



IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2016 2356

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 60(2)

Section 67 of the Coroners Act 2008

Findings of:	Paresa Antoniadis Spanos, Coroner
Deceased:	John Crabtree
Date of birth:	14 May 1947
Date of death:	26 May 2016
Cause of death:	1(a) Myocardial infarction (secondary to) 1(b) Coronary artery atherosclerosis in the setting of infective exacerbation of chronic obstructive pulmonary disease
Place of death:	Box Hill Hospital 8 Arnold Street, Box Hill, Victoria 3218

INTRODUCTION

1. Mr Crabtree was a 69-year-old single man who had been in the care of the State in its various iterations since admission to Kew Children's Cottages at the age of two. Most recently and since 2004, Mr Crabtree resided in Department of Health and Human Services (DHHS) Disability Accommodation in Rooks Road, Nunawading, (the group home), which accommodated eight residents aged between 41 and 60 (at the time) who had dual disabilities, hearing impairments, required communications aids and/or had complex behaviour supports.

2. Mr Crabtree had an intellectual disability, hearing and vision impairment and a psychiatric condition, unspecified in records made available to the court. He was able to express himself with speech which could be difficult to understand, particularly to those who were unfamiliar with him, and he also used adapted signs and gestures. Despite his hearing impairment, Mr Crabtree was able to lip read and could therefore communicate albeit to a limited extent. Mr Crabtree had a medical history that included heavy smoking, emphysema and more recently Parkinson's disease, but no documented heart disease.

3. With some support and supervision, Mr Crabtree was independent with all activities of daily living and enjoyed spending time with others. As regards his medical needs, he remained entirely reliant on those caring for him with no family available to advocate for him during most of his life. Mr Crabtree had a brother and sister who only became aware of his existence four years before his death and chose to have no contact with him so as not to upset his life and routine at that late stage.

CIRCUMSTANCES IMMEDIATELY PROXIMATE TO DEATH

4. On 25 May 2016, Mr Crabtree attended Blackburn Clinic with one of his carers complaining of a cough and sore throat. He was seen by general practitioner (GP) Dr Sean Das although his regular GP was Dr Praba Ratnarajah who last saw him on 29 April 2016 for a review of his annual General Practitioner Management Plan and a referral to a podiatrist. Dr Das noted normal vital signs, a red throat and normal respiratory examination. He diagnosed Mr Crabtree with an upper respiratory tract infection and prescribed the antibiotic Augmentin Duo Forte.

5. The following day on 26 May 2016, Mr Crabtree approached the staff office of the group home at about 7.00am asking for a cigarette. The staff member who had been working

overnight and the house supervisor noted that Mr Crabtree's breathing was abnormal, laboured and shallow. The house supervisor escorted Mr Crabtree back to his room.

6. At 7.50am, the staff member went to check on Mr Crabtree who was in bed and continued to have laboured breathing. She communicated her concerns to the house supervisor who said he was going to call an ambulance once all other residents had departed for their day programs.

7. The call to emergency services for an ambulance was not made until 8.44am, almost one hour later. On arrival at 8.54am, Ambulance Victoria (AV) paramedics found Mr Crabtree was extremely unwell. Their documented observations at 8.57am were heart rate 100 beats per minute (high), blood pressure 90 mmHg systolic (low), extremely elevated respiratory rate of 44 breaths per minute (bpm), very low oxygen saturations of 85% on room air. The assessed Mr Crabtree as anxious and distressed, with coarse crepitations in his lungs and described him as "unable to speak, time critical" in their patient care records.

8. Mr Crabtree arrived in the Box Hill Hospital (BHH) Emergency Department (ED) at 9.29am. He was treated by ED registrar Dr Nazimuddin. The examination findings were respiratory rate of 40 bpm, oxygen saturations of 80% on room air, "unable to talk", afebrile, with significant increase in the work of breathing and generalised expiratory wheeze. Chest x-ray revealed an opacity in the left upper lobe and bilateral opacities centrally in the lungs. Blood tests were performed. An electrocardiogram (ECG) was included in the management plan but not performed.

