IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2020 5825

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)
*Section 67 of the **Coroners Act 2008***

Findings of:	Caitlin English, Deputy State Coroner
Deceased:	YLM[1]
Date of birth:	26 June 1942
Date of death:	25 October 2020
Cause of death:	1(a) Ruptured abdominal aortic aneurysm
Place of death:	Keilor Downs, Victoria

[1] This Finding has been de-identified to replace the names of the deceased and their family members with pseudonyms of randomly generated three letter sequences to protect their identity and to redact identifying information.

INTRODUCTION

1. On 25 October 2020, YLM was 78 years old when he died from a ruptured aortic aneurysm. At the time of his death, YLM lived at Keilor Downs with his wife.

THE CORONIAL INVESTIGATION

2. YLM's death was reported to the Coroner as it fell within the definition of a reportable death in the *Coroners Act 2008* (**the Act**). Reportable deaths include deaths that are unexpected, unnatural or violent, or result from accident or injury.

3. The role of a coroner is to independently investigate reportable deaths to establish, if possible, identity, medical cause of death, and surrounding circumstances. Surrounding circumstances are limited to events which are sufficiently proximate and causally related to the death. The purpose of a coronial investigation is to establish the facts, not to cast blame or determine criminal or civil liability.

4. Under the Act, coroners also have the important functions of helping to prevent deaths and promoting public health and safety and the administration of justice through the making of comments or recommendations in appropriate cases about any matter connected to the death under investigation.

5. This finding draws on the totality of the coronial investigation into YLM's death. Whilst I have reviewed all the material, I will only refer to that which is directly relevant to my findings or necessary for narrative clarity. In the coronial jurisdiction, facts must be established on the balance of probabilities.[2]

MATTERS IN RELATION TO WHICH A FINDING MUST, IF POSSIBLE, BE MADE

Identity of the deceased

6. On 25 October 2020, YLM, born 26 June 1942, was visually identified by his wife.

7. Identity is not in dispute and requires no further investigation.

[2] Subject to the principles enunciated in *Briginshaw v Briginshaw* (1938) 60 CLR 336. The effect of this and similar authorities is that coroners should not make adverse findings against, or comments about, individuals unless the evidence provides a comfortable level of satisfaction as to those matters taking into account the consequences of such findings or comments.

Medical cause of death

8. Senior Forensic Pathologist, Dr Michael Burke, from the Victorian Institute of Forensic Medicine (**VIFM**), conducted an inspection on 26 October 2020 and provided a written report of his findings dated 27 October 2020.

9. Dr Burke provided an opinion that the medical cause of death was *"1(a) Ruptured abdominal aortic aneurysm"*.

10. I accept Dr Burke's opinion.

Circumstances in which the death occurred

11. YLM had a medical history that included diabetes mellitus type-II, hypertension, smoking-induced emphysema, and renal colic.

12. On 21 September 2020, YLM had a video consultation with his general practitioner, Dr Saima Rizvi from the Keilor Downs Medi-Clinic. He reported that in the preceding days he had experienced some loin to groin pain, which had resolved, and some dark-coloured urine. Suspecting renal colic,[3] Dr Rizvi ordered a CTKUB,[4] which was performed on 28 September 2020 at private radiology practice, FMIG Imaging. The CT did not show a kidney stone but did show a 7.1-centimetre infrarenal abdominal aortic aneurysm. The radiology report recommended vascular surgical review.

13. On 30 September 2020, Dr Rizvi reviewed the CT report and sent a text message to YLM advising him to make an appointment to discuss the results.

14. On 1 October 2020, Dr Rizvi had a video-consultation with YLM at which time she informed him of the diagnosis and that she was arranging a vascular surgery outpatient review at the Royal Melbourne Hospital. In her statement, Dr Rizvi stated that YLM reported he did not have any pain or discomfort and she explained the seriousness of the condition and gave clear instructions that if YLM experienced any further pain or discomfort, he needed to present to an emergency department.

[3] Kidney stones.
[4] Computed Tomography Kidney-Ureter-Bladder; a specific CT scan looking for kidney stones.

