CITATION: *Inquest into the death of Judith Smart* [2025] NTLC 4

TITLE OF COURT:	Coroners Court
JURISDICTION:	Darwin
FILE NO(s):	D0103/2021
DELIVERED ON:	25 March 2025
DELIVERED AT:	Darwin
HEARING DATE(s):	19 & 20 August 2024
FINDING OF:	Judge Elisabeth Armitage
CATCHWORDS:	**Adequacy of post operative nursing care at Royal Darwin Hospital for patient with COPD and OSA; Post Anaesthetic Care Unit (PACU); CPAP machine; Staffing; Close Observation Unit; Adequacy of palliative care; ICU End-of-Life Care Guideline**

REPRESENTATION:

Counsel Assisting:	Chrissy McConnel
Counsel for Health:	Michael McCarthy Hutton McCarthy

Judgment category classification:	B
Judgement ID number:	[2025] NTLC 4
Number of paragraphs:	111
Number of pages:	31

IN THE CORONERS COURT
AT DARWIN IN THE NORTHERN
TERRITORY OF AUSTRALIA

No. D0103/2021

In the matter of an Inquest into the death of

JUDITH SMART

ON: 20 June 2021
AT: Royal Darwin Hospital

FINDINGS

Judge Elisabeth Armitage

Introduction

1. Judith Smart ("Judy") was admitted to RDH on 10 June 2021 for elective right patella (kneecap) resurfacing. The surgery was straightforward and uneventful and a full recovery was expected. However, her post operative care was inadequate and at 7.45pm she was found unresponsive in her bed, having suffered a cardiac arrest. By 8.30pm she was transferred to the Intensive Care Unit (ICU) having suffered a hypoxic episode from which she never recovered. At 7.30am on 20 June 2022, Judy was transferred from the ICU to a shared room in a general ward (2A). Without the timely assistance of the palliative team, she passed away shortly after 12pm in circumstances that were highly distressing to her family.

2. This inquest examined the failures in Judy's care at RDH. Her family were naturally gravely concerned about the level of care she received, and it was their wish that their experience was not repeated with any other family.

Judy Smart

3. Judy was 66 years old when she died. She was born on 23 July 1954 in Corowa, New South Wales to Albert and Eileen (both deceased). Judy was

one of six children and when their parents could not care for them, she and four of her siblings were placed at the Retta Dixon Home in Darwin. Judy then lived in various homes throughout the Northern Territory and Western Australia before choosing independence at the age of 15 years.

4. Judy's young life was not an easy one. She was abused by her stepfather and then later by her first husband. She was an industrious worker but with a limited education she took on unskilled positions to support herself and then later, her family. Judy worked as a cleaner, cook, relocation driver, administration assistant, teacher's aide, and carer.

5. In 1977 Judy met her second husband, Trevor Smart, who was in the Royal Australian Navy. The couple commenced their 44-year-long marriage in 1980 and a year later Trevor was posted to California, USA. Judy and her two older children, Shannon, and Daniel, accompanied him and they enjoyed living in the United States for 14 months before returning to Australia. They lived in Sydney and then Brisbane where Judy and Trevor's son, Travis, was born. They spent some years in Western Australia before moving to Darwin in 1989. Following a serious back injury in 1992, Trevor could no longer work. Judy continued to care for the children and the family. In 2004, the couple commenced travelling around Australia, which they did for the next six or so years.

6. In 2003, Judy became 'nanny' to her first grandchild, and she was nanny to five grandchildren when she passed away. When Judy and Trevor returned from their travelling adventures in 2011, they became heavily involved with their grandchildren, caring for them and taking them on holidays both locally and overseas.

7. Her family adored Judy. They told me she was kind, and she would do anything for anyone. She loved to laugh and spend time with her family and her wide circle of friends. She enjoyed travelling, camping, bingo, darts, and ceramics. Their feelings of loss and grief are immense.

Background to the decision to have patella resurfacing

8. In 2014, Judy was diagnosed with right knee effusion with a Popliteal (Baker's) cyst. She received a steroid injection but several months later reported that the pain was worse. Between 2015 and 2017 she continued to experience right knee pain and, following an unsuccessful right knee arthroscopy and debridement, Judy consented to a total knee joint replacement (TKJR) which took place at RDH on 20 September 2018.

9. Following the TKJR Judy continued to experience anterior right knee pain and disability in movement and in October 2019, she was placed on the surgical waiting list for a revisionary resurfacing of the right patella.

Pre-operative assessment

10. On 8 April 2021, Judy saw Dr Dewi Hughes, RDH Consultant Anaesthetist, for an anaesthetic pre-assessment in preparation for her surgery. Although scheduled for 29 April 2021, the surgery was delayed until 10 June 2021 due to a shortage of hospital beds.[1]

11. In the pre-assessment, Dr Hughes noted that Judy had undergone previous surgeries, including her TKJR under a spinal block in 2019, and that she had not had any adverse issues with previous anaesthetics. [2]

12. Dr Hughes also recorded her medical history including her chronic conditions and comorbidities, namely:

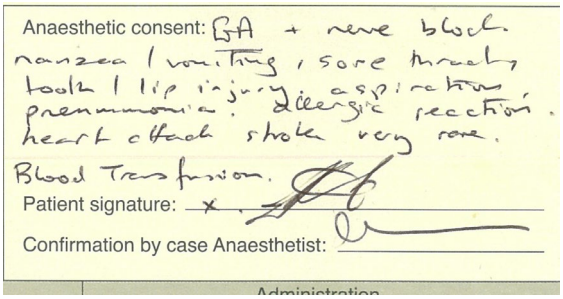
    - Chronic Obstructive Pulmonary Disease (COPD).
    - Obstructive Sleep Apnoea (OSA) managed with a Continuous Positive Airway Pressure (CPAP) machine and noting that Judy was CPAP compliant.

[1] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [203].
[2] The previous TKJR surgery occurred on 20 September 2018. Brief of evidence, Folio 10, RDH Medical Records, Vol 2, Admission 11 - 20/9/2018, pp 16 - 78.

- Type II diabetes which was poorly controlled resulting peripheral neuropathy (nerve damage).
- Fatty liver, high blood pressure and hypertension.
- Body Mass Index (BMI) of 35.2 indicating she was obese.
- Twenty-five cigarettes per day smoker.[3]

13. Judy's medical conditions increased the risks of her anaesthesia for surgery. Her COPD and smoking increased her risk of bronchospasms, and her high blood pressure required close monitoring and management. The OSA and obesity increased the risk of obstructed airways while under anaesthetic. Dr Hughes said that he routinely asked patients with OSA to bring their CPAP machine to hospital and he would have directed Judy to do that.[4]

14. Judy signed the 'anaesthetic consent' for a general anaesthetic and nerve block which Dr Hughes confirmed and signed.[5]


Anaesthetic consent: GA + nerve block.
nausea / vomiting, sore throat, tooth / lip injury, aspiration, pneumonia, allergic reaction, heart attack stroke very rare.
Blood Transfusion.
Patient signature: x
Confirmation by case Anaesthetist:
Administration

15. For the purposes of the investigation and inquest an expert statement was obtained from Dr Michael Stone, a Consultant Anaesthetist and Pain Specialist.[6] He considered that the pre-operative assessments and investigations were adequate and consistent with accepted practice.