9. The working diagnosis for Mr Crabtree was an infective exacerbation of chronic obstructive pulmonary disease. Mr Crabtree was supported with non-invasive ventilation and antibiotics and other medications were administered. ED staff attempted to contact the house supervisor to determine if Mr Crabtree had an advanced care plan or any next of kin who should be contacted.

10. While still in the ED at 10.58am, Mr Crabtree became unresponsive and had a cardiac arrest. At the time, the working diagnosis was septic shock and hypoxia leading to a cardiac infarct and arrest. Cardiopulmonary resuscitation was commenced but was ceased when Mr Crabtree failed to respond, and clinical staff pronounced him deceased at 11.29am on 26 May 2016.

CORONIAL INVESTIGATION

11. This finding is largely based on the investigation and brief compiled by Coronial Investigator (CI) Leading Senior Constable Sue Smith at my request and direction which includes statements from Ms Debra Lewis, Operations Manager for Disability Accommodation Services; Dr Praba Ratnarajah GP; Dr Nor Hanaa Nazimuddin, ED Registrar, BHH ED; Matthew Welsh, Registered Nurse, BHH ED; and from the CI.

12. The coronial investigation was also informed by the Court's in-house clinicians within the Coroners Prevention Unit (CPU) who reviewed the medical records and statements and provided advice about aspects of Mr Crabtree's clinical management and care by reference to current standards, and additional statements and reports obtained as a result of that advice.¹

PURPOSE OF A CORONIAL INVESTIGATION

13. The purpose of a coronial investigation of a *reportable death*² is to ascertain, if possible, the identity of the deceased person, the cause of death and the circumstances in which death occurred.³ In this case Mr Crabtree's death was reported as he was immediately before death a person placed in custody or care.⁴

14. The *cause* of death refers to the *medical* cause of death, incorporating where possible the *mode* or *mechanism* of death. For coronial purposes, the *circumstances* in which death occurred refers to the context or background and surrounding circumstances but is confined to those circumstances sufficiently proximate and causally relevant to the death, and not all those circumstances which might form part of a narrative culminating in death.⁵

¹ These additional statements and reports include an additional statement from Dr Praba Ratnarajah; a statement from Mr Todd Keating, Acting Operations Manager, Inner East Melbourne Area, DHHS; a Final review report, Ethical Standards, DHHS; Mr Crabtree's Disability Accommodation Service File; and a statement from Dr Jeffrey Kirwan, Acting Executive Director Research/Chief Medical Officer, Eastern Health.

² The term is exhaustively defined in section 4 of the *Coroners Act 2008* [the Act]. Apart from a jurisdictional nexus with the State of Victoria a reportable death includes deaths that appear to have been unexpected, unnatural or violent or to have resulted, directly or indirectly, from an accident or injury; and, deaths that occur during or following a medical procedure where the death is or may be causally related to the medical procedure and a registered medical practitioner would not, immediately before the procedure, have reasonably expected the death (section 4(2)(a) and (b) of the Act).

³ Section 67(1).

⁴ See the definition of "person placed in custody or care" in section 3 of the Act.

⁵ This is the effect of the authorities – see for example *Harmsworth v The State Coroner* [1989] VR 989; *Clancy v West* (Unreported 17/08/1994, Supreme Court of Victoria, Harper J.)

15. The broader purpose of any coronial investigation is to contribute to the reduction of the number of preventable deaths through the findings of the investigation and the making of recommendations by coroners, generally referred to as the *prevention* role.⁶

16. Coroners are empowered to report to the Attorney-General in relation to a death; to comment on any matter connected with the death they have investigated, including matters of public health or safety and the administration of justice; and to make recommendations to any Minister or public statutory authority on any matter connected with the death, including public health or safety or the administration of justice.⁷ These are effectively the vehicles by which the coroner's prevention role can be advanced.⁸

17. It is important to stress that coroners are not empowered to determine the civil or criminal liability arising from the investigation of a reportable death and are specifically prohibited from including in a finding or comment any statement that a person is, or may be, guilty of an offence.⁹

18. Where, as in this case, the death under investigation is that of a person who was "in care" immediately before their death, the Act mandates an inquest.¹⁰ Other than irrelevant exceptions, an inquest is not mandated if the coroner considers that the death was due to natural causes.¹¹ As will become apparent below,¹² I do consider that Mr Crabtree's death was due to natural causes and have conducted the coronial investigation of his death without inquest based on statements, reports and documents produced by the relevant witnesses.