15. His wife stated, *"It was around this time that [redacted] had started vomiting but he didn't complain about any pain but he did look bloated."* She recalled that Dr Rizvi had advised that if YLM felt any pain, he needed to go to hospital as soon as possible.

16. On 2 October 2020, YLM's daughter telephoned Dr Rizvi after internet-researching abdominal aortic aneurysms. The medical record noted that Dr Rizvi explained the management plan and informed her of the referral made to Royal Melbourne Hospital. Dr Rizvi also explained the 'red-flags' to watch for and when to present to an emergency department.

17. YLM's wife noted that her husband appeared tired and pale at a family BBQ on 23 October 2020. She asked him whether he wanted to go to hospital, but he declined and said he was just tired. He did not complain of pain.

18. Over the following day, she observed her husband to look *"uncomfortable"*, but her husband was reluctant to go to hospital; he did not feel any pain, just bloated. When she said she would call him an ambulance, he told her that he was feeling better.

19. On the evening of 24 October 2020, YLM's wife went to bed and YLM stayed up watching television.

20. The next morning at 4.30am, YLM's wife found YLM completely dressed and sitting on the closed lid of the toilet, deceased.

21. YLM's wife noted that she and her husband had never received any call from the hospital about making an appointment in regard to the referral.

FAMILY CONCERNS AND REVIEW OF CARE

22. YLM's family was concerned that he should have been advised to immediately present to a hospital.

23. In response to these concerns and as part of my investigation, I obtained statements from Dr Rizvi and Noel Atkinson, Head of Unit, Vascular Surgery, at the Royal Melbourne Hospital. I also obtained advice from the Coroners Prevention Unit (**CPU**) regarding whether the care provided to YLM was appropriate.

24. The CPU is staffed by healthcare professionals, including practising physicians and nurses. Importantly, these healthcare professionals are independent of the health professionals and

institutions under consideration. They draw on their medical, nursing, and research experience to evaluate the clinical management and care provided in particular cases by reviewing the medical records, and any particular concerns which have been raised.

Abdominal aortic aneurysms

25. The CPU noted that Statewide Referral Criteria[5] for abdominal aortic aneurysm provides that aneurysms greater than four centimetres should be referred to vascular surgery outpatients.

26. While the guidelines do not have a specific size above which referral to an emergency department is recommended, the guidelines do recommend immediate referral to an emergency department in the presence of back/ abdomen/ groin pain.

Statewide Referral Criteria

27. The Statewide Referral Criteria were introduced in February 2019 to help general practitioners navigate the confusing interface between public hospital outpatient specialist clinic referrals. The Statewide Referral Criteria is a free-standing Victorian Health Department website that contains standardised inclusion and exclusion criteria for outpatient referrals including which patients should be referred to an emergency department.

28. As noted above, the Statewide Referral Criteria do not provide a minimum size of when to refer an aortic aneurysm[6] to an emergency department. It provides the following:

> ***Direct to an emergency department for:***
>
> - *Present or suspected acute aortic dissection.*
> - *Present or suspected ruptured abdominal aortic aneurism or thoracic aortic aneurysm.*
>
> ***Immediately contact the vascular registrar to arrange an urgent vascular assessment for:***
>
> - *Present or suspected symptomatic abdominal aortic aneurysm or thoracic aortic aneurysm (e.g. abdominal or back pain, limb ischaemia).*

[5] Statewide Referral Criteria for Specialist, https://src.health.vic.gov.au/.
[6] Statewide Referral Criteria for Specialist Clinics, Aortic aneurysm, https://src.health.vic.gov.au/aortic-aneurysm, accessed 14 January 2022.

Criteria for referral to public hospital specialist clinic services:

- *Abdominal aortic aneurysm > 4.0cm diameter measure.*
- *Descending thoracic aortic aneurysm > 5.0cm diameter measure.*
- *Rapid abdominal aortic aneurysm expansion (> 1.0cm diameter growth per year).*

29. While the guidelines suggest that pain in association to abdominal aortic aneurysm should be discussed with the vascular surgery registrar, the Statewide Referral Criteria does not specify whether that is ongoing or transient pain. YLM only reported one episode of pain to Dr Rizvi.

