Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

A Decision by the Health and Disability Commissioner

(Case 21HDC02038)

Introduction

1. This report discusses the care provided to Mrs A by Dunedin Hospital (Health New Zealand|Te Whatu Ora (Health NZ) Southern[1]) and considers concerns raised about delays in her surgery for a fractured femur (thigh bone).

2. The following issue was identified for investigation:

- *Whether Health New Zealand|Te Whatu Ora provided Mrs A with an appropriate standard of care between 5 and 12 Month1[2] 2021.*

3. The parties directly involved in the investigation were:

Mrs A	Consumer
Dr B	Complainant/consumer's daughter
Health NZ Southern	Provider

4. Further information was received from:

Dr C	Orthopaedic registrar
Dr D	Consultant orthopaedic surgeon
Dr E	Consultant orthopaedic surgeon
Dr F	Consultant in general medicine
Dr G	Orthopaedic surgeon
The Office of the Coroner	

Information gathered during investigation

5. Mrs A (aged 74 years at the time of events) had a history of oesophageal cancer (successfully treated 11 years previously), cardiac ablation for paroxysmal atrial tachycardia[3] in 2008, and osteoporosis,[4] but otherwise was described as 'fit and well' and living independently.

[1] On 1 July 2022, the Pae Ora (Healthy Futures) Act 2022 came into force, which disestablished all district health boards. Their functions and liabilities were merged into Health NZ. All references in this report to Dunedin Hospital and Southern District Health Board (SDHB) now refer to Health NZ Southern.
[2] The relevant month is referred to as Month1 to protect privacy.
[3] An abnormal heart rhythm.
[4] A condition in which bones become weak and brittle.

Admission to hospital — 5 Month1 2021

6. On 5 Month1 2021, while walking her dog in a park, Mrs A was knocked to the ground by another person's dog. She was unable to stand and was in severe pain, and at 6pm she was taken to Dunedin Hospital Emergency Department (ED) by ambulance. Mrs A was reviewed by an orthopaedic registrar, Dr C, and found to have a right distal femur fracture[5] that extended into her knee joint, which required surgery.

7. The triage and timing of Mrs A's surgery was discussed between Dr C and a consultant orthopaedic surgeon, Dr D. The fracture was given a surgical acuity of 'Priority (P) 4'[6] and was booked for operative repair at 8.47pm the following morning. It was estimated that the operation would take 120 minutes.

8. Dr C stated that Mrs A was 'correctly booked and prepared for surgery the following day'. A preoperative computed tomography (CT) scan of the hip and pelvis was required for surgical planning, 'so the plan for … surgery [the following morning] was dependent on that being done prior'. The CT scan request made at 8.44pm stated: 'Ideally this evening or tomorrow morning prior to surgery.'

9. Dr D said that given the need for a preoperative planning CT scan, had they proceeded with surgery that night, it was likely this would have commenced close to midnight. Dr D told HDC that there is 'a general reluctance' to perform fracture repairs on older patients when the surgery extends into the early hours of the morning, and therefore it was appropriate to postpone her surgery until the following morning.

10. Mrs A underwent a femoral nerve block[7] and was placed in a plaster cast back slab to relieve her pain. She was transferred to a surgical ward and kept 'nil by mouth' (no eating or drinking) for surgery.[8] Mrs A was also given a dose of the blood-thinner enoxaparin,[9] as well as a compression device for her non-injured leg, to reduce the risk of venous thromboembolism (VTE).[10]

11. Mrs A's daughter, Dr B (a general practitioner), told HDC that VTE is a recognised risk for elderly patients with femoral fractures and '[i]t is well documented in the medical literature that the incidence of [VTE] … rises linearly with delayed surgical repair, as does overall mortality with repairs delayed [over] 48 hours'. Dr B said she reminded Dr C of the increased risk of mortality if surgery was delayed but was told that a delay overnight would not increase Mrs A's risk.