⁶ The 'prevention' role is now explicitly articulated in the Preamble and purposes of the Act, compared with the *Coroners Act 1985* where this role was generally accepted as 'implicit'.

⁷ See sections 72(1), 67(3) and 72(2) regarding reports, comments and recommendations respectively.

⁸ See also sections 73(1) and 72(5) which requires publication of coronial findings, comments and recommendations and responses respectively; section 72(3) and (4) which oblige the recipient of a coronial recommendation to respond within three months, specifying a statement of action which has or will be taken in relation to the recommendation.

⁹ Section 69(1). However, a coroner may include a statement relating to a notification to the Director of Public Prosecutions if they believe an indictable offence may have been committed in connection with the death. See sections 69 (2) and 49(1).

¹⁰ Section 52(2).

¹¹ See section 52(3) for exceptions which do not apply here and section 52(3A) for the "natural causes" exception which does. Note that in such cases a coroner may exercise the broad discretion to hold an inquest into any death they are investigating – see section 52(1).

¹² See paragraphs 20 and following below where the medical cause of death is discussed.

IDENTIFICATION

19. John Crabtree born on 14 May 1947 was identified by Michael Glenister who signed a formal Statement of Identification to this effect on 26 May 2016 before a member of Victoria Police. Mr Crabtree's identity was not in issue and required no further coronial investigation.

MEDICAL CAUSE OF DEATH

20. Mr Crabtree's body was brought to the Coronial Services Centre. Forensic pathologist Dr Yeliena Baber, from the Victorian Institute of Forensic Medicine (VIFM), reviewed the medical records and medical deposition from BHH, the circumstances of the death as reported by police to the coroner, post-mortem CT scanning of the whole body undertaken at VIFM (PMCT) and performed an autopsy.

21. Having done so Dr Baber provided a detailed 12-page autopsy report in which she summarised her autopsy findings as heavy and congested lungs with bilateral consolidation of the upper lobes and pinpoint lumen to the main coronary arteries. Dr Baber made the following additional comments pertaining to the cause of Mr Crabtree's death:

"...Internal examination revealed critical narrowing of all three major coronary arteries and narrowing of the coronary artery ostia. Small bilateral pleural effusions were present. The lung parenchyma was heavy and congested with consolidated upper lobes. A sternal fracture and one anterior rib fracture were present, in keeping with cardiopulmonary resuscitation.

Histology of the lungs showed emphysema. There was an aspergilloma with associated abscess within the left lung upper lobe, and surrounding cavity was a resolving pneumonia with some features of bronchiolitis obliterans. Other than the abscess, there was no acute bronchopneumonia. An area of acute infarction was identified on the posterior left ventricular wall of the heart."

22. Routine toxicological analysis of post-mortem samples taken from Mr Crabtree detected only a low level of paracetamol and no ethanol (alcohol) or other commonly encountered drugs or poisons.

23. Dr Baber expressed the opinion that Mr Crabtree's death was due to natural causes, namely 1(a) myocardial infarction (secondary to) 1(b) coronary artery atherosclerosis in the setting of infective exacerbation of chronic obstructive pulmonary disease.

24. I accept Dr Baber's opinion as to Mr Crabtree's cause of death.

CIRCUMSTANCES IN WHICH THE DEATH OCCURRED

25. The focus of the coronial investigation was on the circumstances in which the death occurred, specifically on the adequacy of the clinical management and care provided to Mr Crabtree in the period immediately preceding his death, and the timeliness of the response of the group home staff to his clinical state on the morning of 26 May 2016.

