
JURISDICTION : CORONER'S COURT OF WESTERN AUSTRALIA
ACT : CORONERS ACT 1996
CORONER : Rosalinda Vincenza Clorinda Fogliani, State Coroner
HEARD : 28 NOVEMBER 2022 - 2 DECEMBER 2022
DELIVERED : 13 DECEMBER 2023
FILE NO/S : CORC 1807 of 2019
DECEASED : HUNTER, ASHLEIGH REBECCA

Catchwords:

Nil

Legislation:

Nil

Counsel Appearing:

Ms S Tyler assisted the State Coroner

Mr D Harwood and Mr T Ledger (State Solicitor's Office) appeared on behalf of the East Metropolitan Health Service and the Department of Health

Ms G J Lee (Australian Nursing Federation) appeared on behalf of Judith Kenworthy, Anthea Walthew, India Flint, David Allen and Ynez Ball

Ms K Pedersen (Moray & Agnew) appeared on behalf of St John Ambulance

Case(s) referred to in decision(s):

Nil

Coroners Act 1996
(Section 26(1))

RECORD OF INVESTIGATION INTO DEATH

*I, Rosalinda Vincenza Clorinda Fogliani, State Coroner, having investigated the death of **Ashleigh Rebecca HUNTER** with an inquest held at Perth Coroners Court, Central Law Courts, Court 51, 501 Hay Street, Perth, on 28 November 2022 - 2 December 2022, find that the identity of the deceased person was **Ashleigh Rebecca HUNTER** and that death occurred on 27 December 2019 at Royal Perth Hospital, Wellington Street, Perth, from meningococcal infection in the following circumstances:*

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INTRODUCTION

1. Ashleigh Rebecca Hunter died at Royal Perth Hospital on 27 December 2019. She was 26 years old and had previously been a healthy young woman. I will refer to her as “*Ashleigh*” in this finding, in accordance with the wishes of her family members, many of whom were in attendance throughout the inquest proceedings. First names are not used for the witnesses, and no disrespect is intended by the use or non-use of an appellation.
2. Ashleigh enjoyed a close and warm relationship with her family and friends, all of whom were shocked and distraught upon hearing of her unexpected death. Subsequent coronial investigations revealed Ashleigh died from a meningococcal infection.
3. In Ashleigh’s case, this illness was caused by a bacterial infection called *Neisseria meningitidis* (W strain), also known as meningococcus. Most exposures to meningococcus result in colonisation of the upper respiratory tract causing minor respiratory symptoms or no disease at all. However, in rare instances, meningococcus can cause a severe illness where the bacteria spreads either to the brain (meningitis), or through the blood (septicaemia or meningococcaemia), which is what occurred in Ashleigh’s case.
4. Ashleigh first displayed symptoms of her illness on the morning of 27 December 2019. Her partner called an ambulance, and she was conveyed to Royal Perth Hospital.
5. When Ashleigh arrived at Royal Perth Hospital at approximately 1.16 pm that day, she was not taken into the Emergency Department (ED) for another hour. Instead, she was allocated to areas contiguous to the ED, based upon her given Triage Code and pending availability of bed space within the ED. Outside the ED she was monitored by St John Ambulance officers and Royal Perth Hospital nurses.
6. When Ashleigh was eventually taken into the ED, she went into cardiac arrest within approximately ten minutes. Despite all resuscitative efforts, tragically she was unable to be revived.
7. Throughout the inquest into Ashleigh’s death, it was clear that the Royal Perth Hospital ED was overcrowded and the pressures on the clinicians were significant. Ashleigh’s loved ones found it difficult to understand how it

could be that their daughter was triaged to the Ramp (exactly what this means is explained later in this finding) instead of entering the ED and being promptly treated, given how critically ill she was.

8. Ashleigh's parents raised a number of questions about Ashleigh's death in the early stages of the coronial investigation and requested that an inquest be held into her death. An expert medical opinion was sought. In June 2021, after the Coroner's Court of Western Australia (the court) received the expert opinion from ED Consultant, Dr Thomas Hitchcock regarding the care and treatment provided to Ashleigh on 27 December 2019, I formed the view that it was desirable, within the meaning of s 22(2) of *Coroners Act 1996* (WA) (the Coroners Act), to hold an inquest into Ashleigh's death in order to examine the circumstances.

THE INQUEST

9. Ashleigh's death was a reportable death within the meaning of s 3 of the Coroners Act and her death was reported to the coroner as required by the Coroners Act.
10. By reason of s 19(1) of the Coroners Act I have jurisdiction to investigate this death.
11. The primary areas of focus at the inquest were as follows:
 - a) Ashleigh's triage assessment at Royal Perth Hospital, the reasons for her being triaged to the Ramp by the Triage Nurse, her subsequent placement in the A&E, and the time it took for her to enter the ED; this involved a consideration of the quality of her treatment and care in each of those areas and appropriateness of the timeframes involved.
 - b) Whether Ambulance Ramping or Delayed Transfer of Care as between St John Ambulance WA and Royal Perth Hospital, due to ED overcrowding, impacted the care Ashleigh received;
 - c) Whether resourcing considerations within the Royal Perth Hospital ED impacted the care Ashleigh received; and
 - d) Whether there was a lost opportunity for Ashleigh to survive due to delays in the provision of her care.

12. I held the inquest between 28 November 2022 and 2 December 2022. I heard evidence from 15 witnesses and received the following exhibits into evidence:
 - a) Exhibit 1, containing 28 tabs;
 - b) Nine exhibits (being Exhibits 2 to 10).
13. Investigations continued and between the time of the inquest and 12 January 2023 I received another four exhibits (Exhibits 11 to 14).
14. My primary function has been to investigate this 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.
15. 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.
16. 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.
17. Pursuant to s 44(2) of the Coroners Act, before I make any finding or comment adverse to the interests of an interested person, that person must be given the opportunity to present submissions against the making of such a finding.
18. After the inquest, on 19 December 2022 counsel assisting the State Coroner circulated a statement of Potential Adverse Findings and Recommendations to the parties, who were given an opportunity to present submissions for the purposes of s 44(2) of the Coroners Act.
19. On 27 January 2023 the lawyers for the East Metropolitan Health Service and the Department of Health (together) and the lawyers for St John Ambulance Western Australia Ltd (St John Ambulance) provided their submissions to me.
20. Further submissions were exchanged in March 2023 concerning two proposed recommendations, and responses received.

21. On 29 May 2023 Ashleigh’s family provided a detailed and thoughtful written outline of their concerns regarding Ashleigh’s treatment and care, and of their cherished memories of Ashleigh. I took this into evidence as Exhibit 15. Their concerns were conveyed to the lawyers for the parties, who were given an opportunity to present further submissions, if they wished, for the purposes of procedural fairness.
22. Between 20 and 21 July 2023 I received submissions in response from the lawyers for the East Metropolitan Health Service, the lawyers for St John Ambulance and the lawyers for the Australian Nursing Federation.
23. In making my findings below I have applied the standard of proof as set out in *Briginshaw v Briginshaw* (1938) 60 CLR 336 per Dixon J at 361-362 which requires a consideration of the nature and gravity of the conduct when deciding whether a matter has been proved on the balance of probabilities. The more significant the issue to be determined, the more serious an allegation or the more inherently unlikely an occurrence, the clearer and more persuasive the evidence needed for the trier of fact to be sufficiently satisfied that it has been proven to the civil standard.
24. In assessing the care and treatment Ashleigh received from St John Ambulance officers and Royal Perth Hospital staff on 27 December 2019, I am mindful of hindsight bias.
25. Hindsight bias is the tendency to perceive events that have occurred as being more predictable than they were at the time.¹
26. I have had the opportunity to review all the available information regarding Ashleigh’s care and treatment, and to obtain information from sources not available to the individual clinicians as they made decisions regarding Ashleigh’s care on 27 January 2019.
27. I have taken this into account in reaching my findings in this case.
28. My findings appear below.

¹ www.britannica.com/topic/hindsight-bias

ASHLEIGH REBECCA HUNTER

29. Mrs Kellie Hunter, Ashleigh’s mother, and Mr Kimberley Hunter, Ashleigh’s father, provided significant insight into their daughter’s life throughout the coronial investigation into her death. Their enduring love for their daughter was obvious in all of their dealings with the Coroner’s Court of Western Australia, and was particularly demonstrated in their thoughtful, respectful, and helpful participation throughout the inquest process.
30. Their information regarding Ashleigh’s background and personality has assisted me in understanding who she was and brings with it the human perspective that is markedly important when the circumstances of the death of a deceased person are being examined. Ashleigh was a vibrant young person, and it is important to acknowledge, in the midst of the detail concerning the last day of her life, that she lived a life that was joyful and meaningful, that she overcame difficulty and sorrow, that she was intelligent and thoughtful, and that she brought a lot of happiness to many people.
31. Ashleigh was born in Three Springs, Western Australia, on 18 October 1993. She grew up in a loving family environment and was described by them as having a *“heart filled with kindness and compassion,”* with an *“affectionate nature, unwavering loyalty, quirky sense of humour and an infectious giggle that endeared her to all who knew her.”*²
32. Ashleigh attended Geraldton Grammar School, where she formed lasting friendships and where it is clear her kind heart and friendly disposition left a profound impact on those she met.³
33. From a young age Ashleigh had a strong sense of social justice. She formed deep and lasting friendships with persons of diverse backgrounds and experiences. The positive impacts that she made are evidenced by a range of communications and artwork from her friends who have felt her love, loyalty and support over many years. Along with her family, they miss her deeply.⁴
34. Music was an important part of Ashleigh’s life, and she played piano and guitar. As a young adult she was fiercely independent and worked hard to achieve her goals. After leaving school she worked as a receptionist,

² Exhibit 15.

³ Ibid.

⁴ Ibid.

completed a Certificate IV in accounting at TAFE, and attended Geraldton University Centre to complete her degree in accounting remotely through the University of Queensland. She performed very well academically and completed that degree by the age of 22 years.⁵

35. Ashleigh gained employment as an accountant and excelled in her work for her clients, showing intellect, courage, good judgement and initiative. I have no doubt that had she lived, she would have continued to succeed in her chosen profession and make a sustained and important contribution to it.⁶
36. In 2010, Ashleigh met the man that in April 2017, became her husband. Over the period of their relationship, they enjoyed many happy years together. However, in early 2019, Ashleigh and her husband separated, and ultimately divorced. Understandably the separation was difficult for them both. As they navigated the separation, they ultimately rebuilt an amicable and supportive friendship.⁷
37. In about May 2019, Ashleigh commenced a new relationship. Ashleigh's friends observed that she appeared happy. Ashleigh and her partner lived together for about seven months prior to her death.⁸
38. On 25 December 2019, Ashleigh drove to Perth from Geraldton to meet her partner for the Christmas holidays. They had rented an Airbnb apartment in East Perth, and were planning to see friends, and go to a festival together the following day. They did not end up going to the festival on 26 December, but they spent time with friends during the day, and went out together that night, coming home in the early hours of the morning.⁹
39. It is clear from the evidence before me that Ashleigh took some illicit drugs over this period and self-evidently, she should not have done so. They did not contribute to the cause of her death, but her admission to having taken them impacted upon some of the treatment and care that she received from clinicians.¹⁰

⁵ Ibid.

⁶ Ibid.

⁷ Exhibit 1, tab 7; Exhibit 15.

⁸ Exhibit 1, tab 7.

⁹ Ibid.

¹⁰ Exhibit 1, tab 5.

40. While it was not the first time that Ashleigh ever took any illicit drugs, she was not a habitual user, and I do not necessarily find she was a recreational user either. It does not characterise her as a person; she led a fulsome and productive life. If her parents had known she was taking drugs, they would have, with compassion and unwavering support, taken all reasonable steps to lead her away from them.¹¹
41. On the morning of 27 December 2019, at approximately 10.30 am, Ashleigh woke up feeling unwell. Just over two hours later, she was rushed to Royal Perth Hospital in an ambulance. Less than three hours after that, at 3.08 pm that same day, Ashleigh died at Royal Perth Hospital.
42. Ashleigh's death has left her family heartbroken and in mourning. Her death is a devastating loss to them and to the community as a whole.

MENINGOCOCCAL INFECTION GENERALLY

43. Ashleigh died from meningococcal infection, which is a bacterial infection.
44. The bacterium *Neisseria meningitidis* (also known as meningococcus) is a human pathogen, carried in the upper airways (the throat) of between 10 to 30% of the population.¹²
45. Meningococcus is a gram-negative diplococcus (which means it is a roundish bacteria seen in pairs that stain pink rather than purple with Gram's staining method). There are 13 or more serogroups, of which five serogroups can cause disease in humans (A, B, C, Y and W).¹³
46. Generally, exposure to meningococcus results in the colonisation of the throat for days or weeks, without causing disease at all, or causing minor influenza like symptoms. This means that people can carry it in the community without having any symptoms or appearing unwell.¹⁴
47. However, in some few cases, the bacteria (meningococcus) become invasive. This means that the meningococcus moves from the throat into either, or both:

¹¹ Exhibit 1, tabs 5 to 7.

¹² Exhibit 1, tabs 15 ad 16.

¹³ Exhibit 1, tab 15.

¹⁴ Exhibit 1, tabs 15 and 16.

- a) The blood stream, causing blood poisoning (this causes meningococcaemia, a form of septicaemia, which can trigger sepsis); and/or
 - b) The lining of the brain and spinal cord (this causes meningitis).¹⁵
48. It is these invasive meningococcal disease cases that are serious illnesses that can quickly cause death, and it was an invasive case of meningococcal disease that ultimately caused Ashleigh’s death.
49. Meningococcus is transmitted by contact with respiratory droplets from someone with the infection in their upper airways, and accordingly, usually requires close, direct contact to spread. In that respect, meningococcus is not an easily transmissible infection, being more likely to be spread between those living together, in sexual contact, or living in crowded conditions, such as a dormitory. Nonetheless, most cases are spread without known contact in the community.¹⁶
50. The age groups at the highest risk from meningococcus are ages 3-12 months, followed by ages 1-4 years, and then 15-19 years. Vaccination programs have had significant success in reducing the rates of meningococcal disease in Australia, but outbreaks continue to occur.¹⁷

WHAT IS “RAMPING”?

51. The “*Ramp*” in connection with Royal Perth Hospital refers to the corridors at the front of the ED. It is used for the placement of patients whose care and treatment is deemed to be less urgent, when the ED is overcrowded. They are referred to as “*ramped cases*.”¹⁸
52. The court is informed that the term “*ramping*” is being phased out by the Department of Health and replaced with terminology that endeavours to delineate the transfer of care as between St John Ambulance WA Ltd (St John Ambulance) and the hospital.

¹⁵ Exhibit 1, tab 16.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Exhibit 1, tab 17.

53. It is becoming replaced by the concept of “*Extended Transfer of Care*”, as outlined by the East Metropolitan Health Service in its report to the coroner.¹⁹
54. The Director-General of the Department of Health also informs the court that the WA health system no longer uses “*ramping*” as a publicly reported indicator and instead uses rates of compliance with “*Ambulance Transfer of Care*.”²⁰
55. Associate Professor Paul Bailey (Professor Bailey) the Medical Director at St John Ambulance prepared a report for the coroner. He also explained that St John Ambulance also prefer to use the term “*delayed or extended transfer of care*” instead of “*ramping*”.²¹
56. Nonetheless, the witnesses at the inquest generally referred to “*ramping*” in connection with Ashleigh’s treatment and care on 27 December 2019, and therefore an exploration of the meaning of ramping is important. It will be seen that Ashleigh’s Adult Triage Nursing Assessment (Triage Notes) are clearly endorsed with the type-written word “*Ramp*” (meaning she was triaged to the Ramp) denoting its evident usage, in practice, and as a concept, at the material time.²²
57. This part will address the different characterisations given to “*ambulance ramping*” and “*patient ramping*.” The differences arise due to the perspective from which the delay is being analysed.
58. In both cases the “*ramping*” occurs primarily due to ED overcrowding, and specifically due to the lack of treatment spaces (beds) for the patient at the hospital. It means there is going to be a delay in the treatment of the patient while that patient is “*ramped*” outside the ED, waiting for a bed in the ED.
59. The East Metropolitan Health Service proffers a definition of “*ED overcrowding*” based upon that given by the Australasian College for Emergency Medicine: “.... *the situation where ED function is impeded because the number of patients exceeds ...the physical and/or staffing capacity of the ED.*” I have adopted this definition for the purposes of considering this problem in this finding.²³

¹⁹ Exhibit 1, tab 13.1; Exhibit 13.

²⁰ Exhibit 1, tab 22.

²¹ Exhibit 1, tab 13.1.

²² Exhibit 1, tab 21.7.

²³ Exhibit 13.

60. One of the witnesses has referred to ED overcrowding as a “*terrible epidemic*” and a *pressing threat*”. Another witness cautioned that it may become an: “*endemic way of operating the acute health system.*” Not unsurprisingly, overcrowded EDs have been associated with increased patient mortality. This is addressed in more detail later in this finding under the heading: *ED overcrowding*.²⁴

Ambulance ramping

61. The term “*ambulance ramping*” characterises the delay from the perspective of the availability of ambulances to respond to other medical emergencies in the community. There are evident difficulties in that the ambulance officers are required to stay on the hospital premises to continue to care for the patient (on the Ramp) until the care can be handed over to the hospital. There is a risk of ambulance staff being asked to perform clinical care outside their training and guidelines. During this waiting period, the ambulance and ambulance staff are not available to respond to other medical emergencies in the community.²⁵
62. St John Ambulance calculate the “*transfer of care*” period (essentially the ambulance ramping period) as the time interval between the arrival of the patient at the ED and the transfer of the patient from the clinical care of the ambulance staff to the ED staff. A delayed transfer of care occurs when this process takes longer than 30 minutes (most commonly due to the lack of an appropriate clinical space within the ED). The Director-General of the Department of Health uses the same time frames when assessing delay.²⁶
63. In Ashleigh’s case, it will be seen in this finding that she presented to Royal Perth Hospital at approximately 1.16 pm and that her care was handed over by the St John Ambulance officers to the Ambulance Bay Nurse at 1.40 pm (according to St John Ambulance) or 1.45 pm (according to Royal Perth Hospital).
64. Utilising the above time frames, the transfer of Ashleigh’s care took between 24 and 29 minutes, being within one and six minutes short of the 30-minute threshold.

²⁴ Exhibit 1, tabs 15 and 17.

²⁵ Exhibit 1, tabs 13, 5 and 17; Exhibit 13.

²⁶ *Ibid.*

65. Professor Bailey comments on Ashleigh’s “*transfer of care*” having regard to the St John Ambulance threshold, namely that there is no “*delayed transfer*” if the care is transferred within 30 minutes or less. On that basis he reports that there was no delayed transfer of care in Ashleigh’s case, from which it is posited that Ashleigh was not “*ramped.*” Professor Bailey does, however, acknowledge that Royal Perth Hospital may use a different calculation for “*ramping*” having regard to the time that Ashleigh then spent in the Ambulance Bay area (after handover to the Ambulance Bay Nurse) before being admitted into the ED.²⁷
66. The 30-minute threshold is a parameter that has been applied by St John Ambulance and the Department of Health, essentially a time frame after which they consider that there has been a delayed transfer of care, primarily for the purposes of their records and administration.
67. Because Ashleigh was in the care of St John Ambulance for less than 30 minutes (either 24 minutes or 29 minutes) it is suggested that she was not “*ramped.*”²⁸
68. I am not bound by that 30-minute time frame when considering whether there was in fact a delay in the transfer of Ashleigh’s care and whether she was “*ramped*” or “*on the Ramp*”, these terms being frequently used during the inquest.
69. I am satisfied that within the context of ambulance ramping, Ashleigh was triaged to the Ramp and kept on the Ramp within the care of St John Ambulance officers for between 24 and 29 minutes.
70. The question of whether technically, her care was “*ramped*” because she was between one and five minutes short of the 30-minute threshold is not relevant to the inquest, though it is acknowledged that within the parameters set by them, she is not reported by St John Ambulance and or Royal Perth Hospital as a “*ramped case.*”

²⁷ Ibid.

²⁸ Ibid.

Patient ramping

71. The term “*patient ramping*” encompasses a longer period, commencing from the patient’s arrival at the hospital and ending only when the patient is admitted into the ED. This concept has regard to the entire time the patient needs to wait before commencement of their clinical care at the hospital, including as will be seen later in this finding, transfer from the Ramp to the Ambulance Bay (before admission to the ED). The time spent outside the ED may carry a range of risks for the patient.²⁹
72. Dr David McCoubrie, Director of Emergency Medicine at Royal Perth Hospital (Dr McCoubrie) introduced the concept of “*patient ramping*” in his report to the coroner. It encompasses the longer time period referred to immediately above, irrespective of whether the St John Ambulance staff have been permitted to leave.³⁰
73. Utilising the patient ramping parameters, it becomes necessary to add up all of the periods that Ashleigh was waiting, before being admitted to the ED, as follows:
- a) The period of time taken for Ashleigh’s care to be transferred to Ambulance Bay Nurse at 1.40 pm or 1.45 pm (being a delay of between 24 and 29 minutes from when she presented at approximately 1.16 pm); plus
 - b) The period of time that Ashleigh then remained in the Ambulance Bay until 2.16 pm, when she was admitted into the ED (which when added to the above period, becomes a delay of approximately one hour).³¹
74. The one-hour delay is a more accurate representation of the time that Ashleigh waited, in order to gain access to the ED. In this regard I agree with Dr McCoubrie’s comments concerning patient ramping (as opposed to ambulance ramping): “*This is a more accurate marker of the immense delays to gain access to an ED cubicle for cases arriving by Ambulance.*”³²

²⁹ Ibid.

³⁰ Exhibit 1, tab 17.

³¹ Ibid.

³² Ibid.