The surgery and anaesthetic – 10 June 2021

16. On the morning of 10 June 2021, Trevor dropped Judy off at RDH and confirmed that she had her personal belongings with her including her CPAP

[3] Affidavit of Dr Dewi Hughes, dated 25 July 2024, [36], Annexure EH-1.
[4] Affidavit of Dr Dewi Hughes, dated 25 July 2024, [38].
[5] Brief of evidence, Folio 10, RDH Medical Records, Vol 3, Admission 13 - 10/6/21, p110.
[6] Expert Statement, Dr Michael Stone, dated 23 May 2024, Additional Document Folio 2, p2

machine, wheelie walker, mobile phone, glasses, medications, and other personal items needed for a stay in hospital. Judy told Trevor that she would call him once she had reported in and was awaiting her surgery.[7]

17. Later that day, surgeons conducted the patella resurfacing surgery with two anaesthetists, RDH Consultant Anaesthetist Dr Jenke and Registrar Anaesthetist Dr Schemenko. She received a general anaesthetic[8] and under supervision, Dr Schemenko also performed a nerve block. In her statement Dr Schemenko explained that a common approach to patients with OSA is to combine anaesthesia with a nerve block and local anaesthetic. This combination reduces the dose of anaesthetic drug required,[9] because the nerve block reduces the level of pain and discomfort experienced by the patient as the patient comes out of the general anaesthetic.[10]

18. After the surgery, the anaesthetists administered a reversal agent to wake Judy up. As she was still experiencing elevated levels of pain, Dr Jenke administered a further 3mg of IV morphine. In total Judy received 18mg of morphine from 1.50pm.[11]

19. The surgery was considered straightforward and without anaesthetic complication.[12] Dr Stone considered that Judy's intra-operative management was appropriate.[13]

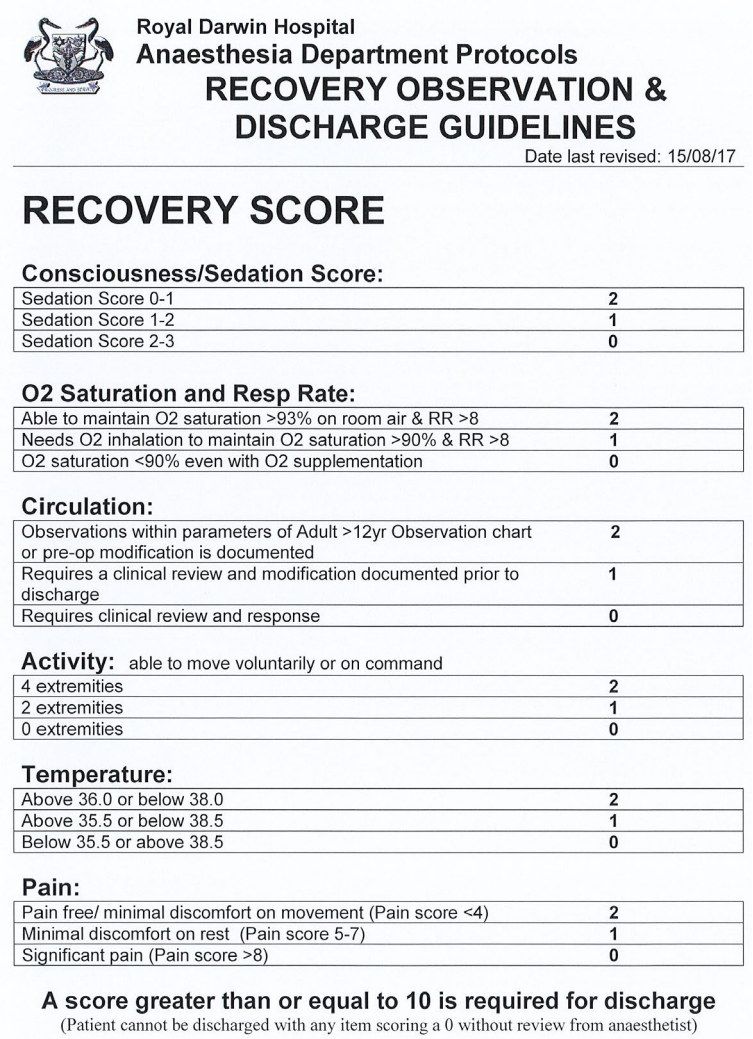
Post Anaesthetic Care Unit (PACU)

20. The PACU contains 14 patient bays and the ratio of nursing staff to patients is 1:1.[14] After any procedure conducted under anaesthesia patients are transferred to the PACU.[15] Patients remain in the PACU until their clinical

[7] T11-12.
[8] Brief of evidence, Folio 10, RDH Medical Records, Vol 3, [111].
[9] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [214].
[10] T55.
[11] Brief of evidence, Folio 10, RDH medical records, Vol 3, pp110-113.
[12] Brief of evidence, Folio 10, RDH medical records, Vol 3, ICU Summary, p12.
[13] Expert Statement, Dr Michael Stone, dated 23 May 2024, Additional Document Folio 2, p3
[14] Affidavit of PACU Nurse 1, dated 31 July 2024, [20].
[15] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [61].

observations are sufficiently stable for them to be moved to an area of lower care with less nursing observation. For example, a patient may be transferred to Ward 3A which has a 1:6 nursing to patient ratio.[16]

21. Before discharge from the PACU, the RDH Anaesthetic Department Protocol "Recovery Observation & Discharge Guideline"[17] (Discharge Guideline) must be completed. Six assessment criteria form the basis of the protocol, each assessment is scored, and the total is calculated.[18] A minimum score of 10 is normally required before a patient can be discharged.



Royal Darwin Hospital
Anaesthesia Department Protocols
RECOVERY OBSERVATION & DISCHARGE GUIDELINES
Date last revised: 15/08/17

RECOVERY SCORE

Consciousness/Sedation Score:

Sedation Score 0-1	2
Sedation Score 1-2	1
Sedation Score 2-3	0

O2 Saturation and Resp Rate:

Able to maintain O2 saturation >93% on room air & RR >8	2
Needs O2 inhalation to maintain O2 saturation >90% & RR >8	1
O2 saturation <90% even with O2 supplementation	0

Circulation:

Observations within parameters of Adult >12yr Observation chart or pre-op modification is documented	2
Requires a clinical review and modification documented prior to discharge	1
Requires clinical review and response	0

Activity: able to move voluntarily or on command

4 extremities	2
2 extremities	1
0 extremities	0

Temperature:

Above 36.0 or below 38.0	2
Above 35.5 or below 38.5	1
Below 35.5 or above 38.5	0

Pain:

Pain free/ minimal discomfort on movement (Pain score <4)	2
Minimal discomfort on rest (Pain score 5-7)	1
Significant pain (Pain score >8)	0

A score greater than or equal to 10 is required for discharge
(Patient cannot be discharged with any item scoring a 0 without review from anaesthetist)

[16] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [256].
[17] Additional documents, Folio 10.
[18] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [63]; Additional Documents, Folio 10.