CLINICAL MANAGEMENT AND CARE PROVIDED TO MR CRABTREE

26. Other than being medicated for high cholesterol, and being a heavy smoker, both known risk factors for cardiac disease, according to his Disability Accommodation Services care plan, Mr Crabtree had no documented cardiac history or investigations, and no current health care plan for cardiac disease. The only health care plan which has come to light during this investigation is a plan pertaining to his Chronic Obstructive Pulmonary Disease (COPD) which expired in 2013.

27. In 2013, Mr Crabtree presented to BHH ED on two occasions. The first when he was brought in by ambulance on 26 October 2013 with likely chest pain. He was noted to have an intellectual disability with communication difficulty, was agitated and hitting a wall, which his carer interpreted as meaning he was in pain, and he was pointing to his left chest and axilla. There was a history of recent chest infection treated with antibiotics and no shortness of breath. There was no indication of trauma to the chest wall or risk factors for pulmonary embolus. He was known to have hypercholesterolaemia treated with atorvastatin and was a smoker with COPD.

28. Mr Crabtree's observations were all within normal limits and on examination there was nothing of significance apart from some coarse crackles in the left lower lung zone on auscultation. ECG showed incomplete right bundle branch block, chest x-ray was normal and blood tests were all essentially normal. Clinicians suspected a mild or unresolved chest infection with pleuritic chest pain and Mr Crabtree was discharged home with oral antibiotics and analgesia with a plan for follow-up with his GP.

29. While waiting outside for a taxi and after smoking a cigarette, Mr Crabtree first looked unsteady and then collapsed. His carer reported he looked pale, sweaty and was drooling. He vomited, was incontinent of urine and was returned to the ED in a wheelchair.

30. Mr Crabtree was admitted to BHH overnight. His observations were normal, and he slept for a period. In the morning, Mr Crabtree went outside for a cigarette. When reviewed

by the ED doctor, his examination was normal, and he was mobilising without any unsteadiness. According to his carer, he was back to his normal self. Mr Crabtree was discharged again with a note to his GP about the events of the past 24 hours. One possibility for his collapse was thought to be the Endone he had been given for pain relief.¹³

30. In the evening of 2 December 2013, Mr Crabtree was taken to the BHH ED by his carer with a referral from his GP indicating that he had been complaining of chest pain intermittently since he woke that morning and, according to the carer, looked pale/grey. A history of reflux treated with Nexium was given. Mr Crabtree's examination was essentially normal and routine cardiac investigations were performed to confirm or rule out a cardiac cause for the pain. Chest x-ray was normal. ECG was consistent with ECGs performed in October 2013 with no evidence of ischaemic changes. Blood tests including Troponin T (and a repeat Troponin T) were all within normal limits. Mr Crabtree's pain appeared to settle after Gastrogel was given for suspected reflux. While in the ED Mr Crabtree went outside for a cigarette without any apparent difficulty.

31. Mr Crabtree was discharged home with a plan for GP follow-up and consideration of an outpatient stress test, if indicated, presumably by ongoing or recurrent chest pain reported to his carers or GP.

32. BHH records and Blackburn Clinic records provided by Mr Crabtree's GP between these presentations in late 2013 and Mr Crabtree's death do not record any subsequent presentations for cardiac disease or symptoms suggestive of cardiac disease until the emergent presentation on 26 May 2016.

33. The CPU noted that Blackburn Clinic records indicated that Mr Crabtree's GP had provided care both for immediate and longer-term issues. They monitored Mr Crabtree's anaemia, organised a colonoscopy in 2015, screened for prostate problems and monitored and treated him for elevated cholesterol levels (last measured in August 2015). While the GP had referred Mr Crabtree to BHH with chest pain twice in 2013, as investigations there found no evidence that the chest pain was due to myocardial ischaemia,¹⁴ it was reasonable that the GP did not refer Mr Crabtree for further follow-up or investigation of possible ischaemic heart disease.

¹³ Statement of Dr Jeffrey Kirwan, Acting Executive Director Research/Chief Medical Officer dated 27 September 2018.

¹⁴ Lack of adequate blood supply to the heart.