75. Whilst the risks to patients are evident, regard should also be had to the hospital clinicians who work under these strained circumstances, all the time endeavouring to provide the best and most appropriate care for their patients. As stated by Dr McCoubrie: “*It is heart breaking for staff [to] work in a situation of such immense overcrowding and to witness extreme delays in access to care often amounting to many hours.*”³³
76. I am satisfied that, within the context of patient ramping as described, Ashleigh’s care was “*ramped*” for approximately one hour.

EVENTS LEADING TO DEATH

The days prior to death

77. On 25 December 2019, Ashleigh drove to Perth from Geraldton to meet her partner for the Christmas holiday. They met at their rented Airbnb apartment in East Perth that afternoon or evening.³⁴
78. On 26 December 2019, Ashleigh and her partner went to visit Ashleigh’s close friend from school days. He was hosting a Christmas and Boxing Day party for his family and friends. Ashleigh and her partner arrived at his house at about 4.30 pm. Her friend recalled that Ashleigh appeared to be her normal self, happy and bubbly.³⁵
79. Her friend saw that she consumed some alcohol, but did not appear to be intoxicated at any stage. He did not see her use illicit drugs at that party.³⁶
80. After about an hour, at approximately 5.30 pm, Ashleigh and her partner left the party as they were planning to see other friends before going out to a festival. Ashleigh’s friend says both Ashleigh and her partner seemed happy and ready to have a fun night out at their festival. Ashleigh’s friend saw no signs of Ashleigh appearing sick at that time, and Ashleigh did not say anything to him that suggested she was unwell or in pain.³⁷
81. After leaving the party, Ashleigh and her partner returned to the Airbnb where they had a few more alcoholic drinks. While at the Airbnb, they decided not

³³ Ibid.

³⁴ Exhibit 1, tab 6.

³⁵ Exhibit 1, tab 7.

³⁶ Ibid

³⁷ Ibid.

to go out to the festival after all. Instead, at about 6.00 pm, Ashleigh and her partner took MDMA (Ecstasy). Ashleigh seemed fine after taking MDMA, and showed no side effects that were discernible to her partner.³⁸

82. Ashleigh and her partner decided to go to the afterparty of the festival, despite not attending the festival itself. The afterparty was held at Jack Rabbit Slims nightclub in Perth. They went and had an alcoholic drink at the nightclub, before going back to their Airbnb.³⁹
83. They then decided to walk to the Burswood Casino. They arrived there at about 1.30 am on 27 December 2019, where they placed some bets, and had an alcoholic drink. They left Burswood Casino about one hour later, taking a taxi back to Jack Rabbit Slims nightclub.⁴⁰
84. They left the nightclub at about 3.30 am, walking back to the Airbnb. Ashleigh was walking and skipping along, and nothing appeared untoward to her partner.⁴¹
85. Ashleigh and her partner arrived back at the Airbnb apartment at about 5.00 am on 27 December 2019. Ashleigh told her partner she was “*knackered*” which is entirely understandable given the late night, so while this might indicate the first sign of her illness, that is not necessarily established. Ashleigh had a hot bath, before getting into bed and falling asleep. At this stage (other than being tired) she did not say anything to her partner about feeling unwell.⁴²

Ashleigh becomes unwell

86. Ashleigh woke up at 10.30 am on 27 December 2019, getting out of bed and going to the bathroom, where she ran another hot bath and got in. Her partner went to check on her, and Ashleigh told him that she did not feel well. Her partner asked what she needed, and Ashleigh asked for some water, which he brought to her.⁴³

³⁸ Exhibit 1, tab 6.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Exhibit 1, tabs 6 and 7.

⁴² Exhibit 1, tab 6.

⁴³ Ibid.

87. Ashleigh's partner then helped her out of her bath and back to bed. Ashleigh went from the bed to the toilet and back a few times after that, looking increasingly unwell. Ashleigh's partner became worried, and asked if he should call an ambulance, but Ashleigh refused.⁴⁴
88. Over the next two hours, Ashleigh started to complain of pain to her body, especially when she moved. She told her partner that she had pain all over her body and a pain to her back. Initially, however, Ashleigh felt it was the flu and despite the pain, claimed to be "*fine*."⁴⁵
89. Eventually, the pain became so bad that Ashleigh could hardly move. She appeared to her partner to be unsteady on her feet, and was coming in and out of consciousness, not responding normally to him. At that point, Ashleigh agreed to her partner calling for an ambulance.⁴⁶

St John Ambulance is called

90. Records reflect that at 12.39 pm, St John Ambulance received a call from Ashleigh's partner asking that an ambulance attend the Airbnb location in East Perth, for Ashleigh. He told the dispatch officer that he was very scared for Ashleigh. He advised the dispatch officer of episodes of Ashleigh being conscious and breathing, also being unconscious, with near fainting, of not being alert and of having collapsed on the toilet. This was replicated in the ambulance callout instructions.⁴⁷
91. An ambulance was promptly dispatched as a Priority 1 less than one minute after the call was received by St John Ambulance. This ambulance was crewed by two officers: the paramedic Fiona Sutton, who was the driver, and the ambulance officer, David Kenny, who was the attendant (together in this finding they are referred to as the ambulance officers).⁴⁸
92. This arrangement meant that Mr Kenny's role was to take the lead with questioning, observations, triage, handover, and escalation, although Mr Kenny and Ms Sutton operated as a team.⁴⁹

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Exhibit 1, tabs 10 and 12.

⁴⁸ Ibid.

⁴⁹ Exhibit 1, tabs 11 and 12.

93. Turning back to the ambulance call, while Ashleigh's partner was on the phone to 000, he left Ashleigh on the toilet and raced outside to check the Airbnb address. Coming back inside, he found Ashleigh on the bathroom floor and helped her back to the bed. At this stage Ashleigh was moaning in pain but able to talk. Her partner observed that she was cool to the touch.⁵⁰
94. The ambulance arrived at the Airbnb at 12.43 pm, less than three minutes after the ambulance officers were allocated the call, but there was some difficulty finding and then accessing the Airbnb unit, due to security measures. Ashleigh's partner went downstairs to let the ambulance officers in, and they entered the apartment some time shortly after 12.47 pm.⁵¹
95. I am satisfied that St John Ambulance responded swiftly and appropriately to the 000 call made in this case.
96. It is unfortunate that there was some confusion over the correct address, and the best way to enter an unfamiliar set of apartments being rented by Ashleigh and her partner. However, I am satisfied that everyone involved acted reasonably, and as quickly as they possibly could, to ensure that emergency services reached Ashleigh in the hope that they would be able to provide lifesaving care.
97. This is reflected in the allocation of Priority 1 (being attendance with lights and sirens, as quickly as possible), the immediate departure by Ms Sutton and Mr Kenny (within one minute) after allocation of the call, and their evidence that they travelled directly to the address and called Ashleigh's partner directly to get accurate information to enter the property, and entering once Ashleigh's partner was able to let them in.

St John Ambulance assessment upon arrival

98. Ashleigh's partner met the ambulance officers at the front of the building where the Airbnb accommodation was, and led them inside, to the 6th floor apartment at approximately 12.47 pm.
99. Mr Kenny described Ashleigh's partner as "*highly animated*" and "*not being able to stand still and hold a...conversation*" when they met at the front of the building. Mr Kenny noted that while this potentially could have been a

⁵⁰ Ibid, Exhibit 1, Volume 1, Tab 6.1, page 6.

⁵¹ Exhibit 1, Volume 1, Tab 10.

response to the stressful situation Ashleigh's partner found himself in, Mr Kenny's perception was that maybe there was drug use on the part of Ashleigh's partner.⁵²

100. When the ambulance officers entered the apartment, Ashleigh was wet and unclothed on the bed with no blankets or covers on her, and with the air conditioning on.⁵³
101. Mr Kenny completed a bedside assessment of Ashleigh, where he described Ashleigh as "*grimacing*", but able to respond to his questions. To him, she did not appear to be experiencing an altered conscious state. Ashleigh was able to accurately respond to Mr Kenny's questions, stating the day, month, and the year. She was therefore described as "*oriented*."⁵⁴
102. Ashleigh told Mr Kenny that she was experiencing severe, 10 out of 10 pain from approximately 10.30 am that morning, alternating between her abdomen, back, chest and legs. He recalled Ashleigh was not screaming in pain and was able to answer his questions about how she was feeling. He described this as Ashleigh being "*easily distracted*" from her pain. As will be seen in this finding, this is terminology that is sometimes used by clinicians when they question the true severity of the pain levels described by a patient.⁵⁵
103. When pain relief was discussed, Ashleigh told Mr Kenny that she had taken paracetamol and ibuprofen. Mr Kenny did not recall what Ashleigh said about when she had taken that medication, and the time was not noted in the St John Ambulance records, however, these medications were detected in Ashleigh's system after her death.⁵⁶
104. Mr Kenny had regard to the information about Ashleigh having recently taken pain relief and, given how close they were to Royal Perth Hospital, he did not consider further pain relief, such as the far stronger opioid medication, fentanyl, for example, to be suitable at that stage.⁵⁷

⁵² ts 18 to 19.

⁵³ ts 19.

⁵⁴ Exhibit 1, tab 10.; ts 19 to 20.

⁵⁵ Exhibit 1, tab 10; ts 27 to 29.

⁵⁶ Exhibit 1, tabs 5 and 10; ts 27 to 29.

⁵⁷ ts 29 to 30; ts 79.

105. Ashleigh also told Mr Kenny that she had experienced nausea and had one episode of vomiting and diarrhoea.⁵⁸
106. Mr Kenny took a set of observations of Ashleigh during that initial assessment to try to build a picture of what was happening with Ashleigh, including taking her heart rate, pulse oximetry, blood pressure, temperature, and blood sugar levels.⁵⁹
107. Mr Kenny noted that Ashleigh had a patent airway, meaning she was having no difficulty breathing, however, her breathing was shallow and rapid, which suggested to Mr Kenny that either Ashleigh was in distress, or possibly that some sort of infective process was taking place. Ashleigh's radial pulse was weak and rapid, and she was pale, damp and cool to the touch. The 3-lead ECG monitoring showed tachycardia with normal sinus rhythm (this refers to a fast heart rate, but no arrhythmia).⁶⁰
108. Ashleigh informed Mr Kenny that she had consumed some illicit drugs, and he recorded: "*2 caps of MDMA and an unknown quantity of methamphetamine last pm.*" It was appropriate to make this record.⁶¹
109. Mr Kenny was aware that the initial dispatch had said that Ashleigh was collapsed on the toilet, but when they arrived, she was on the bed. He considered it to be a reassuring sign, that Ashleigh was able to move to the bed.⁶²
110. Mr Kenny and Ms Sutton helped Ashleigh to dress and used a wheelchair to transport her to the ambulance. Ashleigh was able to move herself from the wheelchair to the ambulance stretcher, though she was not entirely steady on her feet.⁶³
111. Before the ambulance departed, commencing from 1.09 pm, Ashleigh was attached to St John Ambulance Corpuls monitoring equipment. This equipment continually displayed Ashleigh's heart rate and pulse oximetry, and intermittently measured her blood pressure.⁶⁴

⁵⁸ Exhibit 1, tab 10; ts 18 to 20.

⁵⁹ ts 21.

⁶⁰ Exhibit 1, tabs 10, 11 and 16.

⁶¹ Exhibit 1, tab 10.

⁶² ts 20 to 21.

⁶³ Exhibit 1, tabs 11 and 12; ts 34; ts 80.

⁶⁴ Exhibit 1, tabs 11, 12 and 28.

112. I have considered the quality of the St John Ambulance officers' attendance upon Ashleigh at the Airbnb. I take into account the evidence of Mr Kenny, Ms Sutton and also that of Mr Joel Moore, Acting Head of Department for Metropolitan Ambulance Operations. That evidence shows that the role of the paramedic or ambulance officer focusses on initial treatment and assessment of a patient and transport to a care facility. It is not their role to diagnose the patient.⁶⁵
113. I have taken account of the expert evidence of the infectious disease physician and microbiologist Dr David Speers (Dr Speers) following his review of the records. Dr Speers noted that the St John Ambulance arrived promptly and that on assessment the ambulance officers found Ashleigh to be alert, well oxygenated, and with a maintained blood pressure. After approximately 29 minutes at the scene, they left with Ashleigh for Royal Perth Hospital. In Dr Speers' opinion: "*This arrival, assessment and transfer to hospital was prompt and based on the presentation was appropriate and reasonable.*"⁶⁶
114. I accept the submission from St John Ambulance, through their lawyers Moray and Agnew, that the role of the paramedics is to undertake assessment and treatment of a patient, for transport to a care facility, usually a hospital. The paramedics' role is focussed on short term care. It is the role of the hospital to undertake comprehensive assessment and diagnosis and provide care and treatment.⁶⁷
115. I am satisfied that the St John Ambulance officers attended to Ashleigh in a timely manner, that they conducted an appropriate assessment of Ashleigh, and that the salient details concerning Ashleigh's condition, her history and her observations, were properly recorded on the St John Ambulance Patient Care Record (SJA Patient Record).⁶⁸

St John Ambulance conveys Ashleigh to Royal Perth Hospital

116. Records reflect that Ashleigh arrived by ambulance at Royal Perth Hospital at approximately 1.16 pm.⁶⁹

⁶⁵ ts 21;ts 46; ts 79; ts 331.

⁶⁶ Exhibit 1, tab 16.

⁶⁷ Ibid.

⁶⁸ Exhibit 1, tab 10.

⁶⁹ Exhibit 1, tab 10.

117. Dr McCoubrie reported to the coroner that at the time that Ashleigh arrived at the hospital, the ED was already ramping ambulances. They had a very high number of patients coming into the ED that day. Ashleigh was patient number 124 of 259 for that day (where the average was 205 per day).⁷⁰
118. Dr McCoubrie provided the court with the *Emergency Department: Triage and Waiting Room Standard Operational Procedure* (ED Procedure). It references the ED Capacity Procedure to be followed when the ED is at capacity and there are no cubicles available for patient care. It includes an escalation system for hospital wide alert and action and direction for management of patients by the Triage Nurse.⁷¹
119. The ED Capacity Procedure references the Triage Codes from the *Guidelines on the Implementation of the Australasian Triage Scale in Emergency Departments* (ATS Guidelines) and includes the following:
- a) Patients with ATS 1 or 2 (Triage Code 1 or 2) are to be triaged into the ED regardless of ED occupancy;
 - b) Patients who are ATS 3-5 (Triage Code 3 to 5) and clinically suitable are to be triaged to the Waiting Room location (whether they self-present or are brought in by ambulance);
 - c) Patients who are ATS 3-5 (Triage Code 3 to 5) and clinically unsuitable for the Waiting Room are to be placed in the Ambulance Bay 1-4 location, into the care of the nurse or St John Ambulance officers;
 - d) When the Ambulance Bay 1-4 locations are full patients who are ATS 3-5 (Triage Code 3 to 5) are to be triaged to the Ramp location under the care of the St John Ambulance officers;
 - e) The medical accountability for these patients belongs to the EPiC/ERiC (the Emergency Physician or Registrar in Charge) unless otherwise negotiated and until they are allocated a cubicle within the ED.⁷²

⁷⁰ Exhibit 1, tab 17.

⁷¹ Exhibit 1, tabs 14 and 17.

⁷² Exhibit 1, tab 17.

120. On arrival at Royal Perth Hospital, the ED Capacity Procedure had been implemented, and Ashleigh was transferred from the ambulance into the ED triage area on a St John Ambulance stretcher. Mr Kenny waited with Ashleigh for the Royal Perth Hospital Triage Nurse to arrive. Throughout her time at the Royal Perth Hospital site, until St John Ambulance handed Ashleigh's care over to the nursing staff at the Ambulance Bay, Ashleigh remained attached to St John Ambulance's Corpuls monitor.⁷³
121. Ashleigh waited for a period of approximately 13 minutes for the Triage Nurse to arrive and during this time she remained in the care of the St John Ambulance officers. The St John Ambulance officers are not trained in triage and that is not their function.

Ashleigh is triaged to the "Ramp"

122. Triage is usually the first point of public contact with an ED and should generally take two to five minutes. The Triage Nurse does not make a diagnosis of the patient and is guided by the ATS Guidelines in allocating a Triage Code. The Triage Nurse's role is to ascertain a patient's clinical urgency, namely what is a safe period of time that a patient can wait before they see a doctor. The outcomes of the triage are recorded on the patient's Triage Notes.⁷⁴
123. After her arrival at Royal Perth Hospital, Ashleigh was triaged by the Triage Nurse Ms Anthea Walthew (Nurse Walthew). Nurse Walthew had been informed, on arriving for her shift earlier on that day, that there were not enough ED cubicles, so they were "*ramping patients*" who required further care.⁷⁵
124. Nurse Walthew therefore followed the ED Capacity Procedure Policy of the East Metropolitan Health Service, which was to be adopted during periods of ED overcrowding. It guided the placement of the patient depending on the Triage Code allocated to that patient.⁷⁶

⁷³ Exhibit 1, tab 12; ts 28.

⁷⁴ [G24_04 Guidelines on Implementation of ATS Jul-16.aspx \(acem.org.au\)](#) (as applicable at February 2019) ts 106 to 107.

⁷⁵ Exhibit 5.

⁷⁶ Exhibit 1, tab 17.

125. Nurse Walthew allocated a Triage Code of 3 for Ashleigh, meaning that her assessment and treatment by a doctor within the ED should start within 30 minutes. In fact, as will be seen later in this finding, Ashleigh was not assessed by a doctor until approximately one hour after her arrival at Royal Perth Hospital (and approximately 45 minutes after triage).
126. With the ED Capacity Procedure in mind, Nurse Walthew triaged Ashleigh to the “*Ramp*” and that word appears typed on the front of Ashleigh’s Triage Notes. Due to her condition, needing to lie down with the Corpuls monitor, it was unsuitable to place her in the ED waiting room.⁷⁷
127. I turn to the Triage Notes made by Nurse Walthew. They are time stamped for “*triage time in*” at 1.29 pm, meaning Ashleigh’s triage commenced approximately 13 minutes after the ambulance arrived at Royal Perth Hospital. Triage “*time out*” is recorded as 1.32 pm, meaning that Ashleigh’s triage took approximately three minutes, though Nurse Walthew felt it probably took a bit longer than that because she recalled seeing Ashleigh after printing off the Triage Notes at 1.32 pm.⁷⁸
128. Triage typically takes between two and five minutes and does not always involve the taking of formal physiological observations. Under the ATS Guidelines, vital signs should be measured if required to estimate urgency, or if time permits.⁷⁹
129. Nurse Walthew did not see the SJA Patient Record at the time she performed Ashleigh’s triage, though it appears that some or all of the following observations taken at 1.13 pm by St John Ambulance were communicated to her:
- a) Heart rate 116 beats per minute, blood pressure 107/75, respiratory rate 24 breaths per minute, oxygen saturation 100%, temperature 35.9, Glasgow Coma Scale 15.⁸⁰

⁷⁷ Exhibit 1, tab 21.7; Exhibit 5; [G24_04_Guidelines_on_Implementation_of_ATS_Jul-16.aspx\(acem.org.au\)](#) (as applicable at February 2019)

⁷⁸ Exhibit 1, tab 21.7.

⁷⁹ [G24_04_Guidelines_on_Implementation_of_ATS_Jul-16.aspx\(acem.org.au\)](#) (as applicable at February 2019)

⁸⁰ [G24_04_Guidelines_on_Implementation_of_ATS_Jul-16.aspx\(acem.org.au\)](#) (as applicable at February 2019); Exhibit 1, tabs 10 and 17.1.4.

130. St John Ambulance had also taken another set of observations at 1.15 pm as follows: heart rate 120 beats per minute, blood pressure 103/73, respiratory rate 24 breaths per minute, oxygen saturation 99%, Glasgow Coma Scale 15. Other than a slight increase in heart rate, and the fact that temperature was not taken at 1.15 pm there is no material difference between the observations taken at 1.13 pm and those taken at 1.15 pm, and some or all of the latter may also have been communicated to Nurse Walthew.⁸¹
131. Nurse Walthew's entries in the Triage Notes record that Ashleigh reported a pain score of 10 out of 10. Under presenting history on the Triage Notes it was recorded that Ashleigh "*used MDMA and Meth last night*", that she had poorly localised pain in multiple regions, with the words: "*easily distracted.*" Nurse Walthew felt that Ashleigh's pain essentially did not warrant 10 out of 10 pain score (though she recorded those numbers as that is what Ashleigh said). In fact, Nurse Walthew's own view was that Ashleigh's pain was seven out of 10, and I will return to this later in my finding.⁸²
132. Had Nurse Walthew allocated a Triage Code of 2, this would have resulted in Ashleigh being more or less immediately taken into the ED. Essentially under the ATS Guidelines a Triage Code of 2 would ordinarily require assessment and treatment within 10 minutes (with assessment and treatment often being simultaneous).⁸³
133. In terms of the decision making, the difference between allocating a Triage Code of 2 and a Triage Code of 3 can be finely balanced, however the effect upon the patient can be significant because "*Code 3*" is the cut-off point at which the patient's care can then be "*ramped*". Put another way, if Ashleigh had been allocated a "*Code 2*" she would not have been eligible to be "*ramped*".
134. On this occasion Nurse Walthew allocated a Triage Code of 3 and through her lawyer the ANF she provided the following reasons for her decision:

⁸¹ Exhibit 1, tab 10.

