subject to Coroner's findings.

care, and statements from relevant staff: Dr C, Dr D, Dr E, Dr F, Dr G, the medical ward Nurse Coordinator, RN I, and a graduate nurse who was also working on the medical ward.

19. Independent advice regarding Ms A's care and treatment was obtained from an Emergency Medicine specialist, Dr Stuart Barrington-Onslow (Appendix A), and from Nurse Practitioner (NP) Fay Tomlin (Appendix B).

Te Whatu Ora's RCA findings

20. The following systemic and organisational issues (which are summarised) were identified in Te Whatu Ora's RCA of Ms A's care.

Failure to recognise serious illness

21. The RCA concluded that "significant" treatment delays meant that Ms A did not see a doctor, receive pain relief and fluid therapy, or have blood taken until several hours after her arrival in the ED. Once available, Ms A's blood results were "highly abnormal", and strongly suggested sepsis and that she was about to become critically unwell.[16] This was not recognised in the ED due to a range of factors, rather than any specific errors by any individual.

22. The RCA set out that Dr C was a house officer at the time he reviewed Ms A. Dr C consulted with Dr D, who was seeing other patients, and contacted Dr E by telephone. Dr E cannot recall being told that Ms A's lactate was 12mmol/L but felt that the clinical picture "sounded like an abdominal catastrophe" and understood that Ms A was going to HDU and was receiving antibiotics. The RCA concluded that Ms A should have had a physical review by a more experienced doctor, given her illness and lactate level. It stated that the three doctors did not "share a common mental model" about diagnosis or treatment, and did not recognise Ms A's "immediately life-threatening condition" or consider sepsis. While SIRT was an unfamiliar procedure, it was known that it is directed at the liver, and that lactate rises with liver injury. As a result, "it appears lactate was considered [by the attending medical staff] only in the context of liver injury".

23. Further, the RCA found that Ms A's admission to a medical ward (rather than HDU) was "clinically inappropriate", and more experienced senior staff should have been involved in deciding her admission destination. Ms A was transferred to the medical ward and then to the CT scanner without receiving IV pain relief, despite having a pain score of 7–8/10 prior to transfer. Her critical illness was not appreciated for a further three hours after her transfer to the ward, despite her experiencing episodes of profound hypotension[17] and loss of consciousness.

Missed opportunities and delays

24. The RCA concluded that the failure to recognise Ms A's serious illness led to a 15-hour delay in her receiving antibiotics. Further, the medical team did not attempt to contact Ms A's

[16] "Most notably; a venous blood gas lactate of 12.1 mmol/L, venous blood gas pH of 7.22, base deficit of 12 and blood glucose of 14.1 mmol/L, a white cell count of 48.1 x 10^9/L (neutrophils 40 x 10^9/L)."
[17] A blood pressure reading below 90 systolic over 60 diastolic.

oncologist and SIRT doctor earlier, during daytime, in order to get a better understanding of her condition. They did not make an immediate referral to HDU, as was appropriate, or seek surgical and ICU opinions. The RCA stated that "earlier antibiotics and ICU therapies may have prolonged [Ms A's] life". The failure to appreciate Ms A's serious illness also led to her profound hypotension not being addressed urgently, and to the complex decisions that needed to be made about her care in the HDU becoming extremely time critical.

25. In addition, the RCA noted that after her death, there was a six-hour delay before Ms A's body could be transferred to the Coroner, as the on-call house officer could not attend earlier to medically verify her death.

Inconsistent adherence to EWS protocol

26. As follows, the RCA found a number of inconsistencies by nursing staff in the ED and on the medical ward in terms of the use of the Early Warning Score (EWS)[18] and its escalation pathways:

- Some observations were plotted in the wrong zone on the vital signs chart, resulting in an incorrect lower EWS, including two occasions on the medical ward where correct scoring should have triggered an escalation call to a registrar and a 777 pre-arrest call;[19]
- Concerning temperature changes across five ED observations and nine consecutive low temperatures on the medical ward should have been acted on under EWS protocol;
- EWS were not totalled regularly, including at triage, and some scores were totalled incorrectly; and
- Some EWS totals were calculated from incomplete vital signs, or excluded unobtainable readings (such as blood pressure), and if calculated correctly, would have resulted in a higher EWS.

Nursing assessment and record-keeping failures

27. The RCA identified poor quality nursing records with limited detail, in addition to non-adherence with Te Whatu Ora procedures, as follows:

- There was a lack of complete nursing assessments and documentation in the ED, including Ms A's presenting symptoms and pain score not being recorded at triage at 1.27pm, baseline observations at 2.55pm being only partially completed, and brief handover notes;

[18] EWS is a clinical "track and trigger" decision support tool used to quickly assess the severity of illness in a patient. A score is allocated to a full set of routinely recorded vital signs. A mandatory escalation pathway applies depending on the score calculated, with the urgency increasing the higher the EWS.

[19] Pre-arrest is the period before cardiac arrest. At the time of Ms A's admission, the Te Whatu Ora EWS Mandatory Escalation Pathway mandated a call to a registrar where an EWS was 8 or 9 (likely to deteriorate rapidly) or where any vital sign was charted in a red zone; and a call to rapid response number 777 where an EWS was 10+ (immediately life-threatening critical illness) or where any vital sign was charted in a blue zone.

- A nursing assessment care plan was not completed on the medical ward, and full observations were not taken consistently on most occasions;
- A graduate nurse who was responsible for Ms A on the medical ward informed her Nurse Coordinator that Ms A's blood results appeared abnormal as they were showing in red, and asked her to follow up the results. Although not documented in the nursing notes, it is accepted that the graduate nurse raised clinical concerns that were not recognised and acted on; and
- There were a number of casual pool nurses working in the ED and a lack of experienced nurses on the medical ward. The RCA stated: "The lack of experienced staff reduced the likelihood of [Ms A] being identified as severely unwell."

Communication

28. The RCA highlighted communication failures in several respects. The failure to recognise Ms A's serious illness caused a delay in her being advised of her deteriorating condition, given the chance to consider her options in an informed way, and spend time with her family before her death, including her husband, Mr A, who was in another region.[20] There was also a delay in informing Ms A's parents and sister about her transfer to the HDU and the gravity of her condition, and no indication of direct communication with Mr A in this respect.

29. The RCA identified that the pressure to provide time-critical care in the HDU resulted in Ms A's family being given inaccurate information about her illness and unclear information about what the life support treatment she was given would entail.

RCA conclusions and recommendations

30. Te Whatu Ora's RCA concluded:

> "No patient with a lactate of 12 mmol/L and an extremely elevated white cell count and with evidence of multi-organ failure should be admitted without consideration, investigation and treatment of sepsis. The involvement of so many staff over a twelve hour time period suggests an urgent solution is needed that is organisation wide. Factors such as staff illness, high junior staff ratios, busy shifts in the emergency department [and] bed block delaying ward transfer occur regularly in public hospitals. Extra layers of organisational and clinical support are required to prevent the failure to detect a septic patient, a patient with multi-organ failure or a patient with recurrent severe hypotension."

31. A number of recommendations for improvement were made in the RCA, including:

- Implementing a complete package of sepsis learning[21] for resident doctors, nurses and Patient at Risk (PAR) nurses, including a sepsis identification and treatment decision tool for junior medical staff;

[20] Ms A ordinarily lived with her husband but had relocated to stay with her sister in order to undergo chemotherapy.
[21] Through work with the Sepsis Trust NZ and the Health Quality & Safety Commission.

- Implementing a PAR nurse service to review and manage unwell patients and conduct service audits;
- Evaluating implementation of a hospital-wide electronic EWS track and trigger system;
- Reviewing systems for responding to junior doctors and nurses when they escalate concerns, and evaluating implementation of a hospital-wide "Speaking up for safety" programme to empower these staff to escalate clinical concerns;
- Reviewing systems and processes for nursing and medical documentation in the ED;
- Reviewing systems and process for timely certification of the deceased; and
- Hospital-wide anonymised case study discussions about Ms A's care.

32. Te Whatu Ora held a meeting with Ms A's family to present and discuss the RCA findings and recommendations.

Responses to provisional opinion

Te Whatu Ora

33. Te Whatu Ora acknowledged the systemic and organisational failures in Ms A's care, and said that it is "sincerely sorry" for those failures. Te Whatu Ora stated that it is focused on addressing the issues identified, and that it has already taken a number of steps in relation to identification of sepsis and use of the EWS. Te Whatu Ora noted that the failures in Ms A's case occurred prior to improvements made at the hospital following HDC's investigation of a similar case.[22] It said that the cases had "b[r]ought into sharp focus the need for Te Whatu Ora Taranaki to improve systems and it is dedicated to ensuring that similar systemic failures do not occur again".

34. Te Whatu Ora stated that it was disappointed with any adverse comment being made about Dr D's care of Ms A. Te Whatu Ora said that "[Dr D] proved … to be a competent and compassionate medical practitioner" while at Te Whatu Ora, and "staff resources and [a] lack of clarity around the management of patients referred to the medical ward via ED" impacted on the standard of care Dr D was able to provide to Ms A.

35. In response to a provisional recommendation, Te Whatu Ora advised that it could not confirm that Dr C, Dr D and Dr E had attended Sepsis Ready training. Te Whatu Ora said Dr D did not work there when the training started, and Dr C and Dr E no longer work for Te Whatu Ora, and no register was kept at the training.

Dr D

36. Dr D was a relatively junior medical registrar at the time of these events, and had worked only in a provincial hospital. The role was very busy, with numerous responsibilities and interruptions, and it was not physically possible to review every newly admitted medical patient.

[22] 20HDC00333.

37. Dr D and Dr C considered Ms A's initial abnormal lactate result in the clinical context of her cancer and recent SIRT, which led them to the differential diagnosis of a focal liver issue. Dr C felt that the lactate might be a spurious result, however, and Dr D said that the doubt about that result and the key focus on a possible focal liver issue contributed to the initial failure to recognise Ms A's sepsis. After the second abnormal lactate result, Dr D decided to escalate Ms A's case to Dr E. Dr D said that Dr C made contact with Dr E, as was the common practice at the hospital.

38. Dr D considered that being relatively junior also contributed to not recognising that Ms A was very unwell. Dr D said that four years on, and with more experience, it is now possible to clearly recognise that, but it was more challenging at the time. Dr D expressed sincere regret for not reviewing Ms A, and extended sincere condolences to her family and friends.

The family

39. The family was provided with the "information gathered", "changes made" and clinical advice sections of the provisional opinion. In response, the family stated that "there is compelling evidence of an unintended bias, where staff caring for Ms A seemed focused on her terminal cancer diagnosis and not her presenting condition". They believe this bias meant that doctors "did not actively consider treatment", meaning "aggressive intervention" did not occur. The family said that Ms A was living with a terminal disease and "was not expected to die when she did". They said that her death was "premature and due to severe deviations from [the] medical care expected in a New Zealand hospital" and submit that it is "highly probable" that Ms A would have survived if she had been given antibiotics promptly. The family continue to experience acute distress from the loss of Ms A, and "recognise that the best they can hope for from Te Whatu Ora … is for steps to be put in place to avoid a comparable death in future".

Opinion: Te Whatu Ora Taranaki — breach

40. I offer my sincere sympathy to Ms A's family for the loss of their daughter and sister, and to Mr A for the loss of his wife. Although Ms A was living with metastatic cancer, she believed that chemotherapy could contain it and potentially allow her to live for another nine months to three years. Te Whatu Ora said that Ms A had a "reasonable outlook" of doing so, and acknowledged that her life may have been prolonged with earlier antibiotic and ICU treatment. I do not underestimate the distress this information, and the review into the circumstances of Ms A's death, will have caused her family.

41. I have undertaken a thorough assessment of the information gathered, and Te Whatu Ora's RCA report and recommendations in particular. My assessment was guided by the independent advice I received from Dr Barrington-Onslow and NP Tomlin, who provided their advice without reference to Te Whatu Ora's RCA.