[5] A break of the thigh bone (femur) just above the knee.
[6] SDHB's 'Acute Theatre Priority Categories' (2021) ('the Priority Categories') defines P4 as: 'Non critical and not urgent … The patient's condition is stable, no deterioration is expected … Surgery to commence within 24 hours of theatre being notified.'
[7] An injection of analgesia (pain relief) close to the femoral nerve in the thigh.
[8] Clinical notes show that between 6–8 Month1 2021, Mrs A was repeatedly kept nil by mouth for surgery from 2am until her surgery was postponed each day and she was charted intravenous (IV) fluids for hydration.
[9] An anticoagulant (blood thinner) that is used to treat and prevent blood clots. Clinical notes show that a stat dose (a single dose administered immediately) was given to Mrs A at 12.56am on 6 Month1 2021.
[10] Formation of a blood clot in a vein.

Theatre availability

12. Health NZ told HDC that on each business day starting at 8am, two acute theatres were available — one with scheduled cases until 10.30pm and the second until 4pm. In addition, two days per week, three acute theatres were scheduled. However, on Saturdays, availability was reduced to only one acute theatre from 8am to 10.30pm, and orthopaedic cases were limited to P2[11] or above. On Sundays, two acute theatres were available (one until 10.30pm and the other until 4pm). Health NZ stated that acute theatres are staffed overnight but are limited to life- or limb-threatening conditions (P1[12] and P2) and non-deferrable acute surgery.

6–8 Month1 2021

13. Over the next three days, Mrs A's surgery was repeatedly postponed due to limited theatre availability and higher acuity patients being prioritised, some having come from two serious motor vehicle accidents.

14. On-call consultant orthopaedic surgeon Dr E stated that on the morning of 6 Month1 2021, Mrs A was 'not ready [to be] first up' on the surgical list as she was still awaiting her CT scan. Orthopaedic surgeon Dr G told HDC that there are limited resources for advanced imaging overnight', and Orthopaedics does not have any 'significant control' over timing of CT scans. The CT scan was performed at approximately 8.45am as a semi-urgent procedure and reported within two hours; however, Dr E stated that as an acute spinal surgery did not finish until 2pm, 'there was only time available for [a] short case' afterwards. Mrs A's surgery was cancelled at approximately 2pm.

15. Clinical notes from 7 Month1 2021 show that Mrs A was 'for possible [surgery] today', although it was noted that there was a 'long [theatre] list'.[13] Dr E told HDC that the only orthopaedic surgery performed that day was a P2 fractured pelvis in the evening. Dr E stated that '[t]he organ donor retrieval team occupied [the] acute theatre for approx. 4 hours' and a P3[14] surgery from another speciality was performed.

16. Surgery was next planned for 8 Month1 2021; however, this was cancelled at 8.30am as the theatre was at capacity for the day. Dr E stated that four orthopaedic surgeries were performed that day, including a P3 case that had 'been in since Friday'.

Risk of VTE

17. Dr D told HDC that they 'were certainly cognisant of the increased risks for [Mrs A] because of delays — particularly, [VTE] problems' and therefore Mrs A received daily anticoagulation treatment to reduce the risk of VTE, although initially this was withheld each day because of the likely requirement of a spinal anaesthesia for her surgery. Dr G stated that the provision of anticoagulant medication is 'challenging in the relative uncertainty of access to

[11] P2 is defined under the Priority Categories as 'Organ or limb threatening conditions'.
[12] P1 is defined under the Priority Categories as 'Life threating conditions'.
[13] The clinical entry noting that Mrs A's surgery had been cancelled has no time stamp; however, it is deduced from the entries prior to and following this that it was sometime between 8.33am and 3.12pm.
[14] P3 is defined under the Priority Categories as 'Non critical but urgent'.

acute operating [theatres]', as if it is not withheld appropriately then surgery cannot go ahead.

18. Clinical notes show that 40mg of enoxaparin was charted 'Once Daily (20:00)'. Mrs A was given these doses at approximately 8.30pm on 6, 7 and 8 Month1 2021.

Consideration of transfer of care

19. Dr B told HDC that on 8 Month1 2021, she expressed concern to the orthopaedic team about Mrs A's delayed surgery and discussed with Dr E the potential for transfer to another hospital for the operation, but 'neither were logistically viable options'.

20. Dr D told HDC that consideration was not given to transferring Mrs A to another hospital as each time she was postponed, it was anticipated that her surgery would be completed the following day. Furthermore, Health NZ told HDC that it does not routinely transfer patients to other facilities unless it is a service that cannot be provided.