⁸² Exhibit 1, tab 21.7; ts 113; ts 120; ts 135;

⁸³ [G24_04_Guidelines_on_Implementation_of_ATS_Jul-16.aspx \(acem.org.au\)](https://www.acem.org.au/G24_04_Guidelines_on_Implementation_of_ATS_Jul-16.aspx) (as applicable at February 2019)

- a) There was no sign of meningism, Ashleigh was not photophobic under the fluorescent lights, she had a Glasgow Coma Scale of 15 and she was not delirious or febrile;
 - b) Ashleigh exhibited no signs of lethargy, in fact she moved herself around frequently;
 - c) Ashleigh was haemodynamically stable, her blood pressure was within normal parameters for a female of that age, situation and physique and her pulse was slightly tachycardic;
 - d) Peripherally, Ashleigh was still pink, nurse Walthew felt her wrist and it was coolish warm, but warm;
 - e) Nurse Walthew does not recall being told that Ashleigh was tachypneic with a respiratory rate of 22 breaths per minute, although she does recall her having a respiratory rate of perhaps 20, but no work of breathing;
 - f) Nurse Walthew did not discern any shortness of breath, as Ashleigh was talking in full sentences;
 - g) There were no clear indicators of meningococcal disease, no immediate life threat, and no paranoia from drug use; and
 - h) While Ashleigh's self-reported pain score was 10 out of 10, based on Nurse Walthew's experience and clinical judgment of Ashleigh at the time she presented to triage, her assessment was that Ashleigh was in moderately severe pain.⁸⁴
135. A number of aspects regarding the triage warrant specific consideration, namely the process for taking Ashleigh's blood pressure and pulse rate, and the manner in which Ashleigh's self-reported pain was addressed.
136. I turn first to Ashleigh's pulse rate and blood pressure. When the St John Ambulance officer initially took the observations at Ashleigh's Airbnb, he noted that Ashleigh had a weak, rapid radial pulse and that her blood pressure

⁸⁴ Exhibit 5; ts 106 to 109; ts 123,

was 105/73. This blood pressure was slightly low (and remained relatively consistent during subsequent readings taken by St John Ambulance while Ashleigh was being conveyed to Royal Perth Hospital and while Ashleigh remained on the Ramp at Royal Peth Hospital, the last such reading being taken by St John Ambulance at 1.37 pm).⁸⁵

137. The following is in relation to Ashleigh's pulse rate. The evidence is that Ashleigh was agitated and moving around on the St John Ambulance stretcher when Nurse Walthew went to triage her. For this reason, Nurse Walthew was unable to place an oxygen saturation probe on her, so she did not get a digital reading of Ashleigh's pulse rate. Nurse Walthew reported that she pushed down firmly on Ashleigh's wrist to feel for the radial artery and that she felt a regular and rapid pulse. Nurse Walthew appears to have compared this with the St John Ambulance Corpuls monitor readings on the screen, though there is insufficient clarity on this point.⁸⁶
138. Nurse Walthew's reference at the inquest to Ashleigh's pulse rate potentially being 135 beats per minute suggests (but does not establish) that she may have observed the readings on the St John Ambulance Corpuls monitor screen, because about five minutes after her triage, the Corpuls monitor recorded Ashleigh's pulse as being 137 beats per minute. However, later in her evidence Nurse Walthew indicated that she believed Ashleigh's pulse rate at triage may have been 120 beats per minute. She testified that there was no place to record it on the Triage Notes and that the Corpuls monitor reading was not her reading in any event. She also testified that she would have been assisted by having a better view of the St John Ambulance Corpuls monitor screen. The sharing of the Corpuls monitor information as between St John Ambulance and Royal Perth Hospital is addressed later in this finding as part of *Recommendation 2 – real time access to Corpuls information*.⁸⁷
139. The following is in relation to Ashleigh's blood pressure. There were no mobile manual sphygmomanometers (manual blood pressure monitors) available to Nurse Walthew in the triage area and she therefore estimated Ashleigh's blood pressure by taking her radial pulse (whilst endeavouring to

⁸⁵ Exhibit 1, tab 10.

⁸⁶ Exhibit 1, tab 21.7; Exhibit 5; ts 109; ts 122; ts 133; ts 137.

⁸⁷ Ibid.

limit her arm movement) with the assistance of readings on the screen of Corpuls monitor, watching the screen as she felt for the pulse. Nurse Walthew then checked her blood pressure estimate as against the St John Ambulance information and was satisfied they were compatible. Nurse Walthew considered that Ashleigh's blood pressure (as estimated by her, being 103/73, same as that recorded by St John Ambulance at 1.15 pm) was relatively low but not uncommon for her age and build.⁸⁸

140. I turn now to Nurse Walthew's assessment of Ashleigh's pain, that was reported by Ashleigh to be 10 out of 10. Patients are ordinarily informed that a rating of 10 is the worst pain imaginable. Nurse Walthew, noting that a person's pain score is "*very subjective*", had regard to her prior experiences of patients reporting 10 out of 10 pain but being on their phone talking to friends or looking around.⁸⁹
141. Nurse Walthew felt that Ashleigh was "*easily distracted*" (from her pain) meaning she could readily concentrate on other topics. In her experience patients with 10 out of 10 pain are usually very self-focussed. Taking account of Ashleigh's behaviour, movement, non-verbal cues, and mode of breathing, ultimately Nurse Walthew's clinical judgement was that Ashleigh was in moderately severe pain of seven out of 10 (meaning that while she recorded Ashleigh's response on the triage form as required, she did not believe that Ashleigh was in 10 out of 10 pain). With the benefit of hindsight, she still considers her own assessment of Ashleigh's pain to be fair.⁹⁰
142. The issue concerning the pain score becomes particularly relevant because under the ATS Guidelines, a pain score of 10 out of 10 would have resulted in a Triage Code of 2, a matter that Nurse Walthew accepted. Specifically, a Triage Code of 2 is allocated in instances of "*Very severe pain – any cause*".⁹¹
143. Had Nurse Walthew believed that Ashleigh had 10 out of 10 pain, she would have allocated a Triage Code of 2. In assessing Ashleigh's pain as seven out of 10, it was borderline as to whether she would allocate a Triage Code of 2,

⁸⁸ Exhibit 5; ts 114; ts 118.

⁸⁹ Exhibit 5.

⁹⁰ Exhibit 5; ts 112 to 120.

⁹¹ [G24_04 Guidelines on Implementation of ATS Jul-16.aspx \(acem.org.au\)](#) (as applicable at February 2019); ts 123.

or 3. It is still significant pain. Nurse Walthew decided to err on the side of not allocating a Triage Code of 2, and this is a matter that she now regrets.⁹²

144. A Triage Code of 2 would have seen Ashleigh taken off the Ramp and into the ED, to be assessed and treated within 10 minutes. It may have led to an earlier diagnosis of possible sepsis with the potential for administration of life saving antibiotics. While the outcome can no longer be known, the factors relevant to this question are addressed later in this finding under the heading: *Was Ashleigh's death preventable?*
145. Ashleigh arrived at Royal Perth Hospital at approximately 1.16 pm, she was triaged 13 minutes later at 1.29 pm and she was seen by a doctor approximately 45 minutes later, at 2.16 pm. By that stage she was close to death.
146. Given the markedly different pathways for Ashleigh's treatment (assessment and treatment in 10 minutes (Code 2) and assessment and treatment in 30 minutes (Code 3)) in the context of an emergency, with insufficient ED cubicles, I have considered the question of the appropriateness of Nurse Walthew's Triage Code.
147. The Independent Expert Dr Thomas Hitchcock, ED Consultant (Dr Hitchcock), on his review of the medical records, considered that no life threats were identifiable on presentation and that Ashleigh was appropriately triaged to Code 3, which is to be applied in the case of a potentially life-threatening condition.⁹³
148. On the basis of his review of the documentary evidence the Independent Expert, Associate Professor Mark Putland, Consultant Emergency Physician (Professor Putland) reported to the coroner that a Triage Code of 2 would have been more appropriate on the basis of very severe pain, but that it would not be uncommon for a Triage Code of 3 to be applied.⁹⁴
149. At the inquest Professor Putland, having regard to further information, including Nurse Walthew's evidence, agreed that pain assessment is

⁹² ts 119; ts 135.

⁹³ Exhibit 1, tab 14.1.

⁹⁴ Exhibit 1, tab 15.1.

complicated. It is very subjective, and people would describe their own pain differently. He explained that the triage process, also a subjective process, typically occurs over two to three minutes. It is not the final diagnosis, and he would be loath to second-guess a triage nurse's assessment of pain, noting the specific training that nurses receive in respect of their triage role.⁹⁵

150. Having regard to the evidence of Nurse Walthew, Dr Hitchcock and Professor Putland, I am satisfied that within the limits of the available time and equipment, Nurse Walthew's triage assessment of Ashleigh was appropriate, and her allocation of the Triage Code 3 was not unreasonable at that time.
151. However, it was not the correct Triage Code for Ashleigh's condition. With the benefit of hindsight, Ashleigh's self-reported severe 10 out of 10 pain should have been believed by Nurse Walthew, a Triage Code 2 should have been allocated and Ashleigh should have been taken straight into the ED. As will be seen later in this finding, under the heading: *The focus on illicit drugs*, perspectives regarding the severity of Ashleigh's condition were clouded by Ashleigh's self-reported drug use.

Monitoring of Ashleigh on the "Ramp"

152. Ashleigh remained triaged to the Ramp from 1.32 pm until she was transferred to into the care of the nursing staff of Royal Perth Hospital's Ambulance Bay (ABay) between 1.40 pm and 1.45 pm. During the time that Ashleigh was triaged to the Ramp, she remained attached to St John Ambulance's Corpuls monitor and St John Ambulance remained responsible for her care.⁹⁶
153. On the Ramp, St John Ambulance was required to take Ashleigh's observations every 20 minutes. The purpose is to assist in identifying trends and patients who deteriorate. Self-evidently, the capacity to identify trends and deterioration is dependent upon the training, skill and experience of the St John Ambulance officer.⁹⁷

⁹⁵ ts 412 to 413.

⁹⁶ Exhibit 1, tab 12;

⁹⁷ Exhibit 1, tabs 11, 12 and 22.

154. Records reflect that St John Ambulance took a final set of observations from Ashleigh at 1.37 pm as follows: heart rate 137 beats per minute, blood pressure 105/78, respiratory rate 24 breaths per minute, oxygen saturation 98%, Glasgow Coma Scale 15.⁹⁸
155. By this stage it was evident that Ashleigh's already elevated heart rate was increasing, and it should have been evident that her pain was severe and ongoing. The St John Ambulance officers sought to escalate Ashleigh's care to the A Bay. They noticed that Ashleigh's behaviour began to change. She became more agitated and began rolling around on the St John Ambulance stretcher. There were concerns that she might tip it.⁹⁹
156. The St John Ambulance officers did not consider it appropriate for them to keep monitoring and managing Ashleigh on the Ramp. They approached the A Bay Nurse to request that she be transferred to a bed within the A Bay (which is part of Royal Perth Hospital). This is addressed in more detail below in this finding under the heading: *Handover of Ashleigh's care to Royal Perth Hospital – A Bay*.
157. I am satisfied that the St John Ambulance officers discharged their functions appropriately while they monitored Ashleigh on the Ramp. Given the ED overcrowding, and the outcome of the triage, the choices available to them were limited. They took the reasonable step of expressing their concerns about continuing to monitor Ashleigh on the Ramp and arranged the handover of her care to Royal Perth Hospital.
158. Shortly after this last set of observations taken by St John Ambulance, Ashleigh was transferred into the care of the Royal Perth Hospital nursing staff in the A Bay. No observations were performed on Ashleigh by Royal Perth Hospital until 2.19 pm, a period of 42 minutes. I shall return to this later in this finding.

⁹⁸ Exhibit 1, tab 10.

⁹⁹ Exhibits 11 and 12.

Handover of Ashleigh's care to Royal Perth Hospital - ABay

159. Ashleigh's care was handed over by the St John Ambulance officers to the nursing staff of Royal Perth Hospital at the point at which she was transferred onto a trolley in the ABay. This occurred between 1.40 pm and 1.45 pm. St John Ambulance records it as occurring at 1.40 pm and the Royal Perth Hospital reports it as occurring at 1.45 pm.¹⁰⁰
160. The last set of observations before Ashleigh was placed into the ABay occurred at 1.37 pm. For reasons that will be outlined in this part, no further observations were taken of Ashleigh until 2.19 pm, when she was close to death, a lapse of 42 minutes.¹⁰¹
161. The ABay Nurse that day was the registered nurse David Allen (Nurse Allen). He commenced his shift as the ABay Nurse at approximately 1.00 pm. He was the only ABay Nurse at the material time, and to the best of his recollection this was his first shift as an ABay Nurse. He made retrospective notes of the incident at 5.00 pm the same day (the retrospective notes), and these will be referred to later in the finding.¹⁰²
162. ABay refers to the four holding bays for ambulance arrivals at Royal Perth Hospital. It is not the ED itself. The ABay is located within the ambulance entrance to the ED and next to the Triage Area.¹⁰³
163. Royal Perth Hospital Director of Emergency Medicine Dr McCoubrie reported to the coroner that under certain conditions, Royal Perth Hospital ED nursing staff may accept care for ambulance cases in the ABay, thereby allowing the ambulance crew to leave. It is not a hard and fast rule and there are instances where the St John Ambulance staff remain on site. In the case of Ashleigh, after handover and completion of paperwork, by agreement the ambulance officers left.¹⁰⁴

¹⁰⁰ Exhibit 1, tabs 10 and 17.

¹⁰¹ Exhibit 1, tabs 10 and 21.

¹⁰² Exhibit 1, tab 26; Exhibit 4.

¹⁰³ Exhibit 4.

¹⁰⁴ Exhibit 1, tab 17.1.

164. Nurse Allen explained that the ABay was very new in December 2019, and he believed it had been created to prevent or alleviate ramping. In his experience it was used as a holding bay for patients before they go into the ED to be seen. It was not supposed to be a treatment area and at the material time there was no designated doctor. The purpose was for the ABay nurse to monitor patients and escalate as needed.¹⁰⁵
165. Self-evidently, at the material time the ABay was a staging post, for placement of a patient under the care of the ABay Nurse (once the St John Ambulance officers leave), after the patient comes off the Ramp and before the patient is taken into the ED.
166. Professor Grant Waterer (Professor Waterer) is the Director of Clinical Services of Royal Perth Hospital Group and the Area Director of Clinical Services for East Metropolitan Health Service. At the inquest he explained that clinicians had expressed their concerns to him about the ABay:
- “... they don’t want to have patients in an ABay. They want to be able to bring patients through that need to have [sic] through and see them. Because there is no substitute for proper medical assessment, which you cannot do in those environments.”¹⁰⁶*
167. The subsequent improvements to the functioning of the ABay after Ashleigh’s death, namely the allocation of a designated Consultant and Resident Medical Officer are referred to later in this finding under the heading *Improvements*.
168. Turning back to the events of that day, Nurse Allen recalled that he first saw Ashleigh on the St John Ambulance stretcher in the Triage Area, just by the ambulance entrance to the ED, as he was passing by. Ashleigh was attached to the St John Ambulance Corpuls monitor and he saw that she had a quick heart rate of 135 to 140 beats per minute.¹⁰⁷
169. Either then or shortly afterwards, Nurse Allen went to speak with Ashleigh and the St John Ambulance officers about the situation. He also looked at her Triage Notes. Ashleigh was rolling around the St John Ambulance stretcher

¹⁰⁵ Exhibit 4.

¹⁰⁶ ts 449 to 450.

¹⁰⁷ Ibid.

and complaining of pain in multiple areas including right-sided chest pain. Nurse Allen recalled being informed that Ashleigh had taken Panadol and Ibuprofen but was unsure how this had been administered to Ashleigh.¹⁰⁸

170. One of the St John Ambulance officers asked Nurse Allen whether they could transfer Ashleigh to one of the ABay trolleys because they were concerned her rolling around was going to tip the St John Ambulance stretcher. Due to the potential hazard, Nurse Allen agreed that Ashleigh be moved to the ABay trolley, but he was concerned about it.¹⁰⁹
171. At this point Nurse Allen recalls he spoke with Nurse Walthew to advise he did not think Ashleigh was suitable for the ABay area due to her fast heart rate, pain that was not controlled, and the fact that she was rolling and screaming from the trolley. He did not recall Nurse Walthew's response. Despite Nurse Allen's expressed concern, steps commenced to have Ashleigh placed into the ABay, and for the ambulance officers to finish up.¹¹⁰
172. Nurse Allen remained worried about Ashleigh's condition and recalled that he promptly went to speak with the Emergency Physician in Charge Dr Conrad Ng (Dr Ng), a specialist emergency physician who was working in the ED at Royal Perth Hospital on that day. In his role as Emergency Physician in Charge, Dr Ng provided the medical supervisory role for the ED. Dr Ng's role included managing the "*flow*" or "*running*" of the ED and being a primary medical communication point for the ED. Medical and nursing staff would often see him for advice during a shift. Dr Ng was situated in the main clinical area of the ED.¹¹¹
173. At the inquest a discrepancy in the evidence emerged, as to whether a conversation about Ashleigh's treatment was had as between Nurse Allen and Dr Ng. Nurse Allen clearly recalled having a conversation with Dr Ng about his concerns regarding Ashleigh's condition, and he noted portions of it in his retrospective notes recorded later that day. Dr Ng did not recall having this conversation.¹¹²

¹⁰⁸ Ibid.

¹⁰⁹ Exhibit 1, tab 12; Exhibit 4.

¹¹⁰ Exhibit 1, tab 26; Exhibit 4.

¹¹¹ Exhibits 4 and 10.

¹¹² Exhibit 1, tab 26; Exhibits 4 and 10.

174. Nurse Allen’s recollection was that he asked Dr Ng for medical review or analgesia for Ashleigh, that he advised that Ashleigh’s heart rate was 140 beats per minute, that she was complaining of right sided chest pain, that he thought she was not really manageable in the ABay and that he asked whether something could be done for her. He had Ashleigh’s medication chart with him in case Dr Ng prescribed her any medication.¹¹³
175. Nurse Allen’s recollection was that Dr Ng looked at Ashleigh’s Triage Notes on the computer and said something like: “*it’s probably related to the meth*”. Nurse Allen took that to mean that the methylamphetamine drug was the reason for Ashleigh’s tachycardia. From this, Nurse Allen understood that he was to go back and manage Ashleigh in the ABay.¹¹⁴
176. However, Dr Ng did not recall this conversation with Nurse Allen. While it is common practice for Dr Ng to look up a patient’s Triage Notes on the computer, he did not recall saying anything to Nurse Allen about the fact that Ashleigh’s Triage Notes indicated that she had recently taken methylamphetamine.¹¹⁵
177. This inconsistency in the evidence is unsatisfactory but I accept that Nurse Allen and Dr Ng gave their evidence to the best of their capacity and recall (with Nurse Allen having regard to the retrospective notes he made later that day). It is not the type of event that should readily be forgotten as it involves potentially a refusal to escalate care following concerns being raised, followed by the death of that patient.
178. There was no requirement to keep notes of such a conversation. Later in this finding, I have addressed this issue in a recommendation directed towards the development of a process for recording the refusal to escalate a patient’s care, after a request is made by a clinician under the heading: *Recommendation 4 – documenting refusal to escalate care*.

¹¹³ Exhibit 4.

¹¹⁴ Exhibits 4 and 10; ts 158 to 159; ts 183.

¹¹⁵ Ibid.

179. Turning back to the events of that day, Nurse Allen returned to the ABay area where he found that the St John Ambulance officers had transferred Ashleigh onto an ABay trolley (as had been agreed with him) and taken the monitoring equipment off her (being the Corpuls monitor). At this point Nurse Allen formally accepted Ashleigh as an ABay patient and the St John Ambulance crew left. This most likely accounts for the five-minute difference in the records as between St John Ambulance (who say she was transferred into the ABay at 1.40 pm) and Royal Perth Hospital (who say that occurred at 1.45 pm).¹¹⁶
180. Given Ashleigh's fast heart rate, Nurse Allen's priority was to commence his observations by attempting to take her blood pressure reading (as this is a significant sign of whether a patient is deteriorating). He needed to know how unwell she was. Unfortunately, he was unable to obtain a blood pressure reading due to Ashleigh continuing to move her arms and legs around.¹¹⁷
181. Ashleigh informed Nurse Allen that she wanted to pass urine and he pushed her, on the ABay trolley, to the toilet. He gave her a specimen jar and asked her to provide a sample, for testing. Ashleigh went into the toilet by herself but shortly afterwards, Nurse Allen heard her call out from inside the toilets. He went in and found her sitting on the floor, with the urine sample in the jar under the sink. She said she was not finished, he helped her up, and he went out again to wait for her.¹¹⁸
182. Approximately one minute later Nurse Allen went back in, and Ashleigh was again sitting on the floor and on this occasion, she did not respond to him until he squeezed her shoulder. Another staff member assisted him with getting Ashleigh back on the trolley. Shortly afterwards, as she was being wheeled back to the ABay Ashleigh began rolling around in the trolley again. A quick dipstick test of her urine did not yield any immediate results.¹¹⁹
183. Nurse Allen continued to attempt to take Ashleigh's blood pressure reading, multiple times without success. He was using a digital sphygmomanometer,

¹¹⁶ Exhibit 1, tab 12; Exhibit 4.

¹¹⁷ Exhibit 4.

¹¹⁸ Ibid.

¹¹⁹ Ibid.

that would not provide a reading, and he went into the ED to try and find a manual sphygmomanometer. There was none that he could find in ED and after he came back out, another St John Ambulance officer who was present handed him a manual one. This was also unsuccessful. He was unable to palpate a radial or brachial pulse.¹²⁰

184. At this stage, being very worried for Ashleigh, Nurse Allen went ahead of his own accord and pushed Ashleigh's trolley into the ED telling the Critical Care Leader, the registered nurse Ynez Ball (Nurse Ball) that he could not get a blood pressure reading and that Ashleigh was essentially being given by him to the ED. Nurse Allen was determined to achieve this transfer into the ED.¹²¹
185. As it transpired, Nurse Allen was right to be concerned. The events in ED follow immediately below.