Identification of key failings

42. There were deficiencies in a number of aspects of Ms A's care and treatment on Days 2 and 3, including a delay in medical and nursing staff recognising that she was seriously ill,

and her treatment not being escalated in line with the ED's Sepsis Pathway[23] or the EWS mandatory pathway.

43. In their respective reports, Dr Barrington-Onslow and NP Tomlin identified the following specific failings, which principally related to the time Ms A spent in the ED and on the medical ward:

- Ms A was not reviewed by a doctor until four and a half hours after her arrival;
- Ms A's serious illness and the strong possibility of sepsis were not recognised despite her concerning blood results and clinical picture, partly due to lack of review by a senior doctor, and medical assessments were not documented;
- There was a consequent failure to revise Ms A's ATS category up to 2[24] and escalate her treatment, including giving antibiotics and seeking an ICU opinion;
- ED and medical ward nursing staff did not regularly obtain and document full vital signs, observations and pain scores, or carry out nursing assessments;
- ED and medical ward nursing staff failed to consistently adhere to EWS documentation and escalation protocols, including two occasions on the medical ward where an escalation call to the Registrar and a 777 pre-arrest call were both mandated but not made;
- Concerns raised by a registered nurse on the medical ward about Ms A's abnormal blood results were not followed up; and
- Inadequate/ineffective communication — by the medical team in not seeking clinical input from ED doctors and other specialties, and by senior doctor/s and ED nurse/s not collaborating about the unit Ms A should be admitted to; attempts to contact Ms A's oncologist and her SIRT doctor were delayed; and there is a lack of evidence of the quality of verbal handovers between the ED, the medical ward and HDU.

44. I am satisfied that the above failings, with the exception of the two discussed below, were identified and adequately acknowledged in Te Whatu Ora's analysis and recommendations. The RCA report is detailed and forthright, and it substantially reflects the clinical records and the staff statements provided to me.

Documentation by medical team in ED

45. It is my view that the medical team's failure to document Ms A's clinical assessments and care in the ED was not given sufficient weight in Te Whatu Ora's RCA. While the RCA

[23] Te Whatu Ora's Emergency Department Sepsis Pathway (November 2017) is a tool for the recognition and immediate management of sepsis. It states, "[A]ll patients with sepsis signs and symptoms will be commenced … immediately to ensure early recognition, response, escalation and resuscitation," and mandates urgent investigations and antibiotic treatment for patients whose symptoms, vital signs and blood results suggest they have, or may have, sepsis.

[24] ATS 2 denotes "imminently life-threatening or important time-critical" and mandates a maximum wait of 10 minutes for medical assessment and treatment.

recommendations included a review of systems and processes for medical documentation in the ED, there was no specific comment about the total lack of medical ED documentation. Dr Barrington-Onslow considered that this record-keeping failure represented a severe departure from accepted practice. I agree. Keeping clear, accurate and complete patient records is a key competency standard for doctors, because such records are central to ensuring safe, effective and timely care.[25] Good record-keeping also allows retrospective reviews of clinical care, such as the RCA Te Whatu Ora carried out, to establish an accurate timeline of events. In Ms A's case, an understanding of her clinical care in the ED had to be developed, in part, from non-contemporaneous statements from the medical team. I am critical of that eventuality, as relying on the recall of staff in order to review a patient's care is inevitably far less reliable than if those staff had documented their care in the patient's notes at the time, or as soon as possible afterwards, as expected.

Involvement of ED doctors

46. The role of ED doctors in Ms A's case also merited further emphasis in Te Whatu Ora's analysis. The RCA of Ms A's care noted that there were "multiple senior [ED] doctors working in the [ED]" on Day 2, but it did not adequately address the significance of that information. Both Dr Barrington-Onslow and NP Tomlin highlighted the fact that the ED doctors on hand could have assisted with Ms A's care during her nine hours in the ED. NP Tomlin said that although Ms A was referred to General Medicine for review, that "[did] not negate the ED nursing and medical staff [from] advocating for and looking after [her] as if one of their own patients". In particular, Dr Barrington-Onslow said that based on Ms A's elevated heart rate at 2.55pm, an ED doctor could reasonably have been expected to review her at the request of an ED nurse.

47. While I recognise that the GP referred Ms A for medical review, and his faxed referral about Ms A's presentation was potentially misplaced and not available to staff,[26] I am concerned that ED doctors were not involved in the circumstances. Ms A was a complex patient who was triaged as ATS 3, requiring medical assessment and treatment within 30 minutes, yet she was in the ED for four and a half hours without being seen by a doctor. Dr Barrington-Onslow considered that the four-and-a-half-hour delay was likely a systemic issue arising from the busyness of the ED, but said that it was a severe departure from the accepted standard of care nevertheless.

48. I accept Dr Barrington-Onslow's advice that it would have been appropriate for an ED doctor to have been involved in some capacity in assessing Ms A at the outset, after which a General Medicine or ICU referral could have been made. That would likely have ensured that Ms A was reviewed earlier, while also increasing the clinical expertise available to assess her symptoms and laboratory results. Te Whatu Ora should have identified the organisational reasons why ED doctors were not also involved in Ms A's case, and developed a robust recommendation to address those factors.

[25] *Good Medical Practice*, Medical Council of New Zealand (December 2016 and November 2021 editions).
[26] Te Whatu Ora told HDC that faxed referrals were recognised as a risk, and an e-referral process for GPs was therefore implemented in February 2021.

Additional comments

49. A number of the other deficiencies that occurred during Ms A's time in the ED and on the medical ward were also severe departures from the accepted standard of care. In particular, Dr Barrington-Onslow specified the medical team's failure to follow the ED Sepsis Pathway, and the lack of senior support provided to Dr C despite Ms A being a complex and critically unwell patient (which I will discuss separately).

50. NP Tomlin found severe departures in the accepted standard of nursing care on the medical ward in terms of the failure to escalate Ms A's care in line with EWS protocol, and the failure to regularly obtain and document vital signs and calculate the EWS. NP Tomlin said that "[t]he ongoing missing figures of vital signs and EWS ha[d] more of an impact during [Ms A's] time on the ward as worsening signs (unrecordable [blood pressure], increased respiration rate, more elevated heart rate [of] 120, decrease in temperature) all would be reflected in an overall elevation of the EWS" if correctly recorded and calculated. These were further missed opportunities for staff to have realised the gravity of Ms A's illness and escalated her care accordingly.

51. Te Whatu Ora accepted that concerns about Ms A's abnormal blood results from a graduate nurse on the medical ward were not acted on appropriately by the Nurse Coordinator, RN I. It is difficult to comment on this issue in detail, as the situation was not documented by either of the nurses at the time. The graduate nurse made a separate retrospective account, although it does not specifically mention Ms A's blood results. The graduate nurse documented that she was unable to obtain Ms A's heart rate or oxygen saturation readings, and found that Ms A had cold hands and a low temperature. The graduate nurse said that although she asked two more senior nurses for help, in hindsight, she wished she had called a pre-arrest for Ms A at that point. The graduate nurse also documented that staffing on the ward was insufficient.

52. I accept NP Tomlin's advice that interpretation of blood results is not ordinarily within a nurse's scope of practice. The graduate nurse had undertaken specific training about deteriorating patients, which gave her some understanding that Ms A's blood results, where highlighted in red, indicated results outside normal parameters. NP Tomlin was not critical that RN I did not know how to interpret the blood results. Nonetheless, I agree with NP Tomlin's conclusion that it would have been better for RN I to have acknowledged the graduate nurse's concerns and encouraged her to discuss Ms A's vital signs, EWS, care plan and a plan for repeat blood tests with medical staff.

53. I note that Te Whatu Ora acknowledged the short amount of time that remained in the HDU to inform Ms A about her critical illness and allow her to consider it, due to the delay in her sepsis being recognised. Te Whatu Ora also accepted that there was a delay in notifying Ms A's parents and sister of her condition and transfer to HDU. These acknowledgements were warranted. Although the ICU registrar's retrospective notes[27] state that Ms A declined

[27] The notes are untimed, but it appears that the ICU registrar first met with Ms A shortly after she arrived in the HDU at 2.40am.

to have her sister contacted until 7am, the documentation contains little information overall about staff contact with her family, or what Ms A's wishes were about which family members should be contacted and when. This is troubling in the context of Ms A's underlying metastatic disease, recent invasive SIRT procedure, blood results and deteriorating vital signs.

54. When Ms A's family returned to the hospital early on Day 3, they found her extremely swollen from fluid therapy administered in the HDU. Te Whatu Ora's RCA acknowledged that "delayed, then aggressive" fluid therapy resulted in "distressing swelling" to Ms A's body and caused her family to feel that she had drowned. Te Whatu Ora told HDC that it accepted and wished to apologise that documentation of fluid charting and monitoring was "suboptimal" at that time. Although Dr Barrington-Onslow was not critical of any aspect of Ms A's HDU care, it was appropriate that Te Whatu Ora recognised that Ms A's family had not been adequately prepared for the fact that "life support" entailed full intensive care therapy, including aggressive fluid therapy that caused Ms A's body to swell.

Conclusion

55. I have carefully considered the extent to which the failings in Ms A's care occurred as a result of individual staff action or inaction, as opposed to systemic and organisational issues.

56. I have concluded that the errors and omissions that occurred during Ms A's 19 hours at Taranaki Base Hospital were, in the main, not the result of isolated incidents involving individual staff members. Rather, many staff — at least four doctors and a number of nurses, some of whom were at a junior level — missed opportunities to recognise and respond to Ms A's serious illness. This is reflective of systemic and organisational issues at Taranaki Base Hospital, for which it is responsible at a service level.

57. In my view, Te Whatu Ora failed to provide services to Ms A with reasonable care and skill for the following reasons:

- There was a significant delay before Ms A was first seen by a doctor, and no senior doctor had substantive involvement in her care until around 2am on Day 3;
- There was a delay by a number of Te Whatu Ora staff in recognising and responding appropriately to Ms A's blood results and other clinical features, which strongly suggested sepsis and the need for prompt escalation of her care;
- On two occasions Ms A's care was not escalated appropriately in line with Te Whatu Ora's EWS Mandatory Escalation Pathway, and the taking of full vital signs and observations for calculation of EWS was poorly adhered to overall; and
- There were significant shortcomings in the quality of the record-keeping by the medical team in the ED and by nursing staff in the ED and on the medical ward.

58. As a result, Ms A did not receive the standard of care and treatment she was entitled to on Days 2–3.

59. As the above failures involved a number of staff across the hospital, I consider that this was a service delivery failure that ultimately was the responsibility of Te Whatu Ora Taranaki. Accordingly, I find that Te Whatu Ora Taranaki breached Right 4(1)[28] of the Code.

60. In its response to the provisional opinion, Te Whatu Ora said that it "unreservedly" accepted the finding that it had breached Right 4(1) of the Code. In doing so, it accepted that it had failed to identify the lack of documentation by the medical team in the ED, and lack of involvement by ED doctors as issues in its RCA. Te Whatu Ora sincerely apologised that "the care provided to [Ms A] did not meet acceptable standards or comply with her rights under the Code".

Other comment — Te Whatu Ora Taranaki

61. On Day 2, three casual pool nurses were working in the ED to cover staff illness, and three of the five experienced nurses rostered on night shift across the medical wards were away due to illness. Te Whatu Ora recognised that staffing was a key issue in Ms A's case, and that it had an impact on the nursing care she received. The RCA found that the lack of experienced nursing staff had lessened the likelihood that Ms A was identified as severely unwell, noting:

> "[Ms A] had body temperatures recorded of 34.7, 35.2, 34.1, 33.4 and 34.1°C between [8.35pm and 1.15am]. This degree of hypothermia suggests overwhelming infection, overwhelming multi-organ failure and imminent death. This fact is well known to experts in sepsis yet it is probably less likely to alert junior staff to sepsis than a high fever which, while it also suggests sepsis, *occurs in a patient well enough to mount a febrile response* [original emphasis]."

