CORONERS COURT
OF NEW SOUTH WALES

Inquest:	Inquest into the death of Robert BISCHARD
Hearing Dates:	14 -17 February 2022
Date of Findings:	17 August 2022
Place of Findings:	Coroners Court of New South Wales at Lidcombe
Findings of:	Magistrate Joan Baptie, Deputy State Coroner
Catchwords:	CORONIAL LAW – manner and cause of death, care and treatment at Wagga Wagga Base Hospital, pre-operative screening processes in the context of comorbidities
File Number:	2017/49625
Representation:	Ms D Ward SC, Counsel Assisting, instructed by Ms C Healey-Nash and Ms F Lilly (Crown Solicitor's Office) Mr S Kettle, instructed by Mr L Sara (Hicksons Lawyers), for the Murrumbidgee Local Health District Dr P Dwyer, instructed Ms K Chambers and Ms V Upton (HWL Ebsworth Lawyers), for Drs E Tai and A Holmes Mr S Barnes, instructed by Ms L Kearney (Avant Mutual) for Dr van der Rijt Mr T Abbott (Walsh & Blair Lawyers, for C Bischard and the Bischard family
Findings	**Identity** The person who died was Robert John Bischard. **Date of Death**

He died on 15 February 2017.

Place of Death

Wagga Wagga Base Hospital, Wagga Wagga.

Cause of Death

Mr Bischard died as a result of multifactorial causes on a background of ischaemic heart disease, generalised vascular risk and other chronic co-morbidities.

Manner of Death

Natural Causes.

Recommendations

To the Murrumbidgee Local Health District

1. That the Murrumbidgee Local Health District give consideration to establishing a structured peri-operative acute shared care model or pathway targeted at identifying and managing risks during surgical admissions in patients with significant co-morbidities

2. That the Murrumbidgee Local Health District audit the use of daily fluid balance charts, the standard clinical pathway for a total knee replacement, and nursing compliance with medical requests for the completion of additional observations (such as postural blood pressure readings) on the Orthopaedic Inpatient Unit.

3. That the Murrumbidgee Local Health District conduct further case presentations with staff (that is, targeting nursing, medical and surgical staff) using Mr Bischard's case as an anonymised case study to prompt discussion around:

    a) The need to carefully chart routine medications and allergies (given the prescribing of MS Contin notwithstanding a reported allergy to sulphur and the initial prescribing of Metoprolol as a 50mg dose each morning rather than 2 x 25mg doses each day.)
    b) Adequate completion of daily fluid balance charts and the standard clinical pathway for total knee replacement.
    c) Recognising "low urine output persistent for 8 hours" as a red zone criteria under the NSW Health Between the Flags protocol.
    d) The need for post-operative plans to be documented in the medical record in a timely fashion and for nurses to implement plans for additional observations where requested (such as recording postural blood pressure readings).

Non-publication order N/A.

Introduction

1 This inquest concerns the death of Mr Robert John Bischard. In these findings I have referred to Mr Bischard at various times as Bob. This is not meant as any disrespect to the gentleman he was, and acknowledged as such, by many during these proceedings. It has been done to reflect the nature of the man who impressed as a family man, a hard worker, and a decent member of the community.

2 Mr Bischard was born on 18 March 1941. He died on 15 February 2017 at the Wagga Wagga Base Hospital at the age of 75 years.

3 Mr Bischard had been admitted to Wagga Wagga Base Hospital for elective surgery on 10 February 2017. The surgery occurred the same day and consisted of a total right knee replacement. He remained an orthopaedic patient from the time of his surgery until 15 February 2017.

4 The identity, date and place of death are not in dispute. This inquest has focused on the manner and cause of his death and contributing circumstances.

5 Through their legal representative, Mr Abbott, Bob's family expressed that they were "very distressed by the events that, particularly leading up to his death, that is, the final hours of his treatment at the Wagga Base Hospital."

6 I acknowledge Bob's family's profound loss and continuing anguish and heartbreak and would like to express my sincere condolences and respect for their loss. I would also like to acknowledge and thank his family members for their contribution and participation in this inquest. I hope that Bob's memory has been honoured by the careful examination of his medical treatment during this inquest and the lessons that have been learned from the circumstances of his tragic passing.

The role of the coroner and the scope of the inquest

7 A coroner is required to investigate all reportable deaths and to make findings as to the person's identity, as well as when and how they died. A coroner is also required to identify the manner and cause of the person's death. In addition, a coroner may make recommendations, based on the evidence adduced during the inquest, which may improve public health and safety.

8 During these proceedings, evidence was received in the form of statements and other documentation, which was tendered in court and admitted into evidence. In addition, evidence was received from a number of witnesses involved in Mr Bischard's medical treatment at Wagga Wagga Base Hospital. Expert evidence was received in a number of reports: as well as jointly from three experts by way of an evidentiary conclave.

9 All of the material placed before the Court has been thoroughly reviewed and considered. I have been greatly assisted by the written submissions prepared by counsel assisting, Ms Donna Ward SC and the other legal representatives. I have embraced their descriptions at times in these findings.

10 During these proceedings, significant issues and concerns arose as to the adequacy of pre-planning, medical treatment and care during Mr Bischard's admission.

Bob's life

11 Bob was born in Ardlethan, near Temora. He grew up enjoying his days fishing, playing AFL and excelling at tennis. His mother unfortunately died when he was 13 years of age and he was raised by his father. When he left school, Bob worked on the farm and with electricians. At the age of eighteen, he commenced working in the tin mining industry, the major employer in the town of Ardlethan. He became a very capable driller.

12 At the age of twenty one, he married his childhood sweetheart, Colleen. Together they raised five children, Susan, Brendan, Deborah, Cameron and Jonathan. Unfortunately, Jonathan died in a car accident in 2010.

13 Bob worked hard all his life and became highly knowledgeable in all things mechanical. Amongst his many achievements, Bob obtained his pilot's licence. After he retired from work at the age of 70, he pursued his interests in model aeroplanes, metal work and tinkering in his shed.

14 The Court was told by the family's legal representative Mr Abbott, that "his greatest loves in life were his shed, his dog, the Sydney Swans – and we won't hold that against him – and supporting his family."

The list of issues considered during the inquest

15 The following list of issues was prepared before the proceedings commenced and were considered and provided focus during the inquest:

i) Cause of death: what was the terminal event that caused death on the background of ischaemic heart disease?

ii) The adequacy of pre-operative assessments to determine that Mr Bischard was "fit for surgery" and in particular, management of his chronic kidney disease and other co-morbidities.

iii) Responsibility for, and adequacy of, post-operative care including fluid management and assessment of post-operative episodes of hypotension commencing from 10 February 2017.

iv) The adequacy of the nursing care that Mr Bischard received across the afternoon/evening of 15 February and whether nurses appropriately recognised the possibility of a deteriorating clinical situation.

Complex medical history prior to 2017 admission

16 Mr Bischard had multiple co-morbidities, which included:

i) Chronic kidney disease (which his consultant nephrologist, Dr Edward Tai stated predominately related to his vascular disease);

ii) Coronary artery disease (leading to a coronary artery bypass graft in 2011);

iii) Heart valve replacement;

iv) Type 2 diabetes;

v) Gastro-oesophageal reflux;

vi) Congestive heart failure;

vii) Hypertension;

viii) Aortic stenosis;

ix) Hypercholesterolemia;

x) Carotid artery stenosis (leading to carotid endarterectomy in 2015); and

xi) Polymyalgia rheumatica (an inflammatory rheumatic disease that often requires long term corticosteroid therapy with an aim of getting the dose as low as possible whilst still effectively managing symptoms).

