Coroners Act 1996
[Section 26(1)]

Western *Australia*

RECORD OF INVESTIGATION INTO DEATH

Ref No: 48/16

I, Barry Paul King, Coroner, having investigated the death of ***Arulselvam Velmurugu*** *with an inquest held at the* ***Perth Coroner's Court*** *on* ***12 December 2016****, find that the identity of the deceased person was* ***Arulselvam Velmurugu*** *and that death occurred on 1 May 2013 at* ***Phosphate Hill Detention Centre on Christmas Island*** *from* ***bronchial asthma*** in *the following circumstances:*

Counsel Appearing:

Sergeant L Housiaux assisting the Coroner
Mr T J Palmer (instructed by Kakulas Legal) appearing for the deceased's family

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SUPPRESSION ORDER

No report may be published of any part of the proceedings or of the evidence given at this inquest that could lead to the identification of the deceased's brother or nephew who have provided statements to this Court.

INTRODUCTION

1. Arulselvam Velmurugu (the deceased) died suddenly and unexpectedly from bronchial asthma at the Phosphate Hill Immigration Detention Centre (Phosphate Hill) on Christmas Island. He had arrived at Christmas Island on an Australian Navy vessel only hours earlier, after being transferred from an Indonesian boat that had entered Australian territorial waters.

2. I infer from the evidence available to me that, at the time of his death,[1] the deceased was, as a matter of law, in immigration detention on Christmas Island because he was reasonably suspected by officers of the Department of Immigration and Border Protection to be an unauthorised

[1] Or 'immediately before death' as provided in s 22(a) *Coroners Act 1996*.

maritime arrival and an unlawful non-citizen under the *Migration Act 1958* (Cth).[2]

3. Under section 5 and 6 of the *Christmas Island Act 1958* (Cth) (the CI Act), Christmas Island is a territory of the Commonwealth of Australia and all property, rights and powers in or in connection with Christmas Island are deemed to be held or enjoyed by or on behalf of the Commonwealth.

4. Under sections 8A and 14B of the CI Act, the laws of Western Australia are in force in Christmas Island, and the Coroner's Court of Western Australia has jurisdiction in Christmas Island as if that territory were part of Western Australia.[3]

5. Under s 19 of the *Coroners Act 1996* (WA) (the Act), a coroner has jurisdiction to investigate a death if it appears that the death is or may be a reportable death. As the deceased died unexpectedly, his death was a reportable death as defined in section 3 of the Act. I therefore had jurisdiction to investigate his death.

6. Under section 22(1)(a) of the Act, a coroner who has jurisdiction to investigate a death must hold an inquest if the death appears to be a Western Australian death and the deceased was immediately before death 'a person held in care'. A person held in care is defined to mean, effectively, a person involuntarily detained under certain Western Australian legislation, including the *Prisons Act 1981*, the *Young Offenders Act 1994* and the *Mental Health Act 1996*, or by a member of the Police Force.

7. A person held in immigration detention under the *Migration Act 1958* does not come within the definition of a person held in care, so there was no requirement for me to hold an inquest. However, given that the deceased was, nonetheless, involuntarily detained, it was desirable that an inquest be held.

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[2] Sections 5, 5AA, 14, and 189 *Migration Act 1958* (Cth)
[3] Note also the *Coroners Act 1996(WA)(CI)* (Cth)

8. I held an inquest into the deceased's death on 12 December 2016. The focus of the inquiry was the medical care provided to the deceased while in immigration detention. Oral evidence in relation to that issue was provided by Sarah Bowen RN, Dr Brendan Hill and Associate Professor David Mountain.

9. The documentary evidence adduced at the inquest primarily comprised a report prepared by Constable Stephen O'Neill of the Australian Federal Police,[4] who provided oral evidence.[5] Statements were also provided by the deceased's brother and nephew.[6]

10. Under s 25(3) of the Act, where the death is of a person held in care, the coroner investigating the death must comment on the quality of the supervision, treatment and care of the person while in that care. While that obligation does not apply in relation to the deceased's case, it is desirable that I make such comments. I have found that the treatment and care provided to the deceased was inadequate, but not as a result of any failure by clinical staff.

THE DECEASED

11. The following account is based on information provided by the deceased's younger brother.[7]

12. On 21 January 1978 the deceased was born into a family of goldsmiths in Munaitivu, a village in the district of Batticaloa in Sri Lanka. He was the sixth of nine children.

13. The deceased attended the local school with his siblings, and in 1992 he moved to Colombo with the help of one of his brothers in order to further his studies.