62. Dr Barrington-Onslow noted that Te Whatu Ora identified high junior staff ratios as an issue in the RCA. He considered that this was a systemic issue that contributed to Ms A waiting four and half hours in the ED, before being seen by a junior doctor. Dr Barrington-Onslow noted that the ratio of junior doctors in EDs is an issue on a national level. In order to ensure a safe workplace and a training environment that is likely to encourage house officers to consider speciality training in emergency medicine, it is imperative that Te Whatu Ora consider how junior doctors can be supported by their senior colleagues. I suggest that key factors of that support are ensuring that communication channels across the team are clear and open, and that senior doctors are encouraged to model asking probing questions in order to elicit necessary information to inform good decision-making.

63. I am, of course, aware of the pressures hospitals are under at a national level due to an increase in demand, workforce shortages and recruitment challenges. I also recognise that staff moving on or being away sick is outside the control of Te Whatu Ora, and, while frequent, can be unpredictable. Fundamentally, healthcare consumers have the right to expect hospitals to be sufficiently resourced with the appropriate mix of skilled staff to

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

provide safe and competent care. That requires that hospitals have effective contingency plans in place to provide suitable and sufficient cover for staff illness.

64. It would have been appropriate for Te Whatu Ora to have confirmed in the RCA that it has appropriate tools or processes in place to safely manage staff mix and short-notice nursing staff shortages across the hospital. In that respect, a recommendation to review nurse staffing levels in the ED and on the medical ward, and the learning needs of pool/casual nursing staff, would also have been relevant.

Opinion: Dr D — adverse comment

65. Dr D was supervising Dr C in the ED on Day 2, as the medical consultant, Dr E, was off site. After assessing Ms A and receiving the results of her blood tests, including her abnormal lactate level, Dr C asked Dr D for advice about further treatment and investigations.

66. In its RCA, Te Whatu Ora said that Dr D recalled that when speaking to Dr C, "[I] ran out of ideas and suggested [Dr C] speak to the consultant for advice".[29]

67. Dr D spoke to Dr C about Ms A twice. Dr D said that during the second conversation, "[d]ue to the uncertainness of the diagnosis, [Dr D] suggested [Dr C] speak to the Consultant on call for further advice". Dr D was not involved in the further conversations about Ms A, with the exception of reviewing her CT scan at handover between 10.30pm and 11pm, and did not know what was discussed.

68. Dr Barrington-Onslow was clear that Dr D should have personally reviewed Ms A and taken over her care, and that not doing so was a severe departure from the accepted standard of care. Dr Barrington-Onslow stated:

> "The assessment and initial treatment given by [Dr C] was of a good standard. He should have prescribed antibiotics and contacted Intensive Care at this stage, but had no support from his seniors. The registrar [Dr D] should have stopped what [they were] was doing and assist[ed] [Dr C], not tell him to call the consultant. [Ms A] was obviously critically unwell and [Dr D] was on site … [Dr D] should have taken charge of [Ms A] [and] made a decent plan and handed … over to the night team."

69. I acknowledge Dr Barrington-Onslow's advice. It is extremely concerning that Dr D, as a registrar and the most senior member of the medical team in the ED, did not recognise that it was appropriate to personally manage Ms A's investigations and treatment in the circumstances. While there is no certainty that the outcome would have been different, Dr Barrington Onslow advised that "the potential to commence the correct treatment was there". Due to the lack of notes, it is unclear exactly why Dr D did not take responsibility for Ms A's care, and to what extent the busy nature of the ED may have been a factor. While it

[29] Dr C's statement is broadly consistent with Te Whatu Ora's summary.

is indicated that Dr D was also uncertain about how to proceed, that did not negate the need to take charge, review Ms A, and consult with Dr E personally.

70. It is relevant to note that Dr E also provided a statement, in which he said that ultimately he was responsible for the medical care provided by Dr D and Dr C. Dr E said, in part, that he did not adequately appreciate Dr C's inexperience, and acknowledged that his own communication and guidance should have been clearer in some respects. Further, Dr E said that he expected to be telephoned again about Ms A's CT scan results, but that did not happen.

71. In its response to the provisional opinion, Te Whatu Ora stated that it was concerned that adverse comment had been made about Dr D's care. Te Whatu Ora said that "staff resources and [a] lack of clarity around the management of patients referred to [the medical ward] via ED impacted [Dr D's] ability to provide [the] best care to [Ms A]". Te Whatu Ora submitted that Dr D's actions must be assessed within that organisational context.

72. The context Te Whatu Ora has described was carefully considered. In my view, the finding that systemic and organisational issues by Te Whatu Ora caused the failings in Ms A's case does not preclude an adverse comment about Dr D's individual actions.

73. In his advice, Dr Barrington-Onslow identified Dr D's failure to recognise Ms A's serious illness and take responsibility for her care as significant, even amongst the wider service-level failure by Te Whatu Ora. I accept that advice. Dr D should have appreciated that Ms A's clinical history, symptoms and abnormal blood results made her a complex patient who should have been reviewed and managed personally, rather than leaving her care with Dr C.

74. I have, however, balanced Dr D's error against the systemic factors, involving multiple staff, that were responsible for the overall failings in Ms A's clinical care in the ED. Taking that context into account, I consider that the severe departure by Dr D is mitigated, and does not amount to a breach of the Code.

75. In my provisional opinion, I recommended that Dr D reflect on my comments and those of Dr Barrington-Onslow in respect of Ms A's case. In response, Dr D accepted that direct oversight of Ms A's initial assessment should have been provided, including a personal review and liaising between Dr C and Dr E. Dr D has reflected on the care provided to Ms A, and has taken learnings from it to inform future practice.

Changes made since events

76. I note that a number of changes and improvements have been made by Te Whatu Ora since Ms A's case.

Sepsis education

77. Te Whatu Ora reported that its sepsis awareness and treatment timelines have improved. This follows its commencement, in June 2021, as the pilot site for the Sepsis Ready

programme about early sepsis intervention and treatment.[30] The pilot launched in Te Whatu Ora Taranaki EDs and Te Whatu Ora is now carrying out a final evaluation of the programme.

78. In November 2020, as part of the implementation of Sepsis Ready, Te Whatu Ora provided the following (non-mandatory) training for doctors and nurses:

- Two multidisciplinary grand rounds[31] on sepsis and deteriorating patients delivered by HQSC and an Intensive Care consultant; and
- Five master training sessions with an Infectious Diseases consultant and Trustee of the Sepsis Trust NZ, which included the use of a sepsis identification and treatment decision tool.

79. Te Whatu Ora said that "multiple" clinical professions from different services attended the training sessions, which were recorded for future use. The following actions were also taken:

- The Medical Director of Intensive Care trained, and continues to train, new medical staff on the Sepsis Ready assessment tools;
- Lanyard reference cards about sepsis identification were circulated for Sepsis Ready, and are given to junior doctors at orientation;
- New adult and paediatric ED CAS-card patient documentation has been introduced with more prominent vital signs and abnormal parameters to help quickly determine triage category and sepsis risk;
- Te Whatu Ora's nursing orientation and induction now includes the completion of a sepsis training module on the Ko Awatea LEARN health sector e-learning site; and
- Sepsis screening tools for adult, paediatric and maternity patients were provided to clinical staff to help identify and escalate sepsis cases.

EWS education

80. Te Whatu Ora's EWS policy was updated to reflect the implementation of the national standardised New Zealand EWS (NZEWS).[32] An extensive education campaign and roll-out programme was carried out for staff in relation to the NZEWS. Te Whatu Ora said that it had made a "huge" difference to patient care, with the type of escalation calls moving from 60% pre-arrest/40% cardiac arrest, to approximately 90% pre-arrest/10% cardiac arrest between 2017 and 2022. Te Whatu Ora said that it continued to see "significant improvements" in this respect, due in part to the new PAR nurse service and training of selected ward staff in advanced life support.

[30] Following engagement with the New Zealand Sepsis Trust, the Accident Compensation Corporation, and the Health Quality & Safety Commission (HQSC).
[31] Formal presentation of a clinical issue by an expert.
[32] https://www.hqsc.govt.nz/resources/resource-library/new-zealand-early-warning-score-vital-sign-chart-user-guide/.

81. Te Whatu Ora confirmed that it did not trial an electronic EWS track and trigger system, as it considered that it should be trialled at a national level.

Patients at Risk (PAR) nursing service

82. The 24/7 PAR nursing service was introduced in November 2019. The PAR nurse team is made up of clinical nurse specialists with a background in acute and critical care. They support nursing and medical staff to identify and co-ordinate care for deteriorating and acutely unwell ward patients, respond to clinical emergencies and acute referrals, monitor patients recently discharged from ICU, and provide education and advice in the management of acutely unwell ward patients.

83. Te Whatu Ora said that there was a significant increase in the number of PAR nurse calls in February 2020, as awareness of the service increased. It said that its PAR nurse data has shown a trend of "earlier recognition of patient deterioration, more timely interventions, escalation of care and better patient outcomes".

Speaking Up for Patient Safety initiative

84. In November 2022, Te Whatu Ora launched the Speaking Up for Patient Safety campaign (which had been delayed by the COVID-19 pandemic). The HQSC video[33] on this topic was utilised to head the campaign, alongside face-to-face teaching and presentations. The Speaking Up for Patient Safety video is presented at Early Warning Signs/Cardiac Resuscitation training, where it is taught to the majority of front-line staff, who have to maintain basic resuscitation skills as part of two-yearly mandatory training. The Associate Chief Medical Advisor also delivered presentations on this topic to junior doctors in December 2022 and February 2023.

85. A Speaking Up for Patient Safety training package has since been developed and will be available to all staff on Ko Awatea LEARN once finalised. Te Whatu Ora intends to carry out an evaluation of the initiative in future.

Certification of death

86. Te Whatu Ora recognised that delays in certifying death can occur when there is an autopsy pending. As a result, ICU registrars now certify death if a delay is likely to occur, to ensure timely release of the deceased from the ICU.

Recommendations

87. In making final recommendations, I have taken account of Te Whatu Ora's response to my provisional opinion, which addressed six of the seven provisional recommendations.

88. I have also taken account of a previous investigation of Te Whatu Ora Taranaki by Deputy Health and Disability Commissioner Deborah James, which concluded on 20 June 2022.[34] As

[33] https://www.hqsc.govt.nz/resources/resource-library/speaking-up-for-patient-safety/.
[34] 20HDC00333.

the investigation involved a similar complaint, many of the recommendations Deputy Commissioner James made are also relevant to Ms A's case, and so were not duplicated.

89. I recommend that Te Whatu Ora Taranaki, further to the verbal apologies already offered, provide a formal written apology to Ms A's family for the breaches of the Code that are identified in this report. The apology should be sent HDC, for forwarding to Ms A's family, within three weeks of the date of this report.

90. In response to my provisional recommendation, Te Whatu Ora considered the changes it could make regarding how unwell patients referred to the ED are managed, to ensure that the knowledge and expertise of ED doctors is utilised if and when required, regardless of which specialty a patient is referred to for review. Te Whatu Ora submitted the following process and service improvements, and I am satisfied that these actions are appropriate to meet this recommendation:

- All positive lactate results of 2 or more for ED patients are phoned to the ED senior medical officer (SMO) telephone. ED SMOs then relay the results to the patient's admitting service (for instance, medical) and ensure that sepsis is considered and/or managed appropriately.
- A blood gas analyser is now in the ED (awaiting full installation) so that ED SMOs will be immediately aware of abnormal results.
- Nursing staff have received further training about sepsis and have been instructed to escalate patients with an EWS of 6 or more to the service SMO if the assigned doctor is not responding appropriately to the deterioration of the patient.
- ED SMOs will review patients admitted to the ED by other services if more than six hours have passed since referral and the patient has not been assessed for deterioration.
- In future, all patients will have triage and an initial evaluation in the ED, with the medical admitting registrar based in the Acute Assessment Unit in a new building.
- If a patient admitted to the ED by another service becomes critical and is being evaluated by the on-call SMO from that service, an ED SMO will discuss any emergency management concerns or plans with that SMO directly.

