



Coroner's Court of Western Australia

RECORD OF INVESTIGATION INTO DEATH

Ref No: 10/18

*I, Rosalinda Vincenza Clorinda Fogliani, State Coroner, having investigated the death of **Daniel Josef ADWENT** with an Inquest held at Perth Coroners Court, Court 51 Central Law Courts, 501 Hay Street Perth between 19 and 28 February 2018 find that the identity of the deceased person was **Daniel Josef ADWENT** and that death occurred on 21 March 2015 at Fiona Stanley Hospital, as a result of Gunshot Wound to the Abdomen in the following circumstances -*

Counsel Appearing :

Mr T Bishop assisted the State Coroner

Mr D Harwood (with Ms E O'Keefe instructed by State Solicitors Office) appeared for the South Metropolitan Health Service and the Department of Health

Mr B Humphris (with Ms N Grant instructed by Western Australia Police Legal Services) appeared on behalf of the Western Australia Police

Ms B Burke (instructed by the Australian Nurses Federation) appeared on behalf of Nurse Brown

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INTRODUCTION

1. Daniel Joseph ADWENT (the deceased) was a 44 year-old male who died at Fiona Stanley Hospital on 21 March 2015 as a result of a gunshot wound to the abdomen. The deceased had been conveyed there by ambulance after being shot by a police officer who had responded to a call out concerning an alleged domestic violence incident involving his wife. Despite extensive resuscitative efforts, the deceased was unable to be revived.
2. The deceased's relationship with his wife had been marred by previous incidents of domestic violence and alcohol abuse. Late at night on 20 March 2015, the deceased's wife telephoned police claiming she had been assaulted by her husband. Police officers attended the scene and sought to arrest the deceased.
3. The deceased became agitated and aggressive. Police attempted to control the deceased's threatening behaviour with a Taser; however this failed on two occasions and capsicum spray was also unsuccessful. The deceased was in possession of a knife and moved towards the police officers, finally lunging at one of them, who discharged his firearm, with a single shot, which struck the deceased in the abdomen, causing him to fall to the ground.
4. Paramedics treated the deceased at the scene and he was also treated in the emergency department of Fiona Stanley Hospital and then transferred to theatre for surgery. Tragically he had sustained life threatening injuries that, despite hospital treatment, proved fatal.
5. The deceased's death was a reportable death within the meaning of section 3 of the *Coroners Act 1996* (the Coroners Act). It was reported to the coroner as required. By reason of s 19(1) of the Coroners Act I have jurisdiction to investigate the death.
6. The death occurred following a police shooting. Therefore, pursuant to s 22(1)(b) of the Coroners Act an inquest into the death was mandated because it appeared that the death was caused, or contributed to, by an action of a member of the Police Force (the police).
7. Section 22(1)(b) is enlivened when the issue of causation or contribution in relation to a death arises as a question of fact, irrespective of whether there is fault or error on the part of the police.
8. My primary function is to investigate the death. It is a fact-finding function. Pursuant to s 25(1)(b) and (c) of the Coroners Act, I must find, if possible, how the death occurred and the cause of

the death. Pursuant to s 25(2) of the Coroners Act, in this finding I may comment on any matter connected with the death including public health, safety or the administration of justice. This is the ancillary function.

9. The deceased was not a “*person held in care*” within the meaning of section 3 of the Coroners Act. He was not at any stage under the control, care or custody of the police, because the police officers had attempted to arrest him but had not gained control, he was not within their care, and they had not established a custodial relationship. It follows that the deceased was not escaping from their control, care or custody immediately before death.
10. I am therefore not required, under section 25(3) of the Coroners Act, to comment on the quality of the police’s supervision, treatment and care of the deceased.
11. My role is to scrutinise the police actions leading to the shooting, and the first aid and other assistance given by police after the shooting and to comment on those matters in furtherance of the principles of open justice and transparency, having regard to the community’s concern about any exercise of a police power or function that results in a death.
12. Section 25(5) of the Coroners Act prohibits me from framing a finding or comment in such a way as to appear to determine any question of civil liability or to suggest that any person is guilty of an offence. It is not my role to assess the evidence for civil or criminal liability, and I am not bound by the rules of evidence.
13. The focus of the inquest was upon:
 - a. the actions of police during the course of the call out and the shooting, including an assessment of whether those actions were taken in the course of carrying out a legitimate law enforcement activity; and
 - b. the treatment and care of the deceased at Fiona Stanley Hospital.
14. I held an inquest at Perth on 19 to 28 February 2018. I heard from 34 witnesses and received 6 volumes of exhibits into evidence, containing a total of 100 tabs.
15. Between 8 March and 13 April 2018 I received written submissions from counsel assisting and the legal representatives of the interested persons under s 44(2) of the Coroners Act.
16. My findings appear below.

THE DECEASED

17. The deceased had worked as a driller in Australia and overseas. He was gainfully employed throughout his life. Prior to his death, he had been working on the mines in Western Australia, two weeks on and one week off. He had met his wife while they were both holidaying in Thailand, and she moved to Australia from the Ukraine, to be with him. They initially resided with the deceased's mother. They married on 7 May 2014.¹
18. At an earlier stage in his life, the deceased had sustained a painful neck injury, and after that time, his mother observed him to drink alcohol a lot. This would cause him to become aggressive. After the deceased and his wife moved into their own home, their marriage became strained and volatile. Sadly, their relationship was marred by his excessive alcohol consumption, and numerous incidents of domestic violence. The deceased developed concerns about his capacity for ongoing work due to his neck injury, and there were mounting financial problems.²
19. The deceased had sought medical help for his alcohol dependency, and for a time it appeared that he reduced his drinking. However, this was short-lived and he reverted to his previous drinking patterns, with ruinous consequences.³
20. The deceased's mother supported him throughout his difficulties, and the night before his death, after observing a particularly harrowing domestic violence incident, she had offered for him to stay at her house for the night, or alternatively, that she would stay with him and his wife at their house. The deceased was adamant that he wanted to go to sleep and she left his home, with the intention of returning the next morning to drive him to work. When she arrived the next morning, she was informed of the deceased having tragically died.⁴

THE CALL OUT

21. There was a history of family violence incidents involving the deceased, and a number of violence restraining orders had previously been issued against him, in connection with behaviour concerning his wife. He had previously been involved in disputes with neighbours, some of whom recounted his problematic

¹ Exhibit 1, tabs 12 and 14.

² Ibid.

³ Ibid.

⁴ Ibid.

alcohol consumption and his tendency towards escalating anger. The deceased also had a number of prior convictions for offending that were characterised by either alcohol consumption or aggressive behaviour.⁵

22. There were a number of warnings about the deceased on the Western Australia Police Force's computerised Incident Management System, to the effect that he was an alcoholic who required medication, that his wife had made reference to his usage of pistols, and that he was likely to assault police.⁶
23. On the evening of 20 March 2015, the deceased and his wife had an altercation, and the deceased left his home and drove to his mother's house, arriving there at approximately 8.15 pm. His mother observed that he was affected by alcohol, and expressed her disappointment with his behaviour. She tried to dissuade him from returning home to his wife (with whom he had recently argued) and encouraged him to stay at her house for the night. The deceased insisted upon returning to his home, with the result that she agreed to drive him there.⁷
24. They arrived at the deceased's home at a stage before 10.00 pm and the deceased's mother waited outside in the car, with the anticipation of him going inside, collecting some overnight things and returning with her to her house. Unfortunately, the deceased and his wife continued their argument, and it escalated into another domestic violence incident. The deceased's behaviour and his actions towards his wife caused her to fear for her life.⁸
25. From outside where she was waiting, the deceased's mother heard his wife shout at her son to leave her alone, and she went inside the house to try and settle the argument between them. Upon entering the house, alarmingly she saw the deceased's wife on the ground, with the deceased leaning over her, "*white with rage.*" She intervened to separate them, and the deceased's wife ran out of the house, seeking help at her neighbour's house.⁹
26. The deceased's wife knocked on the neighbour's door at approximately 10.15 pm. The neighbour had known them for some years, and was aware of the history of the deceased's alcohol consumption, and of a previous domestic violence incident. The deceased's wife used the neighbour's telephone to call police at approximately 10.15 pm, using the 000 emergency service line. She told police that her husband had tried to kill her. In response to questioning she indicated that he had tried

⁵ Exhibit 1, tabs 11, 12, 14, 18, 19, 20 and 21.

⁶ Exhibit 1, tab 11.

⁷ Exhibit 1, tab 14.

⁸ Exhibit 1, tabs 12 and 14.

⁹ Ibid.

to choke her, and that he had done that before. Police told her to remain at her neighbour's house, and that police would attend, and they instructed the neighbour to lock the door.¹⁰

27. Police Operations Centre generated a Computer Aided Dispatch (CAD) task at 10.24 pm which was promptly assigned to the marked police vehicle VN114, operated by Sergeant Matthew Edmunds (Sergeant Edmunds) as driver, and First Class Constable Jonathan Henshaw (Constable Henshaw), his partner. Over the police radio they received information to the effect that this attendance related to a matter concerning a domestic dispute, and that there was no threat to life.¹¹
28. As they were travelling to the address, Constable Henshaw checked the details of the incident upon the on board electronic information system (the Tasking and Dispatch Information System (TADIS)). From that search he was able to inform Sergeant Edmunds that a female had left the home address and sought refuge at her neighbour's house, alleging that she had been "*strangled*" by her husband. Further TADIS searches disclosed that the male involved had previous convictions for assault and been the subject of restraining orders. This information was also conveyed to Sergeant Edmunds.¹²
29. Police arrived at the neighbour's house at approximately 10.38 pm on 20 March 2015, and interviewed the deceased's wife, who was visually upset throughout. She told police that the deceased had tried to strangle her and described the details. It involved the alleged use of a rope and a cane. She complained of neck soreness and pain. Police did not observe any obvious injuries to her neck. Police advised her of short term refuge accommodation and longer term safety strategies. The deceased's wife appeared unsure as to whether she wished to proceed with a complaint against her husband. Police advised they would go next door to speak with her husband, and return to discuss options with her. She did not know whether the deceased's mother was still at their home.¹³
30. As it transpired, the deceased's mother had left their home by that stage, having been unable to persuade her son to come back to her house, or accede to allowing her to stay the night at their house, with the aim of seeking to de-escalate the arguments. She accepted his assurance that he was going to retire for the night, and agreed to return the following morning to drive him to work.¹⁴

¹⁰ Exhibit 1, tabs 12, 13, 18 and 19.

¹¹ Exhibit 1, Tabs 11, 15, 16 and 31.

¹² Exhibit 1, tabs 11, 15 and 16; ts 19.2.2018, p85.

¹³ Exhibit 1, tabs 11, 12, 15, 16, 18 and 19.

¹⁴ Exhibit 1, tabs 11 and 14.