Admission of Ashleigh into Royal Perth Hospital - ED

186. Ashleigh was first seen by a doctor in the ED at approximately 2.16 pm, being one hour after she first arrived at Royal Perth Hospital. Specifically, she was pushed by Nurse Allen into the ED on the trolley at approximately 2.16 pm, she was promptly received into the ED by Nurse Ball, and she was moved into the Critical Care CC11 cubicle at approximately 2.19 pm.¹²²
187. Nurse Ball recalled Nurse Allen pushing Ashleigh on the trolley towards her, telling her essentially that he could not do any nursing interventions with Ashleigh, and she needed to come into the ED to be reviewed. Ashleigh was thrashing about and saying she was in pain.¹²³
188. As Critical Care Leader, Nurse Ball's role involved overseeing 15 Critical Care Bays, which included the resuscitation bays. When Ashleigh was placed into the Critical Care CC11 cubicle, Nurse Ball and another nurse initially tried to do an assessment of her. Unfortunately, due to Ashleigh constantly rolling around in her bed, they were not able to attach monitoring devices to her (such as a blood pressure cuff and pulse oximeter). Nurse Ball explained

¹²⁰ Ibid.

¹²¹ Exhibits 4 and 6.

¹²² Exhibit 1, tabs 14, 17 and 21.7.

¹²³ Exhibit 6.

that Ashleigh was not aggressive, but she was constantly moving, and she felt there was not much they could do safely.¹²⁴

189. Finally, after a lapse of 42 minutes, and given the subsequent availability of the appropriate medical equipment, Ashleigh's observations were taken again. They were recorded in her medical notes as at 2.19 pm and reflect the following: respiratory rate 28 breaths per minute, heart rate 143 beats per minute (which is very elevated), blood pressure 134/100, temperature 35.8 degrees. She was recorded as being "*Alert*" with a response of "*yes*" to the question regarding her pain score, but not able to give a figure. She was described in the Continuation Notes as a "*poor historian*" and no doubt her lack of communication is now better understood within the context of her being close to death.¹²⁵
190. Nurse Ball recalled going to Dr Ng to say that Ashleigh needed to be reviewed and he told her someone was on their way. However, Dr Ng did not specifically recall the conversation with Nurse Ball. Dr Ng recalled seeing a nurse (most likely Nurse Allen) push Ashleigh in a trolley from the Triage area. They went past his area. Dr Ng assigned Dr Ben Carruthers (ED Consultant) and Dr Arthur Teo (ED Registrar) to Ashleigh's care, and he had Ashleigh sent to the resuscitation area.¹²⁶
191. Dr Teo recalled that it was a busy afternoon and that Dr Ng had asked him to attend to Ashleigh. Upon arrival a nurse who was attending to Ashleigh informed Dr Teo that Ashleigh had consumed methamphetamine that day and that she was confused, agitated and very tachycardic with a heart rate possibly as high as 140 beats per minute.¹²⁷
192. When he first saw her, Dr Teo considered that Ashleigh's symptoms did not fit the symptoms of someone who was intoxicated with methamphetamine. Ashleigh was wide-eyed, incoherent, muttering words, grasping at things, and possibly hallucinating. Her mental state in isolation might have suggested methamphetamine intoxication. However, Dr Teo considered that her mottled

¹²⁴ Exhibit 1, tabs 14 and 17; Exhibit 6.

¹²⁵ Exhibit 1, tab 21.7; Exhibit 7.

¹²⁶ Exhibit 1, tabs 6 and 10.

¹²⁷ Exhibit 1, tab 19.

and cold peripheries were not consistent with methamphetamine intoxication. This underscores the importance of a doctor's review.¹²⁸

193. To Dr Teo, Ashleigh's body felt cold, and she appeared to be peripherally shut down. Dr Teo tried to get an IV line into Ashleigh but could not see any veins (nor any IV track marks).¹²⁹
194. The nursing entry at 2.20 pm in Ashleigh's Continuation Notes in her Triage Notes, made while Dr Teo's review of Ashleigh was in progress, includes the following:
- a) "*admits to meth, weed, MDMA and alcohol today*";
 - b) "*complaining of general pain*";
 - c) "*difficulty obtaining vital signs as [patient] constantly moving in bed*";
 - d) "*appears cyanosis*";
 - e) "*tachycardic*".¹³⁰
195. While Dr Teo was examining Ashleigh, she rapidly deteriorated. At 2.28 pm, after thrashing about, Ashleigh went into cardiac arrest. She was swiftly moved to the resuscitation location, Cubicle 12, and CPR promptly commenced, led by the ED Consultant Dr Ben Carruthers (Dr Carruthers).¹³¹
196. A formal 12-lead ECG timed at 2.28 pm with the comment "*arrest*" appeared to show a narrow complex regular sinus tachycardia with a rate of 146 beats per minute. It did not appear to show features for stimulant drug intoxication. Changes which could point to coronary artery spasm from methamphetamine were not apparent. Stimulant drugs did not cause or contribute to Ashleigh's death, and this is addressed later in this finding under the heading: *The role of illicit substances*.¹³²
197. Ashleigh responded initially to resuscitative treatment, and they were able to briefly obtain a return of spontaneous circulation (ROSC) on at least two occasions. However, her cardiac output continued to degenerate, and after ROSC her heart rhythm would deteriorate back to a state of pulseless electrical

¹²⁸ Ibid.

¹²⁹ Ibid.

¹³⁰ Exhibit 1, tabs 14, 17 and 21.7.

¹³¹ Exhibit 1 tabs 14, 17, 20 and 21.7.

¹³² Exhibit 1, tab 27.

activity. Ashleigh's response to resuscitation became less and less until she ceased responding to the medical management.¹³³

198. Despite all efforts at resuscitation, that was conducted assiduously and that continued for approximately 40 minutes, tragically Ashleigh could not be revived, and she was pronounced dead at 3.08 pm on 27 December 2019. This came as a shock to those involved in her care that day. A number of them were upset about it.¹³⁴
199. After resuscitation was ceased, Dr Carruthers turned his mind to the potential reasons for Ashleigh's unexpected death. He suspected possible infection and overwhelming sepsis as a cause of Ashleigh's arrest, but without any clinical signs to specifically confirm it.¹³⁵
200. After Ashleigh's death Dr Carruthers received telephone calls from the Royal Perth Hospital laboratory, advising him that the blood samples taken from Ashleigh at 2.40 pm that day showed that her platelet count was very low, and that there was evidence of diplococci (bacteria) that was suggestive of meningococcal infection. These results were later formally confirmed.¹³⁶
201. In his subsequent reflections on Ashleigh's treatment, Dr Carruthers felt that it was likely that Ashleigh would have had the meningococcal infection for the preceding 24 to 48 hours but she did not present any classical symptoms, such as fever or rash.¹³⁷
202. Dr Carruthers noted Ashleigh's prior reference to feeling "*fluey*", and her back pain, changing to limb pain. In hindsight, he felt this pain was likely as a result of meningococcal infection activating and consuming her coagulation system. He explained that this causes small haemorrhages in the small calibre blood vessels that can lead to ischaemic pain, that is often transient, migratory, and difficult for patients to explain.¹³⁸
203. Once Ashleigh was pushed into the ED by Nurse Allen and accepted for treatment, I am satisfied that the Royal Perth Hospital clinicians took all reasonable and proper steps to try and save her. Ashleigh went into cardiac

¹³³ Exhibit 1, tabs 14, 19 and 20.

¹³⁴ Exhibit 1, tabs 3, 14, 19 and 20.

¹³⁵ Exhibit 1, tab 20.

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ Ibid.

arrest approximately 10 minutes after entering the ED. By the time Ashleigh reached the ED, at 2.16 pm, it would not have been possible to save her.

204. I have, however, considered whether Ashleigh could have been saved if she had been promptly taken into the ED following her presentation at Royal Perth Hospital (being between 45 minutes and an hour earlier than she was taken into the ED). This is addressed later in this finding under the heading: *Was Ashleigh's death preventable?*

Results from Ashleigh's Royal Perth Hospital blood tests

205. Blood tests taken from Ashleigh at Royal Perth Hospital once her resuscitation commenced showed that her condition was dire.
206. At 2.32 pm Ashleigh's point of care venous blood gas analysis became available to Ashleigh's resuscitating team. These results have been subsequently reviewed by Dr Hitchcock, who noted they were an indicator of severe illness. They showed severe metabolic acidosis with an extremely high lactate. In Ashleigh's case this was indicative of the clinical situation known as "*Shock*". Her creatinine levels were high, indicating renal failure. Her pH was 6.68. Dr Hitchcock reported that as a general rule a pH lower than 6.8 due to any cause is regarded as critically unwell with a high probability of a fatal outcome.¹³⁹
207. Blood tests were also taken at 2.40 pm, and these were not available to Ashleigh's resuscitating team (though some were verbally communicated to Dr Carruthers shortly after Ashleigh's death). The formal results of these tests were also subsequently reviewed by Dr Hitchcock who noted they were markedly abnormal, again indicating illness severity. Ashleigh had a low platelet count, indicating a probable Disseminated Intravascular Coagulation. Meningococci were identified on her peripheral blood film, indicating the presence of bacteria in her circulation in large numbers.¹⁴⁰

¹³⁹ Exhibit 1, tab 14.

¹⁴⁰ Ibid.

CAUSE OF DEATH

Post Mortem Examination

208. On 31 December 2019 the forensic pathologist Dr J White (Dr White) made a post mortem examination at the State Mortuary on Ashleigh's body. The coroner had upheld the senior next of kin's objection to an internal post mortem examination. Therefore, Dr White's post mortem examination was an external one, together with a review of medical information, microbiological tests and toxicological analysis.¹⁴¹
209. Positive antemortem and post mortem cultures identified *Neisseria meningitidis* (W strain).¹⁴²
210. Ashleigh's procalcitonin levels were elevated, which was in keeping with generalised infection. There was no evident rash seen on Ashleigh's body.¹⁴³
211. Dr White noted that while Ashleigh's clinical presentation was slightly unusual, her rapid deterioration, as reflected in the medical records, was consistent with meningococcal sepsis. Dr White was unable to confirm whether or not Ashleigh had an associated meningitis.¹⁴⁴
212. The results of toxicological testing, that became available on 20 February 2020 detected illicit substances, namely cannabis and two stimulant drugs (and their metabolites). These are outlined in more detail under the below heading: *The role of illicit substances*, within the context of an expert witnesses' review. For the reasons set out under that heading, I am satisfied that they played no role in Ashleigh's death.¹⁴⁵
213. Toxicological testing also showed medications connected to pain relief, namely tapentadol (detected not analysed), ibuprofen (approximately 5 mg/L) and paracetamol (approximately 6 mg/L). These medications were of no toxicological significance in connection with Ashleigh's death. Alcohol was not detected.¹⁴⁶

¹⁴¹ Exhibit 1, tabs 4.1 and 4.2.

¹⁴² Ibid.

¹⁴³ Exhibit 1, Vol 1, Tab 4.2.

¹⁴⁴ Ibid.

¹⁴⁵ Ibid.

¹⁴⁶ Exhibit 1, tabs 5.1 and 27.1.

214. Dr White also found evidence of medical intervention, with scattered apparent and minor bruising to Ashleigh’s lower limbs. The minor bruising is most likely due to Ashleigh having a history of Von Willebrand Disease, which leads to easy bruising. This did not contribute to her death.¹⁴⁷
215. At the conclusion of the further investigations, on 27 February 2020, Dr White formed the opinion that the cause of Ashleigh’s death was “*meningococcal infection [external only]*”.¹⁴⁸
216. I accept Dr White’s opinion. **I find that Ashleigh’s cause of death was meningococcal infection.**

The role of illicit substances

217. The independent expert clinical pharmacologist Professor David Joyce (Professor Joyce) reviewed the toxicological analysis of Ashleigh’s mortuary admission blood specimen, he prepared a report to the coroner in respect of the possible contributions of illicit drug exposure to Ashleigh’s death, and he gave evidence at the inquest.¹⁴⁹
218. The positive findings in relation to illicit drugs were as follows:

- | | |
|-------------------------|----------------------------------|
| a) Methylamphetamine | 0.67 mg/L (milligrams per litre) |
| b) Amphetamine | 0.08 mg/L |
| c) MDMA ¹⁵⁰ | 0.52 mg/L |
| d) MDA ¹⁵¹ | 0.03 mg/L |
| e) Tetrahydrocannabinol | 1.6 ug/L (micrograms per litre) |

Tetrahydrocannabinol

219. While the presence of tetrahydrocannabinol confirms Ms Hunter used cannabis, in Professor Joyce’s opinion the concentration was so low that the use was probably many hours and maybe up to a day or two before death. I accept Professor Joyce’s opinion that cannabis played no role in Ashleigh’s death.¹⁵²

¹⁴⁷ Exhibit 1, tabs 4.1 and 16.1.

¹⁴⁸ Exhibit 1, tab 4.1.

¹⁴⁹ Exhibit 1, tab 27; ts 437 to 443.

¹⁵⁰ Methylenedioxymethamphetamine

¹⁵¹ Methylenedioxyamphetamine

¹⁵² Exhibit 1, tab 27.1.

The stimulant drugs

220. Professor Joyce explained that methylamphetamine, (and its metabolite amphetamine) and MDMA (and its metabolite MDA) are all drugs of the stimulant amphetamine family. The toxicological findings show that Ashleigh had used both methylamphetamine and MDMA (the former having greater stimulant properties than the latter).¹⁵³
221. In Professor Joyce's opinion, Ashleigh's blood concentrations of methylamphetamine, MDMA and their metabolites indicated ongoing action of the drugs, but not necessarily in the early stimulated phase of intoxication.¹⁵⁴
222. Professor Joyce sounded a note of caution in respect of the reported blood concentrations due to the likely effects of post mortem redistribution, given that the blood specimen was collected three days after death. This refers to the process by which drug and metabolite concentrations in blood may rise or fall after death because of diffusion in and out of tissue.¹⁵⁵
223. Therefore, while the reported concentration of methylamphetamine in Ashleigh's blood was higher than the typical peak concentration usually observed by Professor Joyce in an occasional user, suggesting a more sustained habit of use, due to the very real risk of post mortem redistribution, I do not find that Ashleigh had any sustained habit of methylamphetamine use.¹⁵⁶
224. The evidence before me is sufficient to show that Ashleigh used methylamphetamine before her death. The usual clinical features of methylamphetamine intoxication include agitation and restlessness together with increased heart rate, blood pressure and respiratory rate. Methamphetamine, in combination with intense physical exertion can result in a sudden disturbance of heart rhythm.¹⁵⁷
225. Professor Joyce explained that the blood concentration of MDMA was not high enough to raise a concern about death through its direct stimulant effects,

¹⁵³ Ibid.

¹⁵⁴ Ibid.

¹⁵⁵ Ibid.

¹⁵⁶ Exhibit 1, tab 27.1.

¹⁵⁷ Ibid.

though it is reasonable to propose that the stimulant effects of MDMA, though weaker than methylamphetamine, would have added to the stimulating effects.¹⁵⁸

226. However, based upon Professor Joyce's evidence I am satisfied that Ashleigh was not in the early stimulated phase of intoxication. Therefore, her behaviour at Royal Perth Hospital was related to her illness, and not to the effects of stimulant drugs.¹⁵⁹

227. Professor Joyce reviewed the available records from the 12-lead ECG timed at 2.28 pm (during resuscitation), observations made by Dr Carruthers and Dr Teo (and also the earlier records from the St John Ambulance officers). The Professor noted that the observed rhythm for Ashleigh on each occasion was sinus tachycardia and that there was no mention of a ventricular rhythm, concluding:

*"The ECG evidence, therefore, provides no specific support for a concern that methylamphetamine/MDMA intoxication increased the risk of lethal outcome through arrhythmia."*¹⁶⁰

228. Having regard to Professor Joyce's opinion, I am satisfied that there is no evidence to indicate that the methylamphetamine that Ashleigh did take contributed to her death. Nor did any additional stimulating effects from the MDMA make any such contribution. While sepsis might sensitise a person to methylamphetamine-induced lethal cardiac arrhythmia (due to the activation of the sympathetic nervous system), there is no basis for making this connection in Ashleigh's case.¹⁶¹

MANNER OF DEATH

229. The manner of Ashleigh's death was consistent with natural causes. Ashleigh succumbed to the effects of *Neisseria meningitidis* (W strain) and died as a result of a meningococcal infection.

230. I find that the manner of Ashleigh's death occurred by way of Natural Causes.

¹⁵⁸ Ibid.

¹⁵⁹ Ibid.

¹⁶⁰ Ibid.

¹⁶¹ Ibid.

WAS ASHLEIGH'S DEATH PREVENTABLE?

231. The question of whether Ashleigh's death was preventable is a complex one. In light of the expert evidence in the reports to the coroner and the expert evidence subsequently given at the inquest, my decision on this aspect is finely balanced.
232. Through its lawyer the State Solicitor's Office (SSO), the East Metropolitan Health Service submits to me that given the nature and severity of Ashleigh's condition on arrival at Royal Perth Hospital, there was no treatment that could have prevented her death. They submit that treatment would have needed to have commenced at least 12 hours prior to the time of her presentation, to save her.
233. However, Ashleigh's family feel that delayed access to the ED shortened her life and reduced her chances of survival to "zero." They are concerned that she was denied an opportunity to fight back against the disease that was killing her. They maintain that she had a right to the emergency medical interventions that should have given her a chance at that time.
234. I have carefully considered the evidence on the question of Ashleigh's survivability and have had regard to the opinions of a number of highly qualified experts in their fields: Dr Speers (infectious disease physician and microbiologist), Dr Hitchcock (ED Consultant), Professor Putland (ED Physician) and Professor Waterer (Director of Clinical Services, Royal Perth Hospital). The opinions were proffered having regard to the time of Ashleigh's presentation at Royal Perth Hospital.
235. All the experts agreed that they would have tried to save Ashleigh. In other words, this was not a case of treatment being futile. Between them they had marginally differing views as to the probability of survival, or likelihood of death.
236. In summary, Professor Putland felt there was no real chance to make a difference for Ashleigh, and similarly Professor Waterer felt there was no available intervention that could have altered the outcome. However, Dr Speers felt that Ashleigh's bacterial load was "*probably*" irreversible, and Dr Hitchcock felt that Ashleigh had a small chance of survival, but that survival was not the most probable outcome.

237. I am not prepared to find that, having regard to the time that Ashleigh did present to Royal Perth Hospital, there was no treatment that could have prevented her death.
238. On the evidence before me, I am satisfied that while Ashleigh had a rapidly progressing disease process, her prospects of survival, with prompt medical treatment, while very slim, were not wholly absent.
239. It is very unlikely that Ashleigh would have survived even with prompt medical treatment, but that is not the test for rendering such medical treatment in a timely fashion. The coroner regards the loss of an opportunity to survive as a serious matter. It cannot be known whether a presenting patient will be the one that, contrary to the usual statistical outcomes, does survive with prompt medical treatment.
240. I turn now to the time of Ashleigh's death. While it cannot be established that the delay in Ashleigh's treatment contributed to Ashleigh's death, I am satisfied that this delay most likely affected the timing of her death, by bringing it forward.
241. Had Ashleigh been promptly treated and survived for a period, her family and loved ones may have had the opportunity to see her, comfort her and say goodbye to her in a manner that would have allowed them to express their love and tenderness towards her. This is a matter that is very important to them, and they feel this loss of opportunity very keenly.
242. An outline of the reasons for my decision on this aspect follows, below.

Meningococcaemia

243. The assessment of survivability commences with an outline of the evidence concerning the severity of Ashleigh's disease.
244. Dr Speers prepared a report for the coroner and gave evidence at the inquest. His opinion is referred to below under the heading *Dr Speers' opinion*, but at this point it assists to outline his explanation about the development of features of severe meningococcaemia (a form of septicaemia) that Ashleigh had.¹⁶²

¹⁶² Exhibit 1, tab 16.1; ts 415 to 434.

245. Dr Speers explained that the human pathogen meningococcus is carried in the upper airways of 10 to 30 % of the human population. Most strains are harmless, but some are virulent, with transmission usually requiring direct contact.¹⁶³
246. While the average time from acquiring the meningococcus to presenting unwell is three to four days, it can be from one to ten days. Dr Speers outlined the clinical clues to meningococcaemia:
- a) Petechial or purpuric rash (in approximately 40% of patients, usually six to 12 hours after first symptoms);
 - b) A blanching spotty rash that can appear before the petechial rash;
 - c) Fevers, sweats and rigors;
 - d) Severe pain in the muscles and joints in the arms and legs, neck or back making it difficult to walk;
 - e) Vomiting or nausea, especially in association with headache or abdominal pain;
 - f) Rapid evolution of illness compared to other causes of septicaemia.¹⁶⁴
247. Dr Speers explained that illness in patients with pure septicaemia is generally more severe and progresses more rapidly and has a high fatality rate. Ashleigh demonstrated the features of severe meningococcaemia noted by Dr Speers being lethargy, drowsiness, irritability, confusion, agitation, or altered conscious state (sleepiness) with moaning and unintelligible speech.¹⁶⁵
248. It is often expected that people with septicaemia will have a fever. However, Ashleigh had slightly low body temperature (35.9 degrees). Dr Speers explained that 10% to 35% of people with septicaemia present to hospital with hypothermia (low body temperature) rather than fever. This is an area where knowledge is developing. In Dr Speers' experience, hypothermia is a marker of even more severe septicaemia consistent with twice the mortality rate compared to patients with a fever.¹⁶⁶

¹⁶³ Exhibit 1, tab 16.1.

¹⁶⁴ Exhibit 1, tab 16.

¹⁶⁵ Ibid.

¹⁶⁶ Ibid.

249. A major factor associated with the severity of septicaemia, and mortality, is the load of bacteria in the blood. As will be described later in this finding, Ashleigh had a very high bacterial load.
250. I am satisfied that Ashleigh had a severe form of meningococcaemia.