Whether YLM should have been referred to an emergency department

30. In her statement, Dr Rizvi explained that her understanding was that YLM needed to be referred immediately to the vascular team given the size of the aneurysm. Dr Rizvi stated that she perceived the risk of sending an elderly male with diabetes and emphysema to an emergency department during a stage-4 COVID-19 lockdown was greater than that of an asymptomatic aneurysm. Her expectation was that YLM would be seen within one to two weeks as that was her experience in referring similar cases in the past and surgery would occur within 30 days.

31. In his statement, Mr Atkinson stated the following:[7]

> *The clinical notes relating to left sided abdominal pain and the imaging (CT) showing a 70 mm abdominal aortic aneurysm would have raised concerns to a vascular surgeon. If indeed there was confirmation of* ***abdominal pain*** *then a direct referral to the emergency department would have been a very likely response. Alternatively, an urgent face-to-face outpatient attendance (within 1-2 weeks) may have been recommended.*

32. The CPU advised that Mr Atkinson's advice is clearer than the Statewide Referral Criteria guidelines as to what a 'symptomatic' abdominal aortic aneurysm is – a symptomatic abdominal aortic aneurysm is one that has had *any* pain, *transient or otherwise*, that could be caused by the abdominal aortic aneurysm (for example, renal colic type pain when the CT reveals no renal tract stones).

[7] My emphasis.

Contributing factors

33. The CPU identified a number of contributing factors that may have led YLM not receiving treatment sooner.

34. The first was the lack of clarity regarding pain in the Statewide Referral Criteria, which could lead to misinterpretation. This may have meant Dr Rizvi did not appreciate of the clinical significance YLM's transient pain in the context of an abdominal aortic aneurysm.

35. The CPU advised that while it is appropriate for an *asymptomatic* aneurysm that is incidentally found on a CT scan performed for another purpose (for example, investigation of weight loss) to wait for two weeks to be seen in an outpatient setting, any *transient* pain that *could* be related to an abdominal aortic aneurysm (for example renal colic pain, sudden onset back or abdominal pain) should be considered a *symptomatic* abdominal aortic aneurysm and should either be discussed with vascular registrar or sent to the emergency department.

36. The second factor was that the radiologist reporting the CT that discovered the abdominal aortic aneurysm did not directly contact the referring doctor to discuss the urgency of this finding given the clinical context of abdominal pain. The Royal Australian and New Zealand College of Radiologists has a policy[8] that recommends that when radiologists find significant unexpected, urgent, or critical clinical radiology findings, the communication of critical findings should be documented, in the medical imaging report with the date, time, nature of what was conveyed or discussed and with whom and that the findings are provided to a person who has the capacity to understand and act appropriately on them.

37. It goes without saying that it is of the utmost importance that the critical or urgent radiological findings are discussed with the referrer, which was not performed in the case of YLM. Fortunately, Dr Rizvi's vigilance in reviewing reports in a timely manner meant that the report and YLM's abdominal aortic aneurysm was not missed.

38. The third factor was the Royal Melbourne Hospital outpatient clinics referral process. I note that the Royal Melbourne Hospital conducted a review of its fax logs and determined that while one fax was received from Keilor Downs Medi-Clinic on 1 October 2020, it was not regarding YLM. It therefore appears that the Royal Melbourne Hospital never received the referral from Dr Rizvi.

[8] Royal Australian and New Zealand College of Radiologists, Clinical Radiology unexpected notification, https://www.ranzcr.com/search/clinical-radiology-unexpected-notifications, accessed 14 January 2022.

39. The hospital's referral process is via fax-machine using either the Victorian Statewide Referral Form or a doctor's letterhead (this was used in YLM's case). Postal mail can in theory be used, but rarely is. This request is then manually logged into the Royal Melbourne Hospital electronic medical record system (EPIC) and then the triaging of the requests appears in the specialty unit's director's/ deputy director's 'to do' list.

40. While the Royal Melbourne Hospital's outpatient clinic's webpage[9] has links to the Statewide Referral Criteria, these are separate to the referral workflow process itself. This means that if the doctor's practice has the outpatient fax number programmed into its fax machine, the doctor may remain unaware of or have no reason to refer to the Statewide Referral Criteria guidelines when referring patients – specifically the patients who should be discussed with the emergency department or specialist consultant).