91. In response to my provisional recommendation, Te Whatu Ora provided details of how documentation compliance is regularly monitored and non-compliance with the required standard is addressed, for both medical and nursing staff.

92. Te Whatu Ora said that "ongoing and severe staff shortages" have impacted its ability to conduct regular random audits of its information management system, but it is committed to doing so once staffing improves. In the meantime, Te Whatu Ora proposes to offer staff record-keeping training, and introduce signs in staff-only areas, the ED, and on the wards, to remind staff of their record-keeping obligations.

93. I recommend that Te Whatu Ora provide HDC with further information, in particular a copy of the information management system random audit process, including how anomalies and omissions are dealt with, in addition to details of the proposed record-keeping training and its scheduled start and completion dates.

94. In response to my provisional recommendation, Te Whatu Ora provided information about whether it had a tool (such as Care Capacity Demand Management (CCDM))[35] or process guidelines in place to safely manage nursing resources and shortages and meet the Safe Staffing Accord (SSA).[36] Te Whatu Ora also provided details of the most recent review of efficacy data relating to that tool/process.

95. Te Whatu Ora said that it is still in the process of implementing CCDM. The tool is currently in use in the EDs and most inpatient areas at Te Whatu Ora Taranaki hospitals, and implementation is planned throughout all inpatient areas. Te Whatu Ora advised that it reports to the Ministry of Health monthly regarding CCDM implementation, in addition to providing quarterly milestone reports that show the extent to which its different services have adopted CCDM. Te Whatu Ora said that it is actively engaged with the Ministry of Health to remediate areas where it has fallen short of its SSA obligations. I am satisfied that Te Whatu Ora has provided sufficient information to meet this recommendation.

96. In response to my provisional recommendation, Te Whatu provided details of how the learning needs of pool and casual nursing staff are reviewed and measured, and how any necessary training is implemented.

97. Te Whatu Ora said that its register of casual and pool nursing staff is actively managed. Nurses on the register must have a current annual practising certificate, which confirms that they have completed the continuing professional development requirements of the Nursing Council of New Zealand. Te Whatu Ora stated that casual and pool nurses are required to participate in the same induction as employed staff, and they have access to all staff training and educational resources and are encouraged and paid to attend in-service training. It said that the clinical nurse educators in each department regularly assess the education needs of all nursing teams and tailor in-service education to meet those needs.

98. I recommend that Te Whatu Ora provide further information to HDC, in particular copies of clinical nurse educator assessments from the medical ward (or another medical ward) for three consecutive months during the last six months, which detail how staff nurse and casual/pool nurses' assessments and training needs were determined, and the relevant learning implemented.

[35] A tool designed to determine staffing requirements for Te Whatu Ora regions and support the development of safety strategies and reporting.

[36] On 30 July 2018, the New Zealand Nurses Organisation, the former District Health Boards (now Te Whatu Ora regions) and the Ministry of Health signed the Safe Staffing Accord, which committed to ensuring sufficient nursing and midwifery staffing in public hospitals to ensure the safety of both staff and patients.

99. In response to my provisional recommendation, Te Whatu considered whether the standard in the Certification of Death Protocol (January 2021) could be amended to include the timeframe within which certification of death and release of the deceased should occur, if possible, to provide more effective guidance to the clinical staff involved.

100. Te Whatu Ora said that its two current policies relating to certification of death and release of the body[37] make it clear, respectively, that the process should be completed "in a timely manner … for speedy release" and "as soon as possible after death". It carefully considered including a specific timeframe in the policies but said that it concluded that the current language properly recognises that individual factors in each case affect the timing of certification and release of the body, and setting a single timeframe for managing all deaths would be too "rigid". Te Whatu Ora also considered that a set timeframe, such as 24 hours, may result in the process taking longer, as staff may not prioritise certification and release if they know the policies allow them 24 hours. I am satisfied that Te Whatu Ora's consideration of this issue was appropriate to meet this recommendation.

101. Te Whatu Ora's responses to the recommendations made in paragraphs 93 and 98 should be sent to HDC within four months of the date of this report.

Follow-up actions

102. A copy of this report will be provided to the Coroner.

103. In response to the provisional opinion, Te Whatu Ora asked that I reconsider my proposed referral to the Director of Proceedings. It stated that it has unreservedly accepted my findings and has already undertaken, or committed to undertake, significant recommended improvements and monitoring to prevent a similar failure occurring in future. Te Whatu Ora suggested that remedies available in the Human Rights Review Tribunal would not take matters further, and there is little more to be gained by a referral to the Director of Proceedings. Te Whatu Ora submitted that the cost of a referral to the Director of Proceedings therefore would not be in the public interest.

104. I have carefully considered Te Whatu Ora's submissions. While I accept that Te Whatu Ora has made many improvements and committed to learning from Ms A's case, the numerous systemic and organisational failures that occurred remain concerning. Having regard to the substantial body of clinical opinion that indicates that the care provided to Ms A fell significantly below the accepted standard, I consider that there is a high public interest in holding Te Whatu Ora accountable for the failures identified in the services it provided to her. I therefore consider that it is in the public interest to refer this matter to the Director of Proceedings in accordance with section 45(2)(f) of the Health and Disability Commissioner Act 1994 for the purpose of deciding whether any proceedings should be taken.

[37] "Inpatient Death Protocol and Coroner Case Guidelines" (July 2021) and "Death of a Patient and Immediate Care and Transport of Tupāpaku (Deceased) Policy and Guideline" (January 2021), Te Whatu Ora Taranaki.

105. A copy of this report with details identifying the parties removed, except Te Whatu Ora Taranaki, Taranaki Base Hospital, and the advisors on this case, will be sent to Te Tāhū Hauora Health Quality & Safety Commission and the New Zealand Sepsis Trust.

106. A copy of this report with details identifying the parties removed, except Te Whatu Ora Taranaki, Taranaki Base Hospital, and the advisors on this case, will be sent to the Medical Council of New Zealand, and it will be advised of Dr D's name in covering correspondence.

107. A copy of this report with details identifying the parties removed, except Te Whatu Ora Taranaki, Taranaki Base Hospital, and the advisors on this case, will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Addendum

108. The Director of Proceedings decided not to institute proceedings.

Appendix A: Independent clinical advice to Commissioner

The following independent advice was obtained from Dr Stuart Barrington-Onslow:

"I have read and agreed to follow the guidelines for independent advisers provided by the office of the Health and Disability Commissioner.

I am an Emergency Medicine Specialist, qualifying as a doctor in 1988 at the University of London. I have been practising Emergency Medicine since 1997 and became a Fellow of the Australasian College for Emergency Medicine in 2007. I am currently employed as a full-time specialist at the Christchurch Hospital Emergency Department.

I have been asked to provide independent expert advice regarding the care provided to [Ms A] in the Emergency Department of Taranaki Base Hospital from [Day 2]. To aid me in my advice I have received documentation from the commissioner's office that includes:

1. Letter of complaint dated 10 July 2020;
2. TWO Taranaki's responses to HDC dated 25 January 2021 and 9 June 2021, including statements provided by medical and nursing staff;
3. [Ms A's] clinical records from TWO Taranaki for the period [Days 2–3];
4. Relevant TWO Taranaki policies:
   — *Initial Management of Neutropenic Sepsis Medical Guidelines* (September 2016);
   — *Emergency Department Sepsis Pathway* (November 2017);
   — *Emergency Department Adult Documentation Procedure* (May 2017);
   — *Systemic Antibiotic Guidelines* (undated but confirmed contemporaneous)

Summary of Events

These are provided in the documentation I have received.

I have copied the background summary from the office of the HDC as there are minimal notes from the Emergency Department.

As an advisor in Emergency Medicine, I feel able to comment on the treatment provided by the General Medical team as they are dealing with an emergency in my opinion.

Summary from the office of the HDC

[Ms A], aged [in her forties], had metastatic colorectal cancer. [In] 2019, she underwent Selective Internal Radiation Therapy (SIRT) [overseas]. On [Day 1], [Ms A] returned to New Zealand but continued to feel unwell post-procedure. Her GP contacted Taranaki Base Hospital (the hospital) on [Day 2] to request she be seen for medical review.

[Ms A] arrived at the hospital's Emergency Department (ED) at around 1.00pm on [Day 2]. She received IV fluids, pain relief, PPI and anti-nausea medication. Bloods were taken and a CT scan was arranged. [Ms A] became increasingly unwell while in the ED, with her blood results (particularly high lactate) indicating critical illness. Between 9.00 and 10.00pm, [Ms A] was transferred to [the medical ward] and taken for the CT scan. At a medical review in the early hours of [Day 3], she was recorded as being significantly dehydrated and having ongoing pain, 'unrecordable' blood pressure, cool peripheries and episodes of unresponsiveness. [Ms A] was catheterised after becoming doubly incontinent.

[Ms A] was transferred to the HDU at around 2.40am. Antibiotics were given for the first time at 4.30am. Her condition deteriorated, with her blood pressure trending down, and she went into cardiac arrest at 5.28am. [Ms A] was resuscitated but did not respond to supportive treatment. She was extubated and palliated shortly afterwards, and passed away at 8.20am on [Day 3].

Specific Questions

My opinion will be as specific as possible without knowledge of the extent of [Ms A's] disease and the amount of information she was given post her SIRT and whether it was presented to the Emergency Department.

1. The standard of the medical care in the ED, [the medical ward], and the HDU respectively.

Emergency Department

a. [Ms A] was referred to the medical team at Taranaki Base Hospital

   i. It is claimed the referral was never received as it was faxed, and this system has been improved by the introduction of an electronic system

b. Triage note in ED

   i. [Ms A] arrived at the Taranaki Base Hospital (the Hospital) at 1305hrs on [Day 2]. She was triaged at 1327 and given a triage score of 3. The triage note in my opinion is well below an acceptable standard as it does not mention recent active treatment for her cancer, her recent return from [overseas], and there is no mention of her temperature or pain score. I see in the response from [the] Chief Operating Officer that 'a temperature at triage is not mandated by the ATS (Australian Triage Scale) guidelines'. This statement is incorrect, see Emergency Triage Education Kit

   p24 (https://acem.org.au/getmedia/c9ba86b7-c2ba-4701-9b4f-86a12ab91152/Triage-Education-Kit.aspx)

   Environment 'Assess temperature. Hypothermia and hyperthermia are important clinical indicators and need to be identified at triage.'

In my opinion the triage was moderately below the standard of care, and the triage staff need to be taught to improve their skills in triage.

c. Sepsis

i. The Emergency Department Sepsis pathway was not followed when it should have been.

ii. [Ms A] was certainly immunocompromised/chronic illness, she had undergone a recent surgical/invasive procedure and her heart rate was greater than 90 beats per minute.

iii. This should have mandated an up-triage to ATS of 2 and appropriate investigations and therapy commenced as per the guideline.

This was not done due to the lack of appreciation of how unwell [Ms A] was, and in my opinion is a severe deviation from standard of care as this was the initial step in the deterioration of this lady. Again education is required to remedy this issue especially in reference to patients with malignancies.

d. Time in the Emergency Department

i. There are no notes by an Emergency Department doctor which I find surprising if [Ms A] spent a prolonged period in the ED with nothing done. I would have expected an ED nurse to inform one of the ED doctors about her and potentially request a rapid review.

ii. After the vital signs at triage, the next documented set are at 1455hrs which showed an elevated heart rate of 119 beats per minute with other vital signs being acceptable. There is much mention of EWS (early warning score) in the ED, but it is not mandated in the Emergency Department as we are supposed to recognise unwell patients and act accordingly. I would expect an ED doctor to be informed of this significant change in heart-rate in a patient with significant co-morbidities.

iii. The next set of observations were at 1735hrs when the General Medical Team initiated an assessment after having difficulty finding intravenous access.

iv. The nursing notes in the ED recorded from 1940hrs to 2050hrs are below an acceptable level with the one prior being good.