THE SHOOTING

31. Sergeant Edmunds and Constable Henshaw left the deceased's wife at the neighbour's house, and went to the deceased's home next door, with the intention of conducting their further inquiries. At this stage they considered there was a strong likelihood of violence by the deceased, and that there were reasonable grounds to arrest him in connection with his actions towards his wife.¹⁵
32. The police officers walked along the front yard towards the deceased's home and Sergeant Edmunds looked through a window, but did not see the deceased. Constable Henshaw had gone to check the shed area with his torch, and he saw the deceased crouching between two wheelie bins, appearing to hold a cane. Constable Henshaw thought it was the cane that the deceased's wife had earlier described during their interview with her. Constable Henshaw drew his Taser and instructed the deceased to drop the cane and show his hands.¹⁶
33. Sergeant Edmunds heard Constable Henshaw say "*he's here*" and then he heard him issue an instruction to the deceased to the effect of "*drop the weapon*". Sergeant Edmunds moved to the area and he instructed the deceased to come out, show his hands, and put his hands on the bin. The police were a few metres away from the deceased.¹⁷
34. When Constable Henshaw first sighted the deceased crouching between the wheelie bins, the lighting to that area was poor. Constable Henshaw had turned on his torch, and pointed his Taser towards the deceased's feet, but without activating it. Upon being instructed to do so, the deceased dropped the cane. However, as Sergeant Edmunds moved towards him (with the intention of arresting and handcuffing him) the deceased began "*throwing punches*" in the direction of the sergeant. Sergeant Edmunds stepped backwards, and avoided contact from the deceased, who quickly appeared to have become aggressive and volatile.¹⁸
35. The deceased retrieved a silver object from behind his back, that appeared to Constable Henshaw to be a knife, and he called out to Sergeant Edmunds to warn him about the knife. The deceased continued to move towards the police officers making slashing motions with his right arm, and he held the knife in his right hand. Constable Henshaw endeavoured to deploy his Taser at the deceased, but it failed to fire (by reason of an apparent fault)

¹⁵ Exhibit 1, tabs 11, 15 and 16.

¹⁶ Exhibit 1, tab 16; ts 19.2.2018, p91.

¹⁷ Exhibit 1, tabs 11, 15 and 16; ts 19.2.2018, p49.

¹⁸ Ibid.

and he informed Sergeant Edmunds, who proceeded to deploy his oleoresin capsicum (OC) spray. The spray appeared to make contact with the deceased's face, but it had no discernible subduing effect on him. At this point, Sergeant Edmunds also saw the knife in the deceased's hand.¹⁹

36. The deceased continued to advance towards the police officers making slashing motions, as they retreated towards the street, walking backwards for the main part, and continuing to face the deceased when possible. The officers formed a 90 degree stance in front of him. Constable Henshaw changed Taser cartridges and again endeavoured to deploy his Taser at the deceased, who was facing Sergeant Edmunds, separated by two to three metres. On this occasion, the Taser fired, but did not make sufficient contact and was therefore unsuccessfully deployed. By this stage police had reached the roadside.²⁰
37. Constable Henshaw kept yelling at the deceased, directing him to drop the knife. The deceased did not drop the knife and continued to move towards the police officers. Sergeant Edmunds saw the deceased move his hands towards his face, and observed that the knife's blade was facing towards him. Upon realising the second attempted deployment of the Taser was unsuccessful, both officers feared for their lives as the deceased was continuing to advance towards them, with the knife, and in an aggressive manner. Constable Henshaw reached for his holster, but Sergeant Edmunds had already drawn his firearm.²¹
38. The deceased lunged towards Sergeant Edmunds, who raised his firearm with both hands and aimed at the centre of mass, yelling "stop", to no avail because the deceased continued lunging towards him. Sergeant Edmunds believed the deceased was going to kill him, and when the deceased was approximately two to three metres away from him, he fired one round from his firearm, and the deceased fell to the ground.²²
39. The shooting occurred within a matter of moments after the Taser was unsuccessfully deployed, at approximately 11.00 pm on 20 March 2015, and shortly after the police had arrived at the deceased's home. Records reflect that the Police Operations Centre was promptly informed of the shooting, consistent with the officers' accounts.²³
40. I am satisfied that the sequence of events leading up to the shooting were as testified to by Sergeant Edmunds and Constable

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ Exhibit 1, tabs 15, 16 and 31; Exhibit 3, tabs 1 and 3; ts 19.2.2018, p64.

Henshaw. I found their evidence to be credible and reliable, and it is consistent with:

- a. The subsequent ballistics report and the forensic examinations of the firearms, the fired bullet, the Tasers and the OC spray canister;²⁴
 - b. The information derived from the subsequent evidentiary downloads of the Tasers;²⁵
 - c. The automated time stamps on the communications recorded in the computer generated records of the Police Operations Centre;²⁶
 - d. The subsequent forensic examinations of the scene;²⁷
 - e. The recovery of the knife and the cane from the scene;²⁸
 - f. The evidence of the witness who, from his home, heard the commotion and sighted the police and the deceased near the letterbox at the front of the house, just prior to the shooting; his observations are consistent with the police officers' evidence of the deceased's demeanour as he advanced towards them;²⁹
 - g. The evidence of witnesses who heard the one gunshot, insofar as it supports the police officers' descriptions of the timing of events, and the shooting of one round from one firearm.³⁰
 - h. The observations of the scene made by the St John Ambulance paramedics.³¹
41. My analysis of the police shooting appears separately under the heading *Comments on the shooting*.

FIRST AID

42. After he was shot, the deceased rolled onto his stomach and lay just off the driveway, on the grass near the letterbox. The police officers attended to him, after Constable Henshaw secured the knife (he picked it up and threw it towards the letterbox). The police officers promptly advised Police Operations Centre that a shot had been fired, and they commenced to administer first aid, while arrangements were made for an ambulance.³²

²⁴ Exhibit 1, tab 30.

²⁵ Exhibit 3, tab 1.

²⁶ Exhibit 1, tab 31.

²⁷ Exhibit 1, tabs 10, 34 and 35.

²⁸ Ibid.

²⁹ Exhibit 1, tab 22.

³⁰ Exhibit 1, tabs 12, 19 to 21.

³¹ Exhibit 1, tabs 26 to 29.

³² Exhibit 1, tabs 11, 15 and 16 and 31.

43. Both police officers observed a single entry wound on the deceased's lower right rib area, and Sergeant Edmunds placed a pressure bandage on it. They did not observe an exit wound. They removed a Taser barb from the deceased's clothing to avoid risk of further injury. They were soon joined by a neighbour who identified herself as a registered nurse (the nurse) and she assisted with first aid for the deceased.³³
44. The deceased was lying on his back and the nurse observed his breathing to be shallow. She placed another dressing on the wound, and applied pressure to it, and with police assistance, placed the deceased in the recovery position. The deceased was conscious but disoriented. The nurse reassured him and told him the ambulance was on its way.³⁴
45. Records reflect that the St John Ambulance Service received a call at 11.03 pm on 20 March 2015, and that the task was allocated, and ambulance departed all within one minute, arriving at the scene at 11.18 pm. Upon arrival, paramedics took over the resuscitation. Multiple vehicles responded. The primary crew were on site for 25 minutes, with the ambulance departing for Fiona Stanley Hospital (the closest tertiary hospital) under Priority 1 conditions at 11.43 pm.³⁵
46. When the paramedics arrived at the scene, the deceased was initially breathing and conscious and the paramedics applied defibrillator pads. They found an entry wound just below the right rib cage and began to treat him for a penetrating wound. The deceased's condition deteriorated and at approximately 11.30 pm he went into cardiac arrest. A Lucas device (an external automated cardiac massage device) was placed on the deceased and resuscitation was commenced. They inserted an endotracheal tube to secure the airway, commenced bag valve mask ventilation and decompressed the chest. By this stage the deceased had become unresponsive to voice and pain stimuli. He was recorded as having a Glasgow Coma Scale of 3.³⁶
47. The monitor showed the deceased was in pulseless electrical activity and the decision was made to place him onto a scoop stretcher before being transferred onto an ambulance stretcher, for conveyance to hospital.³⁷
48. Records reflect that at 11.31 pm the St John Ambulance clinical support paramedic informed the Fiona Stanley Hospital emergency department triage nurse that they were bringing in the

³³ Exhibit 1, tabs 11, 15, 16 and 21.

³⁴ Ibid.

³⁵ Exhibit 1, tabs 26 to 29, and 37.

³⁶ Ibid.

³⁷ Ibid.

deceased, with a “*gunshot wound to the chest, right lower abdomen*” who was in cardiac arrest, with CPR in progress and being intubated and ventilated. The paramedic estimated they would arrive in about 10 minutes. As it transpired, the St John Ambulance arrived at Fiona Stanley Hospital at 11.51 pm on 20 March 2015.³⁸

49. Upon arrival at Fiona Stanley Hospital, the deceased had no signs of life, other than the pulseless electrical activity on the cardiac monitor. CPR was in progress by means of the Lucas device.³⁹

MEDICAL TREATMENT AT FIONA STANLEY HOSPITAL

50. Whilst the St John Ambulance Service notified Fiona Stanley Hospital of their impending arrival at 11.31 pm on 20 March 2015, the trauma page (to notify the specific staff of their required attendance at the emergency department) was not activated until 11.43 pm. The hospital accepts that it ought to be activated as soon as possible after the notification regarding an incoming trauma patient.⁴⁰
51. Fiona Stanley Hospital cannot reconcile the twelve minute time difference, other than to posit that the call was received by the HelpDesk and then transferred to the emergency department triage, rather than directly to the emergency department on the red ambulance phone which is in the resuscitation area. The red ambulance phone is answered by the resuscitation team consultant or senior nurse. My comments regarding the notification of required staff are made later in this finding under the heading *Comments concerning medical treatment*.⁴¹
52. Dr Ashok Arasu was the medical lead in the emergency department resuscitation area that night, and when he was made aware, he promptly activated the trauma page in accordance with the procedures applicable at the material time. He also contacted the on-call cardiothoracic registrar and the on-call emergency medical consultant to attend immediately.⁴²
53. The Fiona Stanley Hospital adult triage form did not record a time of arrival for the deceased (though I accept that it was at 11.51 pm on 20 March 2015 as coded by the ambulance’s GPS),

³⁸ Exhibit 1, tab 37.

³⁹ Exhibit 2, tab 2.

⁴⁰ Exhibit 4, tab 1.

⁴¹ Ibid.

⁴² Exhibit 4, tab 1A; Exhibit 5, tab 12.

and that time is also consistent with the emergency department notes themselves. The triage form stated the history as:

*“Gunshot
GCS 3/15
PEA”*⁴³

54. The emergency department notes also recorded that upon arrival, the deceased was in pulseless electrical activity arrest with a Lucas device administering cardiac compressions. The deceased had already been intubated and ventilated. Bilateral needle thoracostomies had been performed by the St John Ambulance paramedic, to decompress the chest and prevent any further pressure to the chest cavity and heart.⁴⁴
55. In the emergency department, the diagnosis of severe shock was made immediately, in the setting of penetrating injury. The penetrating wound was suspected to be in the right chest, and a decision was made to avert the potential for tension pneumothorax by bilateral chest decompression via finger thoracostomies.⁴⁵
56. Emergency department registrar Dr James Colalillo was instructed by a more senior clinician to perform bilateral finger thoracostomies, because the more senior staff were occupied with competing clinical priorities concerning the deceased. Dr Colalillo had not previously performed an emergency thoracostomy. He proceeded to do so, overseen by Dr Arasu on the right side and Dr Andrew Toffoli on the left side. Dr Colalillo reported he felt a pneumothorax on the left side, and at the inquest outlined that: *“...the simple relieving of a pneumothorax is itself something that will lead to the resolution of a PEA arrest, if that is the cause.”*⁴⁶
57. Whilst upon subsequent review it was determined that the left sided finger thoracostomy was not ideally positioned, it is to be borne in mind that it was performed under emergency conditions, possibly with the Lucas device still operating, and it did achieve its objective in releasing a left sided tension pneumothorax. During this procedure, the deceased was also receiving blood, clotting factors and platelets.⁴⁷
58. The deceased did not achieve a return of spontaneous circulation, and it was decided to perform a thoracotomy, as a result of concern regarding a possible injury to the chest. Emergency

⁴³ Exhibit 2, tab 3.

⁴⁴ Exhibit 1, tabs 27 and 37.

⁴⁵ Exhibit 2, tab 3.

⁴⁶ Exhibit 5, tab 2; ts 21.2.2018, p243 to 244.

