QUEENSLAND COURTS

OFFICE OF THE STATE CORONER

FINDINGS OF INQUEST

CITATION:	**Inquest into the death of Rick Dudley Dickinson**
TITLE OF COURT:	Coroners Court
JURISDICTION:	Brisbane
FILE NO(s):	COR 2013/2286
DELIVERED ON:	17 February 2016
DELIVERED AT:	Brisbane
HEARING DATE(s):	27 February 2015; 21 – 23 April 2015. Further written submissions 29 April 2015 - 19 June 2015.
FINDINGS OF:	Mr Terry Ryan, State Coroner
CATCHWORDS:	CORONERS: health care related death; aortic dissection; clinical handover; adequacy of assessment and treatment; appropriateness of discharge from hospital; record keeping.

REPRESENTATION:

Counsel Assisting:	Ms Jennifer Rosengren
Dickinson Family:	Dr Ian Dickinson and Ms Julie Dickinson
St Andrew's War Memorial Hospital, Dr Sean Rothwell, Registered Nurse Zadeh Registered Nurse Els	Mr David Schneidewin i/b Minter Ellison

Registered Nurse Aldous Registered Nurse Hughes	Ms Sally Robb i/b Roberts and Kane
Dr Paul Cole	Ms Melinda Zerner i/b Avant Law
Queensland Ambulance Service	Ms Donna Callaghan i/b QAS

Contents

Introduction

1. On the afternoon of 26 June 2013, Rick Dickinson went to the Goodlife Health Club (the gym) at Ashgrove. He experienced central chest pain and felt dizzy while performing shoulder presses. Staff at the gym asked if the pain was in the area of his heart or muscles. Rick said that it was muscular pain and returned to training. Soon after he told gym staff about severe pain and numbness in his lower back and legs.

2. Goodlife staff called the Queensland QAS Service (QAS). After the QAS arrived vital signs were taken and a visual assessment was conducted. An ECG provided no explanation for the chest pain. Bilateral blood pressures were taken, with the possibility of aortic dissection in mind. The results were normal. While such results were not enough to totally exclude aortic dissection, the QAS paramedics thought that diagnosis was unlikely based on the symptoms exhibited by patients seen previously.

3. The QAS administered morphine and took Rick to the St Andrew's War Memorial Hospital (SAWMH) and initially treated and cared for him in the Emergency Centre. After he was seen by a triage nurse he was transferred to the orthopaedic bay. More pain relief was administered.

4. After seeing the doctor on duty at around 6:55pm he was taken to radiology for a CT scan of his lumbar spine. The scan was conducted at 8:00pm by which time his pain level had diminished. The treating doctor thought it was unlikely that Rick was suffering a life threatening condition, as those conditions would not usually produce symptoms that spontaneously improved. Rick was discharged from hospital with a plan that he consult his general practitioner the next day.

5. Rick had arranged for his friend, Geoffrey Walker, to pick him up from hospital. When they arrived back at Rick's home, Rick appeared in good spirits, though was complaining of ongoing numbness in his legs. He said he was tired and going to bed. At 1:00pm the following day, 27 June 2013, Mr Walker attempted to contact Rick with no response. He went to Rick's unit with Rick's sister and found him on the bed. There was a bowl on the bedside table containing a large quantity of vomit. Rick was clearly deceased. QAS officers confirmed this when they attended.

6. These findings:

   - confirm the identity of the deceased person, how he died, and the time, place and medical cause of his death;

   - consider the appropriateness of the assessment and management of the deceased by the QAS;

- consider the appropriateness of the assessment and management of the deceased by SAWMH, including whether aortic dissection ought to have been considered in the differential diagnoses; and

- consider whether the deceased was discharged prematurely from the hospital.

7. Rick's death was reported under the *Coroners Act 2003,* as the cause of his death was unknown. As he was treated at SAWMH on the evening before his death, it was also considered to be a possible health care related death.

8. The initial coronial investigation into Rick's death concluded that it was due to natural causes. However, the investigation was reopened following concerns expressed by Rick's family about that finding, and a report was commissioned from Professor Anne-Maree Kelly.

The Inquest

9. A pre-inquest conference was held on 27 February 2015, and the inquest was held in Brisbane from 21 – 23 April 2015. All of the statements, records of interview, medical records, and materials gathered during the investigation were tendered at the inquest.

10. Counsel assisting at the pre-inquest conference, Ms Rosengren, proposed that all evidence be tendered and that oral evidence be heard from the following witnesses:

- Dr Ian Dickinson – Rick's brother
- Julie Dickinson – Rick's sister
- Geoffrey Walker – Rick's friend
- Daniel Bloor – QAS paramedic
- Ben Carroll – QAS paramedic
- Maria Els – Registered Nurse, SAWMH
- Beverley Aldous – Registered Nurse, SAWMH
- Shiva Zadeh – Registered Nurse, SAWMH
- Dr Paul Cole – Senior Medical Officer, SAWMH
- Dr Sean Rothwell – Director of Emergency Services, SAWMH

Expert witnesses

- Professor Anne-Maree Kelly – Senior Emergency Physician, Western Health, Victoria
- Dr Christopher May - Director of Emergency Medicine, Redland Hospital

11. I agreed that the evidence tendered in addition to the oral evidence from these witnesses was sufficient for me to make the requisite findings.

12. After the conclusion of oral evidence at the inquest, I received detailed and helpful submissions from counsel assisting and those granted leave to appear, including Rick's family. Those submissions have been of great assistance in the preparation of these findings.

13. The purpose of a coronial investigation, including by inquest, is to enable a coroner to make findings in relation to the matters required by s. 45 of the *Coroners Act 2003,* including how and what caused the person to die. A coroner is not able to make any findings of civil or criminal liability. Following an inquest a coroner can also make recommendations, where appropriate, about ways to prevent deaths from happening in similar circumstances.

Personal history

14. Rick was aged 55 years at the time of his death. His family very helpfully provided me with information about his personal history. Rick was a son, brother and brother-in-law, uncle, a 'second dad' to four nieces, a godson and a godfather. Rick was regarded by his family as an entrepreneur. He had lived overseas in London, New York, San Francisco and Belo Horizonte in Brazil where he developed businesses, mostly in the hospitality industry. He had returned to Brisbane to care for his mother.

15. Rick's family informed me that he was a very fit and health conscious person. He regularly went to the gym and was an A-grade squash player. He had been an accomplished swimmer and rugby player, and played competitive tennis each week in the lead up to his untimely death. He saw his general practitioner infrequently, and had been treated for low/medium grade prostate cancer.[1]

16. Rick was passionate about social justice issues and worked to overcome systemic and personal discrimination. His long-time efforts were mostly focused on support of reconciliation for Indigenous peoples and feminism, but in particular the battle for marriage equality.