Treatment for meningococcal infection

251. I next considered whether there were treatments available for Ashleigh's meningococcaemia.
252. Dr Speers outlined the treatment for meningococcal infection, as follows:
- a) Resuscitation (maintaining the airway and oxygenation, supporting breathing if required and intravenous fluids and inotropes to support the circulatory system);
 - b) Taking blood samples for organ function assessment and culture if possible (though this should not delay the administration of antibiotics);
 - c) Administering an immediate dose and a repeat dose of intravenous antibiotic (or an immediate dose intramuscularly if access to venous system cannot be achieved). The recommended antibiotic is ceftriaxone, but if not available then benzylpenicillin.¹⁶⁷
253. The ED Consultant Dr Hitchcock reported on the Sepsis Six, the name given to a bundle of medical therapies designed to reduce mortality in patients with sepsis, drawn from international guidelines. They consist of three diagnostic and three therapeutic steps all to be delivered within "one hour" of the initial diagnosis of sepsis, as follows:
- a) Titrate oxygen to a saturation target of 94%;
 - b) Take blood cultures and consider source control;
 - c) Administer empiric intravenous antibiotics;
 - d) Measure serial serum lactates;
 - e) Start intravenous fluid resuscitation; and
 - f) Commence accurate urine output measurement.¹⁶⁸

¹⁶⁷ Exhibit 1, tab 16.

¹⁶⁸ Exhibit 1, tab 14.

254. Professor Putland referred to the importance of early treatment with antibiotics in order to salvage the patient but noted that many patients deteriorate despite further initiation of antibiotic therapy, and will require critical organ support (vasomotor agents, intravenous fluids, steroid replacement, invasive ventilation and renal replacement therapy).¹⁶⁹
255. I am satisfied that there are well established treatments for meningococcaemia, and that the likelihood of success depends upon the initiation of prompt treatment.

Dr Speers' opinion - survivability

256. The following part addresses Dr Speers' opinion as to whether Ashleigh's death was preventable.
257. Dr Speers' analysis of the observations taken by the St John Ambulance officers when they arrived at Ashleigh's residence at approximately 12.43 pm persuades me that Ashleigh had well established septicaemia but that a number of compensating mechanisms were helping to maintain her blood pressure and the oxygen level in her blood.¹⁷⁰
258. Having regard to Dr Speers' analysis, Ashleigh's rapid weak pulse initially observed by the St John Ambulance officer was most likely the result of her heart responding to the septicaemia by increasing the rate of beating to maintain blood pressure, to ensure blood supply to her vital organs. As a younger person, her heart was able to keep beating to support blood pressure (compensating) until a late stage, following which she rapidly deteriorated.¹⁷¹
259. At the material time Ashleigh's rapid heartbeat was mistaken for the effects of the stimulant drugs.
260. Dr Speers felt that Ashleigh's low body temperature initially recorded by the St John Ambulance officer was a reflection of severe septicaemia as the body redirects blood away from the skin and muscles to the vital organs.¹⁷²

¹⁶⁹ Exhibit 1, tab 15.

¹⁷⁰ Exhibit 1, tab 16.1.

¹⁷¹ Ibid.

¹⁷² Ibid.

261. At the material time Ashleigh’s low body temperature was mistaken for the effects of a recent shower and the cool air-conditioning at the Airbnb.
262. After Ashleigh arrived at Royal Perth Hospital at approximately 1.16 pm, she quickly deteriorated. Her pulse and blood pressure were difficult to obtain due to her restlessness. Over the next hour her compensatory mechanisms against the infection became overwhelmed and at 2.28 pm she went into cardiac arrest.¹⁷³
263. Ashleigh’s agitation and restlessness, which in hindsight reflected features of severe meningococcaemia, was mistakenly attributed to the effects of stimulant drugs.
264. Ashleigh’s venous blood gas sample, taken at 2.32 pm, within minutes of her cardiac arrest, and that has been addressed previously in this finding, is described by Dr Speers as showing severe metabolic acidosis. The very high lactate level showed that her muscles had been starved of oxygen as blood was diverted away to vital organs. Her circulation system had collapsed.¹⁷⁴
265. Ashleigh’s blood sample, taken at 2.40 pm, upon analysis showed visible bacteria within blood cells and around blood cells with the appearance of meningococci. In Dr Speers’ experience it is uncommon to visualise this bacteria in a blood film in meningococcaemia. This visualisation is only seen when the bacterial load is extremely high. Dr Speers described the bacterial load as “massive”.¹⁷⁵
266. In considering the severity of Ashleigh’s meningococcaemia and the likely outcome for her, Dr Speers opined as follows:

“Ashleigh's presentation was consistent with an extremely rapidly progressive septicaemia due to Neisseria meningitidis (the meningococcus). The process was so rapid there was no opportunity for the development of a rash to provide this clinical clue. The consistent findings with severe septicaemia were the lethargy progressing to mental confusion and restlessness, the unexplained severe body pain, the low recorded skin temperature, and the rapid pulse and breathing. In themselves, none of these signs and symptoms

¹⁷³ Ibid.

¹⁷⁴ Ibid.

¹⁷⁵ Ibid.

are specific for meningococcaemia, it is the constellation of them together, in the absence of another cause, that raises the suspicion for septicaemia. Ashleigh's compensatory mechanisms prevented the development of other signs such as low blood pressure until after admission to hospital. No blood test results, apart from the finger stick blood sugar level were available before death. There were a number of indicators for a poor outcome for Ashleigh:

- *very rapid progression*
- *meningococcal septicaemia without meningitis*
- *hypothermia*
- *significant thrombocytopenia (very low platelets)*
- *severe metabolic acidosis (significant base deficit)*
- *high bacterial load.”*

[emphasis added]¹⁷⁶

267. Early and appropriate antimicrobial therapy gives the best chance of survival. Dr Speers explained that meningococcal bacteria are sensitive to antibiotics and die within several hours of administration. However, in Dr Speers' considerable experience, the meningococcal bacterial load upon presentation is the major predictor of death.¹⁷⁷
268. Unfortunately, with invasive meningococcal disease, the rapid progression of the disease may become irreversible, notwithstanding early administration of antibiotics. The role of the antibiotics is to prevent the bacterial load from increasing to a dangerous level. However, where the bacterial load is already high, the antibiotics may not operate to reverse the outcome.¹⁷⁸
269. Dr Speers' analysed the medical records and other evidentiary material, and formed the view that Ashleigh's bacterial load was already extremely high at the time of her presentation, and the disease had already progressed rapidly to an irreversible severe illness.¹⁷⁹

¹⁷⁶ Ibid.

¹⁷⁷ Ibid.

¹⁷⁸ Ibid.

¹⁷⁹ Ibid.

270. As a result, in Dr Speers' opinion expressed in his report, it was almost certain that Ashleigh would have rapidly deteriorated and died, even if appropriate antibiotics had been given immediately upon her presentation to Royal Perth Hospital at 1.16 pm (approximately one hour before she went into cardiac arrest).¹⁸⁰
271. Dr Speers was questioned on his views regarding survivability at the inquest. He had regard to the rapid course of Ashleigh's disease within the context of her blood test results, referring to her extremely high lactate level and very high bacterial load: "... *that stimulus to the sepsis process couldn't have been turned around quickly with antibiotics, and I think it was **probably irreversible** at the time she arrived at the hospital.*" [emphasis added]¹⁸¹
272. Dr Speers explained that his comments are made with the benefit of hindsight, given what is now known of Ashleigh's blood test results. Those results were not (and could not have been) known during the St John Ambulance officers' assessment and following Ashleigh's presentation at Royal Perth Hospital, on the Ramp, in the A Bay and in the ED.¹⁸²
273. Dr Speers has had regard to Ashleigh's recorded observations on the day, and specifically, that her blood pressure was not low. He has therefore opined that at the material time, Ashleigh appeared a lot more well than she actually was.¹⁸³
274. Importantly Dr Speers explained that if, hypothetically, those blood tests had been known at the material time, showing the extent of Ashleigh's dire condition, clinicians would still have tried to save her, including by the administration of antibiotics and fluids. She was a previously well 26 year old woman. In other words, Dr Speers would not support any argument to the effect that, given her dire condition, treatment would have been considered futile and withheld.¹⁸⁴

Dr Hitchcock's opinion - survivability

275. The following part addresses Dr Hitchcock's opinion as to whether Ashleigh's death was preventable.

¹⁸⁰ Ibid.

¹⁸¹ ts 428.

¹⁸² Ibid.

¹⁸³ Ibid.

¹⁸⁴ ts 428 to 429.

276. Following analysis of the medical records and circumstances Dr Hitchcock formed the view that Ashleigh was most likely gravely unwell due to meningococcal septicaemia at the time of her presentation to Royal Perth Hospital (at approximately 1.16 pm).¹⁸⁵
277. Like Dr Speers, Dr Hitchcock considered Ashleigh’s venous blood gas analysis at 2.32 pm to be an indicator of severe illness, reflecting metabolic derangement. Other indicators of severity, arising from her blood sample collected at 2.40 pm include a low platelet count (indicating probable Disseminated Intravascular Coagulation) and unusually, meningococci being identified on her peripheral blood film, indicating the presence of bacteria circulating in large numbers.¹⁸⁶
278. In Dr Hitchcock’s opinion, by the time these blood tests were taken, some 70 minutes after Ashleigh’s arrival at Royal Perth Hospital, she had an “*usurvivable condition.*” I accept this opinion.¹⁸⁷
279. The issue for me to consider is whether Ashleigh may have survived with earlier assessment and treatment following her arrival.
280. Dr Hitchcock reported that it is not possible to say that Ashleigh would “*definitely*” have survived if she had been promptly and appropriately assessed and treated in an acute care cubicle within the ED within 30 minutes of her arrival (as contemplated by her Triage Code). He had regard to the severity and progression of her disease and the natural history of meningococcal septicaemia and felt she “*probably*” would have nonetheless died from her disease.¹⁸⁸
281. In expanding upon the probability of survival in his report, Dr Hitchcock had regard to his experience of the evidence for the reduction of mortality through timely treatment of sepsis in ED, referring to IV fluid resuscitation and IV antibiotics. His opinion regarding the likely effects of these interventions is that they: “*...would have given her a small chance of survival but not to the point where survival was the most probable outcome.*”¹⁸⁹

¹⁸⁵ Exhibit 1, tab 14.

¹⁸⁶ Ibid.

¹⁸⁷ Ibid.

¹⁸⁸ Ibid.

¹⁸⁹ Ibid.

282. Dr Hitchcock was questioned on his views regarding survivability at the inquest. Having regard to the severity of the meningococcal sepsis he opined that: “... *Ashleigh would most likely have died from that. However, it doesn’t mitigate the delay ...*” He also opined that with appropriate treatment pre-arrest, it may have changed the time of Ashleigh’s death, as opposed to the actual fact that she was going to die.¹⁹⁰

283. On the point of the delay in Ashleigh’s admission to the ED, at the inquest Dr Hitchcock read out an excerpt from his consultations with Dr Putland as follows:

“We would also like to comment on the issue of survivability, as we have both indicated that in our opinion as on the balance of probabilities the patient would not have survived overwhelming meningococcal sepsis. We would like to point out that despite the low probability of survival, delay represents a progressively diminishing chance of survival. We really want the court to understand that delay represents lost opportunity, even if the chance of survival are low.” [Emphasis added]¹⁹¹

284. Dr Hitchcock had regard to the delays experienced by Ashleigh following her presentation to ED. With a Triage Score of 3, Ashleigh should have been assessed and treated within 30 minutes of her arrival. Having regard to the following opinion from Dr Hitchcock, I am satisfied that it is likely that with such treatment Ashleigh would have survived for a longer period, but that it is nonetheless likely (though not certain), that she would have died: “*My view is that the delays experienced by Ms Hunter at Royal Perth Hospital ED most likely were not contributory to her death, but most likely did affect the time of her death.*”¹⁹²

Professor Putland’s opinion - survivability

285. The following part addresses Professor Putland’s opinion as to whether Ashleigh’s death was preventable.

¹⁹⁰ ts 373.

¹⁹¹ Ibid.

¹⁹² Exhibit 1, tab 14.

286. Professor Putland referred to the mortality in respect of Ashleigh’s disease as follows:

*“The classical initial presentation is indistinguishable from benign viral illness but in cases which progress to meningococcal sepsis the progress is often rapid and catastrophic with very high mortality rates.”*¹⁹³

287. Professor Putland also referred to Case Fatality Rates for invasive meningococcal disease in Australia between 1999 and 2015 in the region of four per cent to five per cent, with a larger international study indicating Case Fatality Rate of around ten per cent.¹⁹⁴

288. In Professor Putland’s experience, early signs of sepsis are non-specific, with fever being common but not universal. Some of the clinical screening tools that he referred to have are relevant to Ashleigh’s case, namely a temperature below 36 degrees, a heart rate above 90 beats per minute and a respiratory rate above 20 breaths per minute.¹⁹⁵

289. Like Dr Speers, Professor Putland reports that mortality rates for meningococcal sepsis are particularly high in cases of sepsis without meningitis.¹⁹⁶

290. Within the context of Ashleigh’s survivability, Professor Putland reported that it was highly unlikely that antibiotics and organ support delivered at 1.20 pm would have resulted in a different outcome. However, he noted that hard data on this is lacking.¹⁹⁷

291. Professor Putland was questioned on his views regarding survivability at the inquest. He had regard to the treatment that Ashleigh would have required, and the time it would take to administer it, even if she had come into the ED straight away. He opined that there would not have been enough time to start that treatment and that: “... *there was no real chance to make a difference...*” to the life and death of Ashleigh.¹⁹⁸

¹⁹³ Exhibit 1, tab 15.

¹⁹⁴ Ibid.

¹⁹⁵ Ibid.

¹⁹⁶ Ibid.

¹⁹⁷ Ibid.

¹⁹⁸ ts 400 to 401.

292. Importantly, however, in his report to the coroner, Professor Putland made a comment that would be universally adopted: “.... *any Emergency Physician or Emergency Nurse faced with a patient like Ms Hunter would want to know they had done everything possible to give her a chance of survival.*”¹⁹⁹
293. Professor Putland reiterated this at the inquest, stating that while in retrospect he believes it was “*futile*” to try and save Ashleigh, at the time she presented they would not know that: “.... *and we need to try everything we can.*”²⁰⁰

Professor Waterer’s opinion - survivability

294. Royal Perth Hospital Group Director of Clinical Services Professor Waterer provided a report to the coroner, and he gave evidence at the inquest.²⁰¹
295. In Professor Waterer’s view, the time period at which antibiotics will be effective in the case of sepsis is not perfectly understood. He noted that Ashleigh was not seen to have low blood pressure until 2.28 pm, when resuscitation was commenced, referring to the following regarding her blood pressure:
- a) He felt that in retrospect, while Ashleigh’s collapse in the toilet shortly after 1.32 pm may have been an “*earlier clue*” of severe sepsis, at the material time it may also have represented some postural hypertension (the lowering of blood pressure upon standing up);
 - b) At 1.37 pm, Ashleigh’s blood pressure was 105/78 (as recorded by St John Ambulance) which he described as normal for a person of her age.²⁰²
296. Referencing his own experience and that of other experts, he reported on the survivability in the case of sepsis, after administration of antibiotics, of which I note the following:
- a) If the blood pressure of a patient with sepsis drops, and antibiotics are given rapidly and the patient survives the next 24 hours, then the antibiotics will improve the patient’s chance of survival;

¹⁹⁹ Exhibit 1, tab 15.

²⁰⁰ ts 408; ts 414.

²⁰¹ Exhibit 2; ts 444 to 473.

²⁰² Exhibit 2.

- b) If the blood pressure of a patient with sepsis drops, and again, antibiotics are given rapidly but the patient survives only a few hours, the consensus is that the antibiotics could not have improved the outcome. This is because such patients usually have fatal processes under way and are no longer amenable to antibiotics.²⁰³
297. Professor Waterer referred to studies that have looked at the timing of the administration of antibiotics in patients with sepsis but without shock (that is, without low blood pressure). He reported that the question of how critical the timing is, remains an area of active controversy.²⁰⁴
298. In his report Professor Waterer also referred to the risk of antibiotics accelerating the process of organ failure in patients with high levels of bacteria seen in their blood (as was subsequently seen with Ashleigh). In his experience, and drawn from data from Royal Perth Hospital, penicillin-like antibiotics (as commonly used in sepsis) can induce bacterial destruction that is followed by a massive increase in toxins and immune response, with deleterious effects.²⁰⁵
299. In Ashleigh's case, noting that she did not have low blood pressure upon presentation and noting as is now known, that she had large amounts of bacteria in her blood, in Professor Waterer's opinion: "... *there is no available intervention that could have altered her clinical outcome.*" This is based upon the time that she was present at Royal Perth hospital.²⁰⁶
300. Professor Waterer reported that Ashleigh would need to have presented to Royal Perth Hospital at least 12 if not 24 hours beforehand in order for antibiotics to have had a realistic prospect of impacting upon her disease.²⁰⁷
301. Nonetheless Professor Waterer's clear view in his report is that in the case of every patient suspected of sepsis, it remains appropriate to give antibiotics: "... *because at that point in time it is unknown whether that patient is the one who will survive long enough for the antibiotics to provide a benefit.*"²⁰⁸

²⁰³ Ibid.

²⁰⁴ Ibid.

²⁰⁵ Ibid.

²⁰⁶ Ibid.

²⁰⁷ Ibid.

²⁰⁸ Ibid.

302. At the inquest Professor Waterer expanded on his reasoning, explaining that the early deaths from septic shock are due to the compound lipopolysaccharide, its toxicity associated with the bacterial load. This compound suppresses the heart's contractibility and relevantly, blood vessels lose the ability to contract, meaning there is no blood pressure. Having regard to the high bacterial load, his view was that Ashleigh was responding to that compound before she presented to Royal Perth Hospital.²⁰⁹
303. At the inquest he also confirmed what he expressed in his report, namely that even if he had known of Ashleigh's high bacterial load on the day, he would still have tried to treat her: "*I have patients that I know are almost inevitably going to die but we still try*" and: "*I would hope that we never stop trying.*"²¹⁰
304. Professor Waterer distinguished between a perspective of a clinician, and that of an academic: "*... as a clinician I would still have treated her as aggressively as I could because you never want to give up hope. As an academic, when I look at her case, her level of meningococcaemia, the rate of progression that she had and all the evidence, I do not see survivability here.*"²¹¹

COMMENTS ON ASHLEIGH'S TREATMENT AND CARE

305. This part addresses my comments on aspects of the evidence that raised issues of potential concern and/or missed opportunities in connection with the quality of Ashleigh's treatment and care.

Royal Perth Hospital

306. There are two aspects to the assessment of the quality of Ashleigh's treatment and care, namely:
- a) The role of the individual clinicians; and
 - b) The role of Royal Perth Hospital, as part of the East Metropolitan Health Service.

²⁰⁹ ts 446.

²¹⁰ ts 447.

²¹¹ ts 462 to 463.

307. Commencing with the individual clinicians who assessed and/or treated Ashleigh on 27 December 2019, I am satisfied that the standard and quality of their medical care provided by each of them was reasonable within the limits of the systems and procedures available to them. I do not make any adverse comment in respect of individual clinicians. They were working in an overcrowded ED environment, and provided Ashleigh with the best care that they could give.
308. Turning to the East Metropolitan Health Service and Royal Perth Hospital however, I am satisfied that, as a consequence of their systems and procedures, there were missed opportunities to identify the seriousness of Ashleigh's condition earlier.
309. Ashleigh's family refer to her collection of symptoms that ought to have raised concern about the seriousness of her condition, namely her rapid shallow breathing, her tachycardia, weak radial pulse, intense 10 out of 10 pain, vomiting, diarrhea, low body temperature and collapses.
310. Through its lawyer the SSO, the East Metropolitan Health Service (incorporating Royal Perth Hospital) acknowledges that there were a number of missed opportunities and proffers an explanation, as follows:
- a) East Metropolitan Health Service accepts that Ashleigh's access to the Royal Perth Hospital ED was delayed due to overcrowding of the ED. They would prefer that all patients seeking emergency care immediately enter the ED for medical assessment. They explain that this is not always possible, and cases need to be prioritised having regard to clinical urgency.²¹²
 - b) East Metropolitan Health Service accepts that Ashleigh was not treated within the 30 minute time frame contemplated by her Triage Code of 3 (such code meaning that her condition had been assessed by Nurse Walthew as follows: "*may progress to life or limb threatening, or may lead to significant morbidity, if assessment and treatment are not commenced within 30 minutes of arrival*"). Referring primarily to the evidence given by Dr Hitchcock and Professor Putland, East Metropolitan Health Service draws attention to the nationally accepted standard of 75% of Triage Code 3 patients being seen within 30 minutes,

²¹² ts 322, 449 and 389.

whilst maintaining that it nonetheless aspires to meet that 30 minute time frame for all Triage Code 3 patients.²¹³

- c) East Metropolitan Health Service endorses Professor Waterer’s evidence to the effect that it would be preferable if Triage Code 3 patients could immediately enter the ED. They explain that this is not always possible due to ED overcrowding and acknowledge that these are less than ideal circumstances. They submit that in the circumstances of ED overcrowding, Ashleigh’s placement on the Ramp and then in the A Bay was appropriate.²¹⁴
- d) East Metropolitan Health Service accepts that generally, not having the capacity to move a Triage Code 3 patient into the ED for medical assessment is a potential missed opportunity. Endorsing Professor Waterer’s evidence, they accept that there were missed opportunities to identify Ashleigh’s deterioration and escalate her care, and that the ED overcrowding at Royal Perth Hospital meant that Royal Perth Hospital did not provide the care that it would have liked to have provided. However, referring to Dr Hitchcock’s evidence and Professor Putland’s evidence, they submit that the missed opportunities were generated solely by the lack of available ED beds.²¹⁵
- e) East Metropolitan Health Service also accepts that a specific missed opportunity to identify Ashleigh’s deterioration occurred, with the benefit of hindsight, when she had a faint (or near faint) in the Royal Perth Hospital toilets. This occurred shortly after Ashleigh’s care was handed over to Nurse Allen at the A Bay and St John Ambulance removed their monitoring equipment, being after 1.45 pm). Nurse Allen took Ashleigh to the toilets. East Metropolitan Health Service refers to Professor Waterer’s evidence about the faint (or near faint) being the first real “*clue*” to escalate Ashleigh’s care, because hypotension is a critical event that signals sepsis. East Metropolitan Health Service also refers to Nurse Allen’s acknowledgement at the inquest that in hindsight he could have escalated Ashleigh’s care to the ED at the time of the faint (or near faint). In Nurse Allen’s words this would have been: “...*essentially just pushing her in....*” However, East Metropolitan Health Service also

²¹³ Exhibit 1, tabs 14.1 and 22; ts 316, 395 and 441.