17 Mr Bischard had been experiencing declining mobility and chronic pain associated with his knees, particularly his right knee. In addition, his condition of polymyalgia rheumatica was contributing to his chronic pain and discomfort.

18 He had hoped that the elective surgery may provide some significant relief from pain, as well as improved mobility and stability. Indeed, the likely consequence of him not having this surgery was “progressive pain, progressive muscle weakness as a consequence of the orthopaedic disorder and increased immobility, difficulty in walking, restricted function and still experiencing pain at rest.”

19 On 23 September 2015, Mr Bischard saw Dr Adrian van der Rijt, an orthopaedic surgeon. Dr van der Rijt was of the opinion that Mr Bischard had advanced

osteoarthritis, which was “affecting the medial and to a lesser degree lateral compartment of both knees and there was evidence of chondrocalcinosis”. He also noted that Mr Bischard had wasting to the musculature of his quadriceps and a history of polymyalgia.

20 Dr van der Rijt formed the view that due to Mr Bischard’s “multiple medical co-morbidities, he was advised that he would require review by his treating physician preoperatively for assessment and for management in the perioperative period.” The perioperative period includes the preoperative, intraoperative and postoperative periods.

21 Dr van der Rijt confirmed that the referral letter that he had received from the referring general practitioner did not identify any history of kidney disease (Mr Bischard’s kidney disease might not yet have been diagnosed). As a result, the medical review prior to surgery appeared to focus on obtaining a cardiology review.

22 The following day, 24 September 2015, Mr Bischard was admitted to Wagga Wagga Base Hospital with nausea and vomiting. Medical notes indicate that he was both hypotensive and in hypovolaemic shock on arrival to hospital. He was diagnosed with infectious gastroenteritis and his kidney function was assessed as not being normal. Mr Bischard was admitted for four days. The medical notes confirm that over this period his renal function improved, however he was discharged with a principal diagnosis of chronic renal failure. During this admission, Mr Bischard was monitored by Dr Tai, consultant nephrologist and physician. Dr Tai indicated in his oral evidence that Mr Bischard “had chronic kidney disease by definition long before this.” Dr Tai was of the opinion that his kidney disease was related to his coronary disease rather than his diabetes given that there was no evidence that he was expelling protein in his urine.

23 Subsequently, Mr Bischard attended on Dr Tai regularly, about every six months for the purpose of monitoring his kidney function. On 8 July 2016, Mr Bischard consulted with Dr Tai and explained that he was to undergo a total knee replacement after an assessment by a cardiologist. Dr Tai indicated that he had some concerns relating to Mr Bischard’s diabetes control, however Dr Tai considered that his kidney function was stable enough for the purpose of undertaking a knee replacement. Dr Tai recommended a review in six months. Dr Tai conducted this review on 17 January 2017. At this review, Dr Tai was of the opinion that Mr Bischard’s blood pressure and diabetes were better controlled than they had been previously.

24 In October 2016, Mr Bischard attended an assessment with Dr Paul Roy, locum Cardiologist following referral by his GP. The main purpose of this assessment was to ascertain whether Mr Bischard was sufficiently fit to undertake the proposed elective knee surgery from a cardiology perspective. Dr Roy noted his chronic renal disease and recommended to Mr Bischard’s GP, Dr Kurtzer and Dr van der Rijt, orthopaedic surgeon, that he was sufficiently fit to proceed with the knee surgery. Dr Roy did recommend that he cease taking his regularly prescribed aspirin one week prior to his knee replacement surgery.

25 On 22 November 2016, Mr Bischard attended at the Hospital's Pre-Admission Clinic (PAC) for an assessment of his medical fitness to undergo the proposed procedure on 5 December 2016. Ultimately, his surgery did not proceed as planned owing to the pathology results obtained by the Pre-Admission Clinic.

26 The pathology results indicated an elevated white cell count (15.4) without an obvious infection source. In addition, his HbA1c reading was elevated. HbA1c is a haemoglobin test which is used to measure the amount of glucose attached to the haemoglobin (or "glycated"). The amount of HbA1c formed is directly related to the amount of glucose in the blood. The higher the HbA1c, the greater the risk to the kidneys. The test shows how well a person has been controlling their diabetes over 3-4 months.

27 The pathology results indicated that his glycated haemoglobin was measured at 8.7%. The target range for an elective joint procedure is less than 8%. By 23 December 2016, his HbA1c sample was down to 8%.

28 The evidence suggests that Mr Bischard's GP, Dr Kurtzer, was asked to review the test results from 22 November 2016 and noted that Mr Bischard was still on Prednisolone (a corticosteroid used to manage his polymyalgia rheumatica). Dr Kurtzer ceased the Prednisolone prescription and Mr Bischard's white blood cell count fell to 9.1 by 4 January 2017.

29 At some point, the evidence doesn't establish when this happened, someone at the Pre-Admission Clinic affixed a post-it note to the PAC form from 2016 which read "Pt not having another PAC HbA1c – sugar is now good."

30 Unfortunately though, Mr Bischard's debilitating polymyalgia returned swiftly and in a brutal fashion.

31 Mr Bischard was admitted to the Temora District Hospital from 4 – 6 February 2017 with severe myalgia and polyarthralgia. The hospital notes confirmed that he had ceased his prescribed Prednisolone as directed. He was recommenced on steroids and he responded positively. The hospital notes stated "Target prednisolone dose is 10mg daily. Will increase insulin dose. Review 1 week prior to surgery."

32 However, Mr Bischard's knee surgery was scheduled to occur on 10 February 2017, some four days later, and without the requirement of attendance at a further pre-admission clinic. In addition, his white blood cell count appeared to be an elevated reading of 13.2 H on 6 February 2017. Despite this reading, he was discharged home from Temora Base Hospital.

33 Somewhat surprisingly, Mr Bischard was admitted for surgery at Wagga Wagga Base Hospital on 10 February 2017, despite the very recent admission to Temora Base Hospital. The relevant and available medical records do not disclose why Mr Bischard was admitted for surgery without a further pre-admission review at the clinic.

34 During the inquest, Dr Tai referred to additional electronic medical records from Temora Hospital (this is not to suggest that the records were referred to Dr Tai prior to the surgery). These records confirmed that on the day of his discharge from Temora Hospital, Mr Bischard's creatinine level was 346umol/L. Creatinine is a chemical waste product made from creatine which is used to supply energy to muscles. Creatinine is expelled entirely by the kidneys and by measuring the level of creatinine in a person's blood, an assessment can be made as to kidney function. Dr Tai confirmed that it is important to assess a trend of the creatinine readings, rather than just focusing upon a single reading.

35 By way of comparison, Dr Tai noted that Mr Bischard's creatinine result on 1 July 2016 was 200umol/L. Dr Tai explained that they also measure an eGFR (estimated glomerular filtration rate) to explain renal function. He stated that Mr Bischard's creatinine result of 200umol/L translates to a renal function of 30%. A person of Mr Bischard's age, typically has a renal function of 60%.

36 Nonetheless, the experts were clear and the Court accepts that a creatinine at 346 umol/L on 6 February 2017 was an abnormal result and should have prompted consideration of postponing the knee replacement surgery. This is addressed further below.

Events on 10 February 2017

37 It is unclear whether the clinical team at the Wagga Wagga Base Hospital were aware that Mr Bischard had been discharged from Temora Base Hospital four days prior to his knee surgery.