17. Rick's brother and sister represented the family at the inquest. It is very clear that Rick's family feel a deep sense of loss as a result of his sudden death. They are justifiably disappointed with the treatment Rick received at SAWMH, and the failure to identify and treat his condition, which led to Rick's death alone at home. He was much loved by his family and continues to be greatly missed. I extend to them my sincere condolences.

[1] Exhibit C2

Events leading to death

18. As part of his normal routine, Rick went to the gym at Ashgrove on 26 June 2013. Shortly after 5:30pm he was doing 'military' shoulder presses when he approached reception looking off colour and holding his chest. Rick complained of chest pain and dizziness. One of the staff members asked Rick if the pain was in his heart or muscles. He described it as a 'muscle' pain. After sitting down for five minutes Rick said he was feeling better and returned to training.[2]

19. Rick immediately returned to reception complaining of pain in his lower back and legs. As he was trying to gather up his personal belongings to leave he stopped and said that his pain was getting worse and he was starting to go numb from the waist down. He was taken to the staff room where he lay in a comfortable position on the floor but reported that the pain was getting worse and he was losing more feeling. It was decided to call the QAS approximately 10 minutes later, at around 5:41pm. The QAS was told that Rick had chest pain and was clammy.[3] The gym incident report recorded the description of Rick's injury as:

    "Chest – pain in centre of chest. Waist down – numbness and pain".[4]

20. Rick's brother, Dr Ian Dickinson, is an experienced medical practitioner. In evidence at the inquest, Ian recalled that Rick had called him three times on the evening of 26 June 2013. The first call was received while Rick was at the gym and in a very distressed state. Rick told him that he had experienced sudden chest pain and had become sweaty. He told Ian that he was scared. Ian advised him to ring an ambulance but Rick told him that this had already been attended to. Ian asked Rick to call him from the hospital.[5]

21. The ambulance was dispatched at 5:43pm and arrived at the gym at 5:50pm. At this time Rick was lying down in obvious distress. He was anxious and was repeatedly telling the paramedics that he could not move. Rick reported that he had initially experienced central chest pain while performing overhead shoulder press exercises. He rated the severity of this pain as 8/10 at onset. It was dull in nature and self-resolved over approximately five minutes. He then experienced the onset of severe buttock pain, aching in nature, radiating down the posterior aspect of his upper legs associated with numbness below the level of his navel.[6]

22. Vital signs were taken and visual assessment of Rick's feet found slight pallor. An ECG was undertaken. These observations and investigation provided no explanation for Rick's chest pain. For this reason bilateral

[2] Exhibit C1
[3] Exhibit C13.4
[4] Exhibit C1
[5] Exhibit B11
[6] Exhibit C13.4

blood pressures were taken to rule out an aneurism and with aortic dissection in mind. These were normal.

23. At the inquest, it was confirmed by QAS Advanced Care Paramedic (ACP) Carroll that he was aware that such a finding did not enable aortic dissection to be excluded. However, he considered such a diagnosis was unlikely, as he had previously treated other patients who had suffered aortic dissections and they had not presented in a similar way. ACP Carroll was not aware that symptoms such as chest pain could resolve in a patient who was suffering from an aortic dissection. While ACP Carroll thought it unlikely that an aneurysm or dissection had caused Rick's chest pain, he said it was not something he could diagnose at the gym.

24. Intravenous access was obtained and at approximately 6:06pm Rick was given Ondansetron, a medication commonly used to prevent nausea and vomiting. Some four minutes later he was administered 5mg of morphine for pain relief. At 6:21pm, Rick was administered a further 2.5mg of morphine. This was shortly before Rick was placed onto the QAS stretcher. At 6:25pm he was also given 3ml of another pain relieving medication known as methoxyflurane and was placed in the rear of the QAS vehicle.

25. ACP Carroll called St Andrew's War Memorial Hospital (SAWMH) en-route to ascertain whether it was an appropriate facility for Rick to be transferred to, and to notify the hospital of Rick's imminent arrival and his clinical presentation. He spoke with Nurse Maria Els, who I also heard from at the inquest. ACP Carroll had little recollection of this conversation. Nurse Els recalled part of the history provided to her was that Rick had experienced chest pain that had resolved.

26. While being transported in the QAS vehicle, Rick did not complain of further chest pain and there was no deterioration in his neurovascular observations. However, he was still reporting significant pain to his buttock and legs, the severity of which he rated as 8/10. This pain was associated with numbness and loss of function. ACP Carroll was satisfied that Rick had good motor function to his left leg and Rick was observed to sleep intermittently.

27. ACP Carroll thought the most likely diagnosis was of musculoskeletal origin given the onset of Rick's symptoms while he was exercising at the gym. However, he was cognisant of the fact that Rick's complaint of numbness from the navel to his toes did not fit neatly with such a cause. Unsurprisingly, ACP Carroll was at a loss to identify a medical explanation for Rick's presentation. For this reason, he recorded in the electronic ambulance report form ('eARF') that Rick had undiagnosed severe pain involving the buttocks and legs with associated loss of function.[7]

[7] Exhibit C13.4

28. The QAS vehicle reached SAWMH at 6:35pm and Rick proceeded through triage at 6:45pm. The nursing electronic record indicates that the triage nurse was Nurse Jacqueline Butler.[8] However, I am satisfied that it was in fact Nurse Els. The confusion arose in circumstances where Nurse Butler had left the computer unattended without logging out. Nurse Els entered the triage information without realising that Nurse Butler was still logged on to the computer.

29. ACP Carroll handed Rick over to Nurse Els in the Emergency Centre at approximately 6:50pm. At this time the Centre was operating at near capacity. There were 12 bays, which comprised of two cardiac bays, one eye/ENT bay, three examination bays, two wound dressing bays, one paediatric bay, two orthopaedic bays and two resuscitation bays (which were reserved for emergencies).[9]

30. The Centre was divided into areas, with the paediatric, wound dressing bays and one examination bay comprising the green area. The orthopaedic and other two examination bays were the red area and the cardiac and eye/ENT bays were the blue area. Monitors were in situ in the two cardiac bays, two of the three examination bays and the two resuscitation bays. There were three other mobile monitors. The nurses were allocated to particular areas of the Centre.

31. Nurse Els' evidence was that the Emergency Centre was full on the evening of 26 June 2013. The only free bed available for Rick on arrival was in the orthopaedic section. This was away from the nurses' station and had no monitoring equipment in place.

32. Nurse Els entered the triage notes in the electronic record while she was being provided the handover from ACP Carroll. The history recorded was of the sudden onset of acute dull chest pain while doing overhead bench presses in a sitting position. This chest pain had resolved but Rick continued to complain of pain in his lower back and buttocks, with loss of feeling in his legs and feet. Nurse Els recorded that QAS paramedics had administered analgesics to Rick, which had given him no relief. At the inquest, ACP Carroll had minimal recollection of the handover apart from Nurse Els reiterating that Rick's feet were slightly pale. Nurse Els had no recollection of having done this.