⁴⁷ Exhibit 4, tab 1A; Exhibit 5, tab 2; ts 23.2.2018, p22; ts 21.2.2018, p239.

department senior registrar Dr Ingo Moeller was instructed by a more senior clinician to perform an emergency thoracotomy, pending the arrival of the cardiothoracic registrar. It was reported that Dr Moeller was initially handed a paediatric thoracotomy starter set by accident, but he quickly realised the error and was able to use the main adult set. There was no adverse outcome as a result of this error and it was promptly rectified.⁴⁸

59. Records reflect that at 12.06 am on 21 March 2015 a left sided resuscitative thoracotomy was commenced by Dr Moeller, who had carried out the procedure on one previous occasion. When the on-call cardiothoracic registrar Dr Elizabeth Suthers arrived having been called in from home, the left sided thoracotomy had already been performed by Dr Moeller. Dr Suthers had no prior experience of performing an emergency thoracotomy, and had already informed the hospital.⁴⁹
60. The left sided thoracotomy incisions were not ideally positioned either, and placement might have been affected by the Lucas device remaining in situ during this procedure. My comments regarding this procedure appear later in this finding under the heading *Comments concerning medical treatment*, though again I am satisfied that there was no adverse outcome as a result of this.⁵⁰
61. Dr Suthers looked inside the deceased's chest and noted that there was no left haemothorax, pericardial effusion or tamponade and no acute issues requiring immediate cardiothoracic input. The on-call acute surgical unit fellow Dr Neelankavil arrived at 12.12 am, and it was clear to him that there was internal bleeding that needed to be identified as soon as possible. The thoracotomy procedure had established that there was no obvious bleeding in the left thorax. Dr Neelankavil therefore considered the best approach would be to take the patient to the operating theatre for a laparotomy procedure: "*opening the abdominal cavity, to see where the bleeding is, and if possible, to – you know, and the primary aim is to control it.*"⁵¹
62. In the meantime, Dr Suthers had contacted the on-call consultant cardiothoracic surgeon Dr Christopher Merry and informed him there was no intrathoracic pathology identified that required surgical intervention. She informed him that the patient had a return of spontaneous circulation and was being taken to theatre to treat the abdominal injury. Given the deceased's significant injuries were now considered to be sub-

⁴⁸ Exhibit 4, tab 1A; Exhibit 5, tab 11; ts 26.2.2018, p7 to 9.

⁴⁹ Exhibit 4, tab 1A; Exhibit 5, tabs 4 and 11; ts 22.2.2018, p5 to 6.

⁵⁰ Exhibit 2.

⁵¹ Exhibit 5, tabs 1 and 4.

diaphragmatic, the decision was made that there was no role for a cardiothoracic surgeon in the circumstances, and Dr Merry did not therefore attend at the hospital.⁵²

63. The detection of the beating heart and palpable pulse had given rise to the decision to proceed to the exploratory laparotomy. At approximately 12.20 am Dr Neelankavil therefore attempted to contact the on-call general surgical consultant, Dr Derek Chen, prior to transfer to theatre. Dr Chen did not answer his telephone and was left a message to come to the operating theatre as there was a patient who had a gunshot wound from the police.⁵³
64. Records reflect an SMS voicemail notification to Dr Chen's telephone at 12.21 am from Dr Neelankavil, but for reasons that cannot now be known, it appears that the call went straight through to the message bank without ringing. Dr Chen's telephone records support this, as there does not appear to be a missed call from Dr Neelankavil. In the circumstances, it appears that Dr Chen's telephone did not ring, hence he did not become aware of the initial call for assistance.⁵⁴
65. Dr Neelankavil then called the head of the acute surgical unit trauma services Dr Amanda Foster, and she did not answer her telephone either, though it is noted that she was not on-call. At the inquest, Dr Neelankavil explained the kind of assistance he was seeking from Dr Chen or Dr Foster: "*I would have liked them to be the lead surgeon in such a difficult case and I would have assisted them in that operation.*"⁵⁵
66. The deceased arrived in the operating theatre at approximately 12.40 am. Whilst it is not apparent that the duty anaesthetist and theatre co-coordinator were informed of the precise arrival time of the deceased, due to a possible miscommunication regarding the person obligated to make the final call to theatre, the theatre staff were not unprepared. They had anticipated that the deceased would be coming to theatre when the operating theatre shift co-ordinator, the anaesthetic registrar and anaesthetic technician received the initial trauma page, concerning the gunshot injury.⁵⁶
67. Dr Neelankavil commenced the surgery without delay. The operation report reflects that a midline abdominal incision was made and full thickness multiple lacerations to the right lobe of liver were identified. There were no small bowel or large bowel injuries evident, no bleeding in the pelvis, no laceration of the

⁵² Exhibit 5, tabs 4 and 5; ts 22.2.2018, p5 to 6; ts 22.2.2019, p17.

⁵³ Exhibit 4, tab 1A; Exhibit 5, tabs 1 and 14.

⁵⁴ Exhibit 5, tab 14; ts 19.2.2018, p82 to 83.

⁵⁵ ts 21.2.2018, p251.

⁵⁶ Exhibit 2, tab 3; Exhibit 4, tab 1A; ts 21.2.2018, p252.

spleen and the bullet was not located. The liver was packed and the abdomen was closed. The surgery was concluded by 2.20 am.⁵⁷

68. Dr Neelankavil believed the liver was the major source of bleeding, and that the packs had operated to control it. As it transpired, the surgery did not identify a significant source of bleeding, coming from a tear in the inferior vena cava. Accordingly, whilst the wound was closed, internal bleeding continued, and the deceased's condition deteriorated. My further comments concerning the surgery appear under the heading *Comments concerning medical treatment*.⁵⁸
69. Dr Suthers assisted Dr Neelankavil with the laparotomy, and extended the left sided thoracotomy to the right thoracostomy, to attempt to identify any further cardiothoracic injuries. No bleeding was evident but the right diaphragm/anterior wall was noted to have been punctured. Drains were inserted into the chest which was then closed.⁵⁹
70. After closing up the wound, Dr Neelankavil's management plan was to send the deceased to the intensive care unit to stabilise him, correct his coagulopathy, then refer him for radiological embolisation, and then to have the deceased returned to theatre for a re-look laparotomy in daylight hours with the support of a consultant. The purpose of the referral to the interventional radiologist was to see whether there was any further bleeding. Dr Neelankavil's plan was for this to take place following intensive care unit resuscitation.⁶⁰
71. Dr Neelankavil was able to make contact with on-call consultant surgeon Dr Chen at 2.30 am, and outlined the case to him. He informed Dr Chen that a trauma laparotomy had been performed, that the liver was lacerated, packs had been placed and left in the abdomen, and the bleeding seemed to be controlled. Dr Chen understood that as there was a measure of bleeding control achieved, the deceased was in the process of being transferred to the intensive care unit, and he was supportive of the plan. The decision was made that there was no need for Dr Chen to attend at the hospital. Dr Chen was not aware the deceased was going to interventional radiology.⁶¹
72. In the meantime, blood tests that had been taken at approximately 2.30 am showed a dramatic drop in haemoglobin to 24 (normal 135-180 g/L) consistent with severe blood loss and

⁵⁷ Exhibit 2, tab 3; Exhibit 5, tab 1; ts 21.2.2018, p253 to 257.

⁵⁸ Exhibit 5, tab 1; ts 21.2.2018, p253 to 257.

⁵⁹ Exhibit 5, tab 4.

⁶⁰ Exhibit 5, tab 1; ts 21.2.2018, p259 to 260.

⁶¹ Exhibit 5, tab 14; ts 84 to 85; ts 21.2.2018, p262.

an abnormal clotting profile. In spite of treatment with adrenaline, packed red blood cells, tranexamic acid, platelets and cryoprecipitate, the deceased's condition remained unstable and he was transferred straight to interventional radiology for identification of bleeding blood vessels and embolisation.⁶²

73. The decision to go to interventional radiology rather than the intensive care unit was a collective decision made by senior staff present. The on-call consultant interventional radiologist Dr Dermot Kearney had been called in during the operative procedure, and the angiography suite was ready for the deceased while he was still in theatre. At that stage it was believed that the liver haemorrhage was being controlled by packing, therefore it was considered that urgent embolisation of damaged vessels should be attempted immediately.⁶³
74. Coeliac arteriogram and embolisation was performed by Dr Kearney. The purpose of the procedure is to identify where there is arterial bleeding and try to stop it. The procedure only allows the identification of arterial bleeding points, not venous ones. Angiography showed multiple arterial bleeding points, rising from branches of the right hepatic artery, the right inferior phrenic artery and branches of the gastroduodenal artery in the pancreatic duodenal arcade. The right hepatic artery and branches of the gastroduodenal artery were embolised. However the treating team was unable to keep up with replacement blood and fluids and the deceased was continuing to bleed from multiple sites suggesting his blood was not clotting.⁶⁴
75. The deceased continued to deteriorate and the embolisation procedure was ceased on the advice of the anaesthetic consultant in an effort to attempt to correct his coagulopathy. Records reflect that the embolisation procedure commenced at 3.40 am and finished at 5.00 am.⁶⁵
76. The deceased was therefore transferred to the intensive care unit in the hope of rewarming, and correction of acidosis and coagulopathy before further surgery. Unfortunately the deceased remained hypotensive on adrenaline infusion, despite massive transfusions of blood products. He was acidotic, hypothermic and had on-going, significant, coagulopathy, as evidenced by evident bleeding from various sites. There was also evidence of increasing intrathoracic pressure and an ultrasound showed extensive haemothorax (blood in the thorax). The deceased eventually

⁶² Exhibit 2, tab 3.

⁶³ Exhibit 4, tab 1A.

⁶⁴ Exhibit 2, tab 3; Exhibit 4, tab 1A; Exhibit 5, tabs 8 and 9; ts 23.2.22018, p24 to 25.

⁶⁵ Exhibit 2, tab 3; Exhibit 5, tabs 8 and 9.

progressed to pulseless electrical activity arrest and tragically died at 6.47 am on 21 March 2015.

77. After the deceased's death, State Trauma Director Dr Rao produced a report outlining a number of concerns regarding the deceased's medical treatment at Fiona Stanley Hospital and he also gave evidence at the inquest.⁶⁶
78. The analysis of the medical treatment appears separately under the below heading *Comments concerning medical treatment* and includes some of the matters identified by Dr Rao.

COMMENTS CONCERNING MEDICAL TREATMENT

Notification to consultant general surgeon

79. The consultant general surgeon was not notified of the deceased's impending arrival as soon as practicable after Fiona Stanley Hospital was informed by St John Ambulance Service that the deceased was being transported there. At the time of the deceased's death, this was not a hospital policy requirement. After the deceased's death, Fiona Stanley Hospital amended its policy to provide for such notification in similar circumstances.
80. The details appear below.
81. At the material time, for a level 5 trauma service such as Fiona Stanley Hospital, the Clinical Services Framework mandated having "*a surgeon available in all specialties commensurate with Level 6*" (which includes general surgery). It did not require a consultant general surgeon to be actually present in Fiona Stanley Hospital 24 hours a day.⁶⁷
82. The surgical registrar would receive the initial trauma page and attend the emergency department. However, the general surgical fellow and/or consultant general surgeon would not be contacted until details of the case were known, and this would usually occur after there had been a brief assessment of the patient upon arrival. The practice did however require contact with the consultant before taking the patient to theatre.⁶⁸
83. An attempt had duly been made to contact the on-call consultant general surgeon Dr Chen at his home after the deceased had been assessed in the emergency department by the general surgical

⁶⁶ Exhibit 2, tab 1; ts 27.2.18 p 468 to 536

⁶⁷ Exhibit 4, tab 1A.