[Ms A] was in ED from 1305hrs, and it appears she was not seen by a doctor until 1730 hrs. In my opinion this is a severe deviation from standard of care, but it stems from the lack of recognition that the lady was so unwell. Unfortunately, due to government policies, our Emergency Departments are understaffed and overcrowded and many triage 3 patients will wait this long for a medical assessment. It is, in my opinion, more of a systematic issue than an individual one. Experienced staff are leaving EDs in droves due to the deteriorating working conditions to be replaced by more junior staff who do not yet have the required experience themselves.

e. Medical Assessment in the Emergency Department.

i. [Ms A] was assessed by [Dr C] around 1700hrs to 1730hrs. [Dr C] was asked by his registrar, [Dr D], to see her. I have no hard copy of [the] notes, just [Dr D's] statement.

ii. The assessment and initial treatment given by [Dr C] was of a good standard. He should have prescribed antibiotics and contacted Intensive Care at this stage, but had no support from his seniors. The registrar [Dr D] should have stopped … and assisted [Dr C], not tell him to call the consultant. [Ms A] was obviously critically unwell and [Dr D] was on site (I presume). The blood tests showed a moderately severe metabolic acidosis with a raised anion gap and an elevated lactate. The lactate was 12, [Dr C] [believed] this may have been due to a prolonged tourniquet time when trying to obtain intravenous access. There is no evidence that tourniquet causes raised lactate. She also had moderate renal impairment, abnormal liver function and an elevated C-reactive protein. The reliance on the latter test in the acute setting is a personal bugbear of mine, so I will not discuss it. The full blood count was also grossly abnormal with an elevated haematocrit suggestive of significant dehydration, an extremely high white blood count suggestive of infection and inflammation and a raised platelet count. The INR a test of clotting time determined by liver function (or medications) was also elevated at 1.9 suggesting deterioration in liver function.

iii. [Dr C] spoke to the Specialist on call, [Dr E], who suggested a CT scan of the abdomen. This was appropriate, but he may not have shared his concerns with the team.

The above findings strongly suggest septicaemia, and in my opinion, antibiotics should have been commenced to cover a gastrointestinal source. I have major concern that the registrar, [Dr D], did not review the potentially sickest person in the hospital that night. This is a severe deviation from standard of care and I feel they need further instruction into their role. [Dr D] should not be allowed to leave a [house officer] to deal with a complex and critically unwell person on his own in the future.

In ED, [Ms A] was treated with intravenous fluid, analgesia and antiemetic. The last for her nausea.

[The medical ward]

f. [Ms A] arrived on the ward at 2240hrs after her CT scan.

i. The nursing care in my opinion was of a high standard with obvious concern that was actioned.

ii. [Ms A] had episodes of short lasting unresponsiveness, and the nursing staff informed the night house officer who made a good assessment and sensible plan. The house officer [Dr E] discussed with the night medical registrar [Dr G] who suggested intravenous antibiotics ongoing fluid resuscitation and transfer to the

HDU (High Dependency Unit). The antibiotic Ceftriaxone was given at an unknown time.

iii. [Ms A] was transferred to the HDU at 0220hr on [Day 3].

In my opinion, both the nursing and medical staff on [the medical ward] performed their duties to a high standard in a difficult situation, and should be commended.

ICU

a. [Dr E] transferred [Ms A] to HDU where the ICU (Intensive Care Unit) registrar, [Dr H], gave ongoing care with input from the night Medical Registrar, [Dr G].

i. [Dr H] provided excellent care by recognising the immediate need for circulatory support with vasopressors (drugs to maintain the heart rate and blood pressure), adjuvant antibiotics (to treat presumed abdominal sepsis, Metronidazole and Gentamicin), and to obtain further information regarding the SIRT therapy, and the prognosis from [Ms A's] oncologist in [DHB2]. This was aided by [Dr G].

ii. Despite significant increase in support, [Ms A] continued to physically deteriorate. Her parents and sister had been called, with documentation that she would want all support.

iii. At 0500hrs [Ms A] had a cardiac arrest, she was resuscitated with one round of CPR and intubated (a tube placed through her mouth and into her windpipe). She had central venous access placed via her right internal jugular vein (this is a tube that allows more potent drugs to be administered into the circulation) and was ventilated. She was given both adrenaline and noradrenaline to try to support her circulation but, despite this, her physiological parameters continued to worsen. On discussion with the family, the breathing tube was removed and she was allowed to die peacefully.

Again, I have no concerns regarding the care given in the ICU. It was of a high standard with rapid recognition of how unwell [Ms A] was and a safe and efficient treatment plan.

2. Whether medical assessments were satisfactorily carried out and recorded.

a. There was no medical assessment undertaken by an Emergency Doctor in the Emergency Department, and there was no recognition of the potential sickness of [Ms A].

In my opinion this should have been relayed to an ED doctor, and they should have passed that onto the Medical or Intensive Care Teams. I do not know if this is a one-off event, but would suggest the ED seniors should discuss, face to face, the management of unwell inpatient referrals in the ED.

b. There was an assessment by the medical house officer in ED, but there are no notes. The only information I have is from [Dr C's] statement which I commended for someone so junior.

c. The medical registrar [Dr D] has not written any notes as they had not seen the patient.

   As mentioned, this is a severe departure from any acceptable standard of care.

d. The notes of the night medical doctors were adequate for [Dr E] and [Dr G]. The latter were a bit disjointed as they were written in retrospect.

e. The ICU registrar [Dr H's] notes are very good.

3. Whether appropriate investigations were undertaken

a. Yes, but not in a timely manner. Also, I would have expected at least a chest X ray early in the investigation of someone generally unwell.

   This is a minor deviation from standard of care.

4. Whether consultation/collaboration between the medical team and other specialities was adequate and appropriate.

a. There appears to have been none between the ED and Medical Team.

b. I do not know if [Dr H] received any communication directly from the medical team regarding the transfer of [Ms A] to the HDU.

These issues need to be discussed by clinicians at the Hospital to arrange a safer journey for patients.

5. Whether relevant ED policies were adhered to

a. No. Specifically the sepsis pathway was not adhered to.

b. But was this due to lack of education of ED staff or due to the apparent separation of ED from in-patient services?

c. Both these need correcting.

With the outcome of [Ms A's] care being what it was, this would be a severe deviation from standard of care, as the potential to commence the correct treatment was there. Unfortunately, the outcome could still have been the same.

6. The adequacy and timeliness of the clinical decision making, planning and treatment.

a. This was very slow and disjointed.

b. The day medical registrar should have taken charge of [Ms A], made a decent plan and handed it over to the night team. [Dr D] did none of these.

This was a severe deviation from standard of care until the night staff became involved.

7. Whether communication with [Ms A's] family was adequate and appropriate

a. Yes

b. There is documentation at around 0200hrs that [Ms A] was asked if she wanted her local family called. She declined.

c. It was unfortunate that they arrived just before her cardiac arrest with no knowledge of how unwell she had become.

I feel this is not a deviation from standard of care, as when you are dealing with a critically unwell person at night when staff levels are low, this cannot be expected to be efficient. In my department we are fortunate to have Social Workers on site to aid (perform) this role.

8. The adequacy and appropriateness of the TWO Taranaki policies provided

a. The policies are good, they just need to be adhered to.

9. Any other matters in this case that you consider warrant comment.

a. My condolences to the loved ones and friends of [Ms A].

b. Regarding the Advocacy letter from [the Advocacy Service] 10th July 2020, my response to each paragraph.

i. I have mentioned my concerns regarding the time in ED and lack of comprehension of the blood tests.

ii. She did not receive antibiotics in a timely manner, but I am not sure it would have made a difference with the amount of disease described on the CT. We will never know. There would not have been a surgical option, she was too unwell. The first two drops in blood pressure occurred at midnight on [Day 3] and 0020hrs. They both responded quickly to fluid. After the third episode at 0210hrs she was transferred to the ICU. Her blood pressure, via an arterial catheter had normalised.

iii. [Ms A] did not want her family informed at 0200hrs, and I hope I have explained why the family was not informed in a timely manner. Low staff numbers dealing with a critically unwell person. I am not aware of tumours in her brain or spine, but she did have them in her lungs.

iv. I have no access to why there was a delay to confirmation of death.

v. I have not answered the key points directly but hope most of the explanation is above.

Dr Stuart Barrington-Onslow FACEM
Emergency Medicine Specialist, November 2022”

Appendix B: Independent clinical advice to Commissioner

The following independent advice was obtained from Nurse Practitioner Fay Tomlin:

"I have been asked to provide an opinion to the Commissioner on case number **20HDC01240**. I have read and agree to follow the Guidelines for Independent Advisors (Office of the Health and Disability Commissioner, 2019). I am not aware of any conflicts of interest.

I am a Nurse Practitioner (NP) working in a rural New Zealand Emergency Department since 2016, I previously worked in a Primary Care clinic 2014–16 and as a Nurse Manager of an Accident and Medical department in New Zealand (2012–14). Prior to emigrating I was Matron of a large Urgent Care Centre in the UK from 2006–2012. My qualifications include a MSc in Advanced Clinical Healthcare Practice, Bachelor (Hons) of Nursing and Bachelor (Hons) of Midwifery and various post-graduate diplomas and relevant advanced clinical skills courses. I have written numerous guidelines and policies around the subject area of triage, vital signs and clinical observations within an urgent, unscheduled, and the emergency care environment. I regularly mentor and provide clinical supervision to Nurse Practitioner Interns, post-graduate Registered Nurses and under-graduate student nurses in a variety of clinical settings, including emergency departments.

I believe I have the relevant experience and qualifications to be able to provide my opinion and compile a report on the nursing care provided to [Ms A]. I am aware of hindsight bias and endeavour to review the facts and base my opinions on those facts and clearly articulate and reason how I reach my opinions.

My instructions from the Commissioner are as follows:

With reference to the enclosed clinical records, statements, policies, and other documents, please advise whether you consider the nursing care provided to [Ms A] by TWO Taranaki was reasonable in the circumstances, and why. In particular please comment on:

1. The standard of nursing care in the ED, [the medical ward], and the HDU respectively;
2. Whether the nursing assessments of [Ms A] were adequately carried out and recorded;
3. Whether the taking and recording of vital signs was adequate;
4. Whether the pain management was adequate;
5. Whether escalation protocols were of an appropriate standard;
6. Whether nursing handovers were of an appropriate standard;
7. Whether communication with [Ms A's] family was adequate and appropriate;
8. The reasonableness of the actions of Nurse Co-ordinator [RN I] in respect to [Ms A's] nursing care on [the medical ward], in particular:

a. [RN I's] response to the concerns [RN J] raised with her about [Ms A] having abnormal blood results; and
b. [RN I's] comments on her statement on 3 June 2021 about whether accessing or interpreting blood results are within a nurse's scope of practice.

9. The adequacy and appropriateness of the TWO Taranaki policies provided; and
10. Any other matters in this case that you consider warrant comment.

For each question, please 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 (mild, moderate, or severe) do you consider this to be?
c. How would it be reviewed by your peers?
d. Recommendations for improvement that may help to prevent a similar occurrence in future.

Documents provided:

1. Letter of complaint dated 10 July 2020
2. TWO Taranaki's response to HDC dated 25 Jan 2021 and 9 June 2021, including statements provided by medical and nursing staff;
3. [Ms A's] clinical records from TWO Taranaki for the period [Days 2–3]; and
4. Relevant TWO Taranaki policies:
   — *Initial Management of Neutropenic Sepsis Medical Guidelines (September 2016);*
   — *Emergency Department Sepsis Pathway (November 2017); and*
   — *Emergency Department Adult Documentation Procedure (May 2017)*

Brief factual summary:

[Ms A], aged [in her forties], had metastatic colorectal cancer. She underwent Selective Internal Radiation Therapy (SIRT). On [Day 1], [Ms A] returned to New Zealand but continued to feel unwell post-procedure. Her GP contacted Taranaki Base Hospital (the hospital) on [Day 2] to request she be seen for medical review.