38 On the morning of his surgery, Mr Bischard's blood pressure was recorded as 100/60.

39 Mr Bischard underwent a right total knee replacement at Wagga Wagga Base Hospital as planned on 10 February 2017. Dr van der Rijt was the principal surgeon of the orthopaedic team, assisted by two surgeons, Dr Clout and Dr White and an anaesthetist.

40 Dr van der Rijt noted that "(T)here were no intraoperative matters of concern and the surgery proceeded according to the workflow schedule. The definitive implant showed a satisfactory range of motion with full extension and free flexion. The patient's general medical condition was stable throughout the procedure and the patient left the post-operative recovery bay in a satisfactory and stable condition."

41 Mr Bischard was returned to the orthopaedic ward at 17:37 hours. RN Bandao finished his shift at around 21:30 hours and made various entries in the progress notes including "patient still did not pass satisfactory amount of urine. 3mls was taken from urinal." RN Bandao was at this time working only his fifth shift at the Hospital and his first shift on an orthopaedic ward, and was under the supervision of RN Paudel. At this time, and the ensuing hours, Mr Bischard

was restricted to his bed and was required to use a urine bottle to monitor his urine output.

Medication regime at the time of his admission for knee surgery

42 Although it would appear that Mr Bischard was on a number of additional medications at the time of his knee surgery, the following medications have been the subject of comment and opinion during these proceedings:

i) Frusemide (brand name Lasix), a diuretic;
ii) Irbesartan, an anti-hypertensive which is also potentially nephrotoxic;
iii) Metoprolol (brand name Minax), a beta-blocker used to treat high blood pressure; and
iv) Lercanidipine, an anti-hypertensive.

43 His Frusemide dose was charted as a 40mg dose given each morning, commencing on 11 February until 14 February 2017. It was withheld on 15 February 2017 as recommended by Dr Tai.

44 His Irbesartan was charted as a 75g dose each morning, commencing on 11 February 2017. An entry appeared in the medication chart reading "withhold if BP<130" (probably recorded on 13 February 2017 by Dr Ritchie, the orthopaedic team intern). It was then withheld on 14 and 15 February 2017, in line with the orthopaedic team's plan to "hold Irbesartan until SBP>130mmHg".

45 A 50mg dose of Metoprolol was administered on 11 and 12 February 2017. An entry in the medications chart noted "patient usually on 25mg BD [twice a day]. Pls R/V and rechart." The Metoprolol was then recharted and Mr Bischard was administered 25mg doses twice per day, commencing on 13 February 2017.

46 Mr Bischard's dose of Lercanidipine was charted as a 10mg dose administered in the morning. It appears to have been withheld on 14 and 15 February, although the decision to withhold this medication does not appear to have been recorded in the progress notes.

Events from 11 – 15 February 2017

47 During his admission, Mr Bischard's fluid balance charts were haphazardly completed by staff. The charts recorded the following:

i) 10 February 2017 – no satisfactory urine output recorded;

ii) 11 February 2017 – 450mls urine recorded in total (200mls recorded at 03:15 hours and 250mls recorded at 06:15 hours, with no other urine recorded withing the 24 hour period);

iii) 12 February 2017 – 300mls urine output recorded (at 00:02 hours, with no other urine output recorded within the 24 hour period);

iv) 13 February 2017 – no urine output recorded;

v) 14 February 2017 – no chart available; and

vi) 15 February 2017 – no urine output recorded, 300mls of vomitus recorded.

48 Some nursing staff also made broad reference to urine output in various progress notes.

49 As indicated above, Mr Bischard's urine output appeared to increase during 11 February 2017. A notation relating to his blood pressure on 11 February 2017 noted "BP remained borderline during shift 102 systolic."

50 On 12 February 2017, a medical consult was called after Mr Bischard had been prescribed MS-Contin the previous evening (11 February), despite having a known allergy to sulphur. Fortunately, Mr Bischard did not exhibit any adverse reaction. The plan following this consult was to "1/trial MS-Contin this Am 2/Review by home team tomorrow." On 13 February 2017 one of the Rehabilitation Medicine doctors recommended withholding the MS-Contin given renal impairment.

51 At 14:45 hours on 13 February 2017, RN Brinkman called for a clinical review when Mr Bischard's blood pressure fell to 91/48. He remained on three anti-hypertensives at this time (Metoprolol, Lercanidipine and Irbesartan) and the diuretic Lasix.

52 Dr Sarah Ritchie, an intern on the Orthopaedic Team, reviewed Mr Bischard in response to the request for a clinical review. Dr Ritchie recorded the following plan, (albeit retrospectively),

> "1. Review BP in an hour and page is low 2. Withhold Irbesartan if BP<130 tomorrow morning 3. Encourage oral intake of fluids 4. ECG please – normal 5. Chest x ray today"

53 Later that same afternoon, Dr Clout and the Orthopaedic Team reviewed Mr Bischard and continued Dr Ritchie's plan (other than cancelling the troponin screen).

54 Later that night, RN Brinkman called another rapid response as Mr Bischard's blood pressure fell to 85/48. The rapid response team noted "Possible adrenal insufficiency post operatively. Euvolaemic – blood pressure improved to 122/55 with passive leg raise, so scope for IVF if further hypotension." Mr Bischard was administered "stress dose steroids" of hydrocortisone and encouraged to increase his fluid intake.

55 Focusing upon the creatinine levels on 11 February 2017, Mr Bischard's creatinine levels were recorded as 225umol/L, a significant drop from the high of 346umol/L recorded at Temora Hospital on 6 February 2017. By 13 February 2017, however, his creatinine level was noted to be 303umol/L. This was suggestive of another acute kidney injury between 11 – 13 February 2017. By 14 February 2017, his creatinine level was recorded as having dropped to 275umol/L.

56 On 14 February 2017, Mr Bischard's dosage of Irbesartan was withheld. It was noted that he had not opened his bowels and was prescribed several aperients, namely Coloxol, Movicol and microlax, including an enema. The medical notes associated with the medical round that morning stated, "Ortho WR…noted further clinical review overnight for hypotension…postural BP – 20mmg drop sitting to standing Plan 1. Postural BPs please – noted 20mmHg postural drop as per NS 2. Aperients as charted (stat doses on med chart) 3. Medical consult for assistance with treatment for postural drop, worsening renal function and weaning of steroids with PMR 4. Continue with PT 5. Not for transfer to Temora today."

57 Dr Alex Holmes saw Mr Bischard later that afternoon in response to the request for a medical consult for assistance with "treatment for postural drop, worsening renal function and weaning of steroids". By the time Dr Holmes saw Mr Bischard, his condition appeared to have improved. His observations were within normal limits. His lowest blood pressure reading was 112/60. He did have an elevated C-reactive protein (CRP) test, suggestive of the presence of an inflammatory process. His creatinine was recorded as 275umol/L, down from 303umol/L the previous day.

58 Later the same evening, Dr Tai and Dr Holmes reviewed Mr Bischard's presentation. Dr Tai stated that "when I assessed Robert on the 14th with Dr Homes his fluid deficit was deemed to be very, very minimal and that sort of fluid deficit is quite common seen in someone taking, with a heart disease, with Lasix furosemide." The plan from this consultation was recorded as "Suggest (1) withhold Lasix (2) Gentle IV fluid O/N (1 bag only) (3) urine chemistry (4) drink to thirst (5) withhold Irbesartan for 48 hours."

59 Mr Bischard's presentation appeared to improve on 15 February 2017. It has been suggested that the reason for this apparent improvement was due to a combination of factors of varying importance, including:

i) Withholding the Irbesartan on 14 and 15 February 2019;
ii) 1L of saline being administered overnight;
iii) The Lasix had been withheld on 15 February;
iv) The Metoprolol had been given as two doses of 25mg in the morning and evening, rather than one morning dose of 50mg;
v) His creatinine reading had again dropped to 250umol/L on the morning of 15 February; and
vi) The spinal opiates would have been wearing off.