⁶⁸ Ibid.

fellow, but it was initially unsuccessful and the surgery proceeded without him.⁶⁹

84. At the material time, Fiona Stanley Hospital's policy did not require the earlier notification to the on-call consultant general surgeon of a trauma patient's impending arrival. The South Metropolitan Health Service accepts that earlier notification to the on-call consultant general surgeon, as soon as practicable, would be an improvement in practice, in cases where a hypotensive trauma patient is being transported to the hospital by St John Ambulance as a Priority 1 patient. Fiona Stanley Hospital has now amended its Trauma Activation Response Policy in that regard. The details of these changes appear under the heading "*Improvements*" later in this finding.⁷⁰
85. A review of the unsuccessful attempts to contact the consultant general surgeon or a more senior surgeon to assist with the surgery that night led the hospital to issue further guidance, for persistence when an initial call is unsuccessful.
86. At approximately midnight on 20 March 2015, the surgical registrar Dr Lisa-Marie Devlin contacted the on-call general surgical fellow Dr Shelbin Neelankavil, and requested that he attend Fiona Stanley Hospital. Dr Neelankavil arrived promptly, at 12.12 am on 21 March 2015, assessed the deceased in the emergency department and upon forming the view that there was a need for urgent laparotomy, determined that it was appropriate to involve the on-call consultant.⁷¹
87. At 12.21 pm on 21 March 2015, in accordance with the hospital's escalation plan, Dr Neelankavil attempted to contact the on-call gastrointestinal and general surgeon Dr Chen, but the call went straight to voicemail. Dr Neelankavil left a message.⁷²
88. There were no further attempts made to contact Dr Chen before the commencement of surgery in theatre. At the inquest, it was accepted that further steps could have been taken. In light of the evidence given of errors of omission increasing in times of stress, Dr Paul Mark, Fiona Stanley Hospital's director of clinical services, has since issued and South Metropolitan Health Service has since adopted, a formal policy on the escalation of care to consultants. The policy outlines mandated criteria for notifying the responsible consultant of changes in a patient's condition. The memorandum expressly states:

⁶⁹ Exhibit 5, tab 1; ts 251

⁷⁰ Exhibit 4, tab 1.

⁷¹ Exhibit 2, tab 3; Exhibit 5, tab 1; ts 69; ts 21.2.2018, p246 to 247.

⁷² Exhibit 4, tab 1A; Exhibit 5, tabs 1 and 14; ts 21.2.2018, p251.

“If Doctors in Training need to contact consultants for urgent cases and the consultant does not answer their phone, it is important to instruct HelpDesk to continue ringing until contact is made, preferably on multiple numbers if available. Failing that, another consultant in the specialty should be contacted. If this is also unsuccessful the Duty Medical Director should be contacted.”⁷³

Notification to consultant cardiothoracic surgeon

89. The consultant cardiothoracic surgeon was not notified of the deceased’s impending arrival as soon as practicable after Fiona Stanley Hospital was informed by St John Ambulance Service that the deceased was being transported there. At the time of the deceased’s death, this was not a hospital policy requirement. After the deceased’s death, Fiona Stanley Hospital amended its policy to provide for such notification in similar cases.
90. The details appear below.
91. At the material time, for a Level 5 trauma service such as Fiona Stanley Hospital, the Clinical Services Framework mandated having “24/7 availability of ... cardiothoracic services.” It did not require a consultant cardiothoracic surgeon to be actually present in Fiona Stanley Hospital 24 hours a day.⁷⁴
92. The Clinical Services Framework did not require a consultant cardiothoracic surgeon be notified as soon as practicable after the hospital is advised that a patient like the deceased was being transported to the hospital.⁷⁵
93. The South Metropolitan Health Service accepts that when a patient with a penetrating chest injury is being transported to Fiona Stanley Hospital on a Priority 1 basis with a systolic blood pressure of less than 90 mmHg, notification of a cardiothoracic surgeon as soon as is practicable is an improvement in practice in light of the potential need for a resuscitative thoracotomy.
94. Fiona Stanley Hospital has now amended its Trauma Activation Response policy to provide that in such cases, the senior doctor in the emergency department is to contact the cardiothoracic consultant directly and request they attend. The cardiothoracic consultant is expected to attend the

⁷³ Exhibit 6, tabs 3A and 3B; ts 28.2.2018, p86; and p115.

⁷⁴ Exhibit 4, tab 1A.

⁷⁵ Ibid.

emergency department before the patient arrives, if possible. The details of these changes appear under the heading “Improvements” later in this finding.⁷⁶

Removal of Lucas device prior to thoracotomy

95. The evidence is not clear as to whether the Lucas device was either switched off or removed from the deceased prior to the resuscitative thoracotomy being performed. The concern was expressed to the effect that the Lucas device remained in situ and that this may have interfered with the placement of the thoracotomy incisions.
96. After the deceased’s death Fiona Stanley Hospital, accepting that the preferred arrangement is to remove the Lucas device prior to commencing the procedure, made arrangements to design its Emergency Medicine education sessions on resuscitative thoracotomy to emphasise this learning point.
97. The details appear below.
98. A left-sided thoracotomy was performed in the emergency department by senior registrar Dr Moeller, the allocated procedure doctor, under the instruction of a senior clinician. It was later extended into the right chest area after surgery. The purpose of the left sided thoracotomy was to allow rapid access to the chest area as severe thoracic trauma was suspected. Specifically, such procedures may allow for therapeutic manoeuvres such as pericardial decompression, direct control of intra-thoracic haemorrhage, open cardiac massage and cross clamping of the aorta.⁷⁷
99. By the time the left-sided thoracotomy was being performed, the deceased was in pulseless electrical activity, meaning there was cardiac electrical activity present, but without a palpable pulse. He also had severe hypotension despite pleural decompression and intravenous fluid replacement.⁷⁸
100. Bilateral finger thoracostomies had already been performed by emergency medicine registrar Dr Colalillo, under the instruction of more senior clinicians and this has been referred to previously.
101. Turning now to the thoracotomy, upon later review, it appeared the incisions were potentially one to two centimetres lower than ideal (and there was traversing of the ribs and costal cartilages).

⁷⁶ Exhibit 4, tabs 1 and 1A.

⁷⁷ Exhibit 2, tab 2; Exhibit 5, tabs 2 and 11.

⁷⁸ Ibid.

The two incisions from left and right did not meet end to end, but instead almost crossed, resulting in a triangular flap inferiorly. The question arose as to whether the Lucas device remained in place, and active, thereby causing the procedure to take longer, and potentially being in the way of the cutting.⁷⁹

102. The evidence at the inquest from the clinicians present in the emergency department ranged from a belief that the Lucas device had been entirely removed, that it was switched off but attached to the patient, and that it was in place and compressing at the time of the thoracotomy. It was also opined that it would not have been possible to make a thoracotomy incision with the Lucas device operating.⁸⁰
103. The doctor performing the left-sided thoracotomy could not recall the situation regarding the Lucas device. He believed it would have been removed, because he would otherwise have had difficulties getting access. He also accepted that he may have been able to work around the device if it was not operating but still on the patient. It is to be borne in mind that these procedures were being performed under urgent circumstances.⁸¹
104. The independent expert trauma and general surgeon Dr Katherine Martin of the Alfred Hospital, who reviewed the treatment and care, did not believe the slightly lower placement of the incisions would have had an effect on the outcome of the thoracotomy, but the Lucas device, if it remained on, would have made access a little more difficult. Dr Martin believed the additional time to perform the thoracotomy was not likely to have made a difference to the deceased's outcome, and that any failure to remove the Lucas device was probably not critical, and did not make an overall difference to his chances of survival.⁸²
105. At the inquest, Dr Martin, Dr Rao, and Dr Mark all accepted that the preferable approach is to remove a Lucas device before a thoracotomy procedure. Dr Martin also referred to the use of a Lucas device being contraindicated in patients with traumatic injury.⁸³
106. The court is informed that the major trauma management training courses in Western Australia did not cover the use of Lucas devices when teaching the resuscitative thoracotomy procedure. The procedure is rarely performed in circumstances similar to that of the deceased, and it is not considered that experience will be a viable route for gaining the knowledge. In the

⁷⁹ Exhibit 2, tabs 1 and 2; Exhibit 5, tab 12; ts 26.2.2018, p15 to 16.

⁸⁰ ts 22.2.2018, p10 to 11; p18; p28; p34; p41 to 43;p47.

⁸¹ Ibid.

⁸² ts 28.2.2018, p15 to 17 and 36.

⁸³ Exhibit 2, tab 2; Exhibit 4, tab 1; ts 22.2.2018 p23; p79

circumstances, Fiona Stanley Hospital has now designed Emergency Medicine education sessions on resuscitative thoracotomy which will emphasise the preferred approach of removing the Lucas device prior to commencing the procedure.⁸⁴

No attempt to compress or clamp descending aorta

107. Once the left-sided thoracotomy was performed, it became apparent that there was no evidence of trauma within the left chest. State Trauma Director Dr Rao opined that the appropriate next step would have been to clamp the thoracic aorta in the left chest to stop blood flow to the abdomen, where the injury was. In her report the independent expert trauma and general surgeon Dr Martin also opined that it was an error to proceed to a left anterior thoracotomy without then proceeding to clamping of the descending thoracic aorta in order to control bleeding below the diaphragm. However, following questioning at the inquest, it was established that the benefit may have been small and temporary, having regard to the deceased's overall condition.⁸⁵
108. The South Metropolitan Health Service accepted that there was no attempt to compress or clamp the descending thoracic aorta. They point to the staff present at the time the thoracotomy was performed not having sufficient training and experience.
109. After the deceased's death, accepting that there is a potential benefit of compressing or clamping the aorta, Fiona Stanley Hospital has made policy changes aimed at seeking to provide surgical staff to address such procedures in cases like those of the deceased.
110. The details appear below.
111. Emergency medicine senior registrar Dr Moeller, who performed the left-sided resuscitative thoracotomy procedure considered that the clamping of the aorta was either unnecessary or unsafe, or that there was no one able to achieve the required access to compress or clamp the aorta.⁸⁶
112. The cardiothoracic registrar Dr Suthers was present at the material time having come in from home, but she was not able to perform the clamping procedure, explaining that at that stage she did not know how to do so in a trauma setting.⁸⁷

⁸⁴ Exhibit 6, tabs 3.2 and 3.3.

⁸⁵ Exhibit 2, tabs 1 and 2.

⁸⁶ ts 26.2.2018, p15 to 17.

⁸⁷ ts 22.2.2018, p6.

113. At the inquest Dr Martin's evidence was that she would not expect non-surgical emergency medicine consultants to have this skill. If there is no surgeon present, self-evidently she does not support clinicians trying to do procedures they are not skilled to do. At the inquest Dr Martin opined that where surgeons are present, and in particular on recognising that the problem is below the diaphragm, and not within the chest, then this procedure has a role. However, the matter is complex and she further opined as follows:

*"In patients who have no injury within the chest itself or injury both in the chest and below the diaphragm, there is suggestion that clamping the aorta or compressing the aorta at that point may give the patient some benefit. It is very low benefit. There are a lot of centres that don't do it, because they don't think the benefit is enough ...In patients with injuries below the diaphragm, it may give some improvement but again it's a very, very minor."*⁸⁸

114. The information before me concerning the level of training for the clamping of the aorta in the context of emergency medicine is as follows:

- a. Fiona Stanley Hospital emergency medicine consultant Dr Arasu's evidence was that his training in resuscitative thoracotomy did not include cross-clamping the aorta, and that such a procedure is beyond his expertise;⁸⁹
- b. Fiona Stanley Hospital emergency medicine consultant Dr Toffoli referenced his own training and informed the court that clamping the aorta during thoracotomy where there were no findings of fluid in the chest cavity was not particularly emphasised; his training emphasised the need to open the chest using appropriate equipment and then, essentially, decompressing or opening up the pericardium with the view to potentially treating tamponade of fluid collection around the heart;⁹⁰
- c. The Advanced Trauma Life Support Manual (9th edition) which is used in the Early Management of Severe Trauma course run by surgeons in Western Australia does not refer to compressing the aorta;⁹¹
- d. The manual which is used in the Emergency Trauma Management course run by emergency physicians in Western Australia does not refer to compressing the aorta;⁹² and

⁸⁸ ts 28.2.2018, p42 to 43; and p55 to 56.