[Ms A] arrived at the hospital's Emergency Department (ED) around 1.00pm on [Day 2]. She received IV fluids, pain relief, PPI and anti-nausea medication. Bloods were taken and a CT scan arranged. [Ms A] became increasingly unwell while in ED, with her blood results (particularly high lactate) indicating critical illness. Between 9.00pm and 10.00pm, [Ms A] was transferred to [the medical ward] and taken for the CT scan. At medical review in the early hours of [Day 3], she was recorded as being significantly dehydrated and having ongoing pain, 'unrecordable' blood pressure, cool peripheries and episodes of unresponsiveness. [Ms A] was catheterised after becoming doubly incontinent.

[Ms A] was transferred to the HDU at around 2.40am. Antibiotics were given for the first time at 4.30am. Her condition deteriorated, with her blood pressure trending

down, and she went into cardiac arrest at 5.28am. [Ms A] was resuscitated but did not respond to supportive treatment. She was extubated and palliated shortly afterwards, and passed away at 8.20am on [Day 3].

My expert advice:

1. The standard of Nursing Care provided in the Emergency Department (ED) on [the medical ward] and on the High Dependency Unit (HDU):

Having reviewed all the clinical notes provided for each clinical setting, I can read that there were minor and moderate omissions and departures from the expected standard of nursing care provided to [Ms A] between her arrival in ED and her transfer to the ward approximately 8 hours later and her subsequent nursing care and transfer from the medical ward to the HDU. However these points and my opinions are all detailed and explained in individual sections — Section 2 (nursing assessment), Section 3 (vital signs), Section 4 (pain management), Section 5 (escalation protocols), Section 6 (Nursing handovers), and Section 7 (communication with [Ms A's] family) and in each section are divided further into the three clinical settings. I feel that the sections below provide the details and cover the broad subject of 'the standard of nursing care' for the Commissioner.

2.a Nursing assessments of [Ms A] — were they adequately carried out and documented?

The first nursing assessment in ED was the triage assessment. The ED record demonstrates to us the triage time was 22 minutes after arrival, more than ideal but the Taranaki DHB ED Adult documentation Procedure does not give a specific time frame, it states 'on arrival' and echoes the prompt assessment of T1, T2 seen immediately and then the rest in order of arrival. Whilst the Australasian Triage Score is still widely used across the country, it is acknowledged that there are many models in use and it is no longer a single queue for a doctor situation (Ministry of Health, 2014). The 22 minute time frame most likely is reflective of the business of the designated triage nurse at the time.

There is no explicit mention within the notes of when [Ms A] was brought into the department to rest on a bed in a cubicle or chair or if she was returned to the waiting room after this first brief initial assessment. It is common practice for a T3 case to be brought through into the main department by a senior nurse (the clinical co-ordinator in this case) as soon as space is available as it's the expectation they will be reviewed by a clinical decision maker (ED doctor or nurse practitioner, or specialist team if a direct referral like in this case) within 30 minutes (College of Emergency Nurses New Zealand, 2018, Taranaki DHB Emergency Department Adult Documentation Procedure, 2017).

On the ED chart page one, which relates to the triage assessment, it is written 'medical review — unwell' for presenting problem but it is not ticked if that speciality team was called or not. [Dr C's] … account of [Ms A's] admission confirms she was not reviewed by the ED doctors she was a direct referral to medicine from the GP. The triage nurse's

notes lack details of signs and symptoms (potentially due to the initially missing faxed referral document) should have included information supporting their choice of T3 category — pain, nausea, dehydration symptoms, clammy cool peripheries, dizziness, level of alertness, recent radiation treatment etc. There is no documented 'SOAP' Subjective, Objective, Assessment, Plan of care, written as per the standard outlined in Taranaki's ED Adult Documentation Procedure (2017).

There are no concurrent narrative notes written in the 'continuing assessment and care record' part of the ED chart as another set of vital signs was documented at 14:55. The nursing assessment narrative notes are limited to an entry at 17:35 stating that 4 x IV access attempts were unsuccessful (didn't stipulate why e.g. cool peripheries, hypovolemic?) and that the ED MO (medical officer) gained IV access using ultra sound — again after multiple attempts according to [Dr C's] account. It does take several minutes to attempt to insert a peripheral intravenous access cannula so I can understand there was much delay due to multiple attempts here but the nursing documentation of nursing assessment is lacking details including who is the primary nurse responsible for [Ms A].

Interventions such as medication administration (two types of IV pain relief and possibly two anti-emetic medications (documentation is incomplete for ondansetron) and omeprazole (a Protein Pump Inhibitor — PPI) and the first litre of IV fluids are mentioned (these are co-signed as given between 17:30 and 17:54). The notes also mention that the patient was given the buzzer to notify staff if any change to pain/nausea which is reassuring to read, however there is no evidence here of any further nursing assessment.

The 19:40 entry mentions care was taken over at 19:00 and that repeat bloods had been drawn. Reading the doctor's account I can ascertain this second blood gas sample was due to concerns of elevated lactate being due to prolonged tourniquet time with [Ms A's] clinical appearance not matching the initial elevated result. The nursing note continues to say that the medical review was in progress. The ED nursing notes have the next entry timed at 20:50 as 'F APP' continues (presuming this refers to the titrated doses of IV fentanyl for pain relief), medical review completed, IV fluids continue, patient booked (for admission) [medical ward], accepted for transfer. Neither of these narrative entries provide us with additional nursing assessment details. Three titrated doses of fentanyl (pain relief) are co-signed but no indication of effectiveness or not (discussed further in section 4), no description of ongoing signs/symptoms. Vital signs are specifically discussed in section 3 below. I suspect the minimal nursing assessment documentation during [Ms A's] time in ED reflects the busyness of the department at the time and the prolonged time taken up with multiple IV access attempts and medical review which the nursing staff may not have been present for when they have multiple patients to care for it is only common practice to accompany a doctor doing a medical review if a chaperone or additional therapeutic support is needed by the patient/ whānau. A fluid balance chart was correctly commenced at 17:00 when intravenous fluids were prescribed and administered.

Nursing assessment on [the medical ward] seems a little disjointed with transfer time from ED being approximately 10pm and the transfer to radiology department for CT scan occurring around (11pm) 30 min handover time between the PM and oncoming night shift nurses. The ward nursing notes (written by [RN J]) commence at 22:40 ([Day 2]) stating arrival from ED, EWS 1, HR 100, pain 7–8/10. Taken for CT. Safety concerns re call bell and assistance for mobilising as unsteady are documented as is use of the fluid balance chart and oral fluids given. At 23:15 it is documented that another dose of IV fentanyl was given (this was the final documentation by [RN J]). There is no documentation provided at the time from the Nurse Co-ordinator ([RN I]) only her statement of recollection of events, dated June 2021, which does mention an incident report that she filed the next morning regarding the unsafe staffing situation. [RN J] did not document at the time that she made the senior nurse aware of her concerns about [Ms A's] condition, the abnormal blood results (twice) or that the senior nurse attended [Ms A's] bedside as support with recording vital signs prior to administration of more IV pain relief medication. [RN J] mentions in her statement, dated May 2021, that she repeatedly voiced her concerns to the senior nurse co-ordinator (going off shift) and night RN (oncoming shift) about not being able to calculate an EWS due to the patient's concerning condition — this was not documented in the contemporaneous notes. [RN J] mentions in her statement than she wrote a statement the next day regarding the care she provided [Ms A], it is not mentioned if that timely statement was used to draft the statement signed nearly two years later which would add strength to the recollection of events.

The nursing notes written at 00:20 (night shift nurse — [RN K]) describes a loss of consciousness episode that happened when [Ms A] wanted to go to the toilet, she was assisted by two nurses to get out of bed, her eyes rolled and was unresponsive for 5 seconds so returned to bed, noted to have been incontinent of urine and became alert and talked again. [RN K] documents the difficulties they had recording the vital signs ('obs'), cold and poorly perfused extremities and paged and discussed the current situation with the HO (House Officer). It is documented that the nurse increased the rate of IV fluid administration as advised by the doctor and made efforts to get a warming device (bear hugger) from ED. 00:40 entry states advised to give stat 1 litre normal saline (warmed fluids) and by then next entry at 00:55 a set of vital signs was recorded in the narrative (same as that recorded on the vital signs chart) but no mention of an EWS figure in the notes only on the vital signs chart. There is no documentation of this EWS (score of 9) which should have triggered [RN K] to contact the Medical Registrar (more senior doctor) and Duty Nurse Manager (DNM), this is discussed further in section 3.

Nursing notes written at 01:20 describe another episode of loss of consciousness (LOC), rapid breathing and inability to record observations (vital signs) post LOC episode, it is unclear (illegible handwriting) if this was witnessed by the junior doctor or if they attended or gave advice over the phone re increase administration of IV fluids. However notes written by the junior doctor at 01:20 (states written in retrospect) says 'discussed with medical registrar with plan as below' which included urinary catheter, strict fluid

balance, ceftriaxone (an antibiotic) repeat bloods and transfer to HDU. According to nursing notes at 02:15 a urinary catheter was inserted (unclear by whom) and the junior doctor attempted to insert an IVL (intra venous line? cannula) and was unable to get blood specimens, the decision was made to transfer to HDU and 5 minutes later [Ms A] left the ward en route to HDU.

Nursing assessment on the High Dependency Unit (HDU) appears also to be referenced as ICU (Intensive Care Unit), it is not clear to me if the HDU/ICU are co-located and/or managed by the same team of nurses at Taranaki Hospital. A form entitled '2300–0700 nurses initial assessment' appears to be written on at the time [Ms A] was intubated as there are details of the endotracheal tube and ventilation machine settings at 7am and 8am, medication/fluid input and urine output for the same two time periods, the rest of the document is blank. Potentially the blank parts are reflective that it was a resuscitation situation and [Ms A's] condition was severe and required hands on critical care prioritised over documentation. Nursing notes referring back to 03:30 were written at 08:00 by [a nurse] and mentioned that [a senior nurse] was also present at all times assisting with the ventilator. It is often the case that notes are written up in retrospect if there isn't a designated scribe available to make notes at the time.

2.b In summary, I believe there is a moderate departure of the standard of care with regards to documentation of nursing assessment regarding [Ms A's] time in the ED. Triage notes are minimal and lack details supporting T3 category choice and the contemporaneous narrative 'continuing assessment' notes over the 6–7 hour time period are also minimal and do not indicate subjective findings of [Ms A's] condition during that time. Whilst we can appreciate there were long periods of time and multiple visits that the nurses were at her bedside (attempted IV access/administering IV medication and fluids etc) the notes do not reflect their observations of [Ms A's] condition at the time, especially in regard to subjective symptoms like pain, nausea, and lethargy or concerning objective blood results which might trigger extra vital sign recording or potential warning of the serious nature of her condition that may warrant consideration of bed placement (ward or HDU admission).

The documentation of nursing assessment whilst [Ms A] was on [the medical ward] also suggests a moderate departure from the standard of care in the case of poorly documented EWS and poorly documented escalation of care involving the clinical co-ordinator of the PM shift or if the Registrar and DNM were not contacted at that point. Potentially my grading could be reduced to mild departure if the nurses did contact the relevant people and believed the registrar was aware via the junior doctor but it was just not documented as such.

The documentation of nursing assessment whilst on the HDU is also likely to be a mild departure from the expected standard of care — no patient label on the Nurses Assessment form, essentially one set of nursing notes covering a period of 4.5 hrs.

2.c As Registered Nurses we are all aware of our Code of Conduct (Nursing Council of New Zealand, 2012), Principle 4.8 says 'keep clear and accurate records' and goes on to explain these should include the discussions you have, the assessments you make, the care and medicines you give and how effective these have been. It is standard practice that contemporaneous notes (electronic or handwritten) are recorded by nursing staff during any ED attendance, admission and duration of stay on a ward or HDU/ICU.