Surgery — 9 Month1 2021

21. At 11am on 9 Month1 2021 Mrs A underwent surgery performed by Dr McMahon. Within 30 minutes of anaesthetic induction, Mrs A suffered significant hypotension [15] and cardiovascular collapse,[16] which required vasopressor[17] resuscitation, three units of blood, and four litres of IV fluids. Mrs A was stabilised, and the fracture was repaired.

Events post-surgery

22. Postoperatively, Mrs A was noted to have a neurological deficit, and a subsequent head CT scan revealed that she had suffered a stroke, which Dr D stated was 'likely caused by the episode of hypotensive intraoperatively'. Mrs A was also noted to be in atrial fibrillation (AF),[18] and a CT pulmonary angiogram (CTPA) showed that she had suffered a pulmonary embolism (PE).[19] Health NZ's Adverse Event Review (AER) noted that Mrs A 'likely developed AF following her PE which then led to her stroke'.

23. Dr F, a General Medicine consultant, stated that following discussions with speciality doctors, it was decided that an anticoagulant infusion for the treatment of PE would be initiated, 'understanding there was a risk of intracerebral bleeding'. However, Mrs A continued to deteriorate over the next few days with ongoing hypotension issues, despite maximum vasopressor support. Following discussion with Mrs A's family, the decision was made to withdraw vasopressor support and, sadly, Mrs A passed away on 12 Month1 2021. The established cause of death was obstructive cardiogenic shock[20] occurring in the context of a PE.

[15] Low blood pressure (BP).
[16] Loss of sufficient cerebral blood flow to maintain consciousness.
[17] Medications to narrow blood vessels and raise blood pressure.
[18] An irregular and often very rapid heart rhythm.
[19] Occurs when a blood clot becomes stuck in an artery in the lung.
[20] A condition caused by the obstruction of the great vessels or inadequate function of the heart.

24. I take this opportunity to extend my sincere condolences to Mrs A's family and friends for their loss.

AER

25. Health NZ undertook an AER, which identified the delay in surgery as the root cause of Mrs A's death, alongside contributory factors of a lack of access to operating theatre time, her priority status being unchanged for 84 hours, and possible dehydration. In addition, the AER outlined the following:

- During Mrs A's admission, the acute theatre list had higher priority cases and, as such, there was a delay in her care. Health NZ is well aware of the existing deficits in acute operating theatre capacity and has work in progress to try to increase the available resource.
- The acuity level for surgery, once established, is not usually reassessed. Inpatients awaiting surgery undergo a daily review; however, there is no standard review of the process to ensure that their priority is unchanged. There is no recorded discussion at any stage of Mrs A's admission regarding altering her priority status.
- SDHB's 'Acute Theatre Guidelines and Booking Procedures (Dunedin Hospital)' (2020) ('the Acute Theatre Guidelines') does not include any provision for considering how long a patient may have been waiting.
- The risk of VTE was recognised and appropriate mitigation was initiated.
- Having kept Mrs A nil by mouth repeatedly could have played a role in clot formation due to dehydration, which has been assumed to predispose a person to the risk of VTE, although there are no large clinical studies to support this.
- Transfer to another hospital was not considered actively.

26. Health NZ's AER recommended the following:

1. Review the Acute Theatre Guidelines whereby priority status can be reconsidered when initial triaged time guidelines are not met. Time waiting for surgery and the associated increasing risks need to be taken into consideration.
2. Review standing orders to ensure that the daily review of inpatients awaiting acute surgery fully considers their physiological status and confirms that their current priority status for surgery is appropriate.
3. Continue to recruit and obtain the resources necessary to increase acute operating theatre (as approved in 2022), particularly in the evenings and weekends.

Further information

Dr B

27. Dr B is concerned that her mother waited over 90 hours for her surgery, which should have been performed within 24 hours, and she believes that '[her] mother's demise was a direct consequence of a lack of acute surgical theatre availability'.

28. Dr B understands that there were extenuating circumstances, with more than usual high acuity cases prioritised ahead of Mrs A during her time in care; however, Dr B stated that if non-emergent but acute surgery cannot be accommodated, there should be a contingency plan.

29. Dr B said that lack of theatre resources at Dunedin Hospital continues to be a 'chronic problem' and it is her 'sincerest hope that [her] mother's premature passing could serve to highlight, and bring change, to this serious resource allocation issue through the assistance of the Health and Disability Commissioner'.