33. After ACP Carroll had transported Rick to the orthopaedic bay he retreated to a staff room to complete the eARF so it could be available to the medical and nursing staff prior to him departing the hospital to attend his next case. The form was printed at 7:12pm. ACP Carroll did not recall taking it and the ECG trace (which he had taken at the gym), to the Emergency Centre but thought that he would have done so soon after printing the eARF. He had no recollection of who he handed these

[8] Exhibit C3, page 29
[9] As depicted in the exhibit B1.2

documents to and/or where he left them. Dr Cole and the nurses who gave evidence did not recall seeing or referring to either of these documents that evening.

34. Nurse Els was the nurse in charge for the shift and as the triage nurse made the decision as to the most appropriate bay to allocate to Rick. At the inquest she said that had Rick's chest pain been on-going at the time of arrival at the hospital, further steps would have been taken to accommodate him in a cardiac or resuscitation bay.

35. Given that Rick's primary complaint was back pain and that it was her understanding that Rick's chest pain had been short lived and had self-resolved, Nurse Els considered that irrespective of bay availability, the orthopaedic bays were the most appropriate area for Rick to be treated and cared for while in the Emergency Centre.

36. Nurse Els had no recollection of aortic dissection being referred to during the handover. She gave Rick a triage score of 3, which required that he be reviewed by a medical officer within 30 minutes.[10] At the inquest Nurse Els agreed that the information she obtained from the QAS had minimal effect on her triage decision.

37. Ian Dickinson received a second call from Rick.[11] Ian assumed that at the time of this call Rick had just arrived at the hospital, as he was yet to see a doctor. Ian could tell from Rick's voice that he was in considerable pain. Ian asked him about the chest pain and Rick said that it had been severe and felt 'like a whoosh running up his chest'. He also said that his legs felt numb and he had back pain. Ian enquired of him as to whether he had been straining with heavy weights when he had experienced the chest pain. Rick said he had not and they had only been light weights. Ian told Rick to ring him after he had been seen by a doctor and when his pain was under control.

38. After the paramedics transported Rick to the orthopaedic bay he was seen by Dr Paul Cole, who was the senior medical officer on duty. Dr Cole has been employed at SAWMH for over 19 years, and has worked in the Emergency Centre for most of that time.

39. Dr Cole recalled seeing Rick in the orthopaedic bay shortly before 7:00pm. Dr Cole spent no more than five minutes with Rick. He had not read the triage notes or discussed Rick's presentation with Nurse Els. He also had no recollection of speaking with either of the paramedics. The eARF was not available at this time.

40. Rick appeared to Dr Cole to be in quite extreme distress on account of his pain. He was crying and was not able to articulate his symptoms or provide a clear history of what had led to his presentation to the

[10] Exhibit B14
[11] Exhibit B11

Emergency Centre. Dr Cole was aware that Rick had experienced chest pain that had resolved. He could not recall how this information had come to his attention and wondered whether he might have overheard the handover while he had been in the doctors' write-up area of the Centre. Due to Rick's pain levels, Dr Cole did not explore with Rick where in the chest his pain had been located or how severe it had been. He did not conduct any examination relevant to Rick's chest, heart or cardiovascular system. Further he did not ask him any questions to ascertain potential risk factors for cardiac conditions.

41. In relation to Rick's on-going back and leg symptoms, Dr Cole was aware that Rick had pain in his back and legs and that he had experienced numbness in both legs. His neurological examination was limited to asking Rick to move his legs, which he did. He tested for the Babinski reflex, ankle jerk and a pulse behind his ankle. These were all regular. He observed that there was adequate perfusion in Rick's lower limbs.

42. Dr Cole ordered intravenous pain relief and other analgesics, namely 2.5mg of morphine, 1mg of Kytril and 40 mg of Dynastat. He also ordered a CT scan of Rick's lumbar spine. Dr Cole stated that his intention was to take a further history from Rick and conduct a further examination once Rick's pain levels had been brought under control.

43. Nurse Els allocated Rick's care in the orthopaedic bay to Nurse Aldous, who also gave evidence at the inquest. At the time of Rick's death she was employed on a casual basis and worked 3-4 shifts per week. She confirmed that she did not see Rick until around 7:00pm, as she had been on her dinner break. Dr Cole had seen Rick at this time.

44. Nurse Els thought that the paramedics had provided a handover to Nurse Aldous in the Emergency Centre corridor but ACP Carroll had no recollection of this. Nurse Aldous' evidence was that Nurse Els gave the handover to her in the corridor at the front of the Emergency Centre and not at Rick's bedside. I consider that it is more likely than not that Nurse Els' recollection in this regard was mistaken.

45. When Nurse Aldous arrived at Rick's bedside he looked pale in appearance and was reporting a lot of pain in his lower back. She recalled that he was very distressed and had said he had never experienced similar pain. She administered the three medications that had been ordered by Dr Cole.

46. Nurse Aldous recalled Nurse Els informing her that Rick had been lifting weights at the gym when he suffered severe back pain that radiated into his legs, and that Rick had just been seen by Dr Cole. She did not recall being told of Rick's earlier chest pain. Her evidence was that had she been given such a history that it would have been significant to her as she had previous nursing experience caring for cardiac and critical care patients. She said that with such knowledge, even where the pain had

resolved, she would have taken further steps to ensure that Rick was appropriately monitored from a cardiac perspective.

47. For the following 30 to 40 minutes, Nurse Aldous continued to be primarily responsible for Rick's nursing care. However, in total she was probably only with him for some 10 or so minutes as she was caring for other patients.

48. Nurse Aldous acknowledged at the inquest that she did not refer to the triage entries in the SAWMH electronic record or to the eARF, which both referred to Rick's earlier chest pain. She said that the eARF was kept with a patient's notes in the doctors' 'write-up area' in the centre of the Emergency Centre.

49. Nurse Aldous discussed with Nurse Els moving Rick closer to the front of the Emergency Centre because of her concern about his pain level. Nurse Els advised then Nurse Aldous that she had already reassessed the nursing allocations, and that Nurse Shiva Zadeh would be taking over Rick's care.

50. Nursing Assistant, Rachel Galladio, took a set of observations at the direction of Nurse Aldous. These were entered into the electronic nursing record at 7:26pm. This was some 26 minutes after the morphine and two other medications had been documented as having been administered by Nurse Aldous.

51. I heard from Nurse Zadeh at the inquest. She confirmed that she was allocated to care for patients in the 'green' area. Nurse Zadeh recalled that Nurse Aldous handed over Rick's nursing care to her at approximately 7:40pm, and she cared for Rick until around 9:00pm.

52. At 7:40pm Rick was still in the orthopaedic bay and Nurse Zadeh was only caring for one other patient. She recalled Nurse Aldous telling her that Rick had been given morphine but was still reporting pain in his back and that she felt he needed to be closer to the nurses' station. She did not remember being informed that Rick had experienced an episode of chest pain earlier that evening. This is unsurprising given Nurse Aldous did not recall being aware of this history.