PACU nurses

22. PACU nurses play a critical role in the care of patients immediately following surgery. Their primary responsibility is to frequently and continuously monitor and assess a patient's vital signs such as heart rate, blood pressure, respiratory rate, oxygen saturation and level of consciousness. This is particularly important during the initial phase of recovery when patients may be vulnerable to anaesthetic-related complications.[19]

23. PACU nurses also assess patients' pain levels and manage their pain using medications prescribed by the anaesthesia team or surgeon. The pain management approach taken by PACU nurses is determined by the anaesthetist assigned to the patient's case who will fill in the 'pain protocol' section of the Anaesthetic Record and advise the PACU nurse of the protocol during handover of the patient.[20] The nurses monitor the patient's response to pain management interventions, adjusting treatments as necessary to ensure comfort.[21]

24. In circumstances where a patient needs additional pain medication, the PACU nurses can also refer to the patient's eMMa[22] chart to determine what additional pain medication has been prescribed and can be administered.[23]

25. Once a patient is stable and meets the discharge criteria, the PACU nurses prepare them for transfer to a hospital ward or for discharge home. This involves ensuring the patient is awake, alert, and capable of safely recovering outside of the PACU environment.[24]

[19] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [67].
[20] Affidavit of PACU Nurse 1, dated 31 July 2024, [21].
[21] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [69].
[22] Electronic Medication Management system used at RDH; T21.
[23] Folio 8, Affidavit of PACU Nurse 1, dated 31 July 2024, [21].
[24] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [63].

Judy's arrival at PACU

26. Following surgery, Dr Jenke and Dr Schemenko wheeled Judy the short distance from Operating Theatre 4 to the PACU arriving at around 4.06pm. Dr Jenke was manually supporting Judy's airway with a jaw thrust manoeuvre. This manoeuvre is commonly used on sedated or unconscious patients to open their airway and is frequently seen when patients are brought into the PACU.[25] Judy was also receiving oxygen from a six litre Hudson Mask.[26]

27. An experienced PACU nurse (Nurse 1) and a more junior, graduate nurse (Nurse 2) received her. Dr Jenke told them that Judy had been agitated with pain when she woke from her surgery and had been administered 3mg IV morphine as an analgesic.[27] While Nurse 1 received a handover from Dr Schemenko, Nurse 2 recorded the morphine on the Anaesthetic Record[28] and connected Judy to the observations machine, which recorded her oxygen saturation at 95%.[29]

28. Nurse 1 recalled being told that Judy had COPD and OSA, and that her CPAP machine was in the Day Care Unit.[30] Judy's high levels of pain following her knee surgery were not unusual,[31] and the PACU nurses were to follow the morphine protocol to manage her post-operative pain.

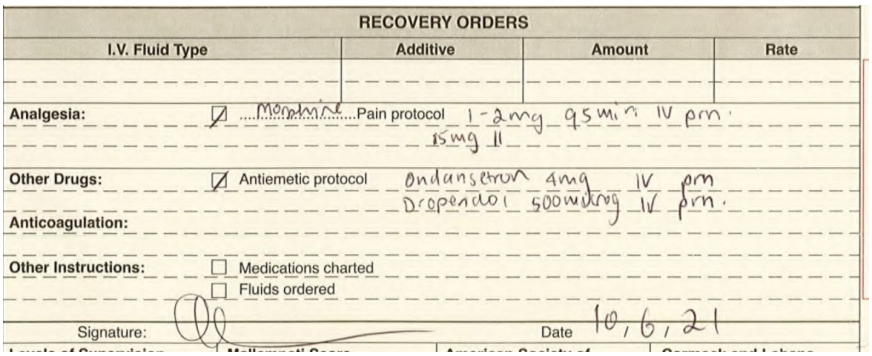
Sedation and pain management protocol

29. Within 10 minutes of arriving at the PACU, Judy was unsettled and in pain. She was clutching at her right knee and told Nurse 1 that it was sore and painful. While offering reassurance, Nurse 1 also encouraged Judy to wake

[25] Affidavit of PACU Nurse 1, dated 31 July 2024, [26]. T16.
[26] T16.
[27] Affidavit of PACU Nurse 1, dated 31 July 2024, [28].
[28] Brief of evidence, Folio 10, RDH medical records, Vol 3, p113.
[29] Brief of evidence, Folio 10, RDH medical records, Vol 3, p113.
[30] Also referred to as the 'Short Stay Unit,' '23 Hour Stay Unit' or 'SDPU'. Additional documents, Folio 8,[29]; T16-17.
[31] Affidavit of PACU Nurse 1, dated 31 July 2024,[30].

up, breathe and cough. This was to avoid the risk of atelectasis, a common breathing complication following sedation and surgery.[32]

30. As Judy became more alert and conscious, Nurse 1 reviewed the pain protocol which was prescribed by the Anaesthetists for 1-2mg of morphine *pro re nata*, or as needed, with a maximum of 15mg.[33]



RECOVERY ORDERS

I.V. Fluid Type	Additive	Amount	Rate

Analgesia: ☑ Morphine Pain protocol 1-2mg q5min IV prn. 15mg II

Other Drugs: ☑ Antiemetic protocol Ondansetron 4mg IV prn
Droperidol 500mcg IV prn.

Anticoagulation:

Other Instructions: ☐ Medications charted
☐ Fluids ordered

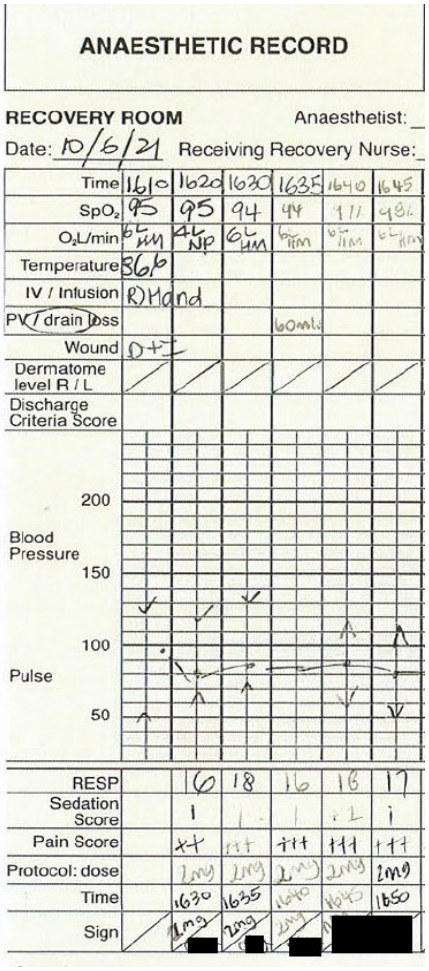
Signature: Date 10/6/21

31. At 4.20pm, Judy's pain score was at medium level (++) and her sedation score was 1 (meaning, occasionally drowsy and easy to rouse).[34] She was complaining of increasing pain and Nurse 1 decided to commence her on the morphine protocol. She administered 2mg of morphine through Judy's cannula and continued to administer further 2mg doses every 5 minutes up until 4.45pm.[35] Nurse 1 sat next to Judy and monitored her breathing, consciousness level and observations which she recorded on the Anaesthetic Record.[36] Judy remained on oxygen throughout this time.

32. During this 25-minute period, Nurse 1 assessed Judy's pain score as (+++) and her sedation level remained at 1.[37] Nurse 1 based her assessments on Judy's behaviour, including her physical reaction to pain such as grimacing and her verbalised reports of pain. Judy's observations were within normal

[32] Affidavit of PACU Nurse 1, dated 31 July 2024, [32].
[33] Affidavit of PACU Nurse 1, dated 31 July 2024, [33]; Brief of evidence, Folio 10, RDH medical records, Vol 3, p112.
[34] Additional documents, Folio 10, RDH *Recovery Observations & Discharge Guidelines.* Sedation Score 1
[35] Affidavit of PACU Nurse 1, dated 31 July 2024, [34]-[37].
[36] Brief of evidence, Folio 10, RDH medical records, Vol 3, p113.
[37] Affidavit of PACU Nurse 1, dated 31 July 2024, [36]. Additional documents, Folio 10, RDH *Recovery Observations & Discharge Guidelines.*

range, with her oxygen saturation ranging from 94% to 98%, and her respiratory rate sitting between 16 to 18 respirations her minute.[38] By 4.45pm the pain protocol ceased, and Judy had received 10mg of morphine.