14. When the deceased finished his studies, he opened his own goldsmith business in Colombo, which he operated for

[4] Exhibit 1
[5] ts 44-50 per O'Neill, S G
[6] Exhibit 2 and Exhibit 3
[7] Exhibit 2

nearly 20 years. He was happily married and had four children.

15. The deceased developed asthma at about the age of 30. There was a history of asthma in his family, with his mother and most of his siblings suffering from it to some degree. His asthma was worse in the rainy season around December; otherwise, it was mild and well-managed with medication.

16. When communal riots started in Sri Lanka and a number of groups started fighting, the deceased was forced to abandon his business. He was later threatened by armed militants and had to go into hiding.

17. Out of desperation, he decided to leave Sri Lanka and to take his second son with him, with hopes of settling in a peaceful country to where the rest of his family could follow him later.

THE DECEASED LEAVES SRI LANKA

18. The following account is based on information provided by the deceased's nephew.[8]

19. On 20 November 2012 the deceased boarded a boat in Beruvala in Sri Lanka with his son and nephew (his family) and about 40 other persons. The boat was ostensibly bound for Australia.

20. The boat journey lasted 45 days. It went well for the first few weeks. The deceased and his family travelled in a cabin below the deck, where a few other families also lived together. There were no fumes from the engine.

21. The deceased was careful to manage his asthma by avoiding certain foods and by using a puffer when necessary, about twice a week. He had ample medications.

[8] Exhibit 3

22. After those first few weeks, the boat had engine trouble and everyone on board became worried. They sought help from passing ships, and a cargo ship bound for Australia finally took them on board. The day after they went onto the ship, they were informed that that ship would take them into Indonesian waters and hand them over to an Indonesian Navy gunboat, which is what happened.

23. The Indonesian Navy vessel took them to the city of Padang on Sumatra in early January 2013. They stayed there for two or three weeks and were then taken to a refugee camp in Medan on 21 January 2013. When they arrived in Medan, the deceased began to experience difficulty breathing.

24. The deceased told people at the refugee camp that he needed to go to hospital. Staff with the International Organisation for Migration took him by car to a hospital in Medan where he was admitted and well looked after for four days.

25. After his stay in hospital, the deceased was discharged back to the refugee camp and was provided with a puffer. He was happy and felt that his asthma would be under control in future. He used the puffer only occasionally over the next few months.

26. The deceased and his family spent nearly three months in the camp in Medan. On one day there were fights between groups of men, leading to people being killed or injured. The deceased requested that they be transferred to somewhere else. They were sent to another place for a week and then, with the help of friends, moved to Jakarta.

27. While in Jakarta the deceased and his family boarded another boat (the boat) bound for Australia with about 180 people from many nationalities. They travelled in a cabin under the deck, where they were not exposed to the sun or rain or engine fumes.

28. He had purchased asthma medication in Indonesia, which I infer included puffers, salbutamol and prednisolone tablets. While on the boat, the deceased self-medicated

with a puffer, which appeared to provide him with some relief.

THE DECEASED ARRIVES IN AUSTRALIA

29. At about 10.00 pm on 30 April 2013 Australia authorities became aware of the boat's existence in the Indonesian Search and Rescue Region outside of the Australian Contiguous Zone. The master of the boat had claimed that it was in distress.[9]

30. At about 6.00 am on 1 May 2013 an Australian Navy vessel arrived at the location of the boat, and a boarding party went onto it. The boarding party ascertained that the boat was not in distress and that none of the persons aboard were significantly sick or injured.[10]

31. By 4.00 pm that afternoon, the boat was within Australian territorial waters. A boarding party again went onto the boat and, this time, transferred the people on board to the Australian Navy vessel. Again it appeared that none of the people were seriously sick or injured. They all got off the boat and onto the naval vessel without assistance or struggle.

32. The people from the boat were taken to the jetty at Flying Fish Cove on Christmas Island where, from about 5.20 pm on 1 May 2013, they were offloaded on rigid hull inflatable vessels and barges.[11] None of the members of the boarding party noticed anyone who was sick or injured.[12]

AT CHRISTMAS ISLAND JETTY

33. When the deceased arrived at Christmas Island jetty, he and his family joined the other people from the boat being processed as 'potential illegal immigrants' by members of the Australian Customs and Border Protection Service and the Department of Immigration and Citizenship (DIAC), as

[9] Exhibit 1, Tab 8
[10] Exhibit 1, Tab 7
[11] Exhibit 1, Tab 8
[12] Exhibit 1, Tab 7

the current Department of Immigration and Border Protection was then called.