53. Rick phoned his brother, Ian for a third time. He told Ian that he was going to have a CT scan. He sounded calmer but was still in pain and said he could not feel his legs. He said that he was not happy with the care he was receiving at the hospital and it was his impression that he had some sort of back injury. Ian told Rick to ask the treating doctor to call him after the scan. Ian received no further phone calls and thought Rick must have been given the all clear.[12]

[12] Exhibit B11

54. On taking over Rick's nursing care, Nurse Zadeh reviewed the medication chart. At around 7:45pm, she made arrangements for Rick to be taken to Queensland Diagnostic Imaging (the radiology area) for the CT scan of his lumbar spine. She and the nursing assistant wheeled Rick to the radiology area. En-route she enquired as to Rick's pain levels to which Rick responded that it had resolved. She recalls him saying words to the effect of *'you wouldn't believe the pain I was in, I can't believe the medication has worked, the pain is completely gone'.* She further recalled Rick expressing a desire to be discharged when the CT scan had been done.[13]

55. Nurse Zadeh waited with Rick for about 20 minutes in the radiology area. She then left him with radiology staff and the assistant nurse and asked to be called when the scan had been completed. It appears from the hospital records that the scan was performed at approximately 8:00pm.

56. Rick's sister, Julie, confirmed that she phoned him a second time at 8:16pm. He took her call on this occasion. He told her that he had experienced severe chest pain while at the gym, and the pain was 'like a ball of air ripping through his chest', then the pain went down his back and he was unable to move his legs. He had been afraid of dying in the ambulance. He also told her that he had seen a doctor for 10 seconds and he was not happy with the service he was receiving. He also told her that at one stage he had been left in a hallway and he had been in so much pain that he had called out '*please somebody help me'*. His voice sounded sluggish and it was her impression that he could not speak very well. Rick told her that it was probably only a pinched nerve or something in his back and that Mr Walker was going to pick him up.[14] This was the last occasion Julie or any other family member spoke with Rick.

57. At about 8:30pm Nurse Zadeh was advised that Rick was ready to be collected from the radiology area. She wheeled him back and he was placed in one of the wound dressing bays, which was in the green area. Nurse Zadeh again enquired of Rick's pain levels to which he responded that he was still pain free. She performed a set of vital observations at around this time. This involved taking Rick's blood pressure, pulse, oxygen saturations and temperature. These are not recorded but Nurse Zadeh stated that she could specifically recall that Rick's systolic blood pressure was 148 and all other observations were normal. She recorded her findings in the electronic record but she failed to action the 'save' facility with the consequence that they were not retained.[15]

58. Rick asked Nurse Zadeh to retrieve his mobile phone from his bag. She overheard him have a telephone conversation with someone who she thought was his friend and Rick telling the friend that he wanted to go

[13] Exhibit B13
[14] Exhibit B10
[15] Exhibit B13

home. She told Rick to '*take it easy'* and that she would speak to Dr Cole about his wish to go home.[16]

59. I am satisfied, on balance, this telephone conversation was with Rick's friend, Geoffrey Walker, who I also heard from at the inquest. He had made arrangements to have dinner with Rick that evening. At about 5:00pm Mr Walker had received a call from Rick's mobile phone while he was at the gym. The caller told him that Rick had had a turn, that an ambulance had been called and that dinner was off and that Rick would ring him later.[17]

60. Mr Walker remembered getting a call from Rick while he was at the hospital. Rick told him that the hospital was running tests and that he was not happy with the service he had been receiving. He said that while he was at the gym he had experienced the onset of 'massive pain' in his chest and then he had felt numb from the waist down. He asked Mr Walker if he would be able to pick him up from the hospital at approximately 9:00pm.

61. Nurse Zadeh left Rick's bedside with the intention of finding Dr Cole to relay Rick's request to go home. She discovered that Dr Cole was on his way to see Rick with the CT films. She thought this was at about 8:35pm. She told Dr Cole that Rick was keen to go home. She stayed outside the bay but in a position where she could see both Dr Cole and Rick. She did not remain within hearing range for the entire conversation.

62. Dr Cole's recollection was that Rick informed him that his pain and symptoms had resolved while he was having the CT scan. He told Dr Cole that he was keen to go home as he felt normal and he was having a dinner party that evening. Dr Cole observed that Rick looked better and in particular was no longer anxious about his symptoms. It was his impression that Rick had become quite dismissive about the episode. Dr Cole thought it was unlikely Rick was experiencing a life threatening condition, as those conditions would not usually produce symptoms that spontaneously improved.

63. At this time, Dr Cole recommended to Rick that he should also have an ECG performed and that bloods needed to be taken for some blood tests. Rick apparently agreed to these but indicated that he wanted these further investigations done as soon as possible and he had made arrangements with a friend to collect him and he was only about 10 minutes away. Dr Cole considered that Rick probably required further tests but conceded in evidence that he did not adequately explain this to Rick. He agreed that Rick could go home provided he attended upon his general practitioner the following morning to obtain the results of the blood tests, which were going to take a few hours.

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[16] Exhibit B13
[17] Exhibit B7

64. Nurse Zadeh recalled overhearing Dr Cole telling Rick that the results of the CT scan were normal. Dr Cole asked her about Rick's observations and she informed him they were all fine.

65. In evidence, Dr Cole explained that he 'attempted' to further explore with Rick his history of chest pain. This was not forthcoming. Dr Cole frankly conceded that his attempts in this regard were inadequate. Dr Cole did not obtain any further history, or perform any other examination of Rick prior to his discharge.

66. Nurse Zadeh performed the ECG that had been ordered by Dr Cole. She recalled that while it was being undertaken Rick received a text message from his friend to say that he was waiting outside for him. She was concerned that the quality of the ECG trace was sub-optimal but it was sufficiently clear for her to see that it contained a sinus rhythm. She printed a copy of the trace to show Dr Cole. He reviewed it and advised her that it was adequate and essentially normal. The ECG printout records that it was captured at 8:47pm. It is assumed that this is a trace from Rick's ECG. For reasons that cannot be explained, the original trace, which was labelled with Rick's personal details, was misplaced and not able to be located.

67. At approximately 8:50pm, Nurse Zadeh took a sample of Rick's blood as requested by Dr Cole. He had requested a number of tests, including the troponin level and D-dimer. Dr Cole's evidence was that he did not have any particular diagnosis in mind when he ordered these tests. Rather, he was 'casting the net' as wide as possible hoping to get some clues as to the reasons for Rick's presentation.

68. Prior to discharge, Nurse Zadeh observed Rick walk between his bed and a chair some 10 steps away. She also saw him mobilise to the bathroom. He presented as a bit drowsy but this did not concern her given that he had been administered morphine earlier in the evening. She remembered Rick saying that he felt much better.