²¹⁴ ts 449

²¹⁵ ts 463.

submit that it is now impossible to be certain as to whether Ashleigh's blood pressure had dropped because as outlined previously, Nurse Allen was not able to obtain a blood pressure reading due to Ashleigh moving about.²¹⁶

311. Through its lawyers the SSO, and citing Dr Waterer's report, the East Metropolitan Health Service also submits that there is no effective test or criteria to identify dangerous sepsis until blood pressure drops. Dr Waterer's view is that there is currently no tool or test that can be applied at the time of triage which would suggest severe sepsis on the basis of tachycardia and agitation alone.²¹⁷
312. I am satisfied that primarily as a result of ED overcrowding, there were missed opportunities to identify the seriousness of Ashleigh's condition and to escalate her care at Royal Perth Hospital. The quality of the care and treatment afforded to Ashleigh was below the standard that ought to be expected of a public hospital in Western Australia.
313. This is not, however, a matter unique to the functioning of Royal Perth Hospital and/or East Metropolitan Service. They are operating within a health system where ED overcrowding has become normalised. One of the many problems with ED overcrowding is that clinicians end up rushing around in stressful environments, doing their very best. The risk is that they may be placed in a position of making assessments without the right amount of time to think about them, to reflect upon them, and to consider whether re-assessment is needed (and that this way of working becomes normalised).
314. In reaching this conclusion I have taken account of the evidence outlined below of Dr Speers, Dr Hitchcock, Professor Putland, Professor Waterer and Dr McCoubrie that touches upon the questions of whether the severity of Ashleigh's illness ought to have been detected, and on the quality of her treatment having regard to the delay she experienced in accessing the ED. That delay was affected by the implementation of the ED Capacity Procedure, as a result of ED Overcrowding.
315. The ED Capacity Procedure did not operate in the interest of Triage Code 3 patients such as Ashleigh, as this was the cut-off point, that resulted in her

²¹⁶ Exhibit 4; ts 455 to 456.

²¹⁷ Exhibit 2.

being triaged to the Ramp despite being assessed as having a potentially life-threatening condition.

316. While there did not appear to be a major trigger for considering the risk of sepsis, the difficulty in obtaining blood pressure readings may have impeded the information required for this trigger.
317. The experts were generally in agreement that Ashleigh should have had timely access to the ED, and that she did not have that.
318. The expert evidence that I have primarily relied upon in reaching my conclusions regarding the missed opportunities and the quality of Ashleigh's treatment and care appears below.

Dr Speers

319. Within the context of whether sepsis ought to have been considered, Dr Speers evidence was that some of the classical features of meningococcal infection were absent. Having regard to the severity of Ashleigh's meningococcal infection, Dr Speers formed the view that it progressed too rapidly for a rash to develop. He noted that Ashleigh did not develop fever, chills, or rigors.²¹⁸
320. Ashleigh complained of 10 out of 10 pain, which moved around her body and was difficult to describe. Dr Speers noted that severe muscle pain, in the absence of fever may be an early symptom of meningococcal, staphylococcal or streptococcal septicaemia, and this remains as an important lesson in the context of Ashleigh's case.²¹⁹
321. Dr Speers referred to the following circumstances as factors that might have affected Ashleigh's assessment, though he feels that the degree to which that occurred cannot be known:
 - a) Absence of a fever;
 - b) Absence of a rash;
 - c) Severe pain, that may have been dominating the presentation;
 - d) The lack of a low blood pressure; and
 - e) The history of recent drug use.²²⁰

²¹⁸ Exhibit 1, tab 16.1.

²¹⁹ Ibid.

²²⁰ Ibid.

322. Dr Speers explained that diagnosis of meningococcal disease is more straightforward with meningitis than with meningococcaemia (Ashleigh having the latter). Meningitis has more straightforward clinical symptoms (headache, neck stiffness, altered conscious state, photophobia and possibly seizures) and a slower evolving infection.²²¹
323. Dr Speers explained that on the other hand, diagnosing meningococcal infection requires clinical suspicion of an infective process, supported by investigations. Such investigations would include a full blood picture. With an overwhelming acute systemic infection, he would expect to see that the white cell count and platelets are low indicating a bone marrow failure due to the infection. A kidney and liver function, a blood sugar level and a C-reactive protein are also commonly performed. It may involve a blood PCR test which may detect the bacterial genome without waiting for the bacteria to grow. Due to the time it takes to get the results, if there is a clinical suspicion of septicaemia, antibiotic treatment is recommended.²²²
324. Ashleigh's disease progressed so rapidly that, in Dr Speers' view, there was no time for her to develop more evident symptoms. Having regard to the infection risk factors in the Adult Sepsis Pathway, that is used by Emergency Departments for triaging unwell patients when infection is suspected, Dr Speers noted that Ashleigh had a temperature of less than 36 degrees, but not the other high-risk factors.²²³
325. Dr Speers noted that Ashleigh had an increased heart rate and that potentially this was mistakenly attributed to her pain and agitation at the material time. She had an increasing breath rate, and the same may have occurred. However, she was not hypotensive, she had no rash, no fever, and no meningitis, which Dr Speers describes as the more typical clues to meningococcal infection.²²⁴
326. At the inquest Dr Speers was asked to expand on this area by reference to the Royal Perth Bentley Group Adult Sepsis Pathway guide, 2019 and 2022 versions (the Sepsis Guide) from the perspective of whether Ashleigh's presentation should have raised a suspicion for sepsis, based upon the indicators for recognising it. The Sepsis Pathway contains a flow chart to

²²¹ Ibid.

²²² Ibid.

²²³ Ibid.

²²⁴ Ibid.

guide the clinician. For the purposes of this analysis there is no material difference in the Sepsis Guide as of 2019 and 2022.²²⁵

327. Having regard to the risk factors listed on the Sepsis Guide, Dr Speers explained that Ashleigh did not have any of the listed background conditions that put her at higher risk of infections and sepsis (such as being immunocompromised or having had recent surgery).²²⁶
328. Having regard to the symptoms or complaints listed on the Sepsis Guide, and the observations taken by St John Ambulance, Dr Speers noted that Ashleigh had three of them, namely a low temperature (35.9 degrees), an elevated heart rate (116 beats per minute) and abdominal pain.²²⁷
329. In respect of criteria that may indicate organ dysfunction, Dr Speers noted that Ashleigh's respiratory rate (24 breaths per minute) was slightly elevated (being more than 22 breaths per minute) but he also noted that her oxygen saturations were not reduced (being between 98% and 100%). Her systolic blood pressure was not less than 100. The St John Ambulance observations record it as being between 103 and 107 (between 1.13 pm and 1.37 pm).²²⁸
330. In his overview of the Sepsis Guide, Dr Speers noted that while the Sepsis Guide refers to abdominal pain, with reference to vomiting, it does not refer to the non-specific sepsis pain where the muscles hurt. At the inquest he said:

“So pain is a recognised symptom of sepsis. It's most commonly back pain or thigh pain, but it can be more generalised, or body pain as well. You're sore to the touch and it's a symptom of sepsis but it may not be on the pathway because it's such a non-specific sign. So many things cause pain. It's one of the commonest presentations to an Emergency Department. It may not be discriminating enough, which is why it's not in this pathway.”²²⁹

331. Dr Speers posited that on occasions, the significance of pain may not be fully incorporated into a clinician's assessment: *“If you're very busy rushing around, you may not have the mental space to think, you know, this person is*

²²⁵ Exhibit 2; ts 420.

²²⁶ ts 420.

²²⁷ ts 421.

²²⁸ Exhibit 1, tab 10; ts 422.

²²⁹ ts 423.

in a lot of pain, why are they in pain, it's not explained, what else could be causing that, that sort of thing."²³⁰

332. Turning back to the question of whether there was anything in Ashleigh's presentation that would have suggested the implementation of the Sepsis Guide, Dr Speers did not consider there was anything that would have been a "*major trigger*" for sepsis, based upon Ashleigh's medical records. However, Dr Speers also noted that it was difficult for the Royal Perth Hospital nurses to get readings of blood pressure and heart rate, and this may have impeded getting the information to trigger the pathway under the Sepsis Guide.²³¹
333. I accept that there was no major trigger for sepsis, but I share Dr Speers' concerns about the clinicians working in an overcrowded ED environment, which can impact upon the time they have to fully consider the implications of symptoms.

Dr Hitchcock

334. In Dr Hitchcock's view it was probable that the methylamphetamine and MDMA that Ashleigh took may have artificially raised her blood pressure, thereby masking the hypotension that would have been an obvious sign of clinical shock at the stage of triage.²³²
335. As outlined earlier, Dr Hitchcock considered it appropriate for Ashleigh to have been allocated a Triage Code of 3 (which would apply in the case of a potentially life-threatening condition). He noted that there were no life threats identifiable upon presentation. He also noted that persisting pain, vomiting and diarrhea are not consistent with a history of drug use. He therefore considered that while Ashleigh's triage assessment was delayed, it was adequate and a Triage Code of 3 was a "*reasonable and cautious approach*" at the material time.²³³
336. Dr Hitchcock took account of the ED being overcrowded that day, and that the Triage Nurse was under an operational instruction to follow ED capacity procedure. Under these circumstances, he felt that the Triage Nurse's

²³⁰ ts 421.

²³¹ ts 424.

²³² Exhibit 1, tab 14.

²³³ Ibid.

placement of Ashleigh at the Ramp location was consistent with her operational instruction.²³⁴

337. Dr Hitchcock expressed the following concerns in connection with Ashleigh's medical care and treatment:

- a) He does not consider it "*clinically appropriate*" for any patient with a potentially life-threatening condition, as reflected in a Triage Code of 3, to wait 60 minutes before assessing an acute ED care cubicle;
- b) The ED Capacity Procedure is not in the best interests of Triage Code 3 patients.²³⁵

338. On the matter of Ashleigh waiting approximately one hour from the time of her arrival (approximately 1.16 pm) to the time she was seen by a doctor in the acute ED care cubicle (2.16 pm), Dr Hitchcock refers to is as a "*delay*" and in his opinion this impacted the standard of care that she received.²³⁶

339. Dr Hitchcock considered that the most appropriate care for Ashleigh would have been for her to be triaged on or immediately after her arrival at Royal Perth Hospital (at approximately 1.16 pm). Having been allocated a Triage Code of 3, ideally the following would have occurred:

- a) She would have had timely access to an acute ED cubicle where an ED nursing assessment could have commenced to assess her distress, pain, and analgesia;
- b) Within 30 minutes of triage, she would have been seen by skilled ED medical and nursing practitioners who would have recognised that she was in septic shock;
- c) Her initial management would have included the following:
 - i. Oxygen titrated to a target of 94%;
 - ii. Blood cultures taken;
 - iii. Empiric antibiotics given;
 - iv. Lactate levels assessed;

²³⁴ Ibid.

²³⁵ Exhibit 1, tab 14.

²³⁶ Ibid.

- v. IV fluid resuscitation commenced;
- vi. Urine output measurements initiated.²³⁷

340. Dr Hitchcock noted that Ashleigh did not receive the above care, with the main reason being that no acute ED bed was available when she arrived at Royal Perth Hospital:

“Ms Hunter’s management was not appropriate in all circumstances. Health practitioners’ capacity to care for her was impaired and delayed by Emergency Department overcrowding.”²³⁸

341. I accept Dr Hitchcock’s reservations about Ashleigh’s management.

Professor Putland

342. Professor Putland questioned the extent to which the crowding in the ED at Royal Perth Hospital when Ashleigh presented influenced the Triage Nurse’s decision to apply a Triage Code 3 instead of a Triage Code 2.

343. While the extent is not established, it is a matter of concern to me that Nurse Walthew was placed in a position of having to make such an impactful and finely balanced decision, against a background of being informed that the ED Capacity Procedure had been implemented, and there were not enough ED cubicles.

344. In Professor Putland’s opinion an elevated heart rate on its own would justify a Triage Code 3, but “*very severe pain*” justifies a Triage Code 2. He noted that 10 out of 10 was recorded as the pain score, but that it was also noted that Ashleigh was “*very distractable.*” Overall, he felt that a Triage Code 2 would have been more appropriate, but it would not be uncommon in the circumstances for a Triage Code 3 to be applied.²³⁹

345. In Professor Putland’s view the care that would ideally have been afforded to Ashleigh was within the capabilities of the ED of Royal Perth Hospital: “.... *when it has capacity to bring unwell people directly in, and when it is resourced for an immediate response.*”²⁴⁰

²³⁷ Ibid.

²³⁸ Ibid.

²³⁹ Ibid.

²⁴⁰ Exhibit 1, tab 15.

346. In Ashleigh’s case he opined that the time taken to review her was longer than any ED would want to take in the case of a distressed patient with a tachycardia and elevated respiratory rate.²⁴¹
347. I accept Professor Putland’s concerns about the delay in Ashleigh’s treatment.

Professor Waterer

348. Professor Waterer, as Director of Clinical Services of Royal Perth Hospital Group, opined that Ashleigh’s Triage Code was appropriately given based upon their triage policies. In his view, in the presence of normal blood pressure, there was no basis for increasing the triage priority by reference to Ashleigh’s increased heart rate and agitation.²⁴²
349. At the inquest Professor Waterer testified that he was “*absolutely not*” satisfied with Ashleigh’s journey from her arrival at Royal Perth Hospital in the St John Ambulance up to her admission to the ED. Resourcing levels essentially impeded her progression. Professor Waterer would like to have seen Ashleigh come straight into the ED and be assessed.²⁴³
350. Having regard to Ashleigh’s bacterial load and the time that she presented at Royal Perth Hospital, Professor Waterer felt that there was no opportunity to change her clinical outcome, even if the ED had capacity to receive her upon arrival.²⁴⁴
351. On the matter of “*ramping*”, that Professor Waterer refers to as “*Extended transfer of Care*”, a number of comments are made. On behalf of the East Metropolitan Health Service Professor Waterer acknowledges the potential for adverse consequences on patient outcomes and staff morale where Extended Transfer of Care is longer than 30 minutes.²⁴⁵
352. In this regard, whilst maintaining that there was no adverse impact on the clinical outcome in Ashleigh’s case, Professor Waterer draws my attention to a range of initiatives aimed at mitigating the risk of not detecting clinical

²⁴¹ Ibid.

²⁴² Exhibit 2.

²⁴³ Ts 449.

²⁴⁴ Ibid.

²⁴⁵ Ibid.

deterioration. These are addressed later in this finding under the heading: *Improvements*.

353. I share Professor Waterer's disappointment with Ashleigh's journey from her arrival at Royal Perth Hospital to her admission to the ED.

Dr McCoubrie

354. Director of Emergency Medicine at Royal Perth Hospital, Dr McCoubrie, reported that patients on the "Ramp" should receive a triage nursing assessment on arrival and a review by the Emergency Physician in Charge "usually within 20 minutes or earlier if requested."²⁴⁶
355. Under this scenario Ashleigh, who was triaged between 1.29 pm and 1.32 pm would have been reviewed by the Emergency Physician in Charge between 1.49 pm and 1.52 pm. Instead, she was not seen by a doctor until a time between 2.16 pm and 2.19 pm.²⁴⁷

The focus on illicit drugs

356. Ashleigh's family express a range of concerns related to the impact that her admission about her use of illicit drugs had on her treatment and care at Royal Perth Hospital. They believe it impacted adversely upon it, and consequently a collection of symptoms that should have raised serious concerns for septicaemia were prematurely and erroneously attributed to drug use. They feel that for most who encountered Ashleigh that day, stimulant drug toxicity was the primary and only suspicion for the cause of her condition.
357. Indeed, one of the features of the information about Ashleigh's symptoms, passed on from one clinician to another concerned her having taken illicit drugs. This is not to say that drug taking is not a relevant consideration in connection with a patient. My concern is that there were significant symptoms reflecting upon the seriousness of Ashleigh's condition, but the drug taking was the one consistent piece of information that was passed on. The following outlines the manner in which this specific information was sought and passed on:

²⁴⁶ Exhibit 1, tab 17.1.

²⁴⁷ Exhibit 1, tab 17.1 and 21.7.

- a) The St John Ambulance Officers properly recorded that Ashleigh had taken “*2 caps MDMA and unknown quantity of methamphetamine*” on the SJA Patient Record after attending to her at her residence, and then passed it on (along with the rest of the relevant information) to the Triage Nurse, Nurse Walthew at approximately 1.30 pm. They also recorded Ashleigh’s partner as being “*highly animated*”, the inference being that he was on drugs, and Nurse Walthew was informed, who notified security about the potential threat that the partner posed.
 - b) Nurse Walthew recorded: “*used MDMA and meth last night*” in Ashleigh’s Triage Notes (between 1.29 pm and 1.32 pm), when Ashleigh was on the Ramp.
 - c) The drug taking was noted by the ABay Nurse, Nurse Allen, who looked at the Triage Notes as Ashleigh was being prepared for handover into the ABay.
 - d) Nurse Ball who received Ashleigh into the ED at 2.16 pm, after Nurse Allen could not take observations, recalled Nurse Allen informing her that Ashleigh had taken drugs as something that: “*stands out.*”
 - e) At 2.20 pm Nurse Flint recorded Ashleigh having stated she had taken “*meth, weed, MDMA and alcohol today*” in Ashleigh’s medical notes.
 - f) As late as the time when Dr Teo became involved, very shortly before Ashleigh’s cardiac arrest at 2.28 pm, he was informed that Ashleigh had: “*consumed methamphetamine that day*” (though he did not think her symptoms were consistent with methamphetamine toxicity).²⁴⁸
358. In his report to the coroner Professor Putland opined that that while many of Ashleigh’s symptoms could have been attributed to drug toxicity: “*.... the fact that she slept for a few hours before becoming unwell should have put stimulant drug toxicity very low on the list of differential diagnoses.*”
359. At the inquest I explored the question of whether there may have been an associated cognitive bias that clouded the assessments made of Ashleigh, and attributed her serious symptoms to drug taking, thereby closing off, in the minds of clinicians, other avenues of inquiry.

²⁴⁸ Exhibit 1, tabs 7, 10, 19 and 21.7; ts 217; ts 220; ts 261.

360. Nurse Judith Kenworthy (Nurse Kenworthy) was the shift coordinator at Royal Perth Hospital on 27 December 2019. Her role involved overseeing the ED. At the inquest she was questioned on whether, in her experience, the full picture of a patient is sometimes obscured by a focus on drugs as opposed to a full examination. Her response was candid and professional: “... *it’s human to have a bias. But you’re there as a nurse and a professional. So you’ve got to examine your bias and put it aside. Is it always easy? No.*”²⁴⁹
361. At the inquest the Triage Nurse, Nurse Walthew, was asked to reflect on whether there was anything in Ashleigh’s presentation that should have triggered the sepsis pathway. With the benefit of hindsight, Nurse Walthew thought she probably should have had heightened suspicion for sepsis.²⁵⁰
362. However, Nurse Walthew felt that at the material time the picture was clouded by the fact that Ashleigh had used methamphetamines, which in her view may have accounted for the agitation, the high pulse rate and the lack of responsiveness. Looking back, she said: “*If there was no drugs on board, yes, I would have said this looks like sepsis.*”²⁵¹
363. Nonetheless Nurse Walthew testified that she doubted that it would have made a difference to the length of time that Ashleigh waited to see a doctor, which is a concern.²⁵²
364. In response to a question about the triage process and specifically whether Ashleigh’s agitation and the trouble in getting her blood pressure would have been enough to allocate a Triage Code of 2, Nurse Walthew responded in a manner that shows how finely balanced this decision can be:

*“-In a person who I believed drug-affected with a pulse rate under 125 because I said 120, it’s a toss-up. I don’t think so. Perhaps. Well, I don’t know. It – yes. It’s a borderline case. So yes. I would go maybe yes.”*²⁵³

²⁴⁹ ts 246 to 247.

²⁵⁰ ts 126 to 127.

²⁵¹ ts 126.

²⁵² ts 126 to 127.

²⁵³ ts 133.