⁸⁹ ts 26.2.2018, p46.

⁹⁰ ts 26.2.2018, p63.

⁹¹ Exhibit 6, tab 3.2.

⁹² Exhibit 6, tab 3.3.

- e. A number of articles based upon respected research in the area, refer to the primary aim of resuscitative thoracotomy being the release of cardiac tamponade, control of thoracic haemorrhage and access for internal cardiac massage; the articles posit that there is no clear evidence that aortic cross clamping improves outcome, and for that reason, is not taught.⁹³
115. It was also noted by State Trauma Director Dr Rao that the aorta cannot be occluded by compression or clamping indefinitely. Dr Rao stated that the clamp should be removed at the 30 to 40 minute mark.⁹⁴
116. Inquiries were made with the Australasian College for Emergency Medicine in connection with their resuscitative thoracotomy curriculum. They outlined that a graduating fellow of the college is expected to know how to perform a resuscitative thoracotomy, often with indirect assistance from some-one more expert, and will only attempt this rare procedure independently as a lifesaving procedure. Emergency physicians are not expected to be proficient in this procedure.⁹⁵
117. The Australasian College for Emergency Medicine also informed that they do not specify the procedure of cross clamping the aorta in their curriculum: “...*the onus is on the emergency physician to talk through the procedure with a trauma physician/surgeon who is proficient in these procedures for guidance as to what to do once the access to the inside of the thoracic cage is obtained. The discussion should be done prior to commencing the procedure if possible.*”⁹⁶
118. Fiona Stanley Hospital through its lawyer the SSO informs the court that, in light of the evidence of Dr Martin and Dr Rao, it accepts that if an appropriately trained and experienced clinician is present, compressing or clamping the aorta in a case such as that of the deceased may be of benefit. To that end the hospital has made policy changes aimed at providing surgical staff to address the issue in cases such as the deceased.⁹⁷
119. The details of these changes appear under the heading “*Improvements*” later in this finding.

⁹³ Exhibit 3, tab 2; Exhibit 6, tab 3.4.

⁹⁴ ts 27.2.2018, p30.

⁹⁵ Exhibit 6, tab 5.

⁹⁶ Ibid.

⁹⁷ ts 28.2.2018, p18, 24, 42 and 55 to 56.

Trauma laparotomy did not identify injuries

120. The left sided thoracotomy established that there was no evidence of trauma to the chest. The evidence was therefore highly suggestive of a major intra-abdominal injury being the source of the bleeding. Up to this point, attempts had been made to restore blood volume, but there had been no attempt made to control blood loss.⁹⁸
121. The general surgical fellow Dr Neelankavil upon arriving from home, determined that an urgent laparotomy was required in order to examine the abdominal cavity and organs. The deceased was transferred to theatre for this purpose. As outlined previously, Dr Neelankavil attempted, but was unable to make contact with the general surgical consultant on-call Dr Chen. The deceased had regained weak pulses on open thoracotomy and therefore had minimal cerebral perfusion. The need to control intra-abdominal haemorrhage was time critical.⁹⁹
122. Dr Neelankavil undertook the laparotomy procedure, but as it transpired, a number of the deceased's significant injuries were not identified. Specifically a significant source of bleeding was not detected because the trajectory of the bullet was not identified, and therefore the extent of the retroperitoneal injury. Dr Neelankavil observed the retroperitoneal haematoma, but he did not want to risk further bleeding by disrupting it. However, the deceased was continuing to bleed from the inferior vena cava, which had been torn.¹⁰⁰
123. After the deceased's death, in hindsight and based on the evidence of Dr Martin and Dr Rao, the South Metropolitan Health Service accepts that best practice includes exploration of any retroperitoneal haematoma in the context of penetrating trauma, though it is noted that views differed even amongst senior clinicians.
124. The details appear below.
125. Dr Neelankavil operated upon the deceased for just over one and a half hours (12.40 pm to 2.20 am) and over this time, he observed the retroperitoneal haematoma just below the liver, but it did not appear to him to be growing or expanding. In accordance with his teaching, he did not want to risk immediate death of the patient by disrupting the haematoma, and so he decided not to explore it.¹⁰¹

⁹⁸ Exhibit 2, tab 2.

⁹⁹ Exhibit 4, tab 1.

¹⁰⁰ Exhibit 5, tab 1; ts 21.2.2018, p256 and 265.

¹⁰¹ Ibid.

126. Dr Neelankavil examined the cavities of the abdomen and packed the four quadrants and the pelvis. He formed the view that the bleeding was coming from the liver, that appeared shattered with a number of full thickness lacerations. He removed the blood in the abdomen and brought the liver together with the packs. To him, this appeared to have minimised the bleeding. His observations were that blood was not pooling as before and he therefore concluded that he had succeeded in stemming the bleeding.¹⁰²
127. However, the bleeding had not in fact been stemmed because the deceased had multiple sources of bleeding. Unbeknown to Dr Neelankavil, significant bleeding was coming from behind the area of the retroperitoneal haematoma, by reason of the torn inferior vena cava.¹⁰³
128. In her report to the coroner Dr Martin opined that the presence of the retroperitoneal haematoma in the area adjacent to the liver injury indicated that this space had been breached, and in the case of penetrating trauma (i.e. the bullet) should mandate immediate exploration. At the inquest Dr Martin explained that injuries will otherwise keep bleeding, and she also acknowledged the risk of losing control (of the bleeding) in the course of exploring the retroperitoneal haematoma, with the patient dying on the operating table.¹⁰⁴
129. At the inquest, Dr Rao opined that where the patient is very unstable, a retroperitoneal haematoma should be explored if the surgeon has the skills. He would have urged an exploration under the circumstances, given the possibility of being able to at least apply some level of control to the bleeding.¹⁰⁵
130. A number of senior clinicians from Fiona Stanley Hospital gave evidence about the risks associated with exploring a retroperitoneal haematoma, balanced against the need to control the bleeding in an unstable patient. The general tenor of the evidence before me was that it is a risky procedure, and that it was not unreasonable to plan to explore it at a later stage if it was not seen to be expanding. Regard is also to be had to the skill of the surgeon, and in this case it is to be borne in mind that the operating doctor did try to ring the more senior on-call consultant.¹⁰⁶

¹⁰² Exhibit 5, tab 1; ts 21.2.2018, p254 to 257; and 263 to 264.

¹⁰³ Ibid.

¹⁰⁴ Exhibit 2, tab 2; ts 28.2.2018, p34 to 35.

¹⁰⁵ ts 27.2.2018, p25, 34 to 35, 61 and 117.

¹⁰⁶ Exhibit 5, tab 14; ts 27.2.2018, p89 to 94.

131. Another area of concern was expressed about failure to apply the Pringle manoeuvre to control hepatic inflow, in circumstances where the packing failed to achieve control of the bleeding. Dr Neelankavil however had formed the view that his packing had controlled the bleeding. I also accept that a Pringle manoeuvre would likely have controlled portal venous and hepatic artery bleeding, but again this does require some considerable surgical experience.¹⁰⁷
132. Both Dr Martin and Dr Rao considered the Pringle manoeuvre to be the next logical option in these circumstances. They also considered that the deceased was in irreversible shock at or around this time. The South Metropolitan Health Service accepts that, where bleeding is not controlled by the packing approach, best practice includes the application of the Pringle manoeuvre on the basis that it may buy time to get additional consultants (general, trauma or vascular) into theatre. It may also have made it easier to detect non-liver sources of bleeding.¹⁰⁸
133. It is to be borne in mind that the Pringle manoeuvre would not have stopped venous bleeding, such as the bleeding from the inferior vena cava, that had not been detected at that stage.
134. Having regard to the evidence of Dr Martin and Dr Rao, as outlined above the South Metropolitan Health Service also accepts that best practice includes the exploration of any retroperitoneal haematoma in the context of penetrating trauma.
135. I take account of the fact that these opinions, which are very helpful in the improvement of trauma services in this State, are being delivered with the benefit of hindsight. I am satisfied that Dr Neelankavil applied his skills in accordance with his training, under very urgent and challenging circumstances, and that he exercised finely balanced clinical judgement regarding the exploration of the retroperitoneal haematoma, and taking account of the risks and no doubt his own clinical experience, he elected not to explore it.

Injuries were not treated

136. Following subsequent examination, Dr Rao informed the court that the deceased sustained a number of injuries that were not treated, that included the following:
 - a. The liver was severely fragmented in its right lobe, and only intact at the superior end; there was no repair or control of bleeding except for the packing;

¹⁰⁷ Exhibit 4, tab 1; Exhibit 5, tab 1; ts 21.2.2018, p10; and 49 to 59; and 116.

¹⁰⁸ ts 27.2.2018, p36; and 74.

- b. The head of the pancreas was avulsed from the duodenum;
 - c. The duodenum was transected;
 - d. The inferior vena cava (the largest vein in the body which returns all the blood from the lower body to the heart) was almost completely torn, exposing a large gap in the vein (30mm vertically and 20mm transversely).¹⁰⁹
137. The effect of the large tear to the inferior vena cava cannot be underestimated. It was not identified, and all of the blood and fluids used for resuscitation would have escaped from it. This injury is not compatible with survival if not repaired. In order to rectify it, Dr Neelankavil would have had to explore the retroperitoneal haematoma.¹¹⁰
138. Save for the damage to the liver (that Dr Rao believes was underestimated) the other injuries were not identified. The aim of the trauma laparotomy would have been one of damage control, namely to control bleeding and contamination. Ideally the bleeding from the inferior vena cava would have been controlled, but at the material time no one knew it had been torn.¹¹¹
139. Dr Rao was made aware of the case and he rang Dr Neelankavil from his home at approximately 2.30 am on 21 March 2015 to offer his assistance. Dr Neelankavil had finished operating and was confident he had controlled the bleeding from the liver with packs. He did not discuss any other injuries with Dr Rao, and informed him that the deceased was to go to the angiography suite for embolisation of any bleeding from the liver.¹¹²
140. Dr Rao, being aware that there was no consultant surgeon available to assist Dr Neelankavil, remained concerned and rang him again to offer his assistance. Specifically Dr Rao said he could seek urgent credentialing so that he could come to Fiona Stanley Hospital to assist in the care of the deceased, in the absence of a consultant, and to provide the surgical expertise in trauma and liver surgery. Dr Rao recalled that Dr Neelankavil did not feel he needed the assistance.¹¹³
141. Dr Neelankavil recalls speaking with Dr Rao on a number of occasions, and believes he explained that the deceased was not sufficiently stable for transfer to Royal Perth Hospital. However, Dr Neelankavil does not recall Dr Rao offering to attend at Fiona Stanley Hospital, and does not believe he told Dr Rao that he did

¹⁰⁹ Exhibit 2, tab 1.

¹¹⁰ Ibid.

¹¹¹ Exhibit 2, tabs 1 and 2.

¹¹² Exhibit 2, tab 2.