60 Mr Bischard was noted to appear well: “he was mobilising by himself with elbow crutches, walking 50 metres, interacting, concerns about the blood pressure had dissipated into the proceeding days, had improving or at the very least stable biochemistry.”

61 Notwithstanding the improvement observed earlier in the day by around 17:00 on 15 February 2017, Mr Bischard’s condition began to deteriorate. The aperients took effect, he was unable to walk unassisted and he began to vomit. He was given medication to stop him vomiting, however, vomited this as well. He was then administered an IV dose. He complained that he was in pain and very tired.

62 At some point, an after-hours medical officer was contacted by the nursing staff, however, it would appear from the available records that this medical officer did not attend and assess Mr Bischard.

63 By evening there was, according to the expert evidence, “quite a severe acidosis… [with a] fairly precipitous drop” also described as “a very acute change suggestive of acute, calamitous, underlying pathology”.

64 From the time his condition started to markedly deteriorate until his death was declared at 22:27 hours, Mr Bischard was bullied, abused, harassed, and exposed to ridicule and indignities by one member of the nursing staff in particular. This extraordinarily unprofessional behaviour was recorded on the phone of the other patient in Mr Bischard’s ward room, Mr Mitchell Butler.

65 Mr Mitchell Butler had been sharing a room with Mr Bischard for five days. Mr Butler said that they would spend a couple of hours a day having a general chat and he described Bob as a “good, knock around bloke.” Mr Butler indicated that he never heard Bob complaining, and that he was able to leave his bed and move around, despite his knee surgery.

66 Mr Butler recalled that later on during the evening of 15 February 2017, he could hear Bob starting to moan and was seeking the assistance of the nursing staff. Mr Butler indicated that one of the junior nurses was assisting him, however the older nurse was berating him. He became concerned when this nurse started becoming aggressive with Bob and Mr Butler began recording the events. The recording continued for around 20 minutes. During this time, Mr Butler indicated that he couldn’t see Bob, as the curtain was drawn around his bed. He recalls Bob breathing heavily and moaning and then going quiet. He became aware that Bob had died.

67 Mr Butler sought his father’s advice and then contacted the police. He transferred his recording to Detectives Doubleday and Lawrence.

68 Owing to the contents of this recording, Police referred Mr Bischard’s death to the Coroner.

69 Both nurses were referred to the New South Wales Civil and Administrative Tribunal (NCAT) in separate proceedings. The junior nurse was found guilty of

unsatisfactory professional conduct and cautioned under s 149A(1)(a) of the *Health Practitioner Regulation National Law*. The senior, and significantly more professionally derelict nurse, was found guilty of unsatisfactory professional conduct rising to a level that amounted to professional misconduct. She was reprimanded, had her registration suspended for six months, with a further two years of conditions imposed upon her registration. The NCAT judgments include various non-publication orders.

Autopsy report

70 An autopsy was conducted on 27 February 2017. In the autopsy report, the direct cause of death is noted as ischaemic heart disease with antecedent causes listed as coronary artery atherosclerosis and generalised atherosclerosis. Other significant conditions were shown as type II diabetes mellitus, chronic renal failure. At the time of the autopsy, medical records were not available to the pathologist.

71 Dr Lorraine du Toit-Prinsloo subsequently reviewed the medical records, witness statements and the original post-mortem report, and noted the following:

> "The heart of the deceased was enlarged when compared to the average weight expected for body mass and body weight. Bearing in mind increased heart weight, left ventricular hypertrophy and coronary artery disease noted at autopsy, sudden collapse with sudden cardiac death due to arrhythmia could have occurred at any time."

72 Counsel assisting this inquest and her solicitors have obtained a number of expert opinions to assist with navigating Mr Bischard's complicated medical history and determining if his demise was due to his cardiac complications or was multifactorial.

73 An expert opinion was sought from Associate Professor Mark Adams, Cardiologist. He stated the following:

> "I am not certain that Mr Bischard's ultimate cause of death was directly due to his cardiac disease for several reasons. Firstly the nature of how his cardiac disease caused his death is not clear….secondly the clinical features exhibited….in the days prior to his death were not really consistent with cardiac pathology …[the] constellation of clinical findings and investigations are not consistent with cardiac disease in absence of myocardial infarction, cardiac failure or prolonged arrhythmia; none of these appear to have been present from the findings during life or at autopsy…although it is possible Mr Bischard suffered a sudden cardiac death due to arrhythmia, he was not at high risk, there were no signs of arrhythmia at any stage during the admission and this does not explain Mr Bischard's obvious deterioration from 13 to 15 February 2017."

The experts' conclave

74 Counsel assisting and her solicitors obtained an expert opinion from Dr Thomas Cromer, Endocrinologist. Dr Cromer provided an initial report and two further supplementary reports. In addition, he participated in the experts' conclave and provided expert testimony on 17 February 2022.

75 Similarly, an expert opinion was obtained from Professor David Gracey, Renal Physician. Professor Gracey provided an initial report and one supplementary report. He also participated in the experts' conclave on 17 February 2022.

76 On behalf of Dr Tai and Dr Holmes, an expert opinion was sought and obtained from Associate Professor Scott Wilson, Nephrologist. He also participated in the experts' conclave on 17 February 2022.

<u>The experts' assessment of Mr Bischard's cardiac fitness for knee surgery</u>

77 As previously noted, Dr Paul Roy, Cardiologist had conducted a pre-operative cardiology assessment on 6 October 2016. He determined that Mr Bischard was "fit to proceed with his knee surgery."

78 Associate Professor Mark Adams concluded that:

> "I agree with Dr Roy's assessment on 6 October 2016 that from a cardiovascular point of view Mr Bischard was fit to proceed with knee surgery. There is no doubt that Mr Bischard would be at an increased risk of cardiovascular events during and immediately following the operation, however the cardiovascular risk could not have been significantly reduced further by any intervention and his current management was optimised prior to the surgery."

79 Associate Professor Adams determined that the risk of a serious cardiac event was not prohibitive when assessed against the potential improvement in mobility and the quality of life that might have been gained with the surgery.

80 Professor Gracey noted that:

> "the cardiologist was really asked to assess fitness for surgery from a cardio point of view. Again…no-one seemed to come up with a management plan for the peri-operative period and perhaps the cardiologist who didn't know the man very well and was a locum…perhaps he assumed Dr Tai would do it. Perhaps Dr Tai assumed he would do it but no-one has established a peri-operative management plan in this case."

81 Associate Professor Wilson assessed Mr Bischard's risk as "high" compared to "all-comers", however concluded that this did not detract from Associate Professor Adams' opinion that the risk was not prohibitive from a cardiology point of view.

82 The conclave agreed that once Dr Roy had assessed Mr Bischard for knee surgery, no further contact was made with Mr Bischard's cardiology team to discuss matters including, how to optimise his cardiac and blood pressure medications to limit the impact on his renal function, whilst continuing to support his cardiovascular functioning.

The experts' assessment of Mr Bischard's creatinine levels

83 Each of the experts agreed that Mr Bischard's creatinine reading of 346mmol/L recorded on 6 February 2017 at Temora Hospital was an abnormal result and serious consideration should have been given to the cancellation of his surgery, planned for 10 February 2017.

84 Professor Gracey stated that:

> "someone with acute kidney injury, probably should be fully recovered from the acute kidney injury and in optimal state before any operative intervention is considered and always and particularly with that history, that Dr Tai should have been involved earlier".