Health NZ

30. Health NZ offered its sincere condolences to Mrs A's family for their loss and apologised 'for her experience as a patient and for the role this played in her passing'.

31. Health NZ stated that there is limited theatre capacity at Dunedin Hospital, and elective surgery is deferred daily to allow increased access to acute surgery. Furthermore, during high periods of demand, where additional capacity cannot be made available through the postponement of elective surgery, 'postponement of lower acuity patients is a regrettable necessity'.

32. At the time of the events, Health NZ told HDC that although there is work in progress to increase acute theatre resources, including staffing extra theatres at weekends, currently this is limited by staffing shortages and '[r]ecruitment, locally and nationally, is severely hampered by [COVID-19] related immigration and quarantine regulations'.

Dr D

33. Dr D told HDC that '[i]t has been well documented that risks for morbidity and mortality do rise with delay in surgical treatment of femoral fractures in [older] patients', and the delay in surgery 'significantly contributed to [Mrs A's] fatal complication' (PE).

34. Dr D stated that he has concerns about the access to sufficient operating theatre time for the management of emergency orthopaedic patients, particularly as there is not a dedicated orthopaedic emergency theatre available on weekends (although he noted that there are plans to remedy this).

35. Dr D stated that in retrospect, with the other cases on the emergency list requiring surgery, he should have suspected that 'there may have been a problem' and taken steps to ensure that Mrs A's surgery was completed, such as asking a colleague with an elective list to defer this and perform Mrs A's surgery. Dr D apologised to Mrs A's family for failing to ensure that she received her surgery in a timely manner.

Dr F

36. Dr F stated that '[t]he root cause of [Mrs A's] death was the delay in time to surgery'. Dr F questioned why operating theatre time was not extended to accommodate Mrs A's surgery.

37. Dr F said that there are both international and New Zealand standards stipulating goals of timing for femur fracture repair. Dr F referred to research conducted by the New Zealand Perioperative Mortality Review Committee (POMRC), which found that '[m]ortality rates

[for hip fractures[21]] increased with longer delays between admissions and surgery'.[22] As such, the POMRC has set a goal that all patients with hip fractures should be offered surgery within 48 hours to mitigate this risk. Dr F stated that '[t]he Southern District Health Board did not meet this standard'. Health NZ's AER referred to the POMRC report and noted that '[r]esearch has found that distal femur fractures are thought to have a similar or greater risk factor'.

38. Dr F also referred to the Health Quality & Safety Commission's 'Hip Fracture Care Clinical Care Standard' (2016), which states that patients with hip fractures should receive surgery within 48 hours.[23] Furthermore, the healthcare provider is to ensure that systems are in place for this to occur, noting that this may not be feasible in remote areas; however, 'networks and systems should be in place to ensure coordinated transfer and timely surgery' of patients in these areas who sustain a hip fracture.

Dr G

39. Dr G agreed that Mrs A's death was a consequence of a fatal PE, and the lack of acute theatre availability was a 'significant contribution'. Dr G told HDC that at the time of these events, 'resources were particularly tight, both with nursing and also within the theatre suites with significant shortages of both nursing staff and in particular anaesthetic assistants'.

Responses to provisional decision

Dr B

40. Dr B was given the opportunity to respond to the information gathered during this investigation. Dr B confirmed that the facts were correct and had nothing further to add.

Health NZ

41. Health NZ was given the opportunity to respond to the provisional opinion. Health NZ accepted all the proposed actions and recommendations and had no further comment to make.

Relevant policies

42. The SDHB 'Acute Theatre Guidelines and Booking Procedures (Dunedin Hospital)' (2020) provides the following:

> '**Order of cases**
>
> Cases in a higher category; will take precedence over those in a lower category.
>
> Cases may not necessarily be done in the order they are booked, however all cases in a category; e.g. P3 will be done in order.

[21] A break in the upper portion of the thigh bone (proximal femur).
[22] https://www.hqsc.govt.nz/assets/Our-work/Mortality-review-committee/POMRC/Publications-resources/POMRCSeventhReport2018WEB.pdf (accessed 2024).
[23] As of 2023, this Standard has been updated to within 36 hours of first presentation: https://www.safetyandquality.gov.au/sites/default/files/2023-09/hip-fracture-clinical-care-standard-2023.pdf (accessed 2024).

NOTE: Only the duty anaesthetist may alter the category of urgency after consultation with the surgeon/registrar.