69. The electronic record indicates that Nurse Zadeh entered her progress notes at 8:56pm. She transferred Rick outside in a wheelchair to Mr Walker's car, which was parked outside the main doors of the Emergency Centre. Mr Walker's evidence was that Rick was not steady on his feet when he was being transferred into this car. He observed Rick to be in discomfort, which appeared to be centred on his back. Mr Walker lay the car seat down almost all the way to make the drive home more comfortable for Rick.

70. Nurse Zadeh had no particular concerns regarding Rick's mobility at the time of discharge. She explained that it was standard practice to transport patients from the Emergency Centre in a wheelchair if the presenting problem was thought to be back related. She was certain that she had provided no assistance to Rick in transferring him into Mr

Walker's four wheel drive. She did not observe Mr Walker provide any assistance while Mr Walker explained that he provided minimal assistance.

71. Dr Cole wrote a follow-up letter to Rick's general practitioner, Dr Hansen. This was faxed to Dr Hansen's practice. Dr Cole provided Rick with a referral for an MRI. The follow-up letter indicated that the episode had been preceded by a brief episode of chest pain and the focus of Rick's symptoms had been severe back pain with numbness in both legs and that his pain and symptoms had resolved in the CT scan.

72. On the way home, Rick appeared to be in continuing discomfort. Given that he had expressed dissatisfaction with the care he had received at the hospital, Mr Walker offered to drive him to the Royal Brisbane Hospital but Rick declined.

73. When they arrived back at Rick's home, he appeared to be in good spirits although he complained of on-going numbness in his legs. Mr Walker stayed with Rick for some time, as Rick's flat mate was not home. Rick continued to display signs of pain but it appeared to improving. He told Mr Walker that the numbness would dissipate when he lay down. Rick had a shower while Mr Walker was there. Mr Walker left Rick's place at around 10:30-11:00pm. Rick told Mr Walker that he was tired and was going to bed. Rick walked him to the front door and made arrangements to speak with him the next day.

74. Dr Cole finished his shift at approximately 11:00pm. Nurse Zadeh recalled giving Dr Cole the result of the D-dimer test and advising him that it was positive. However, Dr Cole took no action as a consequence of the positive result before the end of his shift.

75. At approximately 1:00pm on 27 June 2013, Mr Walker attempted to contact Rick but was unable to reach him. Mr Walker and Rick's sister, Julie were concerned for his well-being and contacted the real estate agency leasing Rick's unit to gain access to it. Later that afternoon Mr Walker entered the unit and discovered Rick's body on the bed in his bedroom. There was a bowl located on the bed side table and contained what looked to be a large quantity of vomit.

76. The QAS was called and attended. CPR was not commenced, as no vital signs were present. It was considered as an obvious death and no resuscitation was attempted.

Autopsy results

77. A post mortem examination was undertaken by anatomical pathology registrar, Dr Kyra Thompson, and forensic pathologist, Dr Nathan Milne, on 1 July 2013. The autopsy report was tendered at the inquest and the findings it contained were not disputed.[18]

78. The post mortem findings revealed an aortic dissection involving the whole aorta from the root of the aorta to the left common iliac artery. The superior mesenteric artery and right common carotid artery were also involved by the dissection. There was a rupture of the ascending aorta causing a haemopericardium. There was an acute inflammation at the site of the initial tear to the aorta, indicating that there was some time between the initial tear and death.

79. Histological examination revealed cystic medial degeneration within the thoracic and abdominal aorta.

80. The dissection had caused obstruction of the blood flow of the smaller vessels, which can cause symptoms such as nerve compression or ischaemia to the organs that the blood supplies. The autopsy report noted that this explained the symptoms of lower body numbness experienced by Rick prior to his death.

81. The proximate cause of death was considered to be a cardiac tamponade due to a ruptured aortic dissection (Type A) against a background of cystic medial degeneration.

Aortic dissection

82. As the post mortem report noted, the aorta is the main artery that carries blood under high pressure from the heart to the rest of the body. An aortic dissection occurs when there is weakening of the inner layer of the aorta, causing a tear. This allows blood under pressure to enter the aortic wall and dissect between the layers. The deep tear in this instance occurred due to degeneration in the aorta's muscular layer.[19]

83. Aortic dissection is a rare but life-threatening medical condition. The incidence of aortic dissection is 3 patients per 100 000 per year.[20] In Queensland this would equate to only around 140 cases per year. In contrast, the incidence of acute myocardial infarction is 800 times that of aortic dissection. I accept that only a handful of cases is likely to present to any Queensland emergency department each year.

84. Diagnosis of aortic dissection can be difficult for even the most competent and experienced emergency physicians. This is because the

[18] Exhibit A2
[19] Exhibit A2
[20] Exhibit B5.2

range of symptoms it presents is very broad and the proportion of cases that present with atypical symptoms is small.[21]

85. There is no validated clinical tool or one sign or symptom that can positively diagnose the condition. These difficulties are compounded by the relative rarity of acute aortic dissection, compared with other causes of chest and back pain. As noted by Professor Kelly, careful history taking around the nature of the initial pain gives the best chance of making the correct diagnosis.[22]

86. Hypertension is an important risk factor for aortic dissections. Rick did not have a known history of this. However, aortic dissections are twice as common in males when compared to females and are more common in males of more mature years. Rick also had two other risk factors, which were identified at autopsy but were not known of prior to his death. One was mild to moderate coronary atherosclerosis and the other was a genetic connective tissue disorder.

Conclusions regarding Queensland Ambulance Service

87. The evidence of ACPs Bloor and Carroll demonstrated that they were both familiar with aortic dissection as a medical condition. The evidence was that they received training in relation to the condition from the QAS. However, they did not consider this to be a likely explanation for Rick's presentation. They had not previously treated a patient with an aortic dissection who had presented with the same constellation of symptoms.

88. ACPs Bloor and Carroll were given some reassurance that Rick was unlikely to have sustained an aortic dissection when the bilateral blood pressures were tested and were normal. As a consequence, ACP Carroll informed Nurse Els during the handover that Rick had experienced chest pain, which had resolved. He did not hand over the fact that he had considered but discounted the possibility of aortic dissection. I accept the submission of counsel assisting that this cannot be criticised in the circumstances.

89. It is understandable that ACP Carroll did not recall the specific content of the handover discussion in detail two years after the event. However, from the evidence he gave at the inquest and the level of detail contained in the eARF, I consider it likely that ACP Carroll would have given a thorough handover when discussing Rick's condition with Nurse Els.

90. I agree with Professor Kelly that the assessment made by the ACPs was reasonable and appropriate. As Professor Kelly noted, aortic dissection is a rare condition and the progression of symptoms made a definitive and accurate 'final assessment' very difficult. I agree that it was not the role of the QAS ACPs to form a diagnosis.[23]

[21] B5.2
[22] B5
[23] Exhibit B5.3, p.3

91. Professor Stephen Rashford is the Executive Director of Medical Services at the QAS. His statement sets out the role of the paramedic within the Queensland Emergency Medical System (QEMS).[24] Paramedics have three primary tasks:
    - the assessment and prioritisation of patient's immediate and definitive needs;
    - delivery of the appropriate immediate care; while concurrently
    - organising the provision of definitive care in the most time efficient manner.