34. The processing involved the people placing any personal items they were carrying into their luggage and undergoing a frisk search. Each person was given an individual number and was questioned about his or her personal details before being placed in the custody of Serco Immigration Services (Serco) staff to be transferred by bus to a processing centre (the processing centre) at Phosphate Hill. Serco was a security provider who operated the three immigration detention centres on Christmas Island for DIAC.

35. At the jetty when the deceased arrived was Kathy Alexander RN, a nurse from International Health and Medical Services Pty Ltd (IHMS), which was a company contracted, presumably by DIAC, to provide primary health care and emergency response to immigration detainees at Christmas Island.[13]

36. The role of IHMS nurses at the jetty was to conduct a rapid public health screening of any person who had been identified as requiring one before arriving at the jetty[14] and to observe the condition of the people arriving in order to address any conditions that they considered required urgent medical assistance.[15] Any arrivals requiring hospital attention would be transferred directly to the Christmas Island Hospital.[16]

37. One of the persons processing the people arriving at the jetty noticed that the deceased was using an asthma puffer. At about 6.20 pm, a customs officer approached Serco Regional Manager John Harrison to ask if the deceased could retain his puffer. Mr Harrison noted that the deceased was wheezing and had slightly laboured breathing, but did not appear to be in any distress. The deceased came across as a person trying to be friendly as he was smiling and using open hand gestures.[17]

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[13] Exhibit 1, Tab 38A
[14] Exhibit 1, Tab 38A
[15] Exhibit 1, Tab 15
[16] Exhibit 1, Tab 38A
[17] Exhibit 1, Tab 19

38. Mr Harrison allowed the deceased to keep his puffer, and escorted him to Nurse Alexander. Nurse Alexander noted that the deceased had an audible wheeze but was able to carry out a conversation without becoming breathless. He was able to speak English. The deceased said that he used his puffer whenever he needed it and that he had last used it on the naval vessel.[18]

39. Nurse Alexander and Mr Harrison took the deceased and his son to the front of the line for processing and, when the processing had been completed, took them to an air-conditioned bus and placed him at the front of the bus. The process from the time Nurse Alexander first saw the deceased until he was placed on the bus took about five minutes.[19]

40. Once the deceased was on the bus, Nurse Alexander contacted an IHMS nurse at the processing centre, Sarah Bowen RN, to inform her and two other nurses at the processing centre that the deceased was going to arrive. She passed on his processing number and explained that he was an asthmatic with an audible wheeze.[20] Nurse Bowen informed the two other nurses about the deceased, and one of them obtained a salbutamol puffer from a cupboard and made sure that it would be available.[21]

41. It seems that the bus carrying the deceased and his son arrived at the processing centre at about 7.00 pm, though the evidence of the times at which events occurred is patchy and sometimes unreliable.

THE DECEASED ARRIVES AT THE PROCESSING CENTRE

42. When the deceased arrived at the processing centre, he was not immediately identified as the asthmatic person whom Nurse Alexander had notified Nurse Bowen would soon arrive. There was no evidence to indicate that his

[18] Exhibit 1, Tab 15
[19] Exhibit 1, Tab 15
[20] Exhibit 1, Tab 15
[21] Exhibit 1, Tab 12

condition had deteriorated, or that he had approached anyone to seek help for his condition.

43. After some time, one of the other nurses came across the deceased while he was being processed and realised that he was the person with asthma whom they were expecting. That nurse informed Nurse Bowen, who volunteered to take the deceased to the nearby induction centre to conduct a full assessment and to call the on-duty doctor, Dr Brendan Hill.[22]

44. Nurse Bowen walked the deceased the 50 m or so to the induction centre.[23] The deceased was able to walk and talk easily with a slight wheeze. Once they arrived, Nurse Bowen administered the deceased oxygen from a large cylinder (which I infer was on a trolley) and explained a medical consent form, which he signed. She obtained his vital signs: blood pressure of 139/91, temperature of 36.8, respiration rate of 32, pulse of 100, blood glucose levels of 5.7 mmol, and auscultations which revealed bilateral wheeze.[24]

45. At 7.30 pm Nurse Bowen called Dr Hill, who at that time was reviewing a patient at North West Point Immigration Detention Centre, about 15 km away. Dr Hill considered that the symptoms described by Nurse Bowen indicated a moderate exacerbation of underlying asthma, which should respond well to treatment and did not indicate a life-threatening situation. His evidence was that he instructed her to give the deceased up to three 5 mg bursts of salbutamol every 15 to 20 minutes together with high-flow oxygen and 50 mg of prednisolone.[25]