¹¹³ Exhibit 2, tab 2; ts 27.2.20218, p54 to 55.

not require assistance with the patient. He does not believe he would have refused Dr Rao's offer.¹¹⁴

142. It is not possible for me to reconcile the two accounts, save to say that the discussions were had under urgent circumstances, and at some point with a staff member holding the telephone near Dr Neelankavil's ear, which may have given rise to a misunderstanding or misinterpretation.¹¹⁵
143. Relevantly Dr Neelankavil does recall Dr Rao making reference to not having accreditation, which does support some discussion being had about the administrative requirements for Dr Rao to come in to Fiona Stanley Hospital.¹¹⁶
144. I am satisfied that Dr Rao offered to help, but in the confusion and surrounding circumstances it was not fully apprehended by Dr Neelankavil in that way.
145. Self-evidently, treatment would have been best performed by a consultant trauma or vascular surgeon. There were a number of missed opportunities to treat the deceased's injuries, or control the bleeding pending the arrival of a more senior surgeon, but some of these options were not without risk themselves:
 - a. The duodenum could have been stapled at each end, though a more inexperienced surgeon could simply pack the area;¹¹⁷
 - b. Some temporary control of the bleeding from the inferior vena cava may have been gained by applying pressure with packs and swabs, while awaiting assistance from a vascular surgeon;¹¹⁸
 - c. Given the deceased's dire circumstances, the inferior vena cava could have been tied off at the top and bottom;¹¹⁹
 - d. While it was technically possible to stitch the tear to the inferior vena cava, there is the potential for a more inexperienced surgeon to cause further damage to the vein by attempting to do so; it would be a challenging case for many surgeons.¹²⁰
146. Arguably, the inferior vena cava injury was incompatible with life when looked at in the context of the deceased's entire presentation. An experienced consultant trauma surgeon or vascular surgeon may have been able to repair the tear, but the

¹¹⁴ Exhibit 5, tab 1; ts 21.2.2018, p260 to 262.

¹¹⁵ Ts 21.2.18, p18.

¹¹⁶ Ibid.

¹¹⁷ ts 28.2.2018, p28.

¹¹⁸ ts 28.2.2018, p28; and p117 to 118.

¹¹⁹ ts 28.2.2018, p27.

¹²⁰ ts 28.2.2018,p29; and p88.

outcome, having regard to the deceased's overall condition, cannot now be known.

147. The South Metropolitan Health Service submits to me, and I accept that, even if the retroperitoneal haematoma had been explored, the inferior vena cava tear found and managed by one of the methods referred to above, and further assistance been sought from a vascular surgeon, the deceased would have been beyond help by that stage.
148. Dr Martin has been active in the management of trauma patients at the Alfred Hospital since February 2009. Dr Martin opined that by the end of the operation, knowing the deceased's injuries and his downtime, his prospects of survival even if he had presented to her trauma centre, were between 1% and 5%. In Dr Martin's view, the deceased's shock was irreversible by the end of the operation.¹²¹
149. Further analysis of the deceased's prospects of survival appears below.

Prospects of survival

150. The deceased was in cardiac arrest for approximately 20 minutes before arrival at Fiona Stanley Hospital. Records reflect that he went into cardiac arrest at 11.29 pm on 20 March 2015, and that he was brought in by ambulance to Fiona Stanley Hospital Emergency Department at 11.51 pm. During that time remained in cardiac arrest with pulseless electrical activity.¹²²
151. Fiona Stanley Hospital records reflect that pulseless electrical activity continued for the first half hour at the hospital, until at least 12.20 am. At 12.25 am it was reported that the deceased's heart was beating and there was a femoral pulse. The deceased was therefore in cardiac arrest for up to approximately one hour before the return of spontaneous circulation was obtained.¹²³
152. There is a body of research that addresses the prospects of survival where an individual has been in prolonged cardiac arrest. In circumstances of a traumatic cardiac arrest with CPR of longer than 10 minutes, after reversible causes have been addressed, there is almost never a good outcome.¹²⁴
153. Statistics on traumatic out of hospital cardiac arrests in Western Australia between 1997 to 2014 reflect a 0.66% survival rate, and

¹²¹ ts 28.2.2018, p44, 58 and 60 to 61.

¹²² Exhibit 1, tabs 36 and 37; Exhibit 2, tab 3.

¹²³ Exhibit 2, tab 3; ts 21.2.2018, p227.

¹²⁴ Exhibit 5, tab 12; ts 26.2.2018, p72.

of those, 0.44% had good neurological outcomes. As referred to previously, Dr Martin opined that the deceased's chances of survival were between 1% and 5% (and in any event probably less than 5%) even if he had presented at her trauma centre at Alfred Hospital.¹²⁵

154. The ICU senior registrar at Fiona Stanley Hospital Dr Corynn Goh, having regard to the deceased's arterial blood gas results at 12.22 am on 21 March 2015 (taken when the deceased was still in the emergency department), referred to them as "*very seriously deranged*" and considered that given the amount of time that had passed since he was shot, there was a very low likelihood of those figures being reversed. By that stage the microvascular, biochemical and other injuries impacting his organs may not have been reversible, and with continuing deterioration, would develop into multi-organ failure.¹²⁶
155. Arterial blood gas results at 12.56 am were becoming more abnormal and by this stage it was possible that the shock was not reversible. Even if the deceased's bleeding was able to be stopped at this stage, the injury to his brain was likely to be at the extreme end of the spectrum (at this point in time the deceased's surgery had been progressing for between 11 to 16 minutes).¹²⁷
156. The ICU senior registrar at Fiona Stanley Hospital Dr Benjamin Silbert also commented on the deceased's patient results at 12.22 am on 21 March 2015, describing them as abnormal and reflective of severe acidosis. The organs were very deficient in oxygen and the prospects of survival were very low, even if at this point all bleeding had been stopped. He expressed concern about the damage to the deceased's brain by this stage. Dr Silbert also had regard to the patient results at 3.12 am on 21 March 2015, which were worse, and the likelihood of reversing the picture was very low.¹²⁸
157. Fiona Stanley's on-call consultant anaesthetist Dr David Wright, who attended at theatre, provided his opinion concerning the deceased's very low prospects of survival. He considered that from the time the deceased arrived at the emergency department, having regard to his whole clinical picture, including his prolonged pulseless electrical activity, he was fairly unlikely to survive. From the time he arrived in the emergency department, the fact that the deceased was hypothermic, severely coagulopathic, and had severe hypotension suggested that he

¹²⁵ Exhibit 5, tab 18; ts 28.2.2018, p60 to 61; and 103 to 104.

¹²⁶ Exhibit 2, tab 4; ts 22.2.2018, p49 to 50.

¹²⁷ Exhibit 2, tab 3; ts 22.2.2018, p51 to 52.

¹²⁸ Exhibit 2, tab 4; ts 22.2.2018, p37 to 41.

was within the syndrome of irreversible shock. In his considerable experience, at this stage mortality is very high and survivability is very low.¹²⁹

158. Dr Wright also commented on the deceased's patient results at 12.56 am on 21 March 2015, that indicated the deceased had such a severe injury, with ongoing severe generalised tissue ischemia, that he was unlikely to survive. He opined that even if the inferior vena cava injury had been identified, the deceased would not have survived as the pathophysiological degree of his shock syndrome made his cardiovascular system resistant to drug and fluid therapy.¹³⁰
159. Fiona Stanley Hospital's on-call consultant cardiothoracic surgeon Dr Merry opined that after around 30 to 45 minutes of pulseless electrical activity secondary to hypovolemic shock, it would be questionable whether any further treatment was likely to be resuscitative as the amount of blood loss sustained over a prolonged period of time is likely to have instituted irreversible metabolic change.¹³¹
160. State Trauma Director Dr Rao also accepted that it was likely the deceased was in an irreversible situation by the time he got to theatre. He also opined that it would be reasonable to not even attempt a thoracotomy once a patient has been in arrest for 15 or 20 minutes.¹³²
161. I accept the submission of the South Metropolitan Health Service, through its lawyer the SSO, that the deceased's injuries were not of a type that could have been repaired in the emergency department, and that by the time the deceased reached theatre, his condition was irreversible. With the benefit of hindsight, I am satisfied that the deceased had already sustained irreversible injuries to his organs including his brain, liver and kidneys. Even if the inferior vena cava injury had been identified during surgery, the deceased is unlikely to have survived due to the degree of his shock syndrome.
162. I am satisfied that whilst some aspects of the medical treatment afforded to the deceased at Fiona Stanley Hospital could have been better, any deficiencies were as result of the unavailability of more senior consultant clinicians in the specialty areas, and that the clinicians who did treat the deceased performed in accordance with their training, and in accordance with what

¹²⁹ Exhibit 2, tabs 4; Exhibit 5, tab 8; ts 23.2.2018, p4 to 17.

¹³⁰ Exhibit 2, tab 3; ts 23.2.2018, p18 to 19.

¹³¹ ts 22.2.2018, p18.

¹³² ts 27.2.2018, p73 to 74.

should reasonably be expected of them, in highly challenging circumstances.

163. Having regard to the severity of the deceased's injuries when he presented at Fiona Stanley Hospital, I am satisfied that the deceased's death was not contributed to by any act or omission on the part of any person at Fiona Stanley Hospital.
164. Whilst it is vital that all proper attempts be made to seek to revive a patient in similar circumstances, I am also satisfied that there was nothing further that could have been done at Fiona Stanley Hospital that night that would have had a reasonable prospect of averting the deceased's death.

COMMENTS ON THE SHOOTING

165. A subsequent Internal Affairs Investigation, that assessed the issue of whether Sergeant Edmunds failed to comply with all relevant Western Australian Police policy, procedures, guidelines or training during the discharge of his duty in respect to the death of the deceased, exonerated him, on that point. A critical incident investigation into the fatal police shooting by the Major Crime Division did not identify any criminality. I am relevantly informed by these investigations, but not bound by them. The coronial investigation is a separate process, that has mandated an inquest because the death, upon the facts, appeared to have been caused, or contributed to, by an action of a member of the Police Force, namely Sergeant Edmunds.¹³³
166. The subsequent forensic examinations of the police issue firearms and accoutrements seized from Sergeant Edmunds and Constable Henshaw established that one gunshot was fired from Sergeant Edmunds' firearm. There is no evidence of any other shots fired, or other firearm being discharged.¹³⁴
167. The deceased suffered one perforating wound on the right lower chest wall, that entered the chest cavity and immediately entered the abdominal cavity. The related fired bullet was still residual at the post mortem examination, and it was removed and provided to ballistics officers. The deceased was shot in the course of police carrying out a legitimate law enforcement activity, namely responding to a callout.¹³⁵
168. My comments on the shooting follow.

¹³³ Exhibit 1, tabs 8 and 10.

¹³⁴ Exhibit 1, tab 30.

¹³⁵ Exhibit 1, tabs 5 and 30.