92. I agree with Professor Rashford that, in this instance, the paramedics identified the crucial symptoms and signs and then provided appropriate supportive therapy followed by an appropriate clinical handover to SAWMH.

93. The eARF completed by ACP Carroll shed further light on the nature and severity of Rick's chest pain. It recorded that Rick had rated the severity of the chest pain as 8/10 and that it had been present for some five minutes. Unfortunately, while the eARF was found on Rick's medical file after his death, it is not clear how it came to be there. ACP Carroll did not recall giving it to anyone in particular and the nursing staff and Dr Cole had no recollection of seeing it before Rick's death.

94. Professor Kelly explained in her evidence the importance of having appropriate procedures in place to ensure that eARFs are available to, and read by, treating nursing and medical staff. In particular, Professor Kelly's evidence was that the description of Rick's chest pain in the eARF was such that it ought to have alerted a competent doctor that further investigations in relation to the pain were required to exclude a potentially life threatening cause.

95. I note that it is by no means certain that Dr Cole would have read the eARF even if he had been handed a copy. The reason for this is that he did not read the triage notes which had been recorded in the nursing electronic records and which were readily available to him. It was also clear that none of the nursing staff on duty had reviewed the eARF.

[24] Exhibit B15

Conclusions regarding St Andrew's War Memorial Hospital

Nursing Care

96. It was not disputed at the inquest that ACP Carroll's handover to Nurse Els included a reference to the fact that Rick had experienced chest pain, which had resolved before he arrived at the hospital.

97. While Nurse Els agreed she had been told about the history of chest pain and entered this in the triage notes, she failed to include this in the verbal handover to Nurse Aldous, who was consequently unable to inform Nurse Zadeh when she assumed responsibility for Rick's care.

98. The only explanation for this appears to be that Nurse Els, who ceased her shift at 7:30pm, concluded that the chest pain had fully resolved and back pain was the only presenting problem. This is reinforced by the fact that she allocated a triage level of 3 when a level of at least 2 was warranted.

99. The consequences of Nurse Els' triage assessment and incomplete handover were that a significant piece of the clinical history was not known by the nurses who cared for Rick for most of the time he was in the Emergency Centre, and there was inadequate monitoring carried out.

100. Nurse Aldous had significant experience in caring for patients with cardiac conditions and her evidence was that she would have made a more concerted effort to ensure Rick was placed in a bay with appropriate monitoring facilities. I note that even after Rick was moved from the orthopaedic bay to the wound dressing bay on his return from the radiology department, that bay was not equipped with any monitoring devices.

101. Nursing staff also failed to take regular observations. Only one set of observations was recorded from the time that Rick arrived at the Emergency Centre until his discharge over two hours later. While this made it challenging to monitor Rick for a deterioration in his vital signs, I accept Nurse Zadeh's evidence that she performed a set of observations about an hour after the recorded observations that did not raise any concerns. However, these observations were not saved to the electronic record.

102. Counsel assisting submitted that even with the benefit of hindsight, more frequent observations would not have identified a deterioration, or for any other reason resulted in any different management and care of Rick.

103. However, I agree with the submission from Rick's family that had the SAWMH Observations Policy[25] been complied with (including cardiac

[25] Exhibit C7.5

monitoring) and used in conjunction with a formal adult deterioration detection system on the night of Rick's death, it is possible that his deterioration may have been identified before he was discharged.

Medical Care

104. I am mindful that I make these findings with the benefit of hindsight, and having had the opportunity to reflect on the circumstances in which Rick presented at SAWMH. However, I also take into account the fact that Dr Cole had almost 20 years' experience in the SAWMH Emergency Centre.

105. After considering all of the evidence, including that of both expert witnesses, I conclude that the medical care provided by Dr Cole was well below the standard expected of a senior medical officer working in the emergency department of a tertiary hospital. I concur with the foundations for that conclusion articulated by Counsel Assisting and set out below. Rick's death may have been prevented if the opportunities to correctly identify his condition and manage his care had been taken.

106. Most significantly, Dr Cole failed to take a full and comprehensive history from Rick. He was aware that Rick had experienced chest pain, and acknowledged that he should have asked about the nature and severity of that pain. I accept that when he first saw Rick this may have been difficult due to Rick's level of distress and difficulty communicating his symptoms. However, if Dr Cole had taken a detailed history after Rick's pain had subsided, it is likely that Rick's responses would have flagged that his condition was potentially life threatening.

107. Rick had told at least four other people about the nature of his chest pain during the course of the evening on 26 June 2013. He told the paramedics that at onset, the chest pain had been 8/10 in terms of severity. He described the pain to his brother as having been severe and that it had felt like a whoosh running up his chest. He told his sister that the pain had been like a ball of air ripping through his chest, which had then moved down his back to the point that he had been unable to move his legs. Rick also told Mr Walker that he had experienced the onset of a massive pain in his chest and then he had felt numb from the waist down. I consider that Rick would have provided the same description to Dr Cole if he had taken the time to carefully explore the episode of chest pain.

108. Professor Kelly and Dr May agreed that a careful history taken around the nature of the initial chest pain, and a thorough physical examination, would have given Dr Cole the best chance of making the correct diagnosis.

109. Even with Dr Cole's limited knowledge regarding the nature and severity of Rick's chest pain, he conceded in evidence that his knowledge was such that he should have ordered a CT scan of Rick's chest. This is

important in circumstances where the episode of intense chest pain at the gym is likely to have been the initial dissection of Rick's aorta.

110. Dr May's view was that if a CT scan of Rick's chest had been undertaken, it is likely to have revealed a widened mediastinum. This would then have called for a computerised tomographic aortogram, which in turn would likely have shown the dissection in the aorta. There is no reason why both investigations could not have been undertaken at SAWMH that evening. The appropriate specialists could then have been involved as a matter of urgency to manage and surgically repair the aorta, if such an intervention had been considered necessary.

111. Rick's death was preventable in the sense that correct diagnosis and the commencement of treatment before the catastrophic rupture gave him a chance of surviving this life threatening condition, whereas discharge home gave him little, if any.

112. Professor Kelly explained in her initial report that if aortic dissection had been considered and appropriate investigations performed, and Rick had received definitive treatment prior to his fatal event (likely to have been progression of his dissection into the pericardial sac), it is possible that he would have survived.[26]

113. Dr May stated in his report that 40% of all patients die within minutes and do not reach hospital alive. Of those who survive to hospital, 1-2% will die every hour for the first 48 hours, making prompt diagnosis and treatment a priority. Even after diagnosis 5-20% will die during surgery or postoperatively. In ascending aortic dissection, where surgery is not appropriate or possible 75% will die within 2 weeks. Operative mortality across all surgery is 5% and in-hospital mortality is 50%. Patients who survive to discharge have 1 and 3 year survival rates 88.6% and 68.7% respectively, but have wide confidence intervals.[27]

114. The experts also agreed that Dr Cole should have conducted an examination with respect to Rick's chest, heart and cardiovascular system, and should have asked questions directed at establishing any risk factors Rick may have had for cardiac conditions.