85 Associate Professor Wilson stated:

> "I think the view from altitude would be that somebody with significant kidney injury, and sounds like this was significant on a biochemical level, would be that recovery, or tendency and trending towards recover [sic] prior to an elective procedure would certainly be the preferable way of doing things. I think this added dimension of complexity probably speaks to the system's issues which we've all raised with regard to early specialist support from the physician or internal medicine or renal perspective."

86 He further stated: "…the acute injury to the kidney here is incredibly relevant and if it had gotten presumably to the knowledge or been brought to the attention of the appropriate people, a decision to proceed with an otherwise elective operation could have potentially been made differently."

87 Dr Cromer stated:

> "…if he had a creatinine a week or so earlier that had risen from a baseline of around 200 to 340 then surgery, elective surgery, should have been delayed, number one, and number two, if you have a complicated patient such as Mr Bischard one really had to get all physicians involved early so that appropriate action can be taken. It is always difficult in this situation once things start happening and the orthopaedic surgeon is not really, not the right person. You need a physician or someone to take control in this situation."

88 Dr Tai was of a different opinion, indicating that he did not believe that pre-admission planning was necessary in Mr Bischard's case. Dr Tai was of the view that Mr Bischard's vascular disease was the main issue, and for that reason a cardiac review was the main priority prior to surgery. Dr Tai perceived that he did not need to review or change his treatment plan as Mr Bischard's kidney function had been quite stable at the time of his last review. He noted that Mr Bischard's blood pressure had been very stable, and he would not change his cardio-specific medications as that would be reviewed by the cardiologist at the pre-assessment workshop.

89 In addition, and contrary to the opinion of Dr Tai, the three conclave experts all agreed that it was vital that Mr Bischard's nephrologist should be involved in his pre-admission planning to improve his functioning prior to surgery. Furthermore, they were of the combined opinion that pre-admission consultations should have also considered clinical precautions to prevent acute kidney injury following the procedure. These precautions included:

i) Using intravenous fluids whilst fasting to avoid intravascular volume depletion;
ii) Admission into hospital the day before the planned procedure so that this could take place; and
iii) Withholding some of the anti-hypertensive medications and diuretic medication.

<u>The experts' assessment of Mr Bischard's pre-operative blood pressure readings</u>

90 Mr Bischard's blood pressure was recorded as 100/60, on 10 February 2017, prior to him being admitted to theatre for his knee surgery.

91 Associate Professor Wilson commented that:

> "That would raise concerns for me. That is 20 millimetres lower which is a substantial departure from where the patient was in the pre-admission clinic. It's very borderline particularly for continuing the number of hypertensive agents that we've discussed and would cause me to probably look slightly closer around factors contributing and what I could do to either bring that up or whether the surgery should have proceeded or ways in which the surgery could be made safer."

92 Professor Gracey expressed similar concerns that "a systolic blood pressure of 100 didn't seem to create any action…and didn't seem to flag any concerns."

<u>The experts' assessment of Mr Bischard's low urine output after surgery</u>

93 Mr Bischard was transferred from the operating theatre/recovery to the orthopaedic ward at 17:37 hours. At 18:00 hours, RN Bandao had assumed care for Mr Bischard on the ward.

94 RN Bandao only commenced working at Wagga Wagga Base Hospital on 6 February 2017. On 10 February 2017, he commenced his first shift in the Orthopaedic Ward. He had no prior experience working in any other orthopaedic ward. RN Bandao explained that from the time he commenced his employment at the Hospital on 6 February 2017, he had completed one day of orientation and two days in a supernumerary capacity in the Emergency Department. He could not recall if he was in a supernumerary capacity when he commenced working in the Orthopaedic Ward on 10 February 2017, although he did recall working closely with a more senior member of the nursing staff on that shift.

95 Given the elapse of time, RN Bandao could not recall whether he had received an induction on the relevant forms and records. RN Bandao clearly understood that a strict fluid balance chart was used, "To monitor the oral intake, any oral and intravenous intake and also output whether it be urine or stool from a patient."

96 RN Bandao confirmed that between 18:00 hours and 21:30 hours, Mr Bischard had produced 3mls of urine. He further confirmed that he was sufficiently concerned with that output that he ensured that he recorded it in the chart. He stated:

> "We have protocol we need to report if a patient is having less than 400, less that (sic) 100mls of urine output within four hours."

97 Clearly, this very low urine output should have been brought to the attention of the anaesthetist, or failing that, the orthopaedic team responsible for Mr Bischard's care. It was not.

98 The orthopaedic surgeon, Dr van der Rijt, confirmed in his evidence that such a reading would have concerned him, and he would have directed the person reporting such a low reading to the anaesthetist. He stated that this was because:

> "The anaesthetist has cared for the patient throughout the procedure, there's issues of how much fluid they transfuse, how much blood loss there is and the anaesthetist has a direct understanding of that because they've been managing it in real time during the surgery so that fluid balance management is there for a continuing part of the anaesthetic management."

99 Professor Gracey noted

> "[The] comment from the nursing staff that – I think it was 3 mls of urine that were produced, and that seems to be the total for most of the day, a very abnormal clinical observation which I think should have immediately triggered some clinical response and assessment – and of course, just to mention, the involvement of specialists such as Dr Tai are important in bringing seniority to his medical management….but initially that 3mls of urine, to me, should have been a red flag and should have mandated a clinical review."

Professor Gracey also noted that he could not locate any notation recording any urine output in the operating room, "so 3mls for, what, eight hours or more, which is a very abnormal result."

100 Associate Professor Wilson commented that:

> "As it stands it's very clearly an abnormal result, and at that stage there are multiple reasons as to why it may have occurred…but, with regard to postoperative patient returning some four hours after surgery, the passage of 3mls of urine would be incredibly abnormal and would indicate the need for some form of medical assessment. There's a number of reasons as to why it might be which relate to the peri-operative milieu, relate to potential renal involvement, that relate to potential under-voluming, but also relate to the potential effect of the spinal anaesthesia. So it would be very important that a medical officer attends to determine if there is actually a genuine absence of the production of urine, or it urine has been produced and it's been unable to be passed…" Associate Professor Wilson noted that a number of inquiries should have been considered such as a bladder scan and whether he had prostate problems.

101 Associate Professor Wilson noted that:

> "by way of ballpark figures, we would ordinarily expect a postoperative patient to be making a quarter to at least a half a ml per kilogram of body weight, or urine, per hour. So I would have expected at least 40, 50, 60mls, or more, of urine output to be seen as roughly acceptable or satisfactory. So 3mls, in that view, is unacceptable".

102 Each of the three experts expressed their united view that a patient such as Mr Bischard should have had his pre-admission handled differently, in particular, with multiple specialist reviews and testing. Dr Cromer was of the view that Mr Bischard's urine output result was indicative of the need to have had someone involved in "his total care, from a physician's point of view. He did have a cardiac assessment, but he probably needed more in regards to his diabetes assessment and his renal assessment, pre-op, just because he was so high risk. I would've thought that more should have been preoperatively."

103 The fluid balance charts were at times haphazardly completed, and at others were not completed at all. It was difficult for the experts to interpret the discrepancies between the progress notes and the fluid balance charts. There was clearly a need for the nursing staff to complete these records contemporaneously and accurately to provide a concise and reliable record.

104 Professor Gracey said:

> "for a patient at high risk and with known kidney disease, that accurate fluid balance is needed every day of the admission, not just day 1…. particularly in someone that also had concurrent heart disease and other medical conditions that make the fluid balance a bit trickier to manage. I would say

that the importance of an accurate fluid balance chart is even higher in that circumstance and I would expect it to be filled out accurately every day of the admission.