169. Constable Henshaw was the first officer to speak with the deceased; he had a torch and had located the deceased crouched between two wheelie bins on the side of a shed that was adjacent to the deceased's home, behind a gate. Constable Henshaw saw the deceased had what appeared to be a cane in his hands. He drew his Taser, pointed it towards the deceased's feet and instructed the deceased to drop the cane. The deceased stood up immediately and dropped the cane.¹³⁶
170. Sergeant Edmunds became aware of the deceased's presence and came over with the intention of effecting an arrest. At the inquest Sergeant Edmunds testified that when he ordered the deceased to come out and put his hands on the bin, the deceased was initially compliant. Sergeant Edmunds reached towards the pouch on his belt with the intention of getting the handcuffs, and he moved towards the deceased. Constable Henshaw still had his Taser trained on the deceased and he had seen the deceased reach for something behind his back with his right hand, which made him suspicious. When Sergeant Edmunds was approximately two metres away, the deceased turned and suddenly lunged towards him, as if he was trying to punch him, and yelling "C'mon", in an aggressive tone. Constable Henshaw described the deceased as "*slashing out quite violently and quite erratically.*"¹³⁷
171. Constable Henshaw also had his torch trained on the deceased, and it was he who first saw that the deceased had a knife, because the blade flashed as it passed through the beam of his torch, and he saw flashes of silver. He was not sure whether Sergeant Edmunds had seen the knife, and he decided to deploy his Taser. Sergeant Edmunds heard Constable Henshaw indicate he was going to use his Taser, and he therefore moved out of the line of fire. Constable Henshaw tried to deploy his Taser, but it failed due to a technical malfunction.¹³⁸
172. It quickly became apparent to Sergeant Edmunds that Constable Henshaw's Taser was not working, so he deployed his OC spray. Whilst the lighting was dim, he did observe a jet from the OC spray go generally towards the deceased's face. The deceased did not react, and the sergeant, hearing his partner state that the deceased had a knife, emptied almost all of the contents OC spray canister in the direction of the deceased's face, from approximately two metres distance. Again the deceased did not react to the spray, and Sergeant Edmunds formed the view that the OC spray had been ineffective.¹³⁹

¹³⁶ Exhibit 1, tab 16; ts 19.2.2018, p90 to 91.

¹³⁷ Exhibit 1, tab 15; ts 19.2.2018, p52 to 53; and 92 to 96.

¹³⁸ ts 19.2.2018, p52 to 53; and 92.

¹³⁹ ts 19.2.2018, p54 to 56.

173. The deceased continued to advance, adopting a fighting stance, moving towards Sergeant Edmunds, who initially continued to move backwards, and then turned and ran towards the letterbox, to get more distance between them. Constable Henshaw also started walking backwards, away from the deceased, and reloaded his Taser. Sergeant Edmunds was approximately four metres away from the deceased when he observed Constable Henshaw deploy his Taser, again to no effect, because on this occasion it did not make successful contact.¹⁴⁰
174. The deceased continued to advance towards Sergeant Edmunds, still adopting a fighting stance, moving his arms about, and he did not comply with Constable Henshaw's instructions to stand still or get on the ground. Constable Henshaw described the deceased as making "*a constant slashing motion*" with his arms, with a knife in one hand, and that there was no lull in this behaviour.¹⁴¹
175. As the deceased reached the area of the letterbox, Sergeant Edmunds saw he was holding a knife in his right hand, initially with the blade facing backwards, and later with the blade facing towards him. The direction of the blade was affected by the movement of his hands. The deceased held his hands near to his shoulder-level, generally as fists. Just after Constable Henshaw's second attempt with the Taser failed to make contact, the deceased, still holding the knife, lunged towards Sergeant Edmunds, with purpose and closing the gap extremely quickly.¹⁴²
176. Sergeant Edmunds believed he was under imminent risk of grievous bodily harm or death, and drew his firearm. He believed the deceased was trying to stab him, and that there was a risk of bodily injury to himself and to Constable Henshaw. Sergeant Edmunds instinctively yelled "*stop*", and shot the deceased with his police issue firearm, when the deceased was approximately two to three metres away from him.¹⁴³
177. Sergeant Edmunds did not consider that simply running from the scene was an option, and clearly, turning his back on the deceased presented a range of risks. He feared for his life, and he had observed the deceased to appear aggressive throughout. He explained that the deceased appeared to be fixated in his intentions, he showed a sense of purpose, his fists were clenched, he held the knife, he acted and spoke aggressively, and his demeanour suggested the presence of alcohol or drugs and/or

¹⁴⁰ ts 19.2.2018, p57 to 59; and 93 to 96.

¹⁴¹ ts 19.2.2018, p57 to 59.

¹⁴² ts 19.2.2018, p60 to 61; and 73.

¹⁴³ ts 19.2.2018, p60 to 61.

adrenaline and emotion. The knife appeared to him to be a butterfly knife, or a Leatherman, and the blade was visible to him. As Sergeant Edmunds moved backwards, the deceased continued to advance towards him.¹⁴⁴

178. Sergeant Edmunds discharged his firearm in accordance with his police training (the Situational Tactical Options Model). At this stage both he and the deceased were on the grass verge near the road. There was no time to adopt a proper shoot stance, as he was under duress. Constable Henshaw, upon ascertaining that the Taser failed a second time, holstered his Taser and was in the process of drawing his firearm, because he thought he was going to get stabbed and he also feared for his life. As Constable Henshaw looked up from drawing his firearm, he heard the shot, and immediately understood that Sergeant Edmunds had discharged his firearm. Constable Henshaw was a few metres away from Sergeant Edmunds at this point, and he had observed the deceased holding the knife, continuing to make slashing motions with his arms, and moving towards them with purpose.¹⁴⁵
179. By the time of the shooting, the police officers had retreated from the area immediately outside the house, to the area adjacent to the roadside. The knife was subsequently seized from the grass verge, and found to be a metallic silver Leatherman. The blade portion of the knife was projecting from the handle, and was found to be approximately seven centimetres long. A wooden walking stick (cane) which can be separated into two lengths, joined by a black material cord was also seized at the scene.¹⁴⁶
180. At the inquest I heard evidence in connection with the policy from the Police Manual governing use of force and use of firearms, and the Operational Safety and Tactics Training Unit's training material for critical skills. The manager with oversight of use of force reporting, and the training co-ordinator testified as to their roles, and the police policy and training regarding the use of force.¹⁴⁷
181. The policy provides that a firearm can be discharged to reduce the threat and gain control of a subject where the member reasonably believes there is an imminent risk of grievous bodily harm or death to any person.¹⁴⁸
182. I am satisfied that Sergeant Edmunds had a reasonable belief that he was at imminent risk of death, and at least of imminent

¹⁴⁴ ts 19.2.2018, p72 to 73.

¹⁴⁵ ts 19.2.2018, p60 to 64; and 69; and 97 to 99.

¹⁴⁶ Exhibit 1, tabs 10 and 35.

¹⁴⁷ Exhibit 3, tabs 6 and 7; ts 20.2.2018, p124 to 173.

¹⁴⁸ Exhibit 1, tab 8.

risk of grievous bodily harm, as a result of the deceased continuing to advance on him holding the knife, moving and speaking aggressively, ignoring repeated commands to stop, while the sergeant was continually moving backwards. By the time the deceased finally lunged towards the sergeant, he had only a split second to make his decision to protect himself. Whilst there is no hierarchy in the use of force, the sergeant was also entitled to take account of the fact that two Taser attempts had failed, and the OC spray had been of no effect.

183. I am satisfied that all reasonable attempts were made by police to de-escalate the situation, before Sergeant Edmunds shot the deceased. I am also satisfied that Sergeant Edmunds believed on reasonable grounds that he could not otherwise preserve himself from death or grievous bodily harm.

CAUSE AND MANNER OF DEATH

184. The forensic pathologist Dr Gerard Cadden made a post mortem examination on the body of the deceased at the State Mortuary on 25 March 2015. Dr Cadden noted that severe abdominal injury was evident, with severe laceration injury to the liver, in addition to other abdominal injuries. These injuries were secondary to the gunshot wound to the abdomen.¹⁴⁹
185. In respect of the gunshot wound, Dr Cadden noted the perforating wound on the right lower chest wall, that was seen to enter the chest cavity at the level of rib 7, and immediately enter the abdominal cavity. There was a large injury over the anterior surface of the liver involving the right hepatic lobe. This injury had a stellate appearance with at least 11 spoke like areas of laceration radiating from the central perforation of the liver.¹⁵⁰
186. Dr Cadden followed the wound track, that was seen to extend through the inferior aspect of the liver tracking downwards and posteriorly such as to involve the head of the pancreas with disruption of the head of the pancreas which had been avulsed from the duodenum, which was transected.¹⁵¹
187. The wound track was seen to perforate the inferior vena cava such as to produce a tear within the inferior vena cava 30mm vertically by 20 mm transversely. The wound track was then seen to involve the front surface of the lumbar vertebra L3 where it was confirmed that a projectile was still residual. I am satisfied this

¹⁴⁹ Exhibit 1, tab 5.

¹⁵⁰ Ibid.

¹⁵¹ Ibid.

was the bullet from Sergeant Edmunds' police issue firearm. The projectile was removed and provided to police ballistics officers.¹⁵²

188. On 25 March 2016, Dr Cadden formed the opinion that the cause of death was gunshot wound to abdomen.¹⁵³
189. Toxicological analysis was ordered and became available to Dr Cadden in June 2015. This analysis reported a blood alcohol level of 0.129%, and a urine alcohol level of 0.168%. There were no common amphetamines detected. No tetrahydrocannabinol was detected. Benzodiazepines were reported as positive. Lignocaine and midazolam were detected, and regard is to be had to the period of hospitalisation before death. The forensic pathologist's opinion on cause of death remained the same.
190. I accept and adopt Dr Cadden's opinion on cause of death. **I find that the cause of the deceased's death was gunshot wound to abdomen.**
191. In considering the manner of the deceased's death, I must assess whether Sergeant Edmunds' act in shooting the deceased, that caused his death, was a reasonably necessary response to the circumstances facing him at the time.
192. Further, whether Sergeant Edmunds shot the deceased intending to protect himself (or Constable Henshaw) against an apprehended attack and whether the shooting was (and was believed by the sergeant to be) reasonably necessary, as questions of fact, regarding the surrounding circumstances and his state of mind.
193. For the reasons outlined under the heading *Comments on the shooting*, immediately above, I am satisfied that Sergeant Edmunds' response in shooting the deceased was a reasonably necessary response to his reasonably held belief that he was at imminent risk of death, and at least at imminent risk of grievous bodily harm.
194. **I find that the manner of the deceased's death was homicide by way of self-defence.**

IMPROVEMENTS

195. Since the deceased's death, a number improvements have taken place at Fiona Stanley Hospital, reflecting the learning that has occurred as a consequence of this incident, and directed towards

¹⁵² Ibid.

¹⁵³ Ibid.

the ongoing improvement of trauma services in Western Australia.

196. A number of improvements have also taken place within the Western Australian Police Service, as part of their continual improvement processes.

197. These are outlined below.

Notification of appropriate consultants

198. Since the deceased's death Fiona Stanley Hospital has reviewed their trauma response generally and a range of changes have been designed to improve that response. Through their lawyer the SSO, the South Metropolitan Health Service informs me that:

- a. In October 2016 the Fiona Stanley Acute Surgical Unit Manual was amended to provide that the surgical registrar must inform the fellow and/or a consultant of a trauma code as soon as details are known;¹⁵⁴
- b. The consultant general surgeon must be informed of any trauma patient going to theatre;¹⁵⁵
- c. In July 2017 Fiona Stanley Hospital issued a two-tiered Trauma Response Activation Policy; in the case of physiological instability in the patient there is a hospital wide "Trauma B" response, leading to a notification process for the acute surgical unit consultant and fellow of head of trauma; it generates both an internal emergency department response, plus the attendance of an anaesthetic consultant or senior registrar, a general surgical registrar and the acute surgical unit resident medical officer;¹⁵⁶
- d. In January 2018 the Fiona Stanley Hospital orientation was amended to provide that the acute surgical unit on-call registrar, and the in hours acute surgical unit consultant or fellow must attend all Trauma B calls; further, if the patient requires urgent surgery, the acute surgical unit consultant must be called in;¹⁵⁷
- e. Procedures have been implemented to allow for more information in the initial trauma page to allow junior staff to inform consultants as early as possible of the need to attend, and for repeated efforts to be made to contact consultants;¹⁵⁸

¹⁵⁴ Exhibit 4, tab 11.

¹⁵⁵ Exhibit 4, tab 1A.

¹⁵⁶ Ibid.