CLINICAL MANAGEMENT AND CARE PROVIDED AT BHH ED ON 26 MAY 2016

34. The CPU noted that once in the ED, Mr Crabtree was immediately treated with a working diagnosis of septic shock¹⁵ from a presumed infective exacerbation of his lung disease. X-ray findings seemed to support this working diagnosis. According to the CPU, Mr Crabtree's clinical management and care appeared to be reasonable in the sense that it was based on a reasonable working diagnosis given what was known when he was in the ED.

35. An ECG was planned and was necessary to investigate whether there was a cardiac cause for the condition. In his report, Dr Kirwan conceded that no ECG was performed despite being clinically indicated and explained this was due to Mr Crabtree's irritability and restlessness, making it difficult to perform an ECG. Dr Kirwan noted that Mr Crabtree nevertheless had constant cardiac monitoring while in the ED for about one hour and 45 minutes prior to cardiac arrest.¹⁶

36. The CPU noted that autopsy demonstrated an acute myocardial infarction of several hours' duration and, in retrospect, it is likely that cardiogenic shock from his failing heart, rather than septic shock from infection, caused Mr Crabtree's death. Due to a lack of ECG, this diagnosis appeared not to have been considered. According to the CPU, the resuscitation and management for both septic and cardiogenic shock are similar, but cardiogenic shock secondary to myocardial infarction is ideally managed by angiogram and re-establishment of blood supply to the heart, if the patient is sufficiently stable for the procedure.

37. In conclusion, the CPU noted that about four hours elapsed between Mr Crabtree first being noticed to be short of breath at the group home on the morning of 26 May 2016 and his cardiac arrest at 10.58am and death at 11.29am later that morning. As regards the causal significance of this delay¹⁷, the CPU identified a small *possibility* that had Mr Crabtree been

¹⁵ Inability to supply adequate blood to vital organs due to profound infection.

¹⁶ In an exchange of correspondence with the court, Dr Yvette Kozielski, Medico-Legal Officer for Eastern Health stated 'Mr Crabtree was on cardiac monitoring but no formal ECG was printed for the record and no comment was made about the trace'; '... an ECG is unlikely to have changed the course of events and final outcome.'; 'It is unlikely that there was ST elevation as this is easily seen on the bedside monitor, and without ST elevation Mr Crabtree would not have been a candidate for urgent catheterisations given his respiratory instability'. The CPU noted that the cardiac monitor generally reflects only one or two leads of the 12 lead ECG and changes indicating an AMI may not be evident in the monitored leads, particularly in infarctions in some regions of the heart. Autopsy demonstrated an infarction in the left posterior ventricular wall which would be unlikely to be reflected as an ST elevation in Lead II (the lead commonly displayed) on the cardiac monitor. Further, according to the CPU, a 12 lead ECG is always required to confirm or refute the suspicion of an AMI.

¹⁷ See paragraph 6 above and paragraphs 38 and following below where this delay is discussed.

transported to the hospital immediately and an ECG performed that indicated an AMI, and he was in a condition that allowed transference to the cardiac catheter laboratory, an angioplasty could have been performed and the fatal outcome altered. However, Mr Crabtree did have significant coronary atherosclerosis and it is *probable* he would not have survived, even with optimal management.

THE DELAY IN CALLING AN AMBULANCE ON THE MORNING OF 26 MAY 2016

38. It was not contentious that the delay in calling an ambulance to take Mr Crabtree to hospital was the responsibility of the house supervisor who either failed to appreciate how unwell he was, or inappropriately prioritised getting other residents to their respective day programs ahead of Mr Crabtree's needs, or both. The house supervisor faced disciplinary review about this delay; a further delay when hospital staff called seeking Mr Crabtree's next of kin details and End of Life Plan; and a failure to maintain Mr Crabtree's health plans.