105 Mr Bischard's urine output appears to have improved later in the admission, although the records are inaccurate and at times, were difficult to interpret by the experts. As already outlined the fluid balance charts contain the following detail:

i) 10 February 2017 – no satisfactory urine output recorded;
ii) 11 February 2017 – 450mls urine output recorded in total (200mls recorded at 03:15 hours and 250mls recorded at 06:15 hours with no other urine output recorded within the 24 hour period);
iii) 12 February 2017 – 300mls urine output recorded (recorded at 00:02hours with no other urine output recorded within the 24 hour period);
iv) 13 February 2017 – no urine output recorded;
v) 14 February 2017 – no chart available; and
vi) 15 February 2017 – no urine output recorded, 300mls vomitus recorded.

106 Counsel for the LHD suggested that the urine output noted in the progress notes was additional to the urine output noted in the fluid balance charts. Such an interpretation of the joint records on 11 February 2017 would have the effect that Mr Bischard's total urine output was 150mls of urine sometime prior to 01:39 hours (according to the progress notes) and an additional urine output of 200mls recorded at 03:15 hours in the fluid balance chart. The relevant progress note records "Pt passed 150mls of urine in urinal bottle so far." At 03:15 hours the total in the urinal bottle may well have been 200mls rather than 350mls. Associate Professor Wilson commented that "my interpretation is that at quarter past 3 in the morning the bottle was emptied and there was 200mls or so in it. I don't know that we can speak to when it was produced." He was asked by counsel for the LHD if the total could have been 350mls and he stated "I just can't be convinced from the records that the sums of the volumes are additive, as you suggest, or whether they're incorporated as one might speculate. I think it's too difficult to tease those out."

107 The poor and haphazard record keeping also extended to the "total knee replacement checklist." It appears that this checklist was completed by nursing staff on post-op day 0 and day 3, but was not completed on days 1 and 2. The checklist prompts the author to maintain a strict recording of the patient's fluid balance.

108 Dr van der Rijt expressed his view that a fluid balance should be recorded on post-op day 0 following a total knee replacement, but was not necessary or routine on post-op day 1.

109 It is clear that Mr Bischard had a much more complex presentation and required careful monitoring of a number of issues. It would be reasonable to expect that his nursing staff should have been directed to carefully monitor and record his fluid balance in the days following his surgery.

Criticism of decision to continue furosemide and Irbesartan after surgery

110 Both Professor Gracey and Associate Professor Wilson were critical of the decision to continue Mr Bischard's Lasix medication after he returned from surgery.

111 Professor Gracey commented that:

> "The other medication amongst the list that we haven't touched on much that we routinely withhold in renal patients undergoing surgery, is diuretic Lasix which can predispose to intravascular volume depletion and particularly patients on a combination of a diuretic and an angiotensin receptor blocker such as Irbesartan… this is one of the aspects of his management that….would have benefited a lot from having a plan in advance of the surgery about what should be stopped, what should be modified, and when these should be introduced under the supervision of the renal physician not under the supervision of an intern."

112 Associate Professor Wilson stated that:

> "What we're really concerned about is the overall body fluid status, and all of us are mainly concerned that the risk perioperatively is more towards the under-voluming or the dehydration state with regard to, in sense of the losses, with regard to reduced intake with regard to surgical bleeding, drain losses and those types of scenarios. So it's almost counterproductive in a way to be trying to fight against under-voluming and providing intravenous fluid whilst at the same time you have a hole in the bucket, so to speak, which is the administration of an ongoing diuretic which is a fluid drug."

113 Similarly, the experts were critical of the failure to reduce anti-hypertensive medication, particularly the Irbesartan, after surgery. The experts acknowledged that Mr Bischard's cardiac and vascular issues needed to be treated with medication to ensure stability in these areas. However, they raised their concerns that, by not reducing or ceasing the Irbesartan for the first 24-48 hours post-surgery, a real risk was present that these medications may have an adverse effect on managing Mr Bischard's kidney disease.

114 Associate Professor Wilson suggested that the Irbesartan should be withheld in the first 24-48 hours, and only be recommenced once Mr Bischard's blood pressure was consistently greater than 145-150. He further suggested that the dosages of Lercanidipine should have been withheld until Mr Bischard's blood pressure was more than 120 or 130 systolic. He agreed that he could continue on his regular dose of Metoprolol of 25mg twice a day.

115 Professor Gracey stated that it would be standard practice to withhold the Irbesartan and the diuretic, Lasix, which:

> "can predispose to intravascular volume depletion and particularly patients on a combination of a diuretic and an angiotensin receptor blocker such as Irbesartan. That is a recipe for trouble in the perioperative period, trouble with fluid balance and trouble with the electrolytes or increased renal impairment, so it's a dangerous combination that we don't use in the perioperative period."

116 On 13 February 2017, two rapid responses were called when Mr Bischard's blood pressure dropped significantly. It was only after Dr Tai was called in to assess Mr Bischard on 14 February 2017, that his dose of Irbesartan was ceased. In addition, Dr Tai ordered the administration of one litre intravenous fluid.

117 Professor Gracey acknowledged that:

> "Mr Bischard's heart disease probably weighed into the clinical assessment of his fluid status. People are very cautious about giving intravenous fluids to someone with a history of heart failure, so the usual approach is a fairly cautious, slow, intravenous fluid rate in a patient such as this. And to make the point again that Mr Bischard, because to these co-morbidities, because of the balance between the heart disease, blood pressure, fluid state and the kidney function, was a very difficult patient to manage."

Experts' opinion as to Mr Bischard's cause of death

118 Dr Cromer was of the opinion that the cause of death could be described as multifactorial.

119 Associate Professor Wilson agreed that the cause of death was probably multifactorial "on the basis of substantial underlying generalised vascular risk, with a final common pathway of shock and lactic acidosis due to tissue under-perfusion from a systemic cardiovascular event, with the possibility of either a local or regional area of acute organ infarction less likely."

120 Professor Gracey was of the view that "we don't know the cause of death."

121 Professor Adams' opinion as to Mr Bischard's cause of death is outlined above at [73].

Murrumbidgee Local Health District

122 Professor Lenert Bruce, Executive Director of Medical Services for the Murrumbidgee Local Health District, provided a statement and gave evidence in these proceedings. Professor Bruce is also a Specialist Anaesthetist.

123 Professor Bruce confirmed the current procedure for a patient attending the Hospital's Pre Admission Clinic (PAC).

124 Professor Bruce indicated in his evidence that a patient with a range of comorbidities, may require a co-admission. He explained that a co-admission is where a patient is admitted under more than one treating team. The treating teams each see the patient regularly, trying to anticipate and plan for their recovery from the procedure. He indicated that "if you have a co-admission you will be reviewed by members of other teams on a daily basis as well." He confirmed that this may be done as part of a ward round or it may be "a consult". Professor Bruce compared this model to the treatment that Mr Bischard received, who was only reviewed by a physician with a different specialty from the treating team in response to a surgical request for that review.

125 In addition to the co-admission model, his statement, Professor Bruce indicated that:

> "multidisciplinary support is available when required. Patients reviewed in the pre-admission clinic identified as requiring additional specialist review are referred to the relevant speciality who may then also provide peri-operative inpatient support, if required. There is a 24 hour per day 7-day per week on-site medical registrar supported by an on-call consultant physician who can provide perioperative medicine support to the surgical inpatient teams if required. Further to that, patients undergoing joint replacement surgery are reviewed by the acute pain service which consists of an anaesthetic trainee, supported by a specialist anaesthetist as well as clinical nurse specialist who can provide additional multi-disciplinary input in patient care."