…

Overnight operating

After 2230; only emergency cases P1 and P2 will be conducted.

…

Between 2230–2400hr, P4 cases may be considered under certain circumstances (i.e. surgery less than 30 minutes duration, ASA score of 1[24] with consideration of co-morbidities) and must be in consultation with [the Post-Anaesthetic Care Unit] staff as their shift ends at 2430hrs.'

Opinion: Health NZ — breach

Introduction

43. Mrs A was a fit and well 74-year-old woman whose operative repair of a fractured femur was delayed by four days due to limited theatre availability. Sadly, she died a few days following her surgery. Her daughter, Dr B, raised concerns with this Office about the adequacy of her mother's care in the hope of bringing about change to the capacity issues facing Health NZ Southern. I commend her for doing so.

44. Limited access to operating theatres at Health NZ Southern has been an ongoing issue for many years.[25] However, as highlighted in this report, timely treatment for older patients with femoral fractures is particularly important for reducing the risks of morbidity and mortality.

45. It is important to note that my role is not to determine the cause of Mrs A's death, but rather to consider whether the services provided to her were of an appropriate clinical standard. Under the Code of Health and Disability Services Consumers' Rights (the Code), healthcare providers have a responsibility to provide patients with an appropriate standard of care that minimises the potential harm to, and optimises the quality of life of, that consumer (Right 4(4) of the Code).

46. In this case, it is clear that the care provided by Health NZ was not adequate, and limited access to operating theatres led to a prolonged delay in surgery, which increased the risk of

[24] American Society of Anesthesiologists (ASA) classification system, which is based on the overall health of a patient. A healthy patient is classed as ASA 1.

[25] https://www.odt.co.nz/news/dunedin/acute-surgery-time-approved (published 2011; accessed 2024). https://www.stuff.co.nz/national/health/127041225/southland-hospital-is-too-small--and-they-knew-it-20-years-ago (published 2022; accessed 2024).

potential patient harm. Health NZ is responsible for the operation of the clinical services it provides and is responsible for any service failures.

Delay in surgery

47. Mrs A presented to Dunedin Hospital at 6pm on 5 Month1 2021, with a right distal femur fracture. The priority assigned (non-critical, non-urgent) was for surgery to commence within 24 hours, and this was booked for the following morning, dependent on a preoperative planning CT scan being done.

48. Mrs A's surgery was postponed on Friday 6 Month1 2021 as her preoperative CT scan was not completed in time for her to be first on the theatre list, and another patient occupied the operating theatre until 2pm. As the acute theatre was available only until 4pm, there was not enough time to complete Mrs A's surgery. Acute theatres are available overnight but are limited to P2 or above.

49. As outlined in paragraph 12, on weekends only one acute operating theatre is available, and orthopaedic cases are limited to P2 or above. On 8 Month1 2021, higher priority patients present at the time occupied the two acute theatres available.

50. Mrs A underwent surgery on 9 Month1 2021, during which she suffered a PE and a stroke. She died on 12 Month1 2021 due to complications arising from the PE.

Significance of surgery timing

51. As noted by Dr B, patients with femur fractures are at high risk of VTE,[26] and this risk increases with advancing age. VTE consists of deep vein thrombosis (DVT)[27] and PE, both of which are associated with potentially significant morbidity and mortality, and therefore 'elderly hip fracture patients are always considered to be at the highest risk for developing fatal PE'. [28]

52. Dr F, Dr D, and Dr B all highlighted that the risk of mortality for older patients with femoral fractures increases with delay in surgical treatment. Dr F referred to specific research undertaken by the POMRC evidencing this causal link, as well as standards set by the POMRC and the Health Quality & Safety Commission, which stipulate that patients with hip fractures should receive surgery within 48 hours of first presentation. Dr F stated that Health NZ did not meet this standard.

[26] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6245713/#:~:text=Results,44%2F57)%20were%20ICMVTs (accessed 2024).
[27] A condition in which a blood clot develops in the deep veins.
[28] https://pubmed.ncbi.nlm.nih.gov/15559689/ (accessed 2024).

Cause of delays

53. Health NZ's AER identified the root cause of the event as being the delay in surgery and noted that limited access to acute operating theatres contributed to this delay. Dr D, Dr F, and Dr G agreed with this finding.