2.d I recommend regular auditing of notes is fed back to nursing staff, in all clinical areas, to highlight any great examples of the standard expected, any omissions and examples of where documentation of nursing assessment could be improved; this would reinforce the understanding that if it's not written down how can you prove that care was provided especially years later as is often the case with HDC reviews.

3.a Adequate taking and recording of vital signs?

The ED notes (a black and white photocopy of the 6 page document) provide the initial figures recorded at the point of triage at 13:27 when [Ms A] was categorised as 'T3' by the triage nurse using the Australasian Triage Score system, and a more comprehensive set of figures recorded at 14:55. The Adult Vital Signs Chart (black and white photocopy of 2 page document) provides evidence of documented vital signs including respiratory rate, supplementary oxygen, oxygen saturation (%), heart rate, blood pressure, temperature and level of consciousness, this is usually colour coded and a scoring system known as EWS (Early Warning Score) is tallied near the bottom of the chart linking to the mandatory escalation pathway that prompts those recording an elevated score into further action/assessment.

Whilst there were a few minor omissions within the triage section of the ED notes (e.g. tick boxes referring to circulation and pain were left blank, no temperature was documented) there was adequate information for the triage nurse to make their decision on the triage category. On the adult vital signs chart five individual sets of vital signs were documented between 17:35 and 20:35 (two entries had the same time of 20:35 with different data within those entries). Unfortunately only 2 of those 5 sets of data had a totalled EWS at the bottom of the chart column. Reviewing the figures I can calculate that an EWS total of 1 at 18:40 may have been incorrect as the saturation percentage was not included and based on the previous and subsequent recordings of 94% this would likely have added an additional 1 point to the score — that said an EWS of 1–2 (up to 5) falls within the same action category of manage pain, fever or distress and increase frequency of vital signs to 2 hourly. All vital signs measurements that were documented were done at approximately 1 hour intervals whilst [Ms A] was in the ED however there are two missing vital signs and several level of consciousness and EWS totals left blank.

The Emergency Department Adult documentation Procedure (2017) version that would have been current at the time of [Ms A's] visit to ED is discussed in section 4 below.

Vital sign recording on [the medical ward] continue on the same adult vital signs chart that was used in ED. The first set is at 23:00 and is incomplete as oxygen saturation and level of consciousness are not written in — the EWS total is also omitted. Using what figures are documented I can calculate that the EWS would have been at least 6 triggering the escalation pathway action of 'House officer review within 60 mins and vital signs Q60 mins'. The chart shows that additional sets of vital signs were recorded at midnight, 00:50, 00:55 01:15 and 02:10 prior to transfer. The first documented calculated EWS total was 9 at 00:55 and 12 twenty minutes later. An EWS of 8–9 or any individual vital sign in the red zone (which I can't see as it's a black and white photocopy), clearly states to the reader that the Registrar and DNM (Duty Nurse Manager) are informed and vitals are to be done every 30 minutes or frequency is to be documented following that review. It is concerning that [Ms A's] already low blood pressure (101/67) is then documented an hour later and again 20 minutes after that as unrecordable. At the same time her pulse, which had previously been increasing, then suddenly decreased and was subsequently unrecordable or unrecorded. There is no dedicated space on this chart for a nurse to put their initials next to the date/time/vital signs so there is no clear accountability for who calculated or didn't calculate the EWS and therefore the action(s) listed in the mandatory escalation pathway on the side of the chart. An EWS of 10+ or any vital sign in the blue zone clearly requires a 'pre-arrest 777' call to be made alongside support for the patient's airway, breathing and circulation, plus continuous monitoring is available as it's highlighted to be an 'immediate life threatening critical illness'.

Vital sign recording on the HDU/ICU continue on the same chart used by ED and the ward. In this more intense clinical setting it would be normal practice for continuous monitoring to be attached to the patient and vital sign figures either to be transcribed regularly onto a paper chart or printed out in a table/graph format. On the paper chart provided HDU staff wrote down a set of vital signs every 15 minutes between 02:45 and 06:15 with an 'unrecordable BP' and presumably constant doctor and/or nurse presence at the bedside, the EWS was not documented underneath the vital sign sets. EWS is designed to provide 'early' warning or safety net to highlight those who may acutely deteriorate in hospital (Health Quality & Safety Commission, 2017), therefore once in a critical condition it is no longer being used to warn of worsening — it is too late for that as the senior staff that need to be aware should be present — the trends of ongoing vital signs can indicate further deterioration, stability or improvement.

3.b In summary, I believe the standard of recording and documenting vital signs in the ED to be a mild to moderate departure from the standard expected due to some omission of figures. The intermittent total of the EWS remained within the lowest range of 1–5 indicating that no additional review by the doctor was indicated unless the staff or patient or family were worried.

The ongoing missing figures of vital signs and EWS have more of an impact during [Ms A's] time on the ward as worsening signs (unrecordable BP, increased respiration rate, more elevated heart rate 120, decrease in temperature) all would be reflected in an

overall elevation of the EWS. I feel the significance increases to moderate to severe departure of the standard of care during this time period.

As mentioned above the vital signs were regularly documented whilst [Ms A] was on HDU/ICU and presumably transcribed from continuous monitoring. The EWS total is not so pertinent in that clinical setting for this case as it was already a critical care resuscitation with senior doctors (registrars both medical and ICR) reacting to the patient/monitor in front of them. So I see no departure from the standard of care for measuring and recording vital signs during that period of [Ms A's] care.

3.c I believe my peers would concur with my reasoning and choice of levels where the recording of vital signs and the EWS has been sub-standard. As already mentioned in section 2.c.

3.d Having read the response letter from Taranaki DHB (dated 25 Jan 2021) I am aware of the steps they have taken or plan to take to ensure such situations don't occur again — a 'speaking up for safety' programme and PAR nurse to provide a senior voice for junior nurses and doctors with regards to patients deemed at risk of clinical deterioration. I have nothing more to add.

4.a Adequate pain management?

In ED [Ms A's] pain score was not documented at point of triage, pain scores were first documented as 2 (out of a maximum of 10) at both rest and movement at 18:40. It is best practice to explain this scoring system to an adult patient and document the figures they provide. When providing any form of pain relief it is best practice to document pain score before and after administration with the aim to get it down to 3 or less than 3/10.

Medication for pain relief was documented as given intravenously at 17:45 and 17:57 (paracetamol and fentanyl respectively) and the pain score approximately 40–50 mins later was 2. Later on at 20:35 (the second set of vital signs recorded at that time) had a pain score of 7–8/10 and this is potentially supported by [RN J's] statement of asking for pain relief to be administered prior to transfer from ED to the ward during the telephone hand over she received where she recalls a pain score of 8/10 was given. On the drug chart a 3rd 20mg IV fentanyl dose is recorded as given at 20:53, the next written pain score recording is at 23:00 (on the ward post CT scan) is 6/10.

It is unclear why [Ms A] only received a 500mg dose of IV paracetamol (usual adult dose is 1 gram) possibly because she took some prior to attending the ED. I am unaware if the Taranaki ED nurses have Standing Orders — these allow suitably trained nursing staff to administer certain medications with strict inclusion and exclusion criteria and are in the most part used when there is a delay before the medical or nurse practitioner (authorised prescribers) can get to the patient to prescribe certain medications. It is common practice for EDs to utilise such processes to reduce or alleviate the need for patients to wait for example for pain relief such as paracetamol and ibuprofen in its

various forms (oral tablets or suspensions, IV injections) or inhaled nitrous oxide (Entonox) for prompt pain relief in certain circumstances (excluding head injury or rib injury cases) or another example would be intramuscular injection of adrenaline in the case of anaphylaxis. I do not know if it would have been an option for the nursing staff looking after [Ms A] to administer (and document) pain relief prior to the doctor charting it, if they were aware of her level of discomfort/pain/nausea.

On the ward section of the vital signs chart there is no documented pain score at all after 23:00. On the narrative note page [RN J] writes at 22:40 'pain 7–8/10 heat pack for pain under back, pt has constant pain' which correlates with the vital signs chart pain score of 6/10 some 20 mins later suggesting the heat pack did help a little. In her statement [RN J] explains how medicated pain relief was delayed prior to CT due to [Ms A's] transfer from ED to [the medical ward] having not been done on the computer system 'medchart'. A photocopy of the 8-day medication chart indicates to the reader that 1g of paracetamol was given at 02:00 on the ward. No concurrent pain scores over this time period are provided on either the vital signs chart or in [RN K's] narrative notes.

Once transferred to HDU/ICU at approx. 02:40 doses of IV fentanyl were given at 03:00, 03:10 and 04:10 before being crossed off the medication chart and IV morphine prescribed and given at 05:00 and (illegible time) 2mgs at 0?:30. No pain scores are documented during this time period on the vital signs chart. The retrospectively documented RN notes pertaining to care given between 3am and 8am mentions the switch from IV fentanyl to IV morphine at [Ms A's] request and reports that she found the paracetamol to be more effective than the fentanyl (but they were unable to repeat paracetamol as last dose was at 2am — has to be minimum of 4 hour gap and max dose of 4g over 24 hrs). There is a subsequent mention of increased WOB (work of breathing) noted to be 'according to ?pain' but no other mentions prior to arrest and intubation.

4.b It is impossible to confidently say that [Ms A's] pain was adequately relieved whilst she was in ED or on the ward or in HDU/ICU. Being the patient's advocate and administering/seeking additional pain reducing medication is at the core of being a nurse, we all wish to reduce suffering, it is hoped medication was given whenever [Ms A] asked for it.

We can see that her lowest pain score of 2/10 was documented at 18:40 whilst in ED but it increased again prior to transfer and likely didn't reduce again below 3/10 for long as regular analgesia was given. It appears that nursing staff in ED were likely aware of her pain as they administered IV paracetamol and fentanyl but the lack of post-medication administration pain scores mean we cannot evaluate its effectiveness.

[RN J] on the ward was aware of [Ms A's] pain and provided a heat pack until the medication system allowed a dose of IV fentanyl to be administered prior to her finishing her PM shift. I do not have access to the medchart system/records to know if any additional pain relief was given after 23:15 by the ward night nurses prior to the paracetamol mentioned at 02:00 and [Ms A's] transfer 40 minutes later.

Pain relief medication and its effect is documented as being discussed with [Ms A] whilst in HDC/ICU and analgesia was provided intermittently between 03:00 and her arrest at 05:28.

In conclusion there is no evidence to say that pain management was not adequate in this case, however effectiveness of the pain relief medication could have been better documented to illustrate and support a statement that it was adequate for periods before wearing off and more being required.

4.c No evidence to suggest there has been a departure from the accepted standard of care.

4.d Analgesia effectiveness could be picked up in auditing of notes and fed back to nursing staff as already mentioned in previous recommendation sections above.

5.a Escalation protocols — were they properly followed?

In ED, the vital signs and (partial) EWSs totalled do not indicate that a senior (Registrar) review was necessary during that time. However a triage category of 3 should have prompted the nursing staff to advocate that [Ms A] was seen by one of the medical team doctors within 30 minutes. It was documented that medical review was commenced some 4 hours later and then there was a decision to admit. Whether there should have been a discussion of HDU versus medical ward admission between the primary nurse and the admitting doctor and possibly the DNM as well is a legitimate question. It is possible there may have been discussions around that scenario and it was not documented of course, the notes suggest the HO decided to admit to a medical ward having discussed the case with a Registrar.

Once on the ward [RN J's] statement tells the reader that she questioned the Nurse Co-ordinator ([RN I]) twice about the abnormal blood results and her vital signs and wanting to ask for a pre-arrest medical review and was told this was not necessary. However none of this was documented in the contemporaneous notes. The night shift ward nurse [RN K] was also cited as being part of that conversation by [RN J] and she herself also did not document it.

5.b It appears there has been a moderate departure from the standard of care between triage category and time seen by a clinician (medical house officer in this case). [Ms A] was referred to the on-call medical team but this does not negate the ED nursing and medical staff of advocating for and looking after the patient as if one of their own patients maybe by chasing up the medical team review, someone with the right skill set using ultrasound to insert the cannula to get blood specimens and administer analgesia more quickly.