115. The suite of blood tests and the ECG should have been ordered when Dr Cole ordered the CT scan of the spine, not some two hours later. Dr Cole accepted this criticism, and explained that he would have taken these steps had he appreciated the significance of Rick's history of chest pain.

116. I agree with Dr May that after Dr Cole ordered the blood tests and the ECG, Rick should not have been discharged before those results were

[26] Ex B5, p.7
[27] Ex B6, pp. 6-7

returned to Dr Cole. Included in the blood tests ordered were the troponin level and the D-dimer.

117. With respect to the troponin level, Dr May said that once Dr Cole ordered this test, Rick needed to remain in hospital that evening until the result was known and further troponin levels had been taken. The reason for this is that the troponin level measures the troponin proteins in the blood. These proteins are released when there had been damage to the heart muscle. The more damage there is to the heart, the greater the troponin level will be. A single level, as ordered by Dr Cole could not give any indication of the likelihood of damage to Rick's heart muscle. Having said this, Dr May was unable to determine whether repeated troponin levels that evening would have revealed damage to Rick's heart muscle. This is because while the aorta had initially dissected while Rick was at the gym, it is not known at what point in time the dissection had sufficiently progressed to cause damage to Rick's heart. This issue is further complicated by the fact that it is not known how long Rick had been deceased when he was found at his home.

118. Dr May and Professor Kelly were both critical of Dr Cole for not having contacted Rick on learning that his D-dimer test was positive. This result was indicative of a potentially life threatening condition, such as a pulmonary embolism and required further investigation. Dr May considered that the positive result was most likely explicable by the dissection. If Rick had been asked to return to the hospital for further investigations, the dissection is likely to have been found, even if it had been in the course of excluding a pulmonary embolism. Professor Kelly was also firm in her opinion that Rick should have been called back to the hospital.

Assessment and treatment of neurological symptoms

119. Although Dr Cole's primary focus was on Rick's back pain and neurological symptoms, his management and treatment in relation to these conditions was also less than optimal. Both experts considered that Dr Cole did not take an adequate history or perform an appropriate neurological examination to ascertain the nature and severity of these symptoms.

120. Importantly, Dr Cole did not know that Rick had been numb from his navel down to his toes - information Rick had provided to the paramedics. There is no reason to think that Rick would not have relayed a similar history to Dr Cole had an appropriate history been taken. It was apparent from Dr Cole's evidence that he allowed his clinical decision making to be clouded by Rick's repeated expressed desire to be discharged home, and his impression that there was a link between the symptoms and Rick's exercising at the gym.

121. This was a significant error of judgement on Dr Cole's part. Rick did not self-discharge. Rather, Dr Cole gave Rick no reason to believe he was

being discharged against Dr Cole's advice or that he considered that Rick needed to remain in hospital until potentially life threatening explanations for his presentation had been adequately investigated.

122. Dr May explained that once Dr Cole was aware that the results of the CT scan of Rick's lumbar spine revealed no abnormality, an MRI of Rick's lumbar spine should have been ordered and undertaken prior to Rick's discharge. This is because the onset, nature and extent of the neurological symptoms were sufficiently concerning to warrant this further investigation.

Record keeping

123. Dr Cole made very limited notes in the SAWMH electronic records, which were then copied into the follow up letter, addressed to Rick's general practitioner, Dr Hansen. Dr May and Professor Kelly concurred in their respective criticisms of the brevity of the information contained in Dr Cole's follow-up letter to Dr Hansen.

124. Professor Kelly articulated that her concerns related to the fact the letter did not make it clear that Dr Cole had no definite diagnosis and had been at a loss to explain Rick's presentation, and that Dr Hansen needed to reassess Rick and carry out further investigations to rule out the possibility of a serious condition. It is noted that the deficiencies in the follow up letter were not causally relevant to Rick's death as Rick had passed away prior to any follow up occurring.

Administration of Dynastat and Kytril

125. Dr Cole's decision to order Dynastat and Kytril for Rick also assumed some importance at the inquest. In his evidence, Dr May expressed the view that Dynastat should not be ordered for a patient until any suspicion of bleeding has been ruled out. Dr Rothwell's evidence was that it is routinely used in the Emergency Centre at the hospital and in other emergency departments at other hospitals. Professor Kelly had no concerns regarding the use of either Dynastat of Kytril in Rick's case. She explained that while she has not personally used these medications, that she had used medications with similar compositions for similar purposes.

Findings required by s. 45

126. I am required to find, as far as is possible, the medical cause of death, who the deceased person was and when, where and how he came by his death. As a result of considering all of the evidence, including the material contained in the exhibits, I am able to make the following findings:

Identity of the deceased – The deceased person was Rick Dudley Dickinson

How he died - Rick experienced acute cardiac pain while he was exercising at the gym on 26 June 2013. Although the cardiac pain resolved, he continued to have severe back and leg pain and numbness. Rick was transported by the Queensland Ambulance Service to the St Andrew's War Memorial Hospital Emergency Centre. The triage nurse and the treating doctor at the hospital were aware that Rick had experienced chest pain but focused on his back and leg pain. After a lumbar CT scan revealed no abnormalities further blood tests were ordered and a follow up letter sent to Rick's general practitioner. Rick was discharged before the cause of his pain was identified and he died at his home as a consequence of an aortic dissection. His death may have been prevented if his condition had been correctly diagnosed.

Place of death – He died at Ashgrove in Queensland.

Date of death – He died between 26 and 27 June 2013.

Cause of death – The cause of death was a cardiac tamponade due to a ruptured aortic dissection (Type A), against a background of cystic medial degeneration.

Remedial actions taken by SAWMH

127. Rick's family and the community are entitled to be assured that any lessons learnt from an assessment of the factors that contributed to Rick's death have led to changes.

128. As the family's submission helpfully noted:

> *… staff in hospitals do not work in isolation and it is often not just one action or inaction that causes fatal events to occur. There is a complex relationship between humans and systems and when that relationship fails, disaster can strike unexpectedly, as it did for Rick. It is therefore important when investigating factors contributing to deaths which in future may be preventable, to include not only an interrogation of* human *factors but also an examination of* systemic *flaws extant at the time of the event.*

129. The evidence at this inquest highlighted that there was a series of interrelated factors which contributed to Rick's death. It is important to acknowledge that some positive measures have been taken or are planned by SAWMH to address these factors and which should help prevent deaths of a similar nature.[28]

130. Many of these changes respond to concerns identified in the family's submission (which used the National Safety and Quality Health Service Standards as a touchstone) in relation to matters such as the adequacy of clinical handovers, medication safety, records management, the frequency of observations, the timing of diagnostic tests and discharge practices. These changes demonstrate that the hospital has made a considered response to the circumstances of Rick's death.