39. The DHHS Final Review and Report was provided to me on a confidential basis as was entirely appropriate given the clear overlap between the subject matter of that review and the coronial investigation.¹⁸ Suffice for present purposes to note that the review found that the house supervisor should have called an ambulance straight away rather than waiting for the other residents to leave for their day placements; that there was an unreasonable delay on the part of the house supervisor in responding to the hospital's/his supervisor's request for information about Mr Crabtree and his attendance at the ED to support him; and that there had been a failure to ensure that Mr Crabtree's health plans were up to date.¹⁹

40. The delay in calling an ambulance was relevant from a causal perspective as CPU identified the *potential* for an altered outcome if Mr Crabtree had accessed earlier medical attention, albeit recognising just how unwell Mr Crabtree was and the unlikelihood of an altered outcome. The delay in responding to the hospital's request for information about Mr Crabtree's next of kin and End of Life Plan had no causal significance to the coronial investigation as cardiopulmonary resuscitation in the ED was commenced in a timely manner and continued until it was deemed futile to persist. Finally, although the failure to have current health plans in place for Mr Crabtree was not in accordance with DHHS standards, it

¹⁸ Section 7 of the Act states that *"It is the intention of Parliament that a coroner should liaise with other investigative authorities, official bodies or statutory officers – (a) to avoid unnecessary duplication of inquiries and investigations; and (b) to expedite the investigation of deaths and fires."*

¹⁹ This is my understanding and paraphrasing of the review report.

is apparent that Mr Crabtree's overall healthcare needs were appropriately met by his GP and any failure in this regard had no causal connection with Mr Crabtree's death.

FINDINGS/CONCLUSIONS AS TO CIRCUMSTANCES

41. The standard of proof for coronial findings of fact is the civil standard of proof on the *balance* of probabilities, with the *Briginshaw* gloss or explications.²⁰

42. Adverse findings or comments against individuals or institutions are not to be made with the benefit of hindsight but only on the basis of what was known or should reasonably have been known or done at the time, and only where the evidence supports a finding that they departed materially from the standards of their profession and in so doing caused or contributed to the death under investigation.

43. Applying the standard of proof to the available evidence my conclusions are that:

- i) The deceased's identity was John Crabtree, born 14 May 1947.
- ii) Mr Crabtree died at Box Hill Hospital on 26 May 2016.
- iii) Mr Crabtree's death was due to myocardial infarction secondary to coronary artery atherosclerosis in the setting of infective exacerbation of chronic obstructive pulmonary disease.
- iv) The available evidence does not support a finding that there was any want of clinical management or care on the part of the GPs at the Blackburn Clinic or the clinical staff of the Box Hill Hospital Emergency Department that caused or contributed to Mr Crabtree's death.
- v) That said, it is *possible* that if an ECG had been performed shortly after Mr Crabtree's presentation to the ED, it *may* have indicated that he was suffering a myocardial infarction, and if he was stable enough for catheterisation at the time, *may* have altered the fatal outcome.
- vi) It follows that the failure of the DHHS house supervisor to call an ambulance as soon as it became apparent that Mr Crabtree needed urgent medical attention had

²⁰ *Briginshaw v Briginshaw* (1938) 60 C.L.R. 336 esp at 362-363. "The seriousness of an allegation made, the inherent unlikelihood of an occurrence of a given description, or the gravity of the consequences flowing from a particular finding, are considerations which must affect the answer to the question whether the issues had been proved to the reasonable satisfaction of the tribunal. In such matters "reasonable satisfaction" should not be produced by inexact proofs, indefinite testimony, or indirect inferences..."

an adverse impact by delaying his access to medical attention in circumstances where there was, even if only a mere, *possibility* of a more positive outcome.

- vii) The presence of the House Supervisor or any other carer able to communicate with Mr Crabtree would have enhanced the ED clinicians' ability to obtain a fulsome history and may *potentially* have assisted them to recognise the severity of his illness earlier than when it became apparent he was in cardiac arrest.

PUBLICATION OF FINDING

44. Pursuant to section 73(1B) of the Act, I order the Principal Registrar to publish this finding on the Internet in accordance with the rules.

DISTRIBUTION OF FINDING

45. I direct that a copy of this finding is provided to the following for their information:

The family of Mr Crabtree

Eastern Health

Blackburn Clinic

Department of Health, Disability Services

Leading Senior Constable Sue Smith (#33575) c/o O.I.C. Box Hill Uniform

Signature:



Paresa Antoniadis Spanos

Coroner

Date: 29 October 2021