¹⁵⁷ Exhibit 4, tabs 1A and 13.

¹⁵⁸ Exhibit 4, tab 1A.

- f. If the initial inquiry by HelpDesk establishes that specific criteria of seriousness are met, a range of responses follow, including the required immediate attendance at the emergency department of the on-call general surgeon;¹⁵⁹
- g. For special injuries requiring urgent sub-speciality notification, the doctor initiating the trauma call contacts the relevant sub-specialty as soon as possible; in the case of penetrating thoracic trauma, such as with the deceased, the on-call cardiothoracic surgical registrar or consultant is to be contacted, for attendance at the emergency department, before the patient arrives, if possible;¹⁶⁰
- h. Provision has also been made to instruct sub-specialty registrars to immediately contact their consultant if they are advised of the need for a life-saving procedure that they are not able to perform, and not wait until they themselves have reviewed the patient in the emergency department.¹⁶¹

199. Had these changes been in place at the time of the deceased's gunshot wound the expectation would have been to have the on-call acute surgical unit/general surgical and cardiothoracic consultants in the emergency department before the deceased's arrival there.

200. By reason of these improvements, that are continuing, there is no need for me to make a recommendation concerning the development of processes that ensure the appropriate consultants are promptly notified of a trauma patient's impending arrival at Fiona Stanley Hospital.

Training in resuscitative thoracotomies

201. Whilst acknowledging that the most suitable staff to perform a resuscitative thoracotomy are a consultant cardiothoracic surgeon or consultant general surgeon, through its lawyer the SSO, the South Metropolitan Health Service also acknowledges that this critical procedure may need to be performed by fellows or senior registrars in the emergency department, if the surgeons are not present.

202. Cardiothoracic surgeons are trained in thoracotomies, including compressing or clamping the aorta. In light of their training and experience, as well as the ability to address any injuries discovered in the chest, I accept that consultant cardiothoracic surgeons are the most appropriate and qualified staff at Fiona Stanley Hospital to perform this procedure.¹⁶²

¹⁵⁹ Exhibit 4, tab 12.

¹⁶⁰ Exhibit 4, tab 12.

¹⁶¹ Exhibit 4, tab 12.

¹⁶² Exhibit 4, tab 1A; ts 28.2.2018, p16 to 17; and 77, and 82 to 84.

203. The South Metropolitan Health Service through its lawyer the SSO, informs me that Fiona Stanley Hospital has commenced an audit of acute surgical unit/general surgical consultants and fellows with a view to training those who do not have the skills to perform resuscitative thoracotomies, including the skills to compress and/or clamp a patient's descending thoracic aorta.
204. The emergency department physicians are trained to perform resuscitative thoracotomies, within the context of the primary aims, being the release of cardiac tamponade, control of thoracic haemorrhage and access for internal cardiac massage.
205. At the inquest the independent expert trauma and general surgeon Dr Martin stated that she would expect anyone with surgical training to at least be able to attempt to apply some kind of pressure to the aorta, such as putting a fist on the area. However, Dr Martin would not expect emergency physicians to be able to perform a clamping of the aorta, and noted that while there is a benefit to clamping, it is very minor.¹⁶³
206. The question of whether the training generally for emergency department physicians should extend to compressing or clamping the aorta (in the context of a resuscitative thoracotomy) has been considered, but is beyond the scope of the inquest, especially when regard is had to the existing role of Fiona Stanley Hospital's cardiothoracic surgeons, and the audit being conducted with a view to the further training Fiona Stanley Hospital's acute surgical unit/general surgical consultants.
207. I also have regard to the continually evolving nature of the assessment and management of trauma, that is best left to the experts in the area.
208. By reason of the ongoing and broadened training programs, there is no need for me to make a specific recommendation concerning the training of consultants at Fiona Stanley Hospital, in the area of resuscitative thoracotomies, including the skills to compress and/or clamp a patient's descending thoracic aorta.

Credentialing of Royal Perth Hospital Trauma Surgeons

209. The State Trauma System is made up of a number of streams, that collaborate to provide services for the treatment of patients with trauma:
 - a. The major trauma services of Royal Perth Hospital and Perth Children's Hospital;

¹⁶³ ts 28.2.2018, p19 and 42 to 43.

- b. The metropolitan trauma services of Fiona Stanley Hospital and Sir Charles Gairdner Hospital;
 - c. A number of urban, regional, rural and remote trauma services.
210. The State Trauma Centre is based at Royal Perth Hospital, but it does not run or have oversight of the other trauma services.
211. There are Guiding Principles for Major Trauma inter hospital transfer for when a major trauma patient is to be transferred from one hospital to another. If the transfer were to be from Fiona Stanley Hospital emergency department to Royal Perth Hospital emergency department, early contact should occur, within 15 to 30 minutes.¹⁶⁴
212. I am satisfied however that the deceased was not sufficiently stable for transfer to the Royal Perth Hospital.
213. The South Metropolitan Health Service through its lawyer the SSO, informs me that Fiona Stanley Hospital supports contact with the Royal Perth Hospital trauma centre whenever staff feel that such liaison would be of benefit. That was mirrored by the evidence given at the inquest by a number of senior Fiona Stanley Hospital consultants.¹⁶⁵
214. The support from Royal Perth Hospital may be by way of advice from trauma specialists who are contacted for discussion, but who are not requested to attend upon the patient. As referred to earlier in this finding, State Trauma Director Dr Rao, of the Royal Perth Hospital, twice offered to immediately come in to Fiona Stanley Hospital to assist with the treatment of the deceased, and indicated he would be able to seek urgent credentialing. This offer was not fully apprehended by Dr Neelankavil due to circumstances outlined previously, and Dr Rao was, in effect, informed or left with the impression that this would not be necessary.¹⁶⁶
215. An offer of help from the State Trauma Director warrants serious consideration at any stage. In the circumstances of this case, I am satisfied that by the time the discussions were being held, the deceased's prospects of survival were, sadly, very minimal. I also take account of the evidence to the effect that Dr Neelankavil had formed the view that the surgery had controlled the bleeding.
216. After the deceased's death, in September 2015, two of the trauma surgeons from Royal Perth Hospital, one of them being Dr Rao,

¹⁶⁴ Exhibit 4, tab 10; Exhibit 5, tab 15.

¹⁶⁵ ts 92; ts 114.

¹⁶⁶ Exhibit 2, tab 1.

were credentialed by Fiona Stanley Hospital, and on-site orientation was conducted. Today, if a patient like the deceased presents to Fiona Stanley Hospital, and is too unstable for transfer to Royal Perth Hospital, the major trauma service surgeons are able to attend at Fiona Stanley Hospital to conduct or assist in the surgery. This is part of the ongoing improvement in the delivery of trauma services in this State.¹⁶⁷

Body armour project

217. At the inquest, the question arose as to whether protective vests for police officers may operate so as to afford a degree of security. The vests would primarily protect police officers, and it was also posited that they may alleviate the apprehension of an imminent risk of death or grievous bodily harm, in similar circumstances. This could have the dual benefit of protecting the police officers from harm, and avoiding the felt need to shoot, in similar circumstances. It was also a matter raised by the deceased's mother.
218. The Commissioner of Police through his lawyer Mr Humphris, informs me of the commitment to issue operational police members with stab and ballistic resistant body armour. The significant steps that have been taken since the establishment of the project for the procurement, training, distribution and implementation of personal issue multi threat body armour for operational members persuades me that it is unnecessary for me to make any recommendation in this regard.¹⁶⁸

CAD and TADIS enhancements

219. Before arriving at the scene, Sergeant Edmunds and Constable Henshaw had been tasked by radio communication to attend a domestic dispute, and the coding given indicated that there was no threat to life. Constable Henshaw, in accordance with usual procedure, did a manual search of the TADIS system, while they travelled to the scene. The aim of such searches is to check for existing warnings, alerts, and previous criminal and family violence history. The TADIS search confirmed the information provided by radio.¹⁶⁹
220. At the material time, if a particular address had been flagged by police due to safety concerns, this did not appear on TADIS.

¹⁶⁷ Exhibit 4, tab 1A.

¹⁶⁸ Exhibit 6, tab 2B.

¹⁶⁹ Exhibit 1, tabs 15 and 16; Exhibit 6, tab 2A.

Police were reliant on the existence of such flags (warnings) being conveyed verbally by the radio dispatcher.¹⁷⁰

221. The Commissioner of Police through his lawyer Mr Humphris informs me of a number of improvements since the deceased's death, aimed at providing better information to police who are travelling to an incident.
222. Improvements were made to the guide to the Computer Aided Dispatch (CAD) System that were designed to generate the gathering of further critical information by the call taker, by a series of guided prompts. Such incidents are now referred to as "*family violence*" incidents, and the definition has been broadened. The information received is uploaded by the call taker onto the CAD system.¹⁷¹
223. In October 2016, enhancements were made to TADIS, to include the use of premise flags. These are warnings that may be added for specific premises, to increase situational awareness of the risks posed to police at a particular residence, or by a resident. This complemented the further information being sourced through the CAD prompts.¹⁷²
224. I am satisfied that by reason of the above improvements police officers are currently able to be effectively provided with information as to the type of incident they are attending, the reason for the request for assistance, and if relevant, prior history of police attendance, and premise flags. This enables better planning for de-escalation, if that is possible. There is therefore no need for me to make a recommendation aimed at improving the information on the TADIS system.

Body worn cameras for police

225. The Commissioner of Police informs me that the use of body worn cameras by law enforcement personnel is becoming increasingly prevalent, providing policing agencies with an independent and objective resource to capture incidents, gather real time evidence and record interactions between police and members of the community.¹⁷³
226. The Western Australia Police Service undertook a trial of body worn cameras in 2016 and identified a number of benefits. In July 2018 approval was given for the commencement of a body worn camera procurement process for frontline officers. The

¹⁷⁰ Exhibit 6, tab 2A.

¹⁷¹ Ibid.

¹⁷² Ibid.

¹⁷³ Exhibit 6, tab 6

process has been significantly progressed, with upcoming plans in place for delivery to identified officers, to be followed by a full State-wide roll out.¹⁷⁴

227. One of the features will be the automatic activation of the body worn camera when a police officer draws their firearm. This will be followed by further enhanced functionality as technology develops and allows, and might include the ability to stream to another location, such as the Police Operations Centre.¹⁷⁵
228. It is clear that this project is well under way. There is no need for me to make any recommendation in this area. The automatic activation of the body worn camera allows for an objective appraisal of the circumstances, it can materially assist in subsequent investigations, and supports transparency and accountability. The very fact of its existence may serve to de-escalate incidents.

CONCLUSION

229. Self-evidently, a police shooting is to be avoided whenever possible and the community is justly concerned by any police shooting, and in particular a shooting that results in death. The deceased's mother is heartbroken over the death of her son. These tragedies leave ongoing and traumatic reverberations.
230. Unfortunately, on this occasion the incident escalated quickly and without warning, when police went to arrest the deceased. Within a matter of moments the deceased took out a knife and began advancing on the officers, who kept moving backwards, away from him.
231. I am satisfied that within the time frame of the incident, there were minimal opportunities to de-escalate the situation, and that police did seize upon all reasonable opportunities before Sergeant Edmunds shot the deceased in self-defence.
232. It is my hope that the body armour project, the CAD and TADIS enhancements, and the body worn camera project together operate to improve police responses to incidents in similar circumstances. In particular by improving safety for police officers, the risks to police of death or grievous bodily harm in similar circumstances may be reduced (though not eliminated). The reduction of those risks has a flow on effect, in that the additional protection may avoid a shooting.

¹⁷⁴ Ibid.

¹⁷⁵ Ibid.

R V C FOGLIANI
STATE CORONER
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