54. Furthermore, Health NZ's AER outlined that Mrs A's surgery was delayed due to the acute theatre list having higher priority cases during her admission. Health NZ stated that due to limited theatre capacity, elective surgery is deferred daily to allow increased access to acute surgery, and, where additional capacity cannot be made, lower acuity patients are postponed.

55. Health NZ's AER found that Mrs A's priority status was unchanged for 84 hours, which contributed to the delay in surgery. Health NZ's AER outlined that the acuity level for surgery, once established, is not usually reassessed, although Health NZ noted that there is no review process to ensure that a patient's priority status is reconsidered. In addition, the Acute Theatre Guidelines do not include any provision for considering how long a patient may have been waiting.

Response to clinical risk caused by delay

56. Health NZ's AER found that the risk of VTE was recognised and mitigated appropriately, and that the transfer of Mrs A's care to another hospital was not considered actively. Dr F noted that healthcare providers are to 'ensure systems are in place for clinicians to perform hip fracture surgery within 48 hours of presentation' as directed by the Health Quality & Safety Commission.

Discussion and conclusion

57. There is a clear causal link between delays in femoral fracture repairs and increasing rates of mortality in older persons. As such, both New Zealand and international standards stipulate that surgery should be carried out within 48 hours of admission. While I acknowledge that the research and standards referred to by Dr F are specific to hip fractures, as noted in Health NZ's AER, research has found that distal femur fractures in older patients carry a similar or greater risk of mortality,[29] and therefore I consider that the same goals of timing for surgical repair should apply. In this instance, Mrs A's surgery was not undertaken within this timeframe — her surgery was 62 hours outside the initial triaged time guidelines and nearly double the optimal time frame for such acute surgery as directed by the New Zealand Standards. The risk of potential patient harm increased as a result.

58. I concur with the findings in Health NZ's AER that limited access to acute operating theatres was the primary cause for the delay, and I acknowledge the competing volume of acute serious cases that occurred during Ms A's admission. However, there were also systems failures. Health NZ's systems did not support the reconsideration and reprioritisation of Mrs A's acuity, which would have provided the opportunity to mitigate her increasing risk of complications resulting from the delay. Specifically, as the delays continued outside the

[29] Mortality Following Distal Femur Fractures Versus Proximal Femur Fractures in Elderly Population: The Impact of Best Practice Tariff - PMC (nih.gov) (accessed 2024). https://pubmed.ncbi.nlm.nih.gov/20830542/ (accessed 2024).

guidelines, Mrs A's time waiting for surgery and increasing risk should have been taken into account when prioritising the surgical list, and/or a contingency plan should have been developed to ensure timely care. For example, Dr D acknowledged that possibly elective surgery could have been cancelled to create theatre capacity for Mrs A (as per paragraph 35); Dr F questioned why operating theatre time was not extended to accommodate Mrs A's surgery (as per paragraph 36); and transfer of Mrs A's care to another hospital to ensure timely surgery was not considered actively. I conclude that the failure to reassess and to have systems enabling that reassessment indicates a lack of appropriate response to the clinical risks created by the limited access to acute operating theatres. In my view, this represents a service-level failure that could and should have been avoided.

59. In my opinion, Health NZ failed to provide services to Mrs A in a manner that minimised the potential harm to her and optimised her quality of life, and, accordingly, I find that Health NZ breached Right 4(4) of the Code.

Changes made since events

60. Health NZ told HDC that it has undertaken a range of actions specifically focused on reducing delayed access to operating theatres for acute patients at Dunedin Hospital, including the following:

- In order to manage demand on acute and elective surgical resources, at the beginning of each day, acute theatre and elective surgical demand is assessed by operational and management teams. Should acute demand require additional theatres, the consequence can be that planned care is postponed.
- Prioritisation of acute patients is dependent on the triage category and other clinical factors, such as length of wait for acute surgery, availability of specific resources/teams for specialised surgery, and whether some surgery can be undertaken on planned lists.
- There are daily 'Theatre Planning and Decision Team' meetings that review the previous day's theatre utilisation data to identify opportunities for improvement, and the current day's theatre schedule to ensure maximum utilisation of theatre time against daily demand. This is also an opportunity to identify elective and acute patients of concern, and any postponements of planned care due to acute demand are discussed and require medical director and general manager approval.
- Alternative strategies, such as additional lists undertaken at weekends, can be put into place when there is concern about delay to a specific group of patients, although these are dependent on staff availability and access to care following surgery.
- Health NZ Southern has recruited and trained sufficient staff to be able to double the amount of acute operating theatres over weekends from 1 November 2024.