I suggest there was a moderate to severe departure from the standard of care regarding escalation protocols by both the ward RN and the HO by not asking the Registrar to

attend in person when the EWS was 9 and not putting out the '777 Pre-arrest' call when EWS reached 12.

Once transferred to HDU/ICU and both registrars in attendance I suggest there was no departure from the standard of care in the escalation process.

5.c Early Warning Score charts have been in use across the nation for approximately 2 years prior to this case and remain in use today with additional versions for various paediatric age ranges and for maternity (pregnant or recently postpartum women). I believe all Registered Nurses working in any hospital would be familiar with the concept of EWS and understand how useful they are in highlighting the deteriorating patient and that the charts support the nurse to contact medical and subsequently senior medical colleagues even if they themselves are unsure of the diagnosis or what is going on for that patient.

5.d As [RN J] herself pointed out, courses such as 'the deteriorating patient' provide additional training and increase understanding regarding the signs of what to watch for to spot when patients' conditions are starting to worsen. [RN I] also points out in her statement that a subsequent course she has undertaken has increased her knowledge around blood results (especially lactate) and the sequelae of such a finding. Registered Nurses have an obligation to keep our professional knowledge and skills up to date (Principle 4.3 Code of Conduct), support from management should encourage and facilitate this ongoing learning.

6.a Whether nursing handovers were of an appropriate standard?

From the documents provided, a phone call handover between an ED nurse and [RN J] is mentioned but there is no written details of what this included or the format (e.g. ISBAR) they followed. The Emergency Department Adult Documentation Procedure mentions that transfer of patients will be managed in a timely and effective manner with clear communication between all parties but doesn't provide any tool or further guidance on the subject, therefore I am unable to comment on the standard of the handover.

Statements by [RN J] and [RN I] explain the two stage handover on the ward, initially the Nurse Co-ordinator hands over to the night shift staff in a meeting room and then there is a bedside handover between the nurses in front of the patient in their care. Again this is not a document process it's verbal, therefore I cannot comment on the quality of it. [RN J] mentions a transfer/circulating nurse accompanying [Ms A] from ED to the ward and then to radiology department and back, recording vital signs and verbally relaying these to her.

There is also no clear documentation of the handover between [RN K] and [the senior nurse] — the ward and HDU/ICU nursing staff. Therefore I am unable to comment of the standard of the handover.

6.b As stated above I cannot read or review the handover processes throughout [Ms A's] journey within the hospital as I have no written evidence of it. It is possible for it to be anywhere along the spectrum of great, good, adequate, poor, moderate or severe departure from the standard of care. Principle 6.3 of our Code of Conduct (Nursing Council of New Zealand, 2012 Pg 8) states that we should 'Communicate clearly, effectively, respectfully and promptly with other nurses and health care professionals caring for the health consumer and when referring or transferring care to another health professional or service provider'. I cannot comment if this occurred, and to what standard, in this case.

6.c The communication skill of a concise, logical and focused hand over is one that is appreciated by any multidisciplinary colleague in the hospital setting. I am confident that many would be able to quote ISBAR (introduction/identity, situation, background, assessment, recommendation) as it has been broadly used across the world for over a decade now (WHO, 2011) and such tools are known to improve communication and therefore enhance patient safety.

6.d I would recommend the use of a handover tool (like ISBAR) if one is not already in use. Some departments/hospitals have a separate record sheet for this, others have a sticker which is placed in the patient's narrative notes with the I S B A R highlighted and gaps available for handwritten details to be added under each heading.

7.a Whether communication with [Ms A's] family was adequate and appropriate?

As mentioned in the hospital's response to the Complaints assessor (dated 25 Jan 2021) there is no documentation to support that the family were notified of [Ms A's] transfer to HDU by the ward nurse however the family are quoted as stating that they received a phone call at 02:40 (I do not know who by) and they arrived at 4am. The ICU RN documented at 05:00 the family was called in 'no answer initially, arrived just before arrest'.

It is understandable that the family did not feel the communication was adequate, accurate or timely — and theirs is the perspective that is most important in this situation, therefore I conclude that in hindsight communication was not adequate and appropriate for them.

7.b With the emotions and stress that one struggles to fully appreciate, it is possible that not all information in the phone conversation(s?) was fully processed by the family at the time, therefore it is possible that there was only mild departure from the standard of care expected and documentation of the conversation was omitted from the nursing notes. On the other hand it is possible that there was an increased (moderate) departure from the expected standard of care with the seriousness of the critical decline in [Ms A's] condition not being relayed to the family over the phone or in person on arrival back to the hospital.

7.c The first principle of our Code of Conduct (2012) is Respect the dignity and individuality of health consumers. It is possible that the nurses may have offered to contact [Ms A's] family on her behalf and she declined (e.g. middle of the night may not wish to have disturbed them). Whilst we work in partnership with families, [Ms A] was an adult competent to make her own decisions. I believe my peers would also struggle to answer the Commissioner's question, without hindsight bias, due to the lack of documentation with regard to discussing the seriousness of [Ms A's] condition with her and then subsequently discussing her wishes to have her family contacted.

7.d The importance of documentation and auditing of notes and findings being fed back to the nurses involved has already been recommended.

8.a The reasonableness of the action of Nurse Co-ordinator [RN I] in respect of [Ms A's] nursing care on [the medical ward] in particular [RN I's] response to the concerns [RN J] raised with her about [Ms A] having abnormal blood results.

When [RN J] raised concerns about the abnormal blood results [RN I] accessed them on a computer alongside [RN J] and acknowledged they were highlighted in red (meaning elevated above the high side normal parameters) and now acknowledges that she did not at the time understand the significance of the figures. [RN J] had completed a study day on the 'deteriorating patient' and seems to have retained that additional knowledge hence questioned her senior nurse about it. [RN I] explains in her statement that she presumed the medical staff were already aware of the findings during [Ms A's] time in ED when the test was repeated and a treatment plan developed and therefore explained that she was not concerned about them to [RN J]. Whilst [RN I's] explanation is reasonable (given her experience and knowledge at the time) I suspect she would not make the same assumption now. It would have been better if she had acknowledged [RN J's] knowledge on this subject and encouraged her to confirm with the medical staff the plan for repeating blood tests and updating them of the vital signs and EWS and plan of care heading into the night shift.

8.b. [RN I's] comments in her statement of 3 June 2021 about whether accessing or interpreting blood results are within a nurse's scope of practice.

A nurse's scope of practice is an individual thing to that nurse. Whilst we all should finish training with a certain basic level of knowledge and skills — competencies provided by our governing body — Nursing Council of New Zealand (Nursing Council, 2022). Our subsequent mahi, the clinical setting we work in, roles we undertake, additional training, education — knowledge and skills learnt through experience, these all contribute and define what becomes our scope of practice, and it is ever changing. The Nursing Council approves Professional Development Recognition Programme (PDRP) as recertification programmes under section 41 of the Health Practitioners Competence Assurance Act 2003, as a nurse you can either enrol in a PDRP and produce a portfolio that is assessed at a chosen level — competent, proficient, expert (clinical or leadership) if you pass you are then exempt from the Council's recertification audit for a period. I do not know what [RN I's] level of competence is (or that of any of the other RNs

mentioned in this review), whether she participates in PDRP, what levels she is at within that programme or whether she has any restrictions placed on her practice by the Council.

In her statement, [RN I] explains how, at the time of this complaint, she was regarded as a senior nurse on the medical ward due to her 4.5 years' experience of working there since qualifying and was used to working in the PM Nurse Co-ordinator role which includes supporting junior staff. [RN I's] statement (June 2021) and incident report filed on [Day 3] indicate the unsafe staffing level she experienced on the PM shift of [Day 2]. With reference to blood test results specifically, [RN I] writes that 'it is not ordinarily within a nurse's scope of practice to interpret blood results' and that 'in 2019 I did not have any particular knowledge of or had not completed any training in interpreting blood results'. I would concur and add that it is not common for a new graduate or junior nurse working in a medical ward (compared to working in an ICU or ED) to be aware of the significance of an elevated white blood cell count, CRP or lactate for example. I believe [RN I's] statement is more reflective of her personal scope of practice rather than nurses in general.

9. The adequacy and appropriateness of the TWO Taranaki polices provided;

9.a Initial Management of Neutropenic Sepsis Medical Guidelines (September 2016)

This document provides the reader with clear guidance of the assessment required in a neutropenic sepsis case, the wording and layout support the importance of prompt assessment and treatment in this emergency situation. It is not clear who is responsible for completing this form (primary nurse or responsible doctor or a team effort?) and this is the only recommendation I would add — space for signature(s) and role alongside the date and time boxes.

9.b Emergency Department sepsis pathway (November 2017)

This four page document provides clear guidelines for an ED nurse or doctor to confirm their suspicions that a patient has some risk factors, signs and symptoms that could be indicative of them developing sepsis. Unfortunately in this case it seems no ED nurse thought to use the pathway tick part of the form to recognise and confirm that there was a need to expedite care as a T2 and treat [Ms A] as septic until proven otherwise with the support of their medicine specialist (not necessarily ED doctor) colleagues. In hindsight we can put in [Ms A's] information into the document and can confirm that this pathway would have highlighted to everyone involved in her care that she had severe sepsis. I believe this document is thorough, user friendly and appropriate to provide ED staff with guidance in recognising, escalating and managing this serious condition if it is used.

9.c Emergency Department Adult Documentation Procedure (May 2017)

This document was published in May 2017 and due for review in May 2020, it would have been the document available to staff and guiding their standard of documentation at the time of this case. It clearly stipulates the role and documentation requirements

for the triage nurse and refers to the ED Assessment Document (provided in its appendix).

The role of the primary nurse is also detailed with regards to the mandatory screening questions and continuing to record vital signs on the appropriate EWS chart for that patient. This document also explains that the primary nurse will use the second, third and fourth pages of the ED assessment document to record all interactions, assessments and procedures and events or changes to condition. The ED adult documentation procedure document also provides a list of other potential forms that may be used (but acknowledges isn't limited to) fluid balance chart, Glasgow Coma Score chart, blood glucose monitoring chart. Whilst discharge home is clearly mentioned with details of assessing for potential discharge risk there is no specific mention of guidance for documentation for admission or handover to the next shift (of ED primary nurse) or transfer and handover within the hospital (to ward to other department) within this document or the ED Assessment document inserted within it. I feel the lack of guidance on documentation of handover/transfer is an inadequacy of this document. I cannot comment if this has been captured in any subsequent versions of this document.

10. There are no other matters in this case that I consider warrant comment.

Fay Tomlin, Nurse Practitioner, NCNZ 176935
24 November 2022

References

College of Emergency Nurses New Zealand (2018) NZ Triage Course Pre-reading Workbook. 2nd Ed. New Zealand Nurses Organisation. Wellington

Health Quality and Safety Commission New Zealand (2017) New Zealand Early Warning Score Vital Sign Chart User Guide 2017 https://www.hqsc.govt.nz/assets/Our-work/Improved-service-delivery/Patient-deterioration/Publications-resources/Vital_sign_chart_user_guide_July_2017_.pdf accessed 23.11.22

Ministry of Health (2014) A Quality Framework and Suite of Quality Measures for the Emergency Department Phase of Acute Patient Care in New Zealand https://www.health.govt.nz/system/files/documents/publications/quality-famework-suite-of-quality-measures-for-ed.pdf accessed 23.11.22

Nursing Council of New Zealand (2012) Code of Conduct, Wellington https://www.nursingcouncil.org.nz/Public/Nursing/Code_of_Conduct/NCNZ/nursing-section/Code_of_Conduct.aspx accessed 18.11.22

World Health Organisation (W.H.O.). Patient safety curriculum guide: multiprofessional edition. (2011) https://www.who.int/publications/i/item/9789241501958 accessed 23.11.22"