365. At the inquest Nurse Allen did not express a view on whether Ashleigh’s drug use potentially clouded the realisation that there was an infective source for her deterioration, though he conceded it could “*possibly*” have that effect. He testified that there are frequent presentations of persons intoxicated by drugs and he considers them: “*higher risk*”. He did not discount the possibility of assumptions being made about the reasons as to why drug affected persons have presented, but understandably said it is a difficult question to answer.²⁵⁴
366. Dr Ng as outlined previously in this finding did not recall saying “*it’s probably related to the meth*” to Nurse Allen. He maintained that such a response would not be in his normal practice, and he would want to take more available information into account. His evidence was that drug use may be relevant to a presentation, but he would not shut things off in that way without a proper assessment. He posited that drug use might cloud the patient’s own perception of what is going on and suggested that: “... *we end up investigating them more*” because of the potential effects of drug use.”²⁵⁵
367. On the matter of the frequency of presentations of drug affected patients, at the inquest Professor Waterer’s evidence was that: “... *methamphetamines are so common in our emergency department, it doesn’t cause a blink...*” He was confident that there is no culture of assuming symptoms are methamphetamine related, and if anything, it would result in over-investigation as opposed to under-investigation.²⁵⁶
368. Through their lawyer the SSO, East Metropolitan Health Service submit to me that the information concerning Ashleigh’s drug use did not result in a bias against her in the direction of providing a lesser standard of care.
369. I am satisfied that while there is no culture of inappropriate bias in connection with patients who have taken illicit drugs, and while in some cases the information would appropriately result in additional clinical investigations of that patient, it is clear, particularly from the evidence of Nurse Walthew that the information did have an effect. The effect it had was that Nurse Walthew attributed some of Ashleigh’s symptoms to there being “*drugs on board.*” She might otherwise have considered sepsis.

²⁵⁴ ts 178 to 179.

²⁵⁵ ts 291 to 292.

²⁵⁶ ts 456.

370. Nurse Walthew is highly experienced and she provided mature and candid responses to the questions asked of her at the inquest. Having regard to the limits of the systems and procedures available to her, I have no criticism of her triage of Ashleigh.
371. However, in hindsight, the focus on the illicit drugs was not warranted.

Pain management

372. Ashleigh had told the St John Ambulance officer Mr Kenny that she had generalised 10 out of 10 pain, and her partner advised that she had taken some paracetamol and Nurofen (though there was no information as to when they were taken). Mr Kenny informed the court that if such medication did not give pain relief, the next step up would be an opioid, namely fentanyl. However, given that Ashleigh was “*easily distracted*” he did not consider administering fentanyl.²⁵⁷
373. The St John Ambulance paramedic Ms Sutton agreed with Mr Kenny, explaining that there was no indicator for fentanyl and having regard to the proximity of Royal Perth Hospital, there would be a lot more choice of medications. Ms Sutton did confirm that the drugs that Ashleigh had taken would not have affected the pain relief.²⁵⁸
374. St John Ambulance paramedics have a number of pain management options in the field, but they are usually short acting and designed to manage pain to extricate the patient from their situation and transport them to hospital.²⁵⁹
375. Through its lawyer Moray and Agnew, St John Ambulance draws my attention to the evidence of the Acting Head of Department Metropolitan Ambulance Operations Mr Joel Moore (Mr Moore) who explained that where a patient is a few minutes from hospital, regard needs to be had to a range of factors, because the hospital would be able to provide a better level of ongoing and longer acting pain relief.²⁶⁰
376. That is a reasonable position for Mr Moore to take but it of necessity presupposes that the patient’s pain may be addressed upon or close to arrival

²⁵⁷ ts 28 to 29.

²⁵⁸ ts 79; ts 96.

²⁵⁹ ts 337.

²⁶⁰ Exhibit 3; ts 351.

at the hospital. As it transpired, due to Ashleigh being placed at the Ramp and A Bay locations over the course of approximately an hour, her severe pain levels were not able to be adequately addressed at Royal Perth Hospital. This is not a criticism of St John Ambulance, but a recognition that the fragmentation of care at Royal Perth Hospital had unintended consequences in the area of pain management.

377. As outlined previously in this finding, Ashleigh's Triage Notes record her self-assessed 10 out of 10 pain score. Those same Triage Notes also record that she had taken Panadol and Nurofen prior to her presentation. Nurse Walthew made the record of these medications after being informed of them and she assumed Ashleigh had taken them for her pain. She questioned St John Ambulance officers, but as indicated above they had no information on when Ashleigh took them. Upon being questioned, Ashleigh was not able to recall when she took them.²⁶¹
378. At this point there appears to be no evident justification as to why Ashleigh was not given pain relief, save that she was on the Ramp and opioids cannot be administered without a doctor's supervision.
379. I am concerned that at the material time, Ashleigh's erratic behaviour while she was on the St John Ambulance stretcher was potentially attributed by the clinicians who observed her to be drug related, but the evidence does not establish this in respect of all such clinicians. Ashleigh's Triage Notes recorded her recent drug and alcohol use. This may have led to the assumption that her symptoms and behaviour were primarily drug related. This may also have led to a decision not to prescribe her pain medication.
380. It is now known that her yelling and rolling around should be attributed to the fact that she was in very severe pain and close to death.
381. As outlined previously in this finding, Nurse Walthew did not believe Ashleigh had 10 out of 10 pain because of her "*distractibility*", and formed the view that it was more likely to be in the range of seven out of 10 pain. The inference drawn is that if a patient can be distracted from their pain it cannot be all that severe. At the inquest she explained that while it sounds very unfair, she and other nurses need to make such judgement calls.²⁶²

²⁶¹ ts 119.

²⁶² ts 118 to 119.

382. Ashleigh, to the extent that she was able, remained consistent in expressing the severity of her pain, from when she was first attended to, until her last words almost immediately before going into cardiac arrest. Nurse Ball recalled Ashleigh's pleas for help with her pain when she was finally placed within the critical care bay of the ED: *"I remember her rolling, moving and, sort of, arms going out. And I remember her saying, you know, "It hurts," or, "Help," or something to that effect, that she was, you know, agitated, distressed, even."*²⁶³
383. Dr Speers, familiar with the infective process, testified that the pain experienced in sepsis can vary from none, to extremely severe pain. He had regard to reports of Ashleigh being confused and saying unusual things, and posited that she may have been less able to get across how much pain she was in. Knowing that Ashleigh reported 10 out of 10 pain, his comments regarding the severity of pain in sepsis, and on Ashleigh's account, are relevant: *"... it can be extremely severe. Severe to the point where people can't even walk because it hurts too much to walk. So in severe sepsis, the pain can be to the point of crippling so I don't have a reason to doubt it."*²⁶⁴
384. I am satisfied that Ashleigh's rolling about the stretcher, also described as thrashing about, was due to her severe pain levels. Had she been administered adequate pain relief, she may have stopped thrashing about, and it may have been possible to take her observations, and note her deterioration, at an earlier stage.
385. Through its lawyer the SSO, the East Metropolitan Health Service submits to me that the administration of pain relief is a matter of clinical judgment and draws my attention to the expert witnesses who gave evidence about the subjective nature of pain, the relevance of distractibility, and the importance of prioritising the escalation of Ashleigh's care over the provision of analgesia, which is important but not lifesaving.²⁶⁵
386. At the inquest Nurse Walthew confirmed that she was not able to prescribe medication (such as the opioid fentanyl); that would have required the

²⁶³ ts 220.

²⁶⁴ ts 429.

²⁶⁵ ts 119, 135, 362 TO 363, 396,

assessment of a doctor. She explained that Ashleigh had already taken what she would have been able to give her (namely Panadol and Nurofen).²⁶⁶

387. At the inquest Dr Ng explained that if the Panadol and Nurofen do not alleviate the pain the next level up are the moderate opioids such as oxycodone. The next level up after that would be morphine or fentanyl administered intravenously. However, such patients require close monitoring, that cannot occur on the Ramp or the A Bay (as it operated at the material time). Dr Ng outlined the risks attending the administration of opioids in an area without close supervision because patients may suddenly become drowsy, or otherwise experience a strong reaction: *“It is a difficult situation and there’s no easy, straightforward answer to that. But certainly, giving IV medications is a recipe for disaster in an area that’s unsupervised.”*²⁶⁷
388. Dr Ng noted that the A Bay is a slightly isolated area away from medical care. In considering the administration of further pain relief he raised factors such as the skill of the A Bay nurse, whether or not all four of the A Bay beds are occupied, and the case by case assessment of the patient, and their risk factors: *“.... I wouldn’t be – feel comfortable giving a lot of pain relieve out there, knowing that the patient can potentially deteriorate. And certainly not IV medication that, you know, that requires a lot more close monitoring....”*²⁶⁸
389. Even with oxycodone, Dr Ng would still be concerned about creating a worse situation because: *“.... the patients can deteriorate sometimes because they’re not sensitive to the effects”*²⁶⁹
390. In the administration of pain relief, Dr Ng prefers the patients to be in the safety of a properly allocated patient area in the ED.²⁷⁰
391. Whilst I accept, as submitted by East Metropolitan Health Service through their lawyer the SSO, that the escalation of Ashleigh’s care would have had priority over the administration of analgesia, given what is now known about her rapid deterioration, the fact remains that she was in what Dr Hitchcock refers to as an: *“.... inappropriate location”*. This, Dr Hitchcock said, was recognised by

²⁶⁶ ts 120.

²⁶⁷ ts 289.

²⁶⁸ ts 318.

²⁶⁹ ts 318.

²⁷⁰ Ibid.

both St John Ambulance staff and hospital staff, who were attempting to escalate her care.²⁷¹

392. The escalation of Ashleigh’s care and her pain management are not mutually exclusive. Focussing on the severity of Ashleigh’s pain levels, it is noteworthy that the World Health Assembly considers it to be an: “*ethical duty of health care professionals to alleviate pain and suffering.*”²⁷²
393. The ATS Guidelines for allocating a Triage Code mandate the following:
- a) For Triage Code 2, in respect of very severe pain: “*Humane practice mandates the relief of very severe pain or distress within 10 minutes.*”
 - b) For Triage Code 3, “*Humane practice mandates the relief of severe discomfort or distress within 30 minutes.*”
394. At the inquest Dr Hitchcock was asked to consider, in hindsight, the question of pain relief for Ashleigh. This was in light of concerns expressed, such as by Dr Ng, regarding the potential for her deterioration through the administration of opiate pain relief.²⁷³
395. Dr Hitchcock does not think it is reasonable not to give opiate pain relief to patients who are in severe pain (subject to adequate medical supervision). He believes Royal Perth Hospital has the capacity to manage the attendant risks. For example, while opiates may precipitate hypotension, in the process the patient is being assessed, an IV line would be established, and fluids given.²⁷⁴
396. Ashleigh’s parents rightly feel that at the very least she ought to have been afforded the dignity of a humane death. They submit that providing Ashleigh with relief from her pain would have at the very least granted her the solace of knowing she was being cared for.
397. Royal Perth Hospital did not provide Ashleigh with pain relief, despite her self-assessed pain score of 10 out of 10. The fact that she was on the Ramp and in the ABay for approximately one hour meant that she was not assessed

²⁷¹ ts 386.

²⁷² World Health Assembly. Resolution 67.19, May 24, 2014. Available at: http://apps.who.int/gb/ebwha/pdf_files/WHA67/A67_R19-en.pdf. Accessed November 16, 2018.

²⁷³ ts 391.

²⁷⁴ Ibid.

by a doctor over that period, therefore pain management was not able to be adequately considered.

398. It cannot now be known what the outcome of an earlier assessment for pain management would have been, but it could have avoided her dying whilst thrashing about in pain. At the time, her thrashing about was to a degree attributed to drugs, and that is a lesson to be taken from this inquest, for clinicians to check their assumptions and potential biases when assessing patients who have taken drugs.
399. Ashleigh died in pain, most of her time spent waiting outside the ED with no access to pain relief. At the end of her life, she was having trouble articulating the area of her pain and was only able to place her shaking hands over her abdominal area in response to questions about pain. It should not have happened like this.²⁷⁵

ED overcrowding

400. In his report to the coroner, Dr Hitchcock opined that the matter of EDs operating at overcapacity, resulting in delayed access to clinically appropriate care, appears to be a systemic problem and he considers it likely that all metropolitan EDs are affected.²⁷⁶
401. At the inquest Dr Hitchcock approached the question of ED overcrowding and potential solutions. Self-evidently it is a difficult area to address, and his views are based upon his very many years of intensive and high-level experience in the ED settings, as an ED Consultant.
402. Dr Hitchcock raised the matter of ED overcrowding within the context of demand for its services, including in instances where there are attendances at ED for matters that are not an “*emergency*”. He referred to the problem as follows:

“... the level of demand and the fact that quite a lot of patients go to emergency departments with things that may not be actually emergencies, and that raises the question, and perhaps I will, you know, I could ask you, “What is an emergency?” and I can tell you that there’s no clear definition of what is an emergency in our health

²⁷⁵ Exhibit 7; ta 116 to 117.

²⁷⁶ Exhibit 1, tab 14.

system. And – and it may be a very useful thing to do to – for a community to consider what is an emergency. And implications of that is that you can start to manage demand as patients come to emergency departments and direct people to more appropriate places to go. But that’s a huge body of work”²⁷⁷

403. Dr Hitchcock explained that ED overcrowding is referred to in some quarters as a “*crisis*” but for him, this suggests it is something acute that can be fixed. In fact, he has been seeing patients in hospital EDs since 1986 and experiencing overcrowded EDs for between 20 to 25 years.²⁷⁸
404. Dr Hitchcock addressed the benefits of the universal 24-hour access that ED’s can provide, they are free for the patients, they are capable of seeing a high volume of patients, they represent an attractive option for seeking medical care and they represent “*an amazing safety net for our health system*”²⁷⁹
405. However, the difficulty with ED overcrowding as outlined by Dr Hitchcock is that when problems are generated, they are serious ones. ED overcrowding has the potential to result in the following harms:
- a) The delay in treatment for time dependant conditions;
 - b) The transmission of highly infectious illnesses as between patients in the overcrowded ED;
 - c) The potential for medical error as a result of the greater load on the ED (for example, errors in drug administration, shortcuts because people do not have time).²⁸⁰
406. In light of Dr Hitchcock’s evidence at the inquest, I posed some follow up questions for him, directed towards the potential for public awareness education programs about the question raised by Dr Hitchcock: “*What is an emergency?*”
407. After the inquest the Department of Health provided a response in connection with the issues raised by Dr Hitchcock. Commencing with “*urgency*” the Department of Health draws my attention to the guidance from the

²⁷⁷ ts 360.

²⁷⁸ ts 357.

²⁷⁹ Ibid.

²⁸⁰ ts 357 to 358.

Commonwealth Department of Health and Aging, advising that “urgency” is determined according to the patient’s clinical condition and is used to: “*determine the speed of intervention that is necessary to achieve an optimal outcome.*”²⁸¹

408. Patients who may eventually require a hospital admission, or who have significant morbidity and attendant mortality may still be safe to wait for an emergency assessment. Urgency will be dependent upon the severity or complexity of the illness or injury.²⁸²
409. The Department of Health confirms that there is no formal definition of what constitutes an “emergency” in the ED setting and they note that some patients may seek urgent treatment for a condition, that could be safely provided by a GP. In some cases, there may be no timely GP appointments, or it may be after hours, in which case it may be appropriate for that patient to attend the ED.²⁸³
410. The Department of Health draws my attention to the National Health Reform Agreement which states that the States will provide health and emergency services through the public health system, based on the Medicare principles that include the following: “*eligible persons must be given the choice to receive public hospital services free of charge as public patients*” and “*access to public hospital services is based on clinical need and within a clinically appropriate period.*”²⁸⁴
411. While there appears to be broad agreement amongst ED physicians around what constitutes “core-business” it is based upon examples of specific situations rather than a prescriptive position on what denotes an “emergency.”²⁸⁵
412. With these factors in mind the Department of Health proposed an education program built around the correct use of EDs and this is addressed under the heading: *Recommendation 5*, later in this finding.

²⁸¹ Exhibit 14.

²⁸² Ibid.

²⁸³ Ibid.

²⁸⁴ Ibid.

²⁸⁵ Ibid.

413. Further comment regarding the deleterious impacts of ED overcrowding are addressed later in this finding under the heading: *Comment about WA Health System.*

Fragmentation of care - Ramp and ABay areas

414. At the time of Ashleigh’s presentation, she went through a number of “handovers,” whether they are referred to as such or called something else:

- a) Ashleigh arrived at Royal Perth Hospital in the care of the St John Ambulance officers at approximately 1.16 pm, and they awaited for some 13 minutes for the Triage Nurse; during this time Ashleigh remained in the care of the St John Ambulance officers.
- b) Ashleigh was triaged to the Ramp by the Royal Perth Hospital Triage Nurse between 1.29 pm and 1.32 pm but remained within the care of the St John Ambulance officers (although by this stage there would be some joint responsibility for care, given that the triage has occurred by the Royal Perth Hospital Triage Nurse).
- c) Ashleigh’s care was handed over by the St John Ambulance officers to the Royal Perth Hospital ABay Nurse between 1.40 pm and 1.45 pm, at which point she was formally taken into the care of Royal Perth Hospital, taken off the Ramp and kept within the ABay on one of the beds (all four beds were occupied by patients).
- d) Ashleigh was pushed into the ED on a trolley bed by the ABay Nurse who feared for her condition and felt that she should no longer wait in the ABay, at 2.16 pm.
- e) Ashleigh was accepted into the ED and allocated to a cubicle at 2.20 pm. At 2.28 pm Ashleigh went into cardiac arrest.

415. At the inquest Dr Hitchcock, in response to a question about Ashleigh being moved from the Ramp to the ABay explained that there is a “*communication risk*” every time a patient is moved from one area to another (namely, crossing an interface). This refers to the risk of deterioration in the quality of information passed on by the ambulance officers and/or clinicians, onto the

next person, as the patient's care is handed over: "*There's a risk as patients move through with serial handovers all of the time.*"²⁸⁶

416. With every change of interface in a busy environment, there is a risk of information about the patient being missed or diluted as the conversation is had and/or notes are passed along. The person with the firsthand knowledge is no longer readily available as the patient moves through the system on the way to the ED. This is, essentially, a form of fragmentation of care, that can result in suboptimal treatments and outcomes for a patient.
417. In commenting on the fragmentation of Ashleigh's care and treatment as she was moved through the Ramp to the A Bay and finally admitted into the ED, Professor Putland outlined his concerns as follows:

*"It's compounded further when we don't handover cleanly and that is to say where the handover goes, perhaps through to a ramped area. There's a delay. Then handed over to a temporary, like the A bay, and then perhaps not in this case, but as would have been the case if things had gone to plan, handover further to another clinician inside the mitigation strategies that we make for overcrowding by creating more non-clinical spaces to **insert between the patient and the eventual clinical space.** That's just more fragmentation."* [Emphasis added].²⁸⁷

418. As will be seen under the heading: *Improvements*, referred to below there is now a "*sub-waiting room*", introduced by a subsequent reconfiguration of the Royal Perth Hospital ED. While it is understood that these areas (Ramp, A Bay, sub-waiting rooms) are all designed to provide earlier review and earlier patient care without entry into the ED, they also introduce increased risk. They are important initiatives, but they are ultimately stop gap measures and not the solution to the problem of ED overcrowding. Further comment on this is made later in this finding under the heading: *Comment about WA Health System*.
419. Professor Putland reports that ambulance ramping has been a growing problem in Western Australian Hospitals and across the country. Referring to a St John Ambulance Service report on ambulance activity and response times, he provided the following information:

²⁸⁶ ts 388.

²⁸⁷ ts 397.

- a) In December 2017 the number of ramped hours recorded by St John Ambulance Service state-wide was just over 800 hours (with 200 hours being at Royal Perth Hospital);
 - b) In December 2019 the number of ramped hours recorded by St John Ambulance Service state-wide was 2,300 hours (with 800 hours being at Royal Perth Hospital).²⁸⁸
420. Dr Hitchcock referred to the national standard, being that at least 75% of Triage Code 3 patients be seen within 30 minutes of triage, though it is not “*mandated*” as such. He reported to the coroner that in the financial year when Ashleigh presented, only 32% of Royal Perth Hospital’s 28,785 ED patients were seen within 30 minutes.²⁸⁹
421. As at the time of writing of his report to the coroner, Dr Hitchcock advised that the 75% target is not met by some of the other major teaching hospitals though peer hospitals appear to be averaging 62%.²⁹⁰
422. Dr Hitchcock ascribes this, primarily, to the EDs operating at overcapacity.²⁹¹
423. At the inquest Dr Hitchcock described the Ramp and A Bay areas as: “... *workarounds because of overcrowding*” His own expectation, which he believes is matched by that of the community, is that with a person with a possible life threat, under a Triage Code of 3, you should be starting the process of clinical assessment.²⁹²
424. Similarly, Professor Putland also reported that while the target is not mandated, it is not common for hospitals to meet the benchmark of 75% of Triage Code 3 patients being seen within 30 minutes of triage.²⁹³
425. Professor Putland addressed the public health concerns attending ambulance ramping and overcrowded hospitals:

²⁸⁸ Exhibit 1, tab 15.

²⁸⁹ Exhibit 1, tab 14.

²⁹⁰ Ibid.

²⁹¹ Ibid.

²⁹² ts 390.

²⁹³ Exhibit 1, tab 15.

*“Ambulance ramping and hospital overcrowding is absolutely a matter of public health concern. Overcrowded hospitals produce overcrowded emergency departments which produce ambulance ramping as well as crowded waiting rooms, long waiting times and prolonged ambulance response times. Most of the time it results in inconvenience, discomfort and frustration with tangible patient harm avoided by the efforts of staff to find workarounds. From time to time, it produces real harm to people.”*²⁹⁴

426. Professor Putland describes the undifferentiated patients who are held in ambulance ramping spaces or in waiting areas as: “... *the highest risk patients in the hospital.*” He refers to the difficulties in defining lines of clinical governance and escalation pathways for such patients. They are referred to as “*undifferentiated*” because the clinical picture is not clearly of one problem or another.²⁹⁵
427. Having regard to the extensive experience of each of Dr Hitchcock and Professor Putland, I am satisfied that the ambulance ramping and the failures to meet the benchmark of 75% of Triage Code 3 patients being seen within 30 minutes of triage is part of a wider problem.
428. East Metropolitan Health Service through its lawyers draws attention to the fact that ED overcrowding, that in this case prevented a Triage Code 3 patient from immediately entering the ED is regrettable and that it is a circumstance occurring in WA and across the world.