46. Nurse Bowen, who had prepared the oxygen and the medications before speaking to Dr Hill, provided the deceased with oxygen and prednisolone, and gave the deceased one 5 mg burst of salbutamol on her understanding that Dr Hill's instructions were to provide one burst every five to 15 minutes.[26] She also contacted

[22] Exhibit 1, Tab 9, ts 60 per Bowen, S
[23] ts 54 per Bowen, S
[24] Exhibit 1, Tabs 9 and 21
[25] Exhibit 1, Tabs 13 and 21
[26] Exhibit 1, Tab 21

IHMS staff at another area within Phosphate Hill and asked that an oximeter, which measures oxygen saturations, be brought to her.[27]

47. After about 10 or 15 minutes, Nurse Bowen gave the deceased a second 5 mg burst of salbutamol, after which she reassessed his lung sounds. She noted that the audible wheeze had increased and that his respiration rate had increased to 42 breaths per minute.[28] The deceased was still talking in full sentences, but she was concerned about the deterioration of his condition.[29] At 7.49 pm she called Dr Hill to advise him of the changed circumstances.

48. Dr Hill considered that the new symptoms indicated that the deceased's condition had become more serious and that the deceased had rapidly deteriorated. He instructed Nurse Bowen to continue with the high-flow oxygen and the salbutamol, and he told her that he would leave for Phosphate Hill immediately. It would take him about 20 minutes to drive there.

EVENTS LEADING UP TO DEATH

49. As Nurse Bowen got off the phone after speaking to Dr Hill for the second time, the deceased indicated that he had to use the toilet to empty his bowels.[30] As it would have taken additional time to have wheeled the oxygen cylinder to the toilet with the deceased, and as it appeared that the deceased was becoming agitated and demanding to go to the toilet, Nurse Bowen disconnected him from the oxygen cylinder and walked with him to the toilet block about 10 or 20 metres away.[31]

50. As Nurse Bowen was walking the deceased to the toilet block, another nurse showed up with the oximeter requested by Nurse Bowen. Nurse Bowen attached it to the deceased, but it did not provide a reading.

[27] Exhibit 1, Tab 9
[28] Exhibit 1, Tabs 9, 13 and 31
[29] ts 55-56 per Bowen, S
[30] ts 56 per Bowen, S
[31] Exhibit 1, Tab 9; ts 56 per Bowen, S

She attached it to her own finger and determined that it was not working.[32]

51. When they arrived at the toilet block, the deceased went into it on his own. As he turned around to close the door, he fell back to the wall behind him and slid down to a sitting position. His head slumped forward and his arms were by his sides. Nurse Bowen checked his pulse and found that it had decreased to about 60 beats per minute, while the deceased was taking only about 5 breaths per minute.

52. Within 20 seconds, other nurses went to Nurse Bowen's assistance. A code blue was called, signifying a medical emergency, and a call was made to the Christmas Island Hospital for an ambulance.[33]

53. Nurse Bowen and the other nurses moved the deceased out of the toilet block for assessment. By then, the deceased was not breathing and had no pulse. They commenced administering cardiopulmonary resuscitation (CPR) and were soon assisted by Serco and DIAC officers.[34]

54. One of the nurses went away to obtain a defibrillator but returned to say that she had been unable to find it. Another nurse left and returned with it a short time later. Once connected to the deceased, it advised that no shock be given.[35]

55. At about 8.10 pm Dr Hill arrived. The CPR was still in progress. He ordered that adrenalin be given.[36]

56. Volunteer ambulance officers arrived and took the deceased to Christmas Island Hospital while Dr Hill, Nurse Bowen and another nurse travelled with them and continued resuscitation attempts. The defibrillator in the ambulance showed that the deceased was asystole. At the hospital the deceased was handed over to Indian Ocean

[32] Exhibit 1, Tab 9; ts 54 per Bowen, S
[33] Exhibit 1, Tab 9; ts 54 per Bowen, S
[34] Exhibit 1, Tab 9
[35] Exhibit 1, Tab 9
[36] Exhibit 1, Tabs 9 and 21

Territories Health Services Staff, who continued to perform CPR.[37]

57. At 8.30 pm the Director of Public Health and Medicine arrived at the hospital and, while being informed of the relevant circumstances, examined the deceased. She determined that he was dead and completed a life extinct certificate at 8.35 pm.[38]

CAUSE OF DEATH AND HOW DEATH OCCURRED

58. Chief Forensic Pathologist Dr C T Cooke conducted a post mortem examination of the deceased on 7 May 2013 and found congestion and increased expansion of the lungs with pale coloured mucus in the small airways. Apart from localised mild to moderate arteriosclerosis of one of the coronary arteries, the body organs appeared to be otherwise healthy.[39]