ANAESTHETIC RECORD

RECOVERY ROOM Anaesthetist:

Date: 10/6/21 Receiving Recovery Nurse:

Time	1610	1620	1630	1635	1640	1645
SpO_2	95	95	94	94	97	98
O_2L/min	6L NM	4L NP	6L NM	6L NM	6L NM	6L NM
Temperature	36.6					
IV / Infusion	R) Hand					
PV / drain loss				60ml		
Wound	D+I					
Dermatome level R / L						
Discharge Criteria Score						
Blood Pressure (200 / 150 / 100 / 50)						
Pulse						
RESP		16	18	16	18	17
Sedation Score		1	1	1	1	1
Pain Score		+++	+++	+++	+++	+++
Protocol: dose		2mg	2mg	2mg	2mg	2mg
Time		1630	1635	1640	1645	1650
Sign		10mg	2mg	2mg	[redacted]	

33. Judy was conscious and awake and speaking to Nurse 1 about her husband. She repeatedly asked about her belongings (in particular, her phone) and requested that the nurse collect them and bring them to her, as she wanted to speak with Trevor. However, as Nurse 1 was continuously monitoring Judy, she could not leave her to collect her belongings at that time.[39]

34. Shortly after ceasing the pain protocol, Nurse 1 observed that Judy was grimacing in pain. Nurse 1 reviewed Judy's eMMa chart which contained prescriptions for Endone and Tramadol. Nurse 1 then reviewed the surgery

[38] Affidavit of PACU Nurse 1, dated 31 July 2024, [37].
[39] Affidavit of PACU Nurse 1, dated 31 July 2024, [39]; T20.

Anaesthetic Chart and saw that Judy had already received Tramadol intra-operatively, which meant that she could not have it again. At 5pm, Nurse 1 administered a 10mg dose of tablet Endone to Judy. Nurse 1 knew that it would take between 20 to 30 minutes to take effect, and her plan was for the Endone to kick-in and manage Judy's pain as the morphine wore off.[40]

Patient Controlled Analgesia (PCA)

35. At approximately 5.08pm, Nurse 1 attempted to call Judy's Consultant Anaesthetist, Dr Jenke, to request advice on further pain management as she thought Judy needed more pain relief. Although Nurse 1 wanted to speak with Dr Jenke, he was not available to take the call.[41] Soon after, the Nursing Team Leader asked Nurse 1 to assist Judy with her pain. The Team Leader was holding up a Patient Controlled Analgesia (PCA) form saying words to the effect of "she needs something for this pain."[42]

36. PCA's are frequently used in the PACU and in wards following surgery.[43] A PCA is a medication pump which enables the patient to control the delivery of pain relief medication. PCA's are set with 'lock out intervals' which is a period during which medication will not be administered. A patient can click the PCA button as much as they like but a dose will only be administered after each lock out interval has passed. This prevents overdosing.[44]

37. The standard parameters of an adult morphine PCA are lock out intervals of 5 minutes and doses of up to 1mg. A patient with that set up can receive a maximum of 1mg of morphine every 5 minutes.[45]

[40] Affidavit of PACU Nurse 1, dated 31 July 2024, [42]. The Endone dosage was incorrectly recorded as 5mg on the Anaesthetic Record, [44]; T19; Brief of evidence, Folio 10, RDH medical records, Vol 3, p113.
[41] Affidavit of PACU Nurse 1, dated 31 July 2024, [45]. T21.
[42] Affidavit of PACU Nurse 1, dated 31 July 2024, [46].
[43] Affidavit of Dr Andrew Magness, dated 15 July 2024, [56].
[44] Affidavit of Dr Andrew Magness, dated 15 July 2024, [59].
[45] Affidavit of Dr Andrew Magness, dated 15 July 2024, [60]

Floor Anaesthetist

38. Dr Andrew Magness was the Floor Anaesthetist on duty during the afternoon of 10 June 2021. He was rostered from 12.30pm to 10pm, and then remained on call until 7.30am the next day. Also referred to as the Duty Anaesthetist, the Floor Anaesthetist is the anaesthetic team leader for the operating theatres and is the central point of referral and communication for all anaesthetic issues within the hospital.[46] The Floor Anaesthetist is responsible for ensuring that all requests for anaesthetic assistance are attended to, either by themselves or by another available anaesthetist.[47]

39. 10 June 2021 was particularly busy and demanding. All operating theatres were running, and there were two unexpected 'Category A' emergency cases. They were also down one anaesthetist as the evening Anaesthetic Registrar had called in sick and was not replaced.[48]

40. At around 5pm, Dr Magness was walking past the PACU and he noticed Judy moaning and shifting around on her bed, which indicated to him that she was experiencing severe pain.[49] Dr Magness spoke to Nurse 1 who was standing next to Judy's bed. Nurse 1 reported that Judy had received 10mg of morphine, but she still needed more pain relief.[50]

41. On reviewing her anaesthetic chart, Dr Magness recalled that he had briefly seen her in the operating theatre at the end of her surgery earlier in the day, when she was receiving her nerve block while still under anaesthesia.[51]

42. Dr Magness said that given the amount of local anaesthetic used in Judy's nerve block, it might have been expected that her pain would be controlled for 12 to 18 hours.[52] However, he also explained there are times when nerve

[46] T52.
[47] T52.
[48] T53-54.
[49] Affidavit of Dr Andrew Magness, dated 15 July 2024, [46].
[50] Affidavit of Dr Andrew Magness, dated 15 July 2024, [47].
[51] Affidavit of Dr Andrew Magness, dated 15 July 2024, [45].
[52] T55.

blocks do not work or only provide patchy pain relief, even when perfectly placed.[53]

43. Dr Magness said that ideally, he would have arranged for the Consultant Anaesthetist or Registrar, who were Judy's primary anaesthetic team, to review Judy. But he knew that Dr Jenke would be unavailable for some time as he was dealing with another patient. He considered that Judy needed immediate attention to address her pain.[54] In those circumstances, he reviewed Judy's anaesthetic record. Under her medical history, he noted her COPD and OSA. He considered a further nerve block and analgesia such as Opioids (morphine), Ketamine or Clonidine, but decided that morphine via a PCA was preferable.

44. Dr Magness did not realise that Judy had received 15mg of Morphine intra-operatively. But he said that if he had, it would have confirmed and reinforced his decision to proceed with a morphine PCA. However, he would also have added small doses of Ketamine (in addition to the morphine), because of Judy's high opioid requirements.[55]

Consideration of Judy's co-morbidities in prescribing PCA

45. Dr Magness said that he factored in Judy's complex medical history of OSA, high BMI and COPD into his decision-making process. He understood that opioids could exaggerate respiratory depression in patients with OSA and cause drowsiness.[56] Judy's high BMI and COPD were also relevant. These conditions negatively impact lung tissue and mechanics and have a negative effect on the body's ability to take in oxygen and remove carbon dioxide.[57]

[53] T56.
[54] As above, [49]. T56-57.
[55] Affidavit of Dr Andrew Magness, dated 15 July 2024, [54].
[56] Opioid induced ventilation insufficiency or 'OIVI,' Affidavit of Dr Andrew Magness, dated 15 July 2024, [64].
[57] Affidavit of Dr Andrew Magness, dated 15 July 2024 [64]-[65]; T58-59.