61. Health NZ stated that the recommendations set out in the AER have been actioned as follows:

Recommendation 1

- Due to concern around the potential harm that may arise from increasing priority status for patients who have not met their initial triaged time guidelines, the Acute Theatre Guidelines have not yet been formally reviewed and currently do not include a specific statement regarding reconsideration of priority status. However, a review of the Acute Theatre Guidelines was scheduled for 17 May 2024, and reviews of priority status, including patients where initial triaged time guidelines are not met, have occurred 'frequently' and 'robust[ly]'.

Recommendation 2

- Orthopaedic teams review the acute theatre board and participate in daily morning handovers (in which priority statuses are discussed and adjusted). Patients are reviewed at least daily and all older patients with lower limb fractures, especially femoral, are prioritised by Orthopaedics.

Recommendation 3

- In order to bring about a longer-term improvement to acute theatre access, Health NZ is in the process of extending available acute theatre access — in particular extending the second acute theatre hours on Monday–Thursday until 8pm and making a second theatre available on Saturday from 8am to 4pm.
- The first phase of this was implemented in July 2023, with two Saturdays a month having two acute theatres available. From April 2024, this has increased to three Saturdays per month. The second phase of an additional acute theatre every weekend requires a formal process change and collaboration with anaesthetists, as a change to their conditions of employment is required. This process is expected to be completed by the end of 2024.
- Recruitment of anaesthetic technicians and anaesthetists is continuing, and further appointments are required to move onto the final phase of extending the second acute theatre hours (Monday–Thursday until 8pm). It is envisaged that this will be implemented by the end of 2025.

Recommendations

62. I recommend that Health NZ Southern:

a) Provide a written apology to Mrs A's family for the deficiencies in care identified in this report. The apology should be sent to HDC within six weeks of the date of this report, for forwarding.

b) Report on the effectiveness of the changes/improvements made (as outlined in paragraph 60) within seven months of the date of this report. Effectiveness should be measured via an audit of relevant key service deliverables/indicators and a sample of records where:

- Patients have been prioritised based on length of wait for acute surgery;
- Patients have been postponed due to acute demand; and

- Patients have undergone surgery after being booked on additional theatre lists.

c) Provide an update on the outcome of the review of the Acute Theatre Guidelines scheduled for 17 May 2024. In particular, if the Guidelines have not been amended to include a specific provision regarding reconsideration of priority status for patients where initial triaged time guidelines are not met, provide a rationale for why not. Where changes have been made, or are to be made, explain what training and/or communication will be given to staff to implement these changes. This update is to be provided to HDC within two months of the date of this report.

d) Amend the Acute Theatre Guidelines to include provision for discussion of transfer of patient care to another hospital when initial triaged time guidelines are not met. A copy of the updated guidelines is to be provided to HDC within seven months of the date of this report.

e) Provide an update on any measures taken, or planned, to meet the recommended timeframes for femur fracture repair, including whether the requirements of the Health Quality & Safety Commission that patients with hip fractures receive surgery within 48 hours of admission and systems are in place for this to occur, will be extended to patients with distal femur fractures in light of the research referred to in Health NZ's AER. This update is to be provided to HDC within four months of the date of this report.

f) Use an anonymised version of this case as a basis for an education session around the findings of the POMRC's 'Report of the Health Quality & Safety Commission New Zealand' (2018) and the importance of providing timely care. Evidence of the education session having occurred, in the form of education/training material and staff attendance records, is to be provided to HDC within seven months of the date of this report.

g) Provide HDC with an update on the progress of its recruitment of anaesthetic technicians and anaesthetists. This update is to be provided to HDC by 31 January 2026.

Follow-up actions

63. A copy of this report with details identifying the parties removed, except Health NZ, Health NZ Southern, and Dunedin Hospital, will be sent to the Health Quality & Safety Commission|Te Tāhū Hauora, the Royal Australasian College of Surgeons, the New Zealand Orthopaedic Association, HealthCERT, and the Ministry of Health|Manatū Hauora and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.