59. Microscopic examination confirmed the findings, and microbiological testing showed only *Staphylococcus aureus*, which was probably from a post mortem contamination.[40]

60. Dr Cooke formed the opinion, which I adopt as my finding, that the cause of death was bronchial asthma.[41]

61. I find that death occurred by way of natural causes.

ASSOCIATE PROFESSOR MOUNTAIN'S CONCERNS

62. Associate Professor Mountain, an emergency physician and an academic at the University of Western Australia researching emergency medicine issues, reviewed the available documentary records of the deceased's care and prepared a report in which he expressed several concerns.[42] He also gave oral evidence in which, among

[37] Exhibit 1, Tab 9
[38] Exhibit 1, Tab 20
[39] Exhibit 1, Tab 5
[40] Exhibit 1, Tab 5
[41] Exhibit 1, Tab 5
[42] Exhibit 1, Tab 25

other things, he addressed responses that IHMS had provided to the concerns stated in his report.

63. I shall address each of his concerns (as summarised in the following headings) in turn.

Nurse Bowen's decision to allow the deceased to walk to the toilet

64. Nurse Bowen was a registered nurse who graduated in 2006 and then completed a degree in rural and remote nursing. She worked as a nurse in Queensland for a couple of years and joined IHMS in Darwin where she was acting team leader and immunisation nurse. She was given no specific training by IHMS in relation to asthma, but she had an advanced life support certificate for adults and paediatrics, which encompassed asthma and breathing difficulties, and she had experience with asthmatic patients in an intensive care unit during her post graduate degree.[43]

65. Nurse Bowen allowed the deceased to walk to the toilet block while he was starting to experience a severe asthma attack, and she disconnected him from the oxygen tank in order to do so. The deceased collapsed with a respiratory arrest a few minutes later.

66. Given those facts, it is not surprising that Associate Professor Mountain was concerned. In his view, the deceased should not have been allowed to go to the toilet and should have stayed on an oxygen mask.[44]

67. It seems to me that Nurse Bowen was caught in a dilemma which, even in hindsight, offers no clear right answer. She made what is arguably a justifiable clinical decision for a nurse in urgent circumstances, having regard to the facts that the deceased was still speaking in full sentences and that he appeared to be agitated about needing to go to the toilet. She was not ignorant of the potential severity of his condition. The only other options available were to attempt to force him to remain where he was or to have

[43] ts 51-52 per Bowen, S
[44] ts 31 per Mountain, D

him walk out, down stairs and back up to the toilet block while the large oxygen cylinder was wheeled.[45] There were no bedpans.[46]

68. Given Nurse Bowen's account of the circumstances in which she decided to allow the deceased to go to the toilet block, I find it difficult to be critical of her decision.

69. As the deceased's condition had already deteriorated markedly despite the medication and oxygen she had given him, it is not possible to conclude that her decision contributed significantly to his death.

The delay in transferring the deceased from the jetty to the processing centre

70. It seems that the deceased's condition was first spotted at the jetty at around 6.20 pm and that he was transported to the processing centre about 40 minutes later. Once at the processing centre, he was not picked up as requiring review for perhaps 20 minutes, and was then taken by Nurse Bowen to the nearby induction centre for assessment.[47]

71. Associate Professor Mountain indicated in oral evidence that the delay in taking the deceased to the induction centre from the jetty was one and a half[48] or two hours.[49] His assessment may have been based on an understanding that the deceased arrived at the jetty at 5.30 pm and was allowed to keep his puffer from that time.[50]

72. As I have found above, the time at which the deceased was allowed to keep his puffer, and also the time at which he was identified as suffering from asthma, was probably after 6.20 pm on the basis of Mr Harrison's evidence. The delay was therefore closer to one hour from the time the deceased's condition was appreciated. As mentioned

[45] ts 56 per Bowen, S
[46] ts 62 per Bowen, S
[47] Exhibit 1, Tab 25
[48] ts 10 per Mountain, D
[49] ts 7 per Mountain, D
[50] Exhibit 1, Tab 25

earlier, however, the evidence of the specific times at which events occurred is somewhat patchy.