46. Against these risks, Dr Magness explained that he also understood the importance of effective analgesia, as poorly managed pain can lead to stress on the cardiovascular system, chronic post-operative pain and significant and long-lasting psychological distress.[58] And he knew that while she remained in the PACU she would have 1:1 or 'line of sight' nursing, in other words, she would be constantly watched and monitored.

47. Based on these assessments, at 5.18pm Dr Magness prescribed a PCA for 1mg of morphine with a lockout period of 5 minutes. The PCA is recorded as having been 'checked and connected,' by 5.25pm.[59] Judy was conscious, stable, and awake at this time. She was sitting up in bed and receiving oxygen through nasal prongs. Nurse 1 explained to Judy how the pump worked.[60]

Nursing Handover

48. Nurse 1 was going off-shift at 5.30pm and so conducted a handover to Nurse 2. Nurse 1 told Nurse 2 about Judy remaining under observation in PACU for a while longer to assess whether her pain management was adequate and to monitor her tolerance of the Endone and morphine PCA.[61] They also discussed Judy's OSA and her CPAP machine.[62]

49. Nurse 1 said that she understood Nurse 2 was going to collect Judy's belongings (including her CPAP machine) from the Day Care Unit.[63] But Nurse 2 said that she understood that the CPAP machine and Judy's other personal belongings had already been transferred from the Day Care Unit to Ward 3A (though she conceded that this was not confirmed with nursing staff from Ward 3A).[64]

---

[58] Affidavit of Dr Andrew Magness, dated 15 July 2024, [65].
[59] Affidavit of Dr Andrew Magness, dated 15 July 2024, [73], Annexure AM-02.
[60] Affidavit of PACU Nurse 1, dated 31 July, [50]-[51].
[61] Affidavit of PACU Nurse 1, dated 31 July 2024, [56]; T41.
[62] Affidavit of PACU Nurse 2, dated 23 July 2024, [22].
[63] T25.
[64] As above, [22], T38.

Oxygen saturation modification

50. At 5.40pm, Nurse 2 recorded Judy's oxygen saturation at 93%. Her sedation and pain scores were not recorded at that time.[65]

51. While observing Judy, Nurse 2 noted on more than two occasions that her oxygen saturations would drop down to as low as 88% when she fell asleep, but she would rouse easily when spoken to and the levels would rise again to between 93% and 95%.[66] (Prior to the surgery, Judy's oxygen saturation was recorded as 95%.[67])

52. At around 5.45pm, Nurse 2 assessed Judy as ready for discharge. Her pain was being effectively managed, and she met all the discharge criteria except for oxygen saturation, which was still trending down to 88% when she dozed but would increase to 93% when the nurse roused her. Knowing that Judy had OSA, Nurse 2 considered that her oxygen levels would be managed by use of the CPAP machine, which she understood was already on the ward.[68]

53. As explained earlier in these findings, under the PACU Discharge Guideline,[69] patients normally need a recovery score of equal or greater than 10 (and no score can be 0), before their discharge from the PACU. If a patient does not meet all the standard criteria for discharge or there is any score of 0, they can only be discharged following a clinical review, and if the standard criteria for discharge is modified.[70]

54. While discharge modifications are not uncommon,[71] most requests for modifications concern heart rate and blood pressure.[72] Where an observation of a patient is a predictable consequence of anaesthesia, if the patient does

[65] Affidavit of PACU Nurse 2, dated 23 July 2024, [26], Annexure 3.
[66] Affidavit of PACU Nurse 2, dated 23 July 2024, [27]; T40.
[67] Brief of evidence, Folio 10, RDH medical records, Vol 3, p110.
[68] Affidavit of PACU Nurse 2, dated 23 July 2024, [29]; T40.
[69] Additional documents, Folio 10.
[70] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [248].
[71] Affidavit of Dr Andrew Magness, dated 15 July 2024, [87]- [89]; Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [249].
[72] Affidavit of Dr Andrew Magness, dated 15 July 2024, [90].

not require clinical management, and if the patient is otherwise well and meets all other discharge criteria, a modification may be made to a criterion so the patient can be discharged.[73]

55. Requests for a modification concerning oxygen saturation are less common. Best practice requires a patient to be reviewed in person before any modification to oxygen saturation criteria is made.[74] It was Dr Magness's normal practice to conduct a full clinical review of a patient before making such a modification. However, on 10 June 2023, given the many competing work pressures on him, he deviated from his standard practice[75] and made a discharge modification in the absence of a full and thorough review.

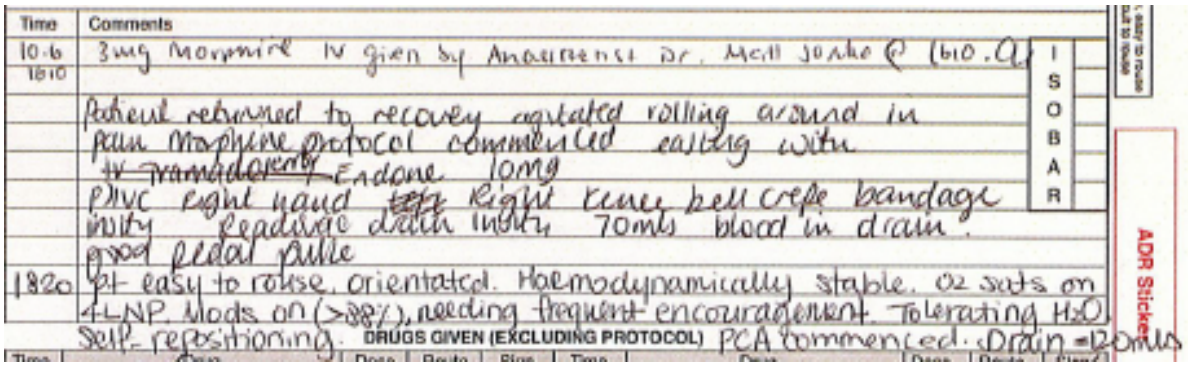
56. Nurse 2 requested Dr Magness make the observation modification.[76] Under the "track and trigger" approach by NT Health to patient observations, the low trigger level for a patient's oxygen saturation levels requiring a nursing response is 93%, unless an observation modification to the trigger level is in place.[77] If Judy's oxygen reading required an ongoing nursing response she could not be discharged.

57. Nurse 2 recalled telling Dr Magness that while Judy was meeting discharge criteria when awake, her oxygen saturations trended downwards to as low as 88% when she fell asleep, she would partially obstruct and make a snoring like sound.[78] Nurse 2 recalled that Dr Magness asked about the CPAP machine and she told him what she understood was the case, namely, that it would be available to Judy on the ward. [79]

58. Although Nurse 2 recalled this conversation, she conceded she did not record the lower oxygen saturation observations on Judy's anaesthetic record (which

[73] Affidavit of Dr Andrew Magness, dated 15 July 2024, [87].
[74] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [250].
[75] Affidavit of Dr Andrew Magness, dated 15 July 2024, [100]-[101]; Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [249].
[76] Affidavit of PACU Nurse 2, dated 23 July 2024, [29]; T41.
[77] Affidavit of Dr Andrew Magness, dated 15 July 2024, [86].
[78] Affidavit of PACU Nurse 2, dated 23 July 2024, [29]
[79] Affidavit of PACU Nurse 2, dated 23 July 2024, [29], T41, T66; T38.

only recorded her saturations as being 93% or higher). And nor did she make any notes made about her drops in oxygen saturation in the comments box. She conceded that this was an omission.[80]



59. Dr Magness recalled that Nurse 2 told him that Judy's oxygen saturations were sitting at 93% but he did not recall the details of any further conversation.[81] Accordingly, it seems that Dr Magness did not fully factor in Judy's drops in oxygen saturation when she dozed off or her need for frequent rousing when he considered modifying her discharge criteria.