IMPROVEMENTS

Additional clinical monitoring - EMHS

429. Professor Waterer, Director of Clinical Services of Royal Perth Hospital Group, has outlined a number of improvements initiated by East Metropolitan Health Service after Ashleigh’s death, in recognition of the importance of earlier detection of sepsis and/or other causes of clinical deterioration, and these are outlined below:

²⁹⁴ Ibid.

²⁹⁵ Exhibit 1, tab 15; ts 361.

- a) An ED Specialist is now rostered to the ED Ramping area at Royal Perth Hospital to enable an earlier clinical review and provide an additional layer of clinical oversight. Had it been in place at the time of Ashleigh's presentation, it may have led to a realisation that she was more critically ill than her vital signs were suggesting.
- b) East Metropolitan Health Service has been trialling wearable monitors for patients awaiting assessment, that automatically measure heart rate, respiratory rate, blood pressure and temperature. The data is monitored centrally, and significant changes are flagged to ED and to their remote monitoring facility: "*Healthcare in a Virtual Environment*" (HIVE). HIVE acts as a second pair of eyes to assist the busy staff in the ED. Had it been in place at the time of Ashleigh's presentation, it may have picked up a fall in her blood pressure.
- c) The East Metropolitan Health Service's hospital-wide sepsis recognition tool (implemented prior to Ashleigh's death and updated 1 September 2022) is applied at the point of medical review. Professor Waterer maintains, however, that the sepsis recognition tool would not have flagged Ashleigh as possibly having sepsis, until the presence of low blood pressure.

Program of works – EMHS

430. After the inquest, the East Metropolitan Health Service reported back to the court, to inform of a program of works being undertaken and/or in development after Ashleigh's death, to endeavour to address ED overcrowding at Royal Perth Hospital. They include the improvements referred to by Professor Waterer under the heading: "*Additional clinical monitoring – EMHS*" and are referred to below.
431. An ED Flow Process Mapping initiative was completed, mapping a patient journey, reviewing nursing and medical roles and responsibilities, and identifying potential services gaps, and solutions. From this initiative the following improvements were implemented:
 - a) An ED Clinical Nurse Specialist position was established to manage the flow of patients, to provide senior level oversight and direction, in consultation with the Emergency Physician in Charge.

- b) A “*Front of House*” team was established, for rapid assessment and planning, in respect of patients on the ambulance ramp, and patients post-triage in the A Bay, or in the Waiting Room, prior to entering the ED. This team is comprised of an Emergency Physician (referred to as the “*Falcon*”, a Resident Medical Officer, and a nurse).
- c) A brief “*Daily Stand-Up Meeting*” process was implemented, where executive, clinical and non-clinical staff work together to improve patient flow (with meetings at 8.45 am, 11.30 am, and 4.00 pm, seven days a week, with follow up as required).
- d) An ED Waiting Room Nurse position was established, skilled in accurate triage, and focussed on providing clinical assessment and escalation of triaged patients within the ED Waiting Room.
- e) The ED was renovated and reconfigured to increase the capacity of the Rapid Assessment and Decision Area by increasing bed capacity from four beds to seven beds, adding two additional consulting rooms, and introducing a smaller “*sub-waiting room*”.²⁹⁶

432. In addition to the above developments, East Metropolitan Health Service informs the court of the following initiatives:

- a) A hospital capacity management tool has been designed, to assist with management of patient flow. The tool, known as “*BRAG*”, is designed to identify operational triggers. It assigns a traffic light status to highlight areas of pressure, in order to produce a graded organisational response to ED demand. It is designed to link current and predicted ED status and demand pressures with action cards that assign activities in response to demand.
- b) A “*Pre-Code Yellow*” escalation tool has been designed, to operate prior to the “*ED Overcrowding Code Yellow*” (which triggers a hospital-wide response, with implementation of extraordinary actions). The Pre-Code Yellow is based on the BRAG status, and results in key clinical staff meeting to review and resolve patient flow pinch points in an emergency response huddle, to activate, if required, an emergency response team to stimulate wider patient flow and limit impacts upon patient safety.

²⁹⁶ Exhibit 13.

- c) A “*Long Stay Patient Strategy*” has been developed, to ensure safe, timely discharge for patients once they are medically cleared.²⁹⁷

Community Awareness – Department of Health

433. Having regard to the matters addressed previously in this finding under the heading *ED Overcrowding*, the Department of Health informs the court of various community awareness initiatives. Through their Emergency Access Response Team they have funded a targeted community awareness campaign with the aim of increasing understanding about responsible use of EDs, alternatives to ED services and how to access them, and information on appropriate healthcare options. The aim is to reduce ED visits for: “*GP type avoidable attendances.*”²⁹⁸
434. Through their lawyer the SSO, the Department of Health informs the court that their Emergency Access Response Team is continuing to work towards reducing ED overcrowding through analysis of potentially avoidable ED presentations (for example lower urgency, in-hours arrival, patient not admitted to hospital) to build up knowledge in the area. They are also considering alternative care pathways such as virtual care, rapid access outpatient clinics and community care options.

COMMENT ABOUT WA HEALTH SYSTEM

435. Under s 25(2) of the Coroners Act I may comment on any matter connected with the death, including public health or safety.
436. The comments under this part are addressed to the Department of Health, with the aim of encouraging consideration for a system wide response to ED overcrowding. ED overcrowding is not confined to Royal Perth Hospital, and not confined to the events surrounding Ashleigh’s death.
437. At the inquest Dr Hitchcock drew attention to the “*terrible situation*” faced by clinical staff in overcrowded EDs where, in order to get someone in, you have to move someone else out, resulting in the dilemma: “.... *which patient is potentially going to be compromised?*”²⁹⁹

²⁹⁷ Ibid.

²⁹⁸ Exhibit 14.

²⁹⁹ ts 361.

438. ED overcrowding is not a recent feature of the health system. It is a longstanding problem. There is a danger of it being seen as “*normal*”, of the problem having become endemic and therefore accepted as part of the functioning of a modern ED. Grappling with the question of how to address the root causes of ED overcrowding, as opposed to interposing workarounds, seems overwhelming.
439. There is a risk of the Health Providers having to focus their efforts on stop-gap measures, such as Extended Transfer of Care, in the absence of a long-term system wide response to ED overcrowding. By the time it is described to me by the Department of Health as a problem “*across the country and around the world*” it becomes clear that a certain level of acceptance has crept in, due to it being seen as, essentially, inevitable.³⁰⁰
440. Some of the stop-gap measures featured in the evidence given at this inquest, such as the Ramp and the ABay. They are essentially staging posts on the way to the ED destination, with the aim of keeping patients out of the ED unless they really need to be in there.
441. Every once in a while, a mistake will be made, and a patient that should have been attended to in the ED will be left on the Ramp or in the ABay. Most times this will be resolved, with the patient experiencing a delay but ultimately receiving proper care and treatment in the ED. Rarely, through tragically in each and every case, a patient may die.

RECOMMENDATIONS

442. At the conclusion of the inquest, counsel for the various parties made submissions orally and in writing. On 19 December 2022, Counsel Assisting circulated to the parties an outline of potential recommendations and invited parties to file and serve any submissions addressing such potential recommendations by 20 January 2023.
443. I received helpful submissions from the parties, in respect of their preliminary views as to the feasibility of those recommendations, which I have taken into account.

³⁰⁰ Exhibit 1, tab 22.

Recommendation 1 – Electronic Medical Records

444. This recommendation is directed towards improving clinical access to patient information as the patient moves through the various interfaces, for their treatment and care. It is made in recognition of the fact that steps are already underway in this area.
445. The Department of Health and East Metropolitan Health Service support this recommendation.
446. Through its lawyer the SSO, the Department of Health informs the court that it is, and will continue, to consult with all Health Service Providers (including East Metropolitan Health Service) to achieve this objective. The Department of Health also informs the court of its belief that an electronic medical record will over time, improve safety through mobile digital recording of clinical observations and automated analysis of these observations to facilitate prompt detection of patterns of concern.

Recommendation No. 1

That the Department of Health consult with Health Service Providers with regard to implementing a single electronic medical record.

Recommendation 2 – Real Time Access to Corpuls Information

447. Prior to handover at the ABay, the Triage Nurse and ABay Nurse would have been able to see the St John Ambulance screen on which Ashleigh’s Corpuls monitor data was displayed (the ePCR screen) though there was some uncertainty about exactly how visible the screen was.
448. This recommendation is directed towards the real-time access to the St John Ambulance Electronic medical records system, including the Corpuls monitor data, for the Health Service Providers of the Department of Health.
449. The Department of Health supports this recommendation.
450. Through its lawyer the SSO, the Department of Health informs the court that it will consult with St John Ambulance to facilitate increased information sharing with and from St John Ambulance.

451. The East Metropolitan Health Service is supportive of the Department of Health consulting with St John Ambulance on behalf of all Health Service Providers (including East Metropolitan Health Service).
452. Through its lawyer Moray and Agnew, St John Ambulance informs the court that it has no difficulty in consulting about the potential for real-time access to Corpuls monitor data, or in consulting about recording observations taken by St John Ambulance within a patient's medical record at the hospital.

Recommendation No. 2

That the Department of Health on behalf of Health Service Providers consult with St John Ambulance to consider pathways allowing real-time access to relevant portions of the St John Ambulance electronic medical records system, including sharing of Corpuls Monitor data.

Recommendation 3 – Information Sharing

453. Ashleigh's observations, as recorded by St John Ambulance showed a pattern of increasing heart rate. It was not possible for the Triage Nurse to take Ashleigh's heart rate and blood pressure due to her moving around, and she estimated it by pushing down on her pulse and looking at the Corpuls monitor screen readings. Similarly, due to Ashleigh moving around, the Abay Nurse was not able to take her blood pressure reading.
454. The evidence showed that observations and Corpuls data taken by St John Ambulance were not readily available to the Royal Perth Hospital clinicians, and the records as between the two entities reflect this lack of continuity.
455. This recommendation is directed towards the development of a shared, consistent documentation process to record a patient's observations with the aim of avoiding as far as possible the fragmentation of a patient's care and treatment.
456. The Department of Health supports this recommendation.
457. Through its lawyer the SSO, the Department of Health informs the court that it will consult St John Ambulance to consider the development of a shared,

consistent documentation process to record observations taken by St John Ambulance within Health Service Providers medical records.

458. The East Metropolitan Health Service is supportive of the Department of Health consulting with St John Ambulance on behalf of all Health Service Providers (including East Metropolitan Health Service).
459. Through its lawyer Moray and Agnew, St John Ambulance informs the court that it has no difficulty in consulting about the potential for the development of a shared, consistent documentation process.

Recommendation No. 3

That the Department of Health on behalf of Health Service Providers consult with St John Ambulance to consider the development of a shared, consistent documentation process to record the deceased's observations taken by St John Ambulance within the medical records of Health Service Providers.

Recommendation 4 – Documenting Refusal to Escalate

460. It has been difficult to reconcile the evidence of Nurse Allen, who maintained that he spoke with Dr Ng to endeavour to escalate Ashleigh's care and the evidence of Dr Ng who did not recall saying "*it's probably related to the meth*" to Nurse Allen. Dr Ng maintained that such a response would not be in his normal practice.
461. This gives rise to a consideration of documenting certain conversations. It is understood that the Emergency Physician in Charge cannot document all conversations and instructions given during a busy ED shift and that would not ever be the intention. However, some conversations and/or instructions are critical, and this recommendation is directed towards a process for documenting any instances where the Emergency Physician in Charge declines a clinician's request to escalate a patient's care.

462. Through its lawyer the SSO, the East Metropolitan Health Service informs the court that it will consider the development of this documentation process.

Recommendation No. 4

That EMHS consider the development of a clear and consistent documentation process to record decisions made by the Emergency Physician in Charge (EPIC) in the event that the EPIC declines to escalate patient care after a request is made, or a concern is raised, by a clinician.

Recommendation 5 – Working Definition of “Emergency”

463. At the inquest Dr Hitchcock stated that “*it does seem strange*” that “*there doesn’t seem to be a clear and understandable definition of what is an emergency that can be applied at the front door of an emergency department.*”³⁰¹
464. Having regard to the matters addressed under the heading *ED Overcrowding*, referred to previously in this finding, the Department of Health expresses its preference for educating the community in order to build awareness around the responsible use of EDs and has expressed some reservations about defining what constitutes an “*emergency.*”³⁰²
465. I have noted the Department of Health’s ongoing efforts directed towards community education about “*responsible use*” of an ED. A working definition of what constitutes an “*emergency*” would assist in this process, together with the examples, as indicated by the Department of Health, of specific situations where ED services could appropriately be used (or not).
466. The process of developing a working definition may identify obvious patient cohorts that would more appropriately be treated in a different clinical setting (for example specialist aged care services, accessible GP services, or specialist mental health services). This may in turn assist in directing the attention towards the development of potential strategies to reduce ED overcrowding.
467. Overall, through their lawyer the SSO, the Department of Health informs the court that they support the purpose of this recommendation. They propose to

³⁰¹ ts 360.

³⁰² Exhibit 14.

consult with relevant stakeholders including emergency physicians and key health service representatives but note that work has been deliberately limited to examples and use cases, given the challenges and potential implications of defining an “*emergency*”.

468. With that in mind I make this recommendation, in the hope that a body of work may be developed around strategies to alleviate ED overcrowding. Self-evidently, this needs to be addressed within the context of planning and funding for the provision of adequate alternative out-of-hospital services (including rapid services and after hours services) within the community, and preventative care.

Recommendation No. 5

That the Department of Health consult with relevant stakeholders to develop a body of work to establish a working definition of an “emergency,” for the purposes of:

- 1. Developing strategies to reduce Emergency Department overcrowding; and**
- 2. Educating the community and building awareness about “responsible use” of an Emergency Department, including the use of examples of specific situations in which Emergency Department services could appropriately be used, or not used.**

Recommendation 6 – Education on “Adult Sepsis Pathway”

469. In his report to the coroner, Professor Putland opined that a sepsis early warning tool, had one been in routine use, may have flagged Ashleigh as a potential sepsis case. In his experience this may have triggered other actions directed towards a sepsis response, such as a category 2 Triage Code, a closer physical assessment, an earlier notification of the registrar, insertion of an IV cannula, drawing of blood for testing and administration of broad spectrum antibiotics.³⁰³
470. While there were differing perspectives offered on whether Ashleigh’s symptoms would have triggered the Adult Sepsis Pathway, and noting that I accepted the evidence that there was no “*major trigger*”, that was within the context of the difficulties in obtaining Ashleigh’s observations.

³⁰³ Exhibit 1, tab 15.

471. The cases that come before the coroner tend to be the ones where the sepsis presentation was unusual, without the more expected features.
472. This recommendation is directed towards more education in this area.
473. Through its lawyer the SSO, the East Metropolitan Health Service conveys its support for this recommendation and informs the court that it is consistent with its emphasis on continuous improvement. It monitors sepsis management compliance across its hospitals using a range of measures including clinical outcomes, patient reported outcomes and audits. Staff training compliance is monitored, with the training encouraging staff to maintain high index of suspicion for sepsis.

Recommendation No. 6

That EMHS consider additional education and audits on the use of the “Adult Sepsis Pathway,” with additional educational focus on encouraging a high index of clinical suspicion for sepsis by clinicians, including nurses who undertake triage assessments, who may ultimately treat a patient with an unusual sepsis presentation.

Recommendation 7 – Escalation of Patients on the “Ramp”

474. At the inquest the St John Ambulance paramedic Mr Kenny was asked about his experiences in bringing his patients to the attention of the Triage Nurse when he is worried about such patients. His evidence was that the ambulance officers will “*self-triage*” patients they are concerned about, which may result in these patients going ahead of other patients.³⁰⁴
475. This response was given within the context of his experiences of waiting for a Triage Nurse upon the St John Ambulance arrival at a hospital anywhere from five minutes to nearly an hour, which in itself is troubling.³⁰⁵
476. As to the escalation options if a St John Ambulance officer has concerns about a patient, in Mr Kenny’s experience, he could talk to the Triage Nurse,

³⁰⁴ ts 42 to 43.

³⁰⁵ ts 42.

escalate to a “*nursing manager*” or to a colleague or someone else that they may know inside the ED.³⁰⁶

477. After the inquest, through its lawyer Moray and Agnew, St John Ambulance submitted that within the context of the evidence given, Mr Kenny was not referring to “*triage*” as that term is understood within the ATS Guidelines, but that it should be understood as a reference to escalating a patient’s care. St John Ambulance accept that in making a decision to escalate a patient, the paramedic must have formed a view that immediate attention is necessary but submit that this is to be distinguished from the assignment of a Triage Code.
478. A St John Ambulance Officer is not trained to triage patients in accordance with the ATS Guidelines and has no role in formally assigning a Triage Code. I accept that Mr Kenny’s evidence about “*self-triage*” should be understood as a reference to escalating a patient’s care and have modified my proposed recommendation accordingly. Nonetheless the process of escalation still places the St John Ambulance Officer in a potentially difficult position, because as was seen from the evidence given, it is not always clear how that escalation is to occur.
479. Further, where a patient’s care warrants a Triage Code of 2, to be assessed and treated within 10 minutes and that patient waits more than 10 minutes to be seen by the Triage Nurse in the first place, there is a risk that the clinical urgency may not be identified while that patient is in the care of the St John Ambulance officers.
480. With this in mind, I make the following recommendation concerning the establishment of guidelines as between the Department of Health and St John Ambulance regarding the escalation of patients on the Ramp (or in an Extended Transfer of Care area).
481. Through its lawyer the SSO, the Department of Health supports this recommendation and advises that its Systems Improvement Unit is actively engaged with St John Ambulance and Health Service Providers on the development of policy and associated guidelines (including mandatory requirements) regarding Transfer of Care from St John Ambulance to the hospital.

³⁰⁶ ts 48 to 49.

482. The SSO informs the court that this policy will provide details addressing delays that may occur “*on the Ramp*” that prevent a timely handover of patients from ambulance to hospital staff and will include a clinical escalation process to address roles and responsibilities in the event that an ambulance crew is concerned about a patient.

Recommendation No. 7

That clear guidelines between the Department of Health, hospitals (including East Metropolitan Health Service), and St John Ambulance be established regarding the duties and responsibilities of St John Ambulance Paramedics or Ambulance Officers to escalate patients, in circumstances where there is ambulance ramping, or any other delay in assessment of a St John Ambulance patient by a Triage Nurse.

Recommendation 8 – Vaccination Availability

483. In his report to the coroner and at the inquest Professor Waterer referred to the opportunity for Ashleigh to potentially have been saved by vaccination. He strongly recommended advocating for the vaccine and felt it was an important learning from the inquest:

“Ms Hunter died of infection from W strain Neisseria meningitidis. There is a highly effective vaccine for this disease in Australia and had she had it then it is extremely unlikely that she would have had the fatal disease. Greater knowledge and promotion of this vaccine, in my opinion, could be a major lesson learned from the tragic death of Ms Hunter.”³⁰⁷

484. At the inquest Dr Speers outlined that in Western Australia every child is offered a vaccination for meningococcal disease covering the major serogroups, including W (it is part of the National Immunisation Program). There was also a catch-up period for high school children. It was introduced in 2018. The hope is that as time goes by, say 20 years from 2018, we will not be seeing young people suffering from severe meningococcal sepsis due to the W strain that Ashleigh died from, anymore.³⁰⁸

³⁰⁷ Exhibit 2.

³⁰⁸ ts 429.

485. In the meantime, as informed by Dr Speers, the majority of Western Australian adults have not been vaccinated against the strain.³⁰⁹
486. Dr Waterer considered that the vaccination was the only thing that would have changed Ashleigh's outcome. He described the disease as being "*really rare*" but potentially fatal when it does occur.³¹⁰
487. This recommendation is directed towards developing public awareness about the availability of the vaccine.
488. I have been assisted by the Department of Health's input into the terms of this recommendation, conveyed through its lawyer the SSO.

Recommendation No. 8

That the Department of Health consider funding an established non-government organisation to develop and implement a Public Awareness Campaign regarding the availability of the Meningococcal ACWY vaccine, and the Meningococcal B vaccine, to advise those who want to protect themselves against meningococcal disease that they can speak to their vaccination provider about getting vaccinated, particularly the cohort that would not have been vaccinated within the free National Immunisation Program.

CONCLUSION

489. Ashleigh's family must now live with the question of what might have occurred, had the ED not been overcrowded, to the extent that people were required to wait outside of the ED when Ashleigh arrived at Royal Perth Hospital.
490. The evidence from the medical experts in this case has persuaded me that while Ashleigh had a rapidly progressing disease process, her prospects of survival with prompt medical treatment, while very slim, were not wholly absent.

³⁰⁹ Ibid.

³¹⁰ ts 458 to 459.

491. While it is very unlikely that Ashleigh would have survived even with prompt medical treatment, understandably her family would have wished for Ashleigh to be given every chance, however small, to survive. The loss of that opportunity to survive, no matter how small, was a terrible loss to them.
492. Ashleigh's family have had to grapple with the thought that prompt treatment may have at least extended Ashleigh's life for long enough to allow her loved ones to travel to Royal Perth Hospital to say goodbye. No doubt the loss of that possibility is devastating to those who loved Ashleigh.
493. Ashleigh was not provided with pain relief for her severe pain at Royal Perth Hospital. Her family have expressed their sadness and dismay about this, and rightly point out that the administration of some pain relief would at the very least have granted her some solace at the end of her life.
494. I have no doubt it is a cold comfort to Ashleigh's family to know that deaths from meningococcal infection are relatively rare. It is my hope that it offers them some consolation to know that, as a result of Ashleigh's death, some improvements have been implemented, and recommendations have been made, with the aim of reducing the likelihood that another person will die in similar circumstances.

R V C Fogliani
State Coroner

13 December 2023