73. In any event, it is apparent that, if the deceased had been in need of immediate attention, any delay would have been detrimental. Associate Professor Mountain pointed out that the deceased's asthma was probably exacerbated by a number of factors associated with the boat journey, and that in treating asthma it is important to stop a mild to moderate case from becoming severe, because turning severe asthma around is difficult.[51]

74. Associate Professor Mountain said that the deceased clearly had acute asthma, and that meant that he had to be treated aggressively as though it could deteriorate and become severe.[52]

75. Associate Professor Mountain qualified his evidence to a large degree by explaining that he had developed the attitude of preparing for worst case scenarios from many years in emergency departments. He said that he sees many junior staff presume that the least bad thing is likely to happen.[53]

76. However, Associate Professor Mountain also said that the early awareness that the deceased was a severe asthmatic may have been problematic and that there was not a great feel for what his previous asthma episodes were.[54] It must be recalled that the deceased showed no distress at the jetty, that he had indicated that he had had good relief from his puffer while on the boat, and that he had not told Nurse Alexander or Nurse Bowen about his episode in Medan.

77. In the light of what the clinicians knew, it appears to me to be understandable that they did not consider that the deceased was in immediate need of aggressive treatment.

78. This is not to say that the delay in having the deceased reviewed after he had been identified as asthmatic was

[51] ts 16 per Mountain, D
[52] ts 29 per Mountain, D
[53] ts 17 per Mountain, D
[54] ts 29-30 per Mountain, D

appropriate. It is clear to me that the system in place at the jetty at the time for transferring asthmatic patients could have been improved. For example, if the duty nurse at the jetty had sufficient concern about a detainee's condition to require a medical review, it may have been possible to transfer him or her to the processing centre or the hospital by car instead of waiting for the bus to fill with other detainees.

79. Again, it is not possible to determine whether the relevant delay contributed to the deceased's death. On the face of the evidence, the deceased's condition did not change until after he had been given oxygen, salbutamol and prednisolone by Nurse Bowen in the induction centre, and then it changed dramatically. It is a matter of conjecture as to what external factor, if any, caused that episode to commence.

The delay in moving the deceased from the processing centre to the induction centre

80. It is clear that there was a systemic failure to identify the deceased immediately upon his arrival at the processing centre.

81. After the deceased's death, IHMS implemented a triaging system involving the use of large coloured cards which are provided to patients and direct handover by telephone between nurses at the jetty and clinicians at the induction centre.[55]

82. For reasons expressed above, I am unable to find whether the delay in the failure to identify the deceased immediately upon his arrival at the processing centre contributed to his death.

The need for resources for nurses or an ambulance at the jetty

83. Associate Professor Mountain pointed out that, although there was a likelihood of there being significantly unwell people aboard boats arriving at Christmas Island,

[55] Exhibit 1, Tab 38A

nursing staff at the jetty appeared to have no access to initial treatments. In his view, when large numbers of people came in, it would seem advisable for an ambulance to be on hand, or for nursing staff at the jetty to have a resource allowing initial care and stabilisation.[56]

84. An IHMS representative responded to this concern by stating that having a single registered nurse at the jetty to conduct a rapid public health screening after health checks by other parties was IHMS policy since the arrivals were to be sent to the processing centre where a team of health professionals waited to provide an induction check. A single nurse was considered to be sufficient since there was little expectation of medical emergency occurring on the jetty without prior notice.[57]

85. In my view, providing nurses at the jetty with treatment resources would be a simple, cost-effective measure to allow them to deal with unexpected medical emergencies. IHMS has since provided 'Thomas Packs', which contain emergency medical supplies, at the jetty and at the induction building.[58]

86. As to whether an ambulance should be at the jetty when large numbers of people arrive, this does appear to be a simple precaution. However, the evidence made clear that the ambulance personnel at Christmas Island were volunteers who were rostered for duty. There was no evidence to establish whether it was feasible to keep volunteers away from their normal lives for potentially protracted periods of time when boats arrived.

87. In any event, these concerns raised by Associate Professor Mountain appear to be only indirectly connected to the treatment provided to the deceased. The clinicians who saw him detected no need for him to receive immediate treatment or to go to hospital.

[56] Exhibit 1, Tab 25
[57] Exhibit 1, Tab 38A
[58] Exhibit 1, Tab 38A

The lack of organisation of medical resources at the processing centre

88. Associate Professor Mountain said that the organisation of those resources was not conducive to an organised approach to treating a patient requiring urgent assessment and management. He said that equipment required for sicker patients should be available where those patients will initially be seen, that it should be regularly checked and that staff should be aware of it and how to use it.[59]

89. That an oximeter did not work, and that staff did not know where to find a defibrillator, were stark examples of that lack of organisation.

90. In its response, IHMS said that AED's (automated external defibrillators) are maintained at all locations, and emphasised that IHMS is contracted to provide primary health services and emergency response, which response is limited by the qualifications and capabilities of the attending clinicians.[60]

91. While I appreciate that IHMS relied on the expertise of its clinicians, I am unable to see how IHMS's response addresses Associate Professor Mountain's suggested organisation of medical resources. If the response was intended to indicate that the responsibility to organise and check resources was the responsibility of the clinicians rather than management, IHMS may need to review its management structure, of which there was no evidence before me.