126 It is unclear from Professor Bruce's statement whether this service was in place at the time of Mr Bischard's admission as he was clearly not provided with these services or care. Indeed, the conclave of experts were critical of the lack of senior medical staff available to attend or advise junior medical staff to review Mr Bischard during his admission, particularly leaving Dr Ritchie, an intern, to propose a treatment plan on 13 February 2017, as well as the failure of a medical officer to attend to him late in the afternoon/evening of 15 February 2017.

127 Professor Bruce confirmed that most patients are admitted on the prearranged date for their surgery. He noted that:

> "in very, very rare occasions patients are admitted preoperatively for different reasons. The predominant reasons would be for specific anticoagulation management is probably the commonest reason and very occasionally for, for patients who are admitted for bowel preparation when we want to keep a close eye on their fluid management but the vast majority of patients are admitted on day of surgery in line with current practice guidelines."

128 Professor Bruce acknowledged that there was no "dedicated perioperative physician team" at the Hospital. He also confirmed that the Hospital currently has two geriatricians on staff and are hoping to employ more.

129 When Professor Bruce was asked if "it is not uncommon that the daily fluid balance sheets are incomplete", he responded that he had "not done a comprehensive review of Mr Bischard's fluid charts."

130 Professor Bruce was asked how nursing staff would know whether or not it was important for a fluid balance chart to be completed for a particular patient. He responded by saying: "It would depend on the instructions in the, the medical record and obviously also handover by the medical staff to the nursing staff if there are particular concerns."

131 Ms Jacquelyn Hilton, Director of Nursing and Midwifery at Wagga Wagga Base Hospital, provided a statement in these proceedings as well as giving oral evidence. Ms Hilton confirmed that an internal review was conducted by the Hospital after Mr Bischard's death. Ms Hilton indicated that nursing staff had participated in a case presentation on 8 June 2017. Since that case presentation, many other issues have become apparent during this inquest which were not apparent at that time.

132 For example, it is abundantly clear that there were deficiencies in regularly and accurately recording Mr Bischard's fluid balance charts and total knee replacement checklists. There were inaccuracies between those forms and progress notes, together with deficiencies in the way that medical staff recorded contemporaneous entries in the medical records, or delayed entering the information, or simply did not record the information. There were failures to manage Mr Bischard's medication, as well as failures to conduct postural blood pressure observations when requested by medical staff.

133 It is clear that some of the risks present at the time of Mr Bischard's surgery and admission have been identified during these proceedings. They constituted serious deficiencies and preventable shortcomings. Patients with complex comorbidities need to be identified, managed and not subjected to abuse. Many of these patients with complex comorbidities are over 65 years of age. It is an area of significant concern in terms of public health and safety, particularly with an aging population in rural and regional NSW and Australia.

134 In light of these concerns, at the conclusion of the evidence, the Court sought a further statement from Professor Gracey and Associate Professor Wilson, specifically in relation to initiatives in the area of peri-operative medicine.

135 Both experts have responded. Professor Gracey stated:

> "As mentioned during the conclave, there has been a recognition of the importance of perioperative medicine, resulting in it emerging as a sub-specialist area of importance. The clinical relevance of excellent peri-operative management is well-recognised, and has been shown to improve clinical outcomes. The models of perioperative medicine used vary

between hospitals, depending on local circumstances and resources." Professor Gracey referred to a number of clinics internationally which in identifying different medical needs, is "focusing on immediate pre-admission co-morbidities and their optimisation, as well as a proactive case review by senior doctors and allied health staff. Routine post-operative review, and discharge planning. The importance of team approach and the involvement of senior practitioners is stressed, as well as the importance of communication between team members and routine review of all high risk patients from immediately after their return to the ward in the post-operative period. A proactive approach is important, rather than waiting for post-operative complications to manifest, as was the case with Mr Bischard."

136 In his statement, Professor Gracey provided examples of perioperative medicine at the Royal Prince Alfred Hospital.

137 Associate Professor Wilson also provided a further statement, noting that:

> "Perioperative medicine is a multidisciplinary and integrated model of care which covers the period from the initial contemplation of surgery through to postoperative recovery. The essential components recognise that complex, multimorbidity patients have many dimensions to their care needs which are in addition to and may directly impact the success of any planned surgery. What has become clear over time is that a deliberately structured setup and implementation is crucial to deliver effective integrated care and improve patient outcomes. Coordination and awareness of potential risk and patient needs is key rather than specialty craft groups being 'generally available', acting in isolation or being engaged reactively. In the contemporary elective perioperative context, it is not sufficient to either simply identify risk or assume safety without a subsequent appropriate mitigating response put in place."

138 Associate Professor Wilson directed the Court to the model identified by the Agency for Clinical Innovation (the ACI model). He explained the style of the model as follows:

> "Perioperative medicine involves co-ordination of personnel and systems across:
>
> Preoperative evaluation and planning, including risk assessment and preparation: as well as shared decision making with the patient on the basis of these findings,
>
> *Then*
>
> Proactive strategizing to optimise or mitigate risk (where possible) and deployment of targeted specialty input across:
>
> Intraoperative care
>
> Postoperative care (including multi-specialty monitoring, rehabilitation and post-discharge.
>
> *And subsequently*
>
> Communication and handover to primary carer of referrer.
>
> Appropriate post-surgical follow-up."

139 He continued, noting:

> "in busy hospitals without a structure pathway, many of these aspects tend to occur organically, 'ad-hoc', reactively or occasionally, not at all. At a structural 'model' level of perioperative care, the coordination and integration of personnel and systems is fundamental. Much of the skill-mix, personnel and infrastructure to facilitate perioperative medicine tends to exist in hospital environments as consultative/liaison services though without a coordinated structure they are utilised reactively rather than proactively, tend to communicate poorly and create gaps in care provision."

140 Clearly the model referred to by Professor Bruce, being the "multi-disciplinary specialist medical support model" is different to the model promoted by Professor Gracey and Wilson. The model identified by Professors Gracey and Wilson appears to have significant potential benefits to the patient, not the least being a structured pathway for relevant specialities to jointly identify risk in advance of the procedure, so attempts can be made to manage the patient's complex needs both before, and after, surgery.

Considerations

141 Mr Bischard's death may never have been referred to the Coroner except for Mr Butler's identification of abusive and unprofessional conduct by one nurse which he captured on his video recording. The subsequent investigation confirmed and highlighted a number of systemic deficiencies in operation at the Wagga Wagga Base Hospital in February 2017. It is unclear whether these systemic deficiencies have been practically addressed to date by hospital management. It is also unclear, precisely what is proposed for future medical interventions, support and monitoring of patients with complex medical presentations.

142 The evidence obtained during the coronial investigation highlighted the communication failures at every level: medical specialists practising in compartmentalised silos of care and treatment, little or no communication between hospitals and their record keeping and haphazard or no record keeping at Wagga Wagga Base Hospital. These failures of communication clearly led to Mr Bischard undertaking surgery on 10 February 2017, when he was unfit for the procedure. I accept the evidence of the conclave that his surgery should have been delayed.

143 It is a reasonable conclusion that if a pre-operative model, such as the ACI model, had been implemented, Mr Bischard's unfitness for his surgery would have been identified and actioned.

144 A recent NSW Parliamentary inquiry received submissions and evidence as to the perceived underfunding of and limited human medical resources in the regional areas of NSW. In this inquest, the human cost appears to have been secondary to budgetary constraints. It is hoped that consideration is given to funding initiatives such as the ACI model in regional hospitals.