60. Instead, it seems that he substantially relied on the Anaesthetic Record, which omitted this additional information. The record revealed that her oxygen saturation was 95% prior to the surgery and that her medical history included COPD, high BMI, OSA and heavy smoking. From this information Dr Magness concluded that her lower oxygen saturation of 93% was likely to be a combination of her lower baseline oxygenation level because of her lung disease, combined with the general anaesthetic and analgesia and other health

[80] Affidavit of PACU Nurse 2, dated 23 July 2024, [33]-[34]
[81] Affidavit of Dr Andrew Magness, dated 15 July 2024, [85]; T66.

conditions and in those circumstances, he did not consider that an oxygen saturation of 93% was immediately concerning.[82]

61. At 5.45pm Dr Magness made a modification to Judy's oxygen saturation and completed the 'modification' section of her observation chart adjusting the criteria to:

> No response >88%
>
> Medical review 86-88%
>
> MET call < 86%

62. As a result of this modification, Judy could be discharged from the PACU. On the modified level, if her oxygen saturation levels were 88% or above, no clinical response was required. If between 86% and 88% a clinical review was necessary, and if Judy's oxygen saturation level were to fall to less than 86%, MET or the Rapid Response Team (Code Blue) was to be called.[83]

63. Considering all the available evidence, including that Judy's oxygen saturations were dropping when she dozed and that she needed to be frequently roused, Dr Stone considered that the decision to alter the calling criteria for clinical review and rapid response was not appropriate.[84]

Transfer to Ward 3A - 10 June 2021

64. At around 6.20pm, a nurse (Nurse 3) from the general surgical ward 3A (Ward 3A) was asked to collect Judy, a post-operative patient who had undergone elective patella resurfacing surgery that afternoon.[85]

65. On attendance at the PACU, Nurse 3 spoke with Nurse 2 who provided Judy's handover including that she had suffered from a lot of pain following her

[82] Affidavit of Dr Andrew Magness, dated 15 July 2024, [94]-[95].
[83] Brief of evidence, Folio 10, RDH medical records, Vol 3, p131.
[84] Expert Statement, Dr Michael Stone, dated 23 May 2024, Additional Document Folio 2, pp4-5
[85] Affidavit of Nurse 3, dated 22 July 2024, [20].

surgery and that there had been difficulty in getting her pain under control.[86] The nurses went through the Anaesthetic Record together to identify the medications that Judy had received in the PACU and Nurse 3 was advised that Judy was on a PCA which would go with her to Ward 3A.[87] Judy's medical history was discussed including that she was a smoker, had obesity, COPD and OSA and that she used a CPAP machine.[88] Nurse 3 was also advised that there had been a modification put in place for Judy's oxygen saturations and that she did not require a clinical review unless her saturations dropped below 88%. Judy also had 3L oxygen running via nasal prongs.[89]

66. Considering her significant medical history and co-morbid conditions, Nurse 3 considered Judy to be a high-risk patient. Nurse 3 was concerned that she would not be able to effectively monitor and manage Judy's pain on the ward if she experienced another pain crisis.[90] Nurse 3 said that she questioned whether Judy should instead go to the Intensive Care Unit (ICU) where she could be closely monitored, but was told that Judy had been reviewed and did not meet the criteria for the ICU.[91]

67. However, Nurse 2 did not recall any discussion about the ICU with Nurse 3.[92]

68. Nurse 3 spoke to Judy who appeared to be comfortable and calm. Judy's observations were within normal limits[93] and she discharged from PACU and arrived in Ward 3A at around 6.30pm.[94]

[86] Affidavit of Nurse 3, dated 22 July 2024, [22].
[87] As above.
[88] As above.
[89] As above.
[90] Affidavit of Nurse 3, dated 22 July 2024, [25].
[91] As above, [23]; T78-79.
[92] T46.
[93] Affidavit of Nurse 3, dated 22 July 2024, [27]-[28].
[94] As above, [29].

Personal belongings - CPAP machine

69. The whereabouts of Judy's personal belongings, including her CPAP machine are not clear, but they were not with her in the PACU or in Ward 3A.

70. There was conflicting evidence from the three nurses caring for Judy about who had responsibility for collecting her belongings or ensuring that she had them and little clarity around how that was to be facilitated.

71. From her handover with Dr Schemenko, Nurse 1 understood that Judy's CPAP machine was with her personal belongings in the Day Care Unit.[95] She had been intending to collect Judy's belongings (including the CPAP machine) from the Day Care Unit at the end of the shift but that did not occur, and she understood that Nurse 2 was going to collect them.[96]

72. However, Nurse 2 believed that the CPAP machine was already on Ward 3A, and she recalled discussing this with Dr Magness when she requested the oxygen saturation modification to enable Judy's discharge from PACU.[97]

73. Dr Magness did not recall any discussions about the CPAP machine. He said that, in the absence of any protocol or guideline for patients with OSA, anaesthetists assumed patients would have access to their CPAP machines and this was not a process that the anaesthetist needed to be involved in or turn their mind to.[98]

74. When asked about the normal processes or protocols for ensuring that a patient's personal belongings are returned to them, Nurse 1 said that the PACU nurse collects personal belongings from the Day Care Unit when the

[95] Affidavit of PACU Nurse 1, dated 31 July 2024,[29].
[96] Affidavit of PACU Nurse 1, dated 31 July 2024, [52]. T23.
[97] Affidavit of PACU Nurse 2, dated 23 July 2024, [22] and [29]; T43.
[98] T66.

patient is ready to be discharged.[99] But Nurse 2 thought that 'sometimes' they were transferred from the Day Care Unit directly to the ward.[100]

75. Nurse 3 described three ways that personal belongings (including CPAP machines) are moved within the hospital:

(a) prior to surgery, a Patient Care Assistant (PCA) may take them to the ward where it is anticipated the patient will be transferred; or

(b) the PACU nurse gives it to the ward nurse when the patient is discharged from the PACU; or

(c) once a patient is received into a ward, a ward PCA is sent to collect the items.