92. As a matter of common sense, it seems to me that a fundamental principle of acute medical care must be that resources, including equipment, must be operational and readily available. The potential consequences of failing to comply with that principle are self-evidently dire, especially where the equipment may relate to assessment and resuscitation.

[59] Exhibit 1, Tab 25
[60] Exhibit 1, Tab 38A

93. In the deceased's case, the lack of an oximeter in the induction centre meant that Nurse Bowen was unable to obtain the deceased's oxygen saturations. Associate Professor Mountain speculated that, if Nurse Bowen had been able to determine the deceased's oxygen saturation, she may not have taken him off the oxygen.[61]

The use of asthma guidelines

94. Associate Professor Mountain stated that it seemed that Dr Hill was clearly aware of the potential life threats of the deceased's presentation after being phoned, but that it was not clear that nursing staff looking after him were. He stated that if they had followed a guideline-based approach to the deceased's care, it was probable that he would have had a much quicker assessment and transfer for management and an earlier, more aggressive treatment of his asthma. He said that earlier aggressive therapy could have prevented his death.[62]

95. The instructions apparently provided by Dr Hill to Nurse Bowen appear to me to have complied reasonably well with the guideline identified as appropriate by Associate Professor Mountain, namely the guideline in the Australian Asthma Handbook (the AAH guideline).[63]

96. I note, however, that on the basis of the relatively contemporaneous statements provided by Dr Hill and Nurse Bowen, it appears that there may have been a misunderstanding between Nurse Bowen and Dr Hill in relation to the dosages of salbutamol. Dr Hill instructed that the deceased be given three 5 mg bursts of salbutamol every fifteen to twenty minutes. Nurse Bowen interpreted his instructions to mean 5 mg of salbutamol every five to fifteen minutes, up to three times. She administered a 5 mg dose and ten minutes or fifteen minutes later gave him another dose. Whether Nurse Bowen complied with Dr Hill's instruction depended on

[61] ts 23-24 per Mountain, D
[62] Exhibit 1, Tab 25
[63] Exhibit 1, Tab 36 p.25

precisely what he intended – three bursts at one time or spread over the fifteen to twenty minutes.

97. The potential results of this possible discrepancy were not explored at the inquest. It seems self-evident that, if substantially less than the recommended dose had been administered, the results might be expected to have been less than optimal. However, Associate Professor Mountain was not critical in his report of the dosage administered by Nurse Bowen, which he appeared to have understood to have been that instructed by Dr Hill.[64]

98. In any event, it appears to me that it would be speculative to conclude that a different outcome would likely have occurred had the dosages been higher. As Associate Professor Mountain said, a severe asthma attack is difficult to turn around.[65]

99. While it is therefore objectively possible that the suggestions in the guideline were not followed, and that a guideline approach may have prevented the deceased's death, that conclusion is not clear.

100. What is clear is that IHMS did not have guidelines available to its clinicians and it did not provide training to them on medical areas such as asthma, relying instead on their individual skill and training.

101. Since that time, IHMS has provided its clinicians access to the Therapeutic Guidelines and has implemented an e-learning management module provided to all new clinicians.[66] I note that the Therapeutic Guidelines website advises that one of the topics under the 'Respiratory' section is acute asthma in adults and adolescents.[67]

102. Associate Professor Mountain had not read the Therapeutic Guidelines, but noted that they are well-recognised and would almost certainly resemble the AAH

[64] Exhibit 1, Tab 25
[65] ts 16 per Mountain, D
[66] Exhibit 1, Tab 38A
[67] https://tgldcdp.tg.org.au/guideLine?guidelinePage=Respiratory&frompage=etgcomplete

guideline.[68] He also said that the use of e-learning packages is a useful way to pass on information.[69]

103. As to Nurse Bowen, in my view it was clear that she was well aware of the potential dangers of asthma and, in a general sense, how to treat it. When she first examined the deceased, she was not concerned because his presentation was not severe. She initially administered the oxygen and medication, which she had prepared before speaking with Dr Hill, in accordance with what she understood were Dr Hill's instructions.