The need for recommendations

145 Section 82 of the *Coroners Act 2009* (NSW), permits a Coroner to make recommendations which are necessary or desirable in relation to the death of a person the subject of an inquest.

146 Counsel assisting has suggested that the Court consider making three recommendations arising from the evidence.

147 Counsel assisting's first proposed recommendation is that:

> "The Murrumbidgee Local Health District give consideration to establishing a structured peri-operative acute shared care model or pathway targeted at identifying and managing risks during surgical admissions in patients with significant co-morbidities".

148 Counsel representing Mr Bischard's family, counsel representing Dr van der Rijt, and counsel representing Dr Tai and Dr Holmes, all support such a recommendation without further comment.

149 Counsel representing the LHD, is content with such a recommendation being made. However, Counsel for the LHD made further written submissions. In those further submissions, it was contended that Mr Bischard was provided with specialist care from a number of doctors and allied health staff. He submitted that apart from Mr Bischard's admission to Temora Hospital from 4-6 February 2017, nothing had "appreciably changed for at least a few months prior and the pre-operative workup followed the usual pathways." Such a submission appears to misunderstand or misconceive the evidence presented to this inquest that the orthopaedic team were unaware of Mr Bischard's admission to Temora Hospital and the elevated white blood cell count recorded immediately before his discharge from Temora Hospital. In addition, it appears to misstate the involvement of Dr Tai, who was unaware of Mr Bischard's surgery until he was contacted and asked to provide his assessment and opinion after the knee surgery.

150 Counsel assisting's second proposed recommendation is:

> "That the Murrumbidgee Local Health District audit the use of daily fluid balance charts, the standard clinical pathway for a total knee replacement, and nursing compliance with medical requests for the completion of additional observations (such as postural blood pressure readings) on the Orthopaedic Inpatient Unit."

151 Counsel representing all parties do not oppose Recommendation 2. Counsel representing the LHD "is content with and supports" the recommendation. Counsel for the LHD stated that:

> "The LHD accepts that there were deficiencies in the recorded observations relevant to fluid output and postural blood pressure and that the daily fluid balance charts were inadequately completed."

Counsel for the LHD however contends that given that:

> "Mr Bischard's case was complex. It is unclear whether even with delayed surgery, earlier cessation of anti-hypertensives and diuretics and/or increased fluids, Mr Bischard's death may have been avoided."

152 Counsel assisting's third proposed recommendation is:

> "That the Murrumbidgee Local Health District conduct further case presentations with staff (that is, targeting nursing, medical and surgical staff) using Mr Bischard's case as an anonymised case study to prompt discussion around:
>
> a) The need to carefully chart routine medications and allergies (given the prescribing of MS Contin notwithstanding a reported allergy to sulphur and the initial prescribing of Metoprolol as a 50mg dose each morning rather than 2 x 25mg doses each day.)
> b) Adequate completion of daily fluid balance charts and the standard clinical pathway for total knee replacement.
> c) Recognising "low urine output persistent for 8 hours" as a red zone criteria under the NSW Health Between the Flags protocol.
> d) The need for post-operative plans to be documented in the medical record in a timely fashion and for nurses to implement plans for additional observations where requested (such as recording postural blood pressure readings)."

153 All parties supported this recommendation. Counsel for the LHD noted that:

> The LHD will, "should Mr Bischard's family wish, collect further details from family (sic) of Mr Bischard's story. The LHD is only permitted to discuss limited information from what is publicly available in such a presentation, even when anonymised, such that the family's input would assist in implementing the recommended case presentations."

154 On behalf of Mr Bischard's family, a submission has been received inviting the Court to "find that if Mr Bischard had not had surgery on 15 (sic) February 2017 he would not have died that day."

155 This submission is understandable. It is, however, more complex than a clear and obvious causal link between the surgery and Mr Bischard's demise. We know for example, that he had a well-documented medical history of cardiac disease. In addition, at autopsy, the pathologist noted ischaemic heart disease. Similarly, the conclave of experts perceived his cause of death as multifactorial or unknown. In those circumstances, I decline the invitation.

Closing observations

156 Mr Bischard was hopeful that his knee surgery would improve his mobility and reduce his chronic pain. He attended as directed and co-operated at every stage with medical referrals and treatment to ensure that he was “match fit” for his surgery.

157 Unfortunately, Mr Bischard was let down by repeated episodes of poor communication and record keeping at both Temora and Wagga Wagga Base Hospital. I have concluded that these failures were systemic. I have concluded that no particular individual should be found accountable for these failures, with the exception of the conduct of the registered nurse who attended on him on the evening of 15 February 2017. I would have recommended referring her for professional misconduct, however, that has already occurred, no doubt because of the egregious and unnecessary behaviour that she exhibited on a clearly very unwell man, stripped of his dignity.

158 In that regard, I acknowledge the conduct of Mr Butler, which was both decent and appropriate. He was clearly shocked by what he heard. Mr Butler did not decide to turn away and do nothing, no doubt in part because he felt that Bob was a decent bloke.

159 I would like to record my gratitude to counsel assisting, Ms Donna Ward, SC and her instructing solicitors, Ms Caitlin Healey-Nash and Ms Francesca Lilly for their assistance, their commitment, and their untiring efforts to prepare and present this complex case.

160 I would also like to acknowledge and thank the Officer in charge, Detective Senior Constable Ned Doubleday for the investigation of this case.

161 Finally, I would like to again record my most sincere condolences to Bob’s family. His family have impressed the Court with their ongoing grace and stoicism. Despite the length of these proceedings, and the attendant uncertainty, they have not complained, nor uttered criticism.

Findings

162 The findings I make pursuant to section 81 (1) of the *Coroners Act 2009* (NSW) are:

Identity

The person who died was Robert John Bischard.

Date of Death

He died on 15 February 2017.

Place of Death

Wagga Wagga Base Hospital, Wagga Wagga.

Cause of Death

Mr Bischard died as a result of Multifactorial causes on a background of ischaemic heart disease, generalised vascular risk and other chronic co-morbidities.

Manner of Death

Natural Causes.

Recommendations

163 I make the following recommendations:

To the Chief Executive Officer, Murrumbidgee Local Health District:

1) That the Murrumbidgee Local Health District give consideration to establishing a structured peri-operative acute shared care model or pathway targeted at identifying and managing risks during surgical admissions in patients with significant co-morbidities

2. That the Murrumbidgee Local Health District audit the use of daily fluid balance charts, the standard clinical pathway for a total knee replacement, and nursing compliance with medical requests for the completion of additional observations (such as postural blood pressure readings) on the Orthopaedic Inpatient Unit.

3. That the Murrumbidgee Local Health District conduct further case presentations with staff (that is, targeting nursing, medical and surgical staff) using Mr Bischard's case as an anonymised case study to prompt discussion around:

    a) The need to carefully chart routine medications and allergies (given the prescribing of MS Contin notwithstanding a reported allergy to sulphur and the initial prescribing of Metoprolol as a 50mg dose each morning rather than 2 x 25mg doses each day.)
    b) Adequate completion of daily fluid balance charts and the standard clinical pathway for total knee replacement.
    c) Recognising "low urine output persistent for 8 hours" as a red zone criteria under the NSW Health Between the Flags protocol.

d) The need for post-operative plans to be documented in the medical record in a timely fashion and for nurses to implement plans for additional observations where requested (such as recording postural blood pressure readings).

164 I close this inquest.

Magistrate Joan Baptie

Deputy State Coroner

17 August 2022