76. But there is also seemingly a fourth method, because Nurse 3 said that she intended to collect Judy's belongings once Judy settled on the ward. Nurse 3 did not consider it an immediate priority because the CPAP is not usually connected until the patient is ready for night sleep, at around 8.30pm.[101]

Ward 3A – 10 June 2021

77. After arriving in Ward 3A, Judy was 'awake and alert', her pain was under control,[102] and her recorded observations were all within range:

Oxygen saturation	93%
Heat rate	79 beats per minute
Respiratory rate	18 breaths per minute
Blood pressure	121/81

78. Nurse 3 placed an oximeter on Judy's finger to monitor her oxygen saturation. An oximeter has an audible alarm which sounds when oxygen saturation drops

[99] T20.
[100] T38.
[101] T80-81.
[102] As above, [30]; Brief of evidence, Folio 10, RDH medical records, Vol 3, p130.

below a set level. Although not completely certain, Nurse 3 thought she set the level between 90-92%.[103] She also thought that nursing staff would hear the alarm if it went off. [104]

79. Nurse 3 stayed with Judy for around 30 minutes, which was longer than usual. However, she wanted to ensure that Judy was safe and sufficiently stable before she tended to her other four patients. She gave Judy dinner and a cup of tea and observed her to be drowsy, but responsive to voice. She thought that Judy's condition appeared like other postoperative patients who had received opioids during and following surgery.[105]

80. During this 30-minute period, Judy's oxygen saturation levels did not drop below 88%. It seems probable that during this period Judy remained roused because of her meal and interactions with Nurse 3. Nurse 3 said that if Judy's oxygen saturation had dropped below 90%, she would not have left Judy, and if it had dropped below 88%, she would have called for a medical review or Code Blue, as directed in the oxygen modification.[106]

81. At about 7pm Nurse 3 was buzzed to look after another patient on the ward who required medication. It was also time for the evening ward rounds and over the next 30 to 40 minutes, Nurse 3 attended to her other patients, including an intellectually disabled patient who required full nursing care and another who had a broken leg and required assistance to go the toilet.[107]

82. When she returned Judy was unresponsive. Initially, Nurse 3 thought that Judy might be sleeping but as she got closer and checked the pulse oximeter, she saw that it was reading 77%. Apparently, the alarm had not gone off or had not been heard. Judy was unconscious, she did not have a pulse and she was

[103] T83.
[104] T83.
[105] Affidavit of Nurse 3, dated 22 July 2024, [32]-[37].
[106] Affidavit of Nurse 3, dated 22 July 2024, [37]; T83-84.
[107] Affidavit of Nurse 3, dated 22 July 2024, [39]-[40]; T84-85.

not breathing.[108] Nurse 3 pressed the emergency buzzer to alert other medical staff and commenced CPR on Judy. As soon as other staff arrived, they called Code Blue at 7.46pm.[109]

83. The Code Blue team arrived on the ward at 7.50pm and resuscitation efforts continued. Judy was intubated and transferred to the ICU.

ICU - 10 June 2021 to 18 June 2021

84. At 8.35pm, just over 2 hours since her discharge from the PACU, Judy arrived in ICU.[110]

85. Judy's oxygen saturation levels had dropped low enough for her to go into cardiac arrest sometime between 7pm and 7.40pm. In Dr Spain's opinion, following her cardiac arrest she suffered a hypoxic episode of at least 15 minutes.[111]

86. Tests to determine the cause of the cardiac arrest and to assess whether there had been any obvious brain damage were performed. On 11 June 2021, a CT pulmonary angiogram (CTPA) and CT brain scan (CTB) were conducted along with a bedside Transthoracic echocardiogram (TTE), to assess Judy's heart. The TTE returned a normal result making it less likely that ischemic heart disease was the cause of her cardiac arrest.[112]

[108] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [268].
[109] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [268]-[273].
[110] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [276].
[111] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [277].
[112] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [280]-[281].

87. Over the next 4 days, Judy's sedation was reduced to allow her neurological condition to be assessed. Unfortunately, Judy showed signs of poor neurological recovery, consistent with a hypoxic brain injury.[113]

88. In most cases, a return to consciousness within 24 to 48 hours following hypoxia indicates chances of a good recovery. However, Judy remained in ICU for 8 days, and given her age and comorbidities, there was no chance of meaningful recovery.[114]

89. On 18 June 2021, her bleak prognosis was discussed with family and it was decided to transition Judy to palliative care.[115]

Saturday, 19 June 2021

90. On 19 June 2021 at 1.10pm, ten days after her admission for straightforward, elective, knee surgery, Judy was extubated in the ICU with a plan for the Palliative team to take over care the next day.[116]

91. At 2pm, ICU Doctor Hensman called the Palliative Care Registrar, Dr Abbey Le Blanc, to make plans for her medication and symptom management. While it was likely Judy would remain in the ICU, the possibility of transfer to a ward was discussed, as the ICU was close to capacity.[117] However, there was no plan to move Judy to the Palliative Care Unit (Hospice) because the Hospice is not normally offered to a patient who may pass away during the transfer process[118] and there was a widely held misconception that patients cannot be transferred to the Hospice on the weekend.[119]

---

[113] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [283].
[114] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [285].
[115] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [286].
[116] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [287].
[117] Affidavit of Dr Abbey Le Blanc, dated 20 August 2024, [26]; T120.
[118] T121.
[119] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [290].

Sunday, 20 June 2021 – Judy passes away

92. By 7.30am, bed pressures in the ICU resulted in a decision to move Judy to a two-patient bay on Ward 2A. The Palliative Care Team was not told of her transfer[120] even though Dr Le Blanc was on-call and was available to attend the hospital if required.[121]

93. Judy's husband, a son and daughter, and a grandchild, visited the hospital, intending to sit with Judy during her anticipated last hours. When they arrived on Ward 2A they were distressed to find Judy in a shared room. She appeared agitated, hot, clammy and was wrapped in a blanket. Her catheter abg was full, and she was struggling to breath.[122] Her family tried to get assistance and waited for about 45 to 50 minutes for a doctor.[123] Her condition was very confronting, and when no doctor arrived, they could stand it no longer and felt compelled to leave the hospital. This outcome is one which continues to cause them much anguish.

94. A nurse on the ward, Nurse 4, was also concerned that there was no definite palliative care plan and at 10.20am requested an urgent review by the Orthopaedic Resident Medical Officer/Registrar. Nurse 4 paged the medical team several times and also sought medication advice from the ICU Liaison nurse.[124]

95. At around 10am, Dr Le Blanc logged into the hospital system remotely and discovered that Judy had been moved to Ward 2A. At that time, the ICU used a paper-based medication chart and Judy's medications had not been entered into eMMa.[125] As no medication was charted on the eMMa system, Dr Le Blanc did not know what medication she was receiving and could not

[120] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [288].
[121] Affidavit of Dr Abbey Le Blanc, dated 20 August 2024, [30], [34].
[122] Coronial Brief, Folio 12.
[123] T125.
[124] Affidavit of Nurse 4, dated 20 August 2024, [27]-[34]
[125] Affidavit of Dr Abbey Le Blanc, dated 20 August 2024, [31].

determine whether it was adequate and appropriate to manage her terminal symptoms.[126]

96. Dr Le Blanc was upset and frustrated that she was not contacted about Judy's transfer. She tried ringing the Orthopaedic Resident Medical Officer (RMO) responsible for Ward 2A but, when she was unable to speak to anyone in the Orthopaedic team, and when she could not confirm that Judy was getting adequate care,[127] she immediately drove to the hospital to review Judy's care.[128] En route she received a call from the ICU Liaison Nurse requesting a review of Judy. She reported that she was already on her way, and she arrived at Ward 2A at around 12pm,[129] at about the same time as the Orthopaedic Resident Medical Officer/Registrar who had been earlier paged.

97. As soon as she arrived, Dr Le Blanc immediately arranged for the second patient to be moved to give Judy some privacy. She observed that Judy had uncontrolled symptoms including loud, rapid, shallow breathing and it was clear that Judy was now in a terminal stage and was dying.[130] She reviewed Judy's medications but before she could administer further medication to improve her symptoms, Judy passed away at 12.20pm.[131] At the inquest Dr Le Blanc described feeling 'devastated' when she learned that Judy's family had been so distressed by Judy's symptoms and care that they were unable to remain with her.[132] She acknowledged that Judy passing away with uncontrolled symptoms was the antithesis of appropriate palliative care.[133]

Post-mortem examination

98. It was the opinion of Forensic Pathologist, Dr Bjorn Swigelaar, that the medical cause of death was Hypoxic-ischaemic encephalopathy with other

[126] Affidavit of Dr Abbey Le Blanc, dated 20 August 2024,[31].
[127] T122.
[128] Affidavit of Dr Abbey Le Blanc, dated 20 August 2024, [34], [36].
[129] Additional documents, Folio 12, [22]. T122.
[130] T123.
[131] Additional documents, Folio 12, [42].
[132] T123- T125.
[133] T124

significant conditions contributing to death being chronic obstructive pulmonary disease, obstructive sleep apnoea, hypertension, and fatty liver disease.