104. She was aware that, when the deceased's respiratory rate increased despite receiving the medication, he was experiencing a severe asthma attack. Had he not gone to the toilet and his condition had continued, she would have called for an ambulance before Dr Hill had arrived, but she did not get a chance to do so before the deceased collapsed and she began to administer CPR.[70]

105. Nurse Bowen was faced with the unexpected rapidity of the deceased's deterioration.[71] She said that, in hindsight, it would have been good for the deceased to have gone from the jetty straight to the hospital given how severe the situation became.[72]

106. Dr Hill, who had experience with asthma patients in emergency department settings, was clearly aware of the life-threatening potential of a severe asthma attack. He said that, in hindsight, and knowing that it took a while for the ambulance to come and what the outcome eventually was for the deceased,[73] it would have been a good time to call the ambulance when the deceased's condition deteriorated. At the time, he wanted to see the deceased because he was not responding to treatment.[74]

[68] ts 25 per Mountain, D
[69] ts 26 per Mountain, D
[70] ts 61-62 per Bowen, S
[71] ts 65 per Bowen, S
[72] ts 65 per Bowen, S
[73] ts 40 per Hill,B T
[74] ts 38 per Hill,B T

107. The evidence establishes that, even if an ambulance had been called at the time the deceased deteriorated, it would have been too late.

SUBMISSIONS AND COMMENT ON THE TREATMENT AND CARE OF THE DECEASED

108. Mr Palmer, who represented the deceased's family, submitted that Associate Professor Mountain's uncontested evidence established that the use of guidelines would have led to more aggressive treatment of the deceased, which could have avoided his death.

109. Mr Palmer submitted that, at the heart of Associate Professor Mountain's criticism was the notion that, if things had been done earlier or more efficiently, the deceased would have been moved to hospital earlier.[75] I agree that, on Associate Professor Mountain's evidence and with the clarity of hindsight, the deceased should have been transferred from the jetty to the hospital as soon as he was identified as experiencing a mild to moderate asthma attack.

110. As I have indicated above, the instructions by Dr Hill to Nurse Bowen approximated the AAH guideline. The difficulty facing the IHMS clinicians lay in identifying the need for treatment at all. The deceased showed no distress and provided no history of severe asthma. As Associate Professor Mountain indicated, the early awareness that the deceased was a severe asthmatic may have been problematic.[76]

111. Mr Palmer submitted that Associate Professor Mountain's evidence illustrated systemic failures by IHMS in relation to all other matters, of which the most notable was a lack of system for nurses to identify the deceased at the processing centre after having been alerted by Nurse Alexander of his pending arrival.[77]

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[75] ts 69 per Palmer, T
[76] ts 29-30 per Mountain, D
[77] ts 68 per Palmer, T

112. I accept the submission in relation to a lack of a triage system, as I have noted above. That lack has since been rectified, so there is no need for a formal recommendation to address it.

113. Mr Palmer also submitted that IHMS had an obligation to train their employees with respect to the asthma guidelines, specifically by providing appropriate clinical procedures or guidelines and to ensure that the employees follow them.

114. I agree that IHMS should have made available procedures at an appropriate standard and should have ensured that its employees were aware that the procedures were available.

115. Beyond that, it seems to me that the context in which IHMS was operating was relevant.

116. IHMS was contracted to provide a level of primary health care and emergency response in difficult and changing circumstances. It did so by employing clinicians who had the requisite skill sets and who were willing to travel to Christmas Island detention centres for relatively short periods. In this situation, it is not reasonable to expect that IHMS should have expended significant resources to train its employees to provide a service which their qualifications and experience should have rendered them capable to provide.

117. As I noted earlier, since the deceased's death, IHMS has provided computer-based information and training to its clinicians, obviating any consideration of a formal recommendation relevant to this issue.

118. The inquest did not investigate IHMS' contractual details or the level of funding available to DIAC to engage a health care provider or the history behind that level. In my view, it would be outside the scope of a coronial investigation to investigate and make recommendations about the levels of resources that are allocated in the federal government's budget to different agencies for specific purposes.

119. In summary, in hindsight it appears clear in objective terms that, as a result of a lack of an appropriate triage system, a lack of an effective equipment organisation and maintenance system and, possibly, a communication error, the deceased received treatment and care that was inadequate.

120. I am unable to find whether the failure to provide the deceased with treatment and care at an adequate standard contributed to his death.

CONCLUSION

121. The deceased died a tragic and untimely death, ironically just hours after he had reached Australia, where he had hoped and expected that he would be able to provide his family with a safe and peaceful future.

122. A further irony lay in the fact that, for a number of disparate reasons, he received more effective treatment for an acute episode of his chronic asthma on the island of Sumatra in Indonesia than he did in Australia.

123. While I am sure that this fact does not reflect on either the capabilities or the commitment of the clinicians who attended the deceased, it does not reflect well on the circumstances in which they were obliged to work.

B P King
Coroner
12 May 2017