131. Following Rick's death, the SAWMH Chest Pain Management Protocol (chest pathway) has been modified to include a reference to 'aortic dissection' as one of the 'time-urgent life threatening emergencies' to be entertained when a patient presents to the Emergency Centre with chest pain.[29] Dr May's evidence was that he was satisfied with this modification.

132. Doctors working in the SAWMH Emergency Centre are now reminded at the six monthly emergency centre craft group meeting that all tests and investigations ordered for a patient, together with results, proposed treatments plans and discussions with patients need to be recorded in the medical notes. It is the responsibility of the doctor to follow up an abnormal result which might include requesting a discharged patient to return to the Emergency Centre.[30]

133. Staff in the Emergency Centre have been reminded of the requirement to ensure that patient information labels are on the front of a patient's medical record and on each and every subsequent page. They have also been reminded to ensure that entries in the medical records are made using each individual's personal login. In November 2013 the computer system was upgraded to automatically log a staff member out of the system if the staff member has not used the computer terminal for

[28] B12
[29] B12.3
[30] B12, para 16-17

30 minutes. The importance of adequate documentation has been reiterated.[31]

134. Vital sign observations of patients in the Emergency Centre are to be conducted half hourly. Any departure from this standing observation protocol and the rationale for this is to be clearly documented in the patient's medical record.[32]

135. The Emergency Centre has commissioned a change to its Electronic Medical Record (EMR) to a different platform for the recording of nursing observations, which will not present the counterintuitive warning message, which likely led to the failure to record some of the observations taken on the night of Rick's attendance. The change to the EMR will also allow the ECGs to be electronically attached to the patient record.

136. The EMR system will include a module enabling deteriorating patient alerts through the Queensland Adult Deterioration Detection System (Q-ADDS).

137. The Emergency Centre intends to introduce a compulsory check box to its EMR, which will require staff to document that they have sighted (and electronically signed for) the QAS eARF before being permitted to proceed further through the EMR.

138. The Emergency Centre has also increased administrative staffing levels to provide for the timely scanning of external documents such as the eARF into the EMR. The new platform for the EMR will also permit the Triage Notes to be visible on the home screen.

139. The SAWMH's Director of Emergency Medicine, Dr Rothwell, said at the inquest that he considered that handovers were an area for improvement in the Emergency Centre. The circumstances of Rick's death demonstrated the desirability of improvements in this regard. Rick's history of chest pain did not come to the attention of the two nurses who were allocated to care for him, namely Nurse Aldous or Nurse Zadeh. If either of these nurses had known of this (particularly Nurse Aldous), further steps may have been taken that would have led to an identification of the seriousness of this history.

[31] B12, para 20-25
[32] B12, para 26-28

140. The SAWMH has subsequently undertaken a review to ensure that all nursing staff are appropriately trained in the SHARED handover tool.[33] The staff will be regularly audited to ensure compliance with handover guidelines. The specific focus for emergency handover will centre around:

- review of triage notes;
- review of QAS records;
- review of clinical observations trending; and
- review of outstanding tests and interventions.

141. A Discharge Card for patients will be developed to cover any further information relating to appointments, additional wound care information, mobility, pain management and deterioration of symptoms.

142. Dr Rothwell was also cognisant that education is vital in raising awareness of aortic dissections and their variable presentations. The following steps have been taken in this regard:

- a specialist emergency physician has been appointed as Director of Clinical Training;
- Dr Cole and two other doctors working in the Emergency Centre who do not have specialist qualifications have completed an Emergency Medicine Certificate through the College of Emergency Medicine;
- a video link has been established with the Royal Brisbane and Women's Hospital Emergency Centre weekly teaching program, which has covered both the assessment of chest pain and the diagnosis of aortic dissections; and
- SAWMH achieved accreditation with the College of Emergency Medicine in 2014 as a department recognised for six months of advanced training for emergency medicine registrars.[34]

Comments and recommendations

143. Section 46, insofar as it is relevant to this matter, provides that a coroner may comment on anything connected with a death that relates to public health or safety, the administration of justice or ways to prevent deaths from happening in similar circumstances in the future.

144. The evidence demonstrated that ordering of Dynastat and Kytril in the Emergency Centre was a vexed issue. It was beyond the scope of the inquest to consider the merits of the most appropriate medications to be administered in an emergency department. I note that the SAWMH Drug Advisory Committee has considered the issue and advised that these are appropriate medications for use in an emergency setting. I make no recommendations in that regard.

[33] Situation, history, assessment, risk, expectation and documentation
[34] B12, para 30

145. Issues associated with aortic dissection, including the communication of ambulance information, diagnostic decision-making and the role of clinical pathways have been the subject of coronial consideration in several other Australian jurisdictions.[35]

146. As noted above, many of the systemic factors that contributed to the circumstances of Rick's death have been addressed by SAWMH. However, the circumstances of Rick's death highlight that there are ongoing opportunities to improve health outcomes and improve patient care with respect to aortic dissection in Queensland. I note that the QAS intended to issue a clinical communiqué in relation to aortic dissection following this inquest.

147. I make the following specific recommendations:

1. That the Queensland Emergency Department Strategic Advisory Panel, the Australasian College of Emergency Medicine and the Queensland Ambulance Service review continuing medical education programs for all staff in emergency settings to ensure that aortic dissection is highlighted in any training relating to the differential diagnosis of patients presenting with chest and back pain and related complex issues.

2. That Queensland Health consider the implementation of procedures to ensure that the information contained in an eARF is more readily available to treating clinicians, such as integration with electronic medical records, or modelling the SAWMH system requiring that the contents of the eARF are noted by hospital staff.

Section 48 referral

148. Section 48 of the *Coroners Act* provides that a coroner may give information about a person's conduct in a profession, obtained while investigating a death, to a disciplinary body for the person's profession if the coroner reasonably believes the information might cause the body to inquire into, or take steps in relation to, the conduct.

149. In this instance Dr Cole's conduct has already been referred to the Medical Board of Australia (the Board). I accept that no purpose would be served by another referral of Dr Cole's conduct for the consideration of the Board.

150. The Board had the benefit of Professor Kelly's report dated 18 April 2014 detailing her criticisms of Dr Cole's management of Rick. Dr Cole was cautioned and entered into undertakings which were proposed by the Board and satisfactorily completed by Dr Cole.[36]

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[35] For example, *Finding - Inquest into the Death of Constandia Petzierides*, Coroners Court, Victoria, 5 June 2014

[36] Ex. B3.3

151. I accept that Dr Cole now has a much better understanding of the shortcomings with respect to Rick's care and has learnt many valuable lessons. This tragic incident and the subsequent inquest have impressed on him the importance of adequate history taking and examination, and the fact that as a doctor, he has the professional responsibility to appropriately educate patients about issues relevant to discharge.

152. I close the inquest.

Terry Ryan
State Coroner
Brisbane
17 February 2016