How can a repeat of Judy's death be avoided?

99. Judy's family were present and engaged throughout the inquest and I heard of the sadness and grief that they experienced. They wanted to make sure that the systemic failures in Judy's care which contributed to her death were identified and, more importantly, rectified, in the hope that other families might be spared the loss and trauma that they experienced, and that other lives might be saved.

100. Dr Stone explained that while she was in PACU, if Judy's drops in oxygen saturation and requirements for interventions to her arousal had been properly understood as a late sign of narcosis, those factors called for an increased intensity of observation and a delayed discharge from PACU and/or continuous oxygen saturation monitoring. Accordingly, her oxygen saturation modifications and discharge to a ward with reduced nursing observations was not appropriate.

101. Dr Stone explained Judy's increased risks and the impact of limited resources, and suggested the following potential improvements:[134]

> There is evidence that perioperative OSA, and opioid tolerance increase the risk of adverse events and opioid induced ventilatory impairment. Scientific evidence on the efficacy of perioperative safety measures is mostly lacking. The rates of obesity and OSA (both diagnosed and unrecognised) is increasing making the allocation of limited resources (high dependency beds, additional nursing staff observations and clinical monitors such as continuous pulse oximetry) more difficult.
>
> Post-operative measures that are supported by perioperative societies and expert groups include:

[134] Expert Statement, Dr Michael Stone, dated 23 May 2024, Additional Document Folio 2, pp5-6

- Continuous pulse oximetry to be administered as long as patients remain at increased risk.

- CPAP or non-invasive positive pressure ventilation to be continuously administered throughout the hospitalisation in patients with preoperative treatment (Cosowicz et al 2021).

102. NT Health's Root Cause Analysis (RCA) and Institutional Response[135] also identified failings in Judy's care and addressed service improvements.

103. Although OSA is a common condition, Dr Spain acknowledged that there were no policies or procedures concerning the use of CPAP machines. In response, NT Health has now promulgated a "Post Anaesthesia Care Unit Guideline" (PACU Guideline) which mandates that adult patients are screened for OSA in the pre-admission clinic and, where a patient requires a CPAP machine, they cannot be discharged from the PACU until a machine is physically with the patient (either their own or a hospital provided machine).[136] I understand there is no proposal for continuous use, as suggested by Dr Stone, and further consideration and guidance should be given concerning any circumstances where continuous use may be indicated.

104. Naturally, NT Health was most concerned about Judy's CPAP machine and was less concerned about her other personal belongings. But from the evidence, Judy was worried about her phone because she wanted to ring Trevor, and she also likely needed her glasses and other belongings to feel safe and comfortable. That she did not have her phone and was not able to make a final phone call added to her family's feelings of loss and distress. NT Health did not provide any policy or guidelines as to how patients are reunited with their personal belongings following surgery, and such a policy/guideline should be promulgated.

[135] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [341]-[366]
[136] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [362]-[365], Annexure BS-11.

105. NT Health, considering Judy's OSA, came to the same view as Dr Stone, namely, that Judy (and similarly placed patients) required higher levels of observation post-operatively. Given the drops in her oxygen saturation and the frequent need to be roused, NT Health agreed that she required an extended stay in PACU, and modifications should not have been made to allow her to be discharged without a full clinical review.

106. The Floor Anaesthetist was working under considerable pressure when he chose to modify Judy's oxygen saturation without a thorough review of her clinical condition and he acknowledged this was neither his normal practice, nor best practice. The RCA and Institutional Response identified that from 5pm onwards there are considerable pressures placed on the Floor Anaesthetist combined with a diminished staffing capacity in PACU, and this pressure may well have been the catalyst for the shortcut. To reduce this pressure, Dr Spain advised that an additional Anaesthetic Registrar is now rostered to support this busy afternoon period and there is now a second on-call consultant on weekday evenings.[137] Furthermore, an additional PACU nurse is rostered overnight, to relieve pressure on PACU nurses to discharge patients.[138]

107. Alternatively, and additionally, NT Health accepts there is a gap in its service provision for high-risk patients who require closer observation than is available on general wards. Dr Spain advised that a Close Observation Unit (COU) is being established for higher-risk patients who are discharged from the PACU, and who do not qualify for admission to the High Dependency Unit (HDU) or ICU. The plan is for the COU to be situated in Ward 3A with a capacity for four patients in one room, for a stay of 24-48 hours. One nurse will always be present in the COU, and continuous pulse oximetry monitors will be available for all patients.[139] Accordingly, the plan is for the COU to

[137] Dr Philip Blum, Anaesthetic Report for the Coroner, dated 29 September 2021, Ex 1 Folio 9
[138] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, [348]- [353]
[139] T103.

provide the continuous monitoring suggested by Dr Stone, and the 'line of sight' nursing which Dr Magness said was desirable for patients with OSA and oxygen modifications.[140] I am told this is a work in progress and the model of care is still under development.

108. Judy's end-of-life care was inadequate and fell far short of the care she should have received. The RDPH Division of Medicine Quality of Dying Working Group (QOD Working Group) is responsible for the development, evaluation and monitoring of new resources to improve end of life care at RDH. I am told they are developing of a Comfort Care Pathway for patients requiring end of life care when a transfer to a Hospice is not an option. On 1 July 2024, a trial of the program was commenced.

109. An ICU End-of-Life Care Guideline now provides guidance concerning the Palliative Care Team and the management of end-of-life care when a patient must be transferred to a ward rather than the Hospice. The approach is to include the prioritisation of transfer to a single room on a medical ward and ensuring all medication for symptom management are available on eMMa prior to transfer.[141]

110. Judy's family was also concerned about insensitive, delayed and inadequate communication by NT Health after Judy's passing. This added to their distress. While NT Health acknowledged that there had been a failure to do a "proper open disclosure" and apologised for their lack of timely communication in this case, there was limited evidence offered that reassured there were effective procedures to guard against similar oversights in the future. Concerns about NT Health's communication with family members have also been raised in other recent inquests. I expect to see improved communication with families concerning reportable deaths moving forward.

[140] T66.
[141] Institutional Response on behalf of the Department of Health, Dr Brian Spain, 8 August 2024, **RCA Recommendation 4**: Improvements to end of life care at RDH, [358]-[361].

111. NT Health demonstrated that they have considered the significant failings in Judy's care and have taken steps to introduce improvements to guard against similar failings in the future. Accordingly, I make no further recommendations.

Formal Findings

Pursuant to section 34 of the *Coroners Act*, I find as follows:

(a) The identity of the deceased was Judith Ann Smart, born on 23 July 1954 in Corowa, NSW.

(b) The time and place of death was at 12.20pm on 20 June 2021, in ward 2A at Royal Darwin Hospital.

(c) The cause of death was Hypoxic-ischaemic encephalopathy.

(d) The particulars required to register the death have been provided to the Registrar of Births, Deaths, and Marriages.