41. For reasons that cannot be determined, there was a failure *between* apparently working fax machines, but more importantly, there was an inability recognise the failure by the referring doctor because of poor feedback from the current referral process regarding the status of a referral.

Previous coronial recommendation to discontinue use of facsimile machines and opportunities for prevention

42. Authorities in Australia, the United Kingdom,[10] and the United States of America[11] have in recent years acknowledged healthcare's use of fax machines as problematic in terms of safety, security, and efficiency and stated their intent of ending their use.

43. This court has also previously identified the use of fax machines as a contributory factor in healthcare associated deaths. In the *Finding into the death of Mettaloka Halwala with inquest*,[12] Coroner Rosemary Carlin examined the direct and timely communication of PET results with using facsimile machines and made the following recommendations:

    (a) that the Royal Australian and New Zealand College of Radiologists, the Australian Association of Nuclear Medicine Specialists, and the Royal Australian College of

[9] The Royal Melbourne Hospital, Outpatients clinics, https://www.thermh.org.au/health-professionals/outpatients-clinics.
[10] Health IT Security, Fax Machine Purchases Banned by UK National Health Service, https://healthitsecurity.com/news/fax-machine-purchases-banned-by-uk-national-health-service, accessed 14 January 2022.
[11] Health IT Security, 90% Healthcare Providers Still Rely on Fax Machines, Posing Privacy Risk, https://healthitsecurity.com/news/90-healthcare-providers-still-rely-on-fax-machines-posing-privacy-risk, accessed 14 January 2022.
[12] Published 10 May 2018 and available at: https://coronerscourt.vic.gov.au/sites/default/files/2018-12/mettalokamalindahalwala_585715.pdf

Physicians collaborate to develop a set of standards dedicated to systems for the communications of imaging results.

(b) that the Austin Hospital phase out fax transmission of imaging results as a priority.

44. The CPU contacted Safer Care Victoria, the New South Wales Clinical Excellence Commission,[13] the Australian Digital Health Agency,[14] the Australian Commission on Safety and Quality in Healthcare, and the Victorian Department of Health's Chief Digital Health Officer to ascertain if there were aware of any plans to address the issues identified with the use of faxes in healthcare.

45. Only Victorian agencies responded. Safer Care Victoria stated it had no current projects.

46. The Office of the Digital Health Officer detailed efforts that are currently underway. They stated they are currently running five pilot programmes testing eReferrals (electronic referrals) across 12 health services (30 hospitals in collaboration with the local general practitioners through their Primary Health Networks).

47. The Office of the Digital Health Officer is also the process of finalising *Victoria's Digital Health Roadmap*. The Safe Transfer of Care Program is part of the *Roadmap*. The program will design a state-wide approach for securely exchanging healthcare information between healthcare providers. This program of work will:

(a) define a state-wide standard for eReferrals (incorporating approved Statewide Referral Victoria);

(b) endorse conformant eReferral products to reuse information from referrer clinical software to reduce transcription errors and improve completeness/accuracy of clinical information and enable eReferrals to be sent from any GP to any health service, regardless of eReferral software being used;

[13] A NSW Department of Health department whose role is broadly similar to Safer Care Victoria.

[14] The Australian Digital Health Agency is the Australian Government statutory agency responsible for My Health Record, Australia's digital prescriptions and health referral system, and other 'eHealth' programs under the national digital health strategy. The agency reports directly to state and territory health ministers and the federal minister for health. The agency is led by its chief executive officer, board, and is subject to directions issued by the minister for health on the approval of all state and territory health ministers

(c) leverage national initiatives to improve the accurate and timely update of health provider information in the National Health Services Directory (NHSD)[15]. This is critical for getting the referral to the intended referral recipient;

(d) enable secure messaging between the referrer and referral recipient. Work continues with the Commonwealth to enable Secure Messaging Providers to exchange messages irrespective of the product used;

(e) provide a real-time receipt or failure to receive acknowledgement of the eReferral by the health service; and

(f) audit progress of the eReferral as it progresses through the system.

48. I appreciate the size and the complexity of this task and commend the Department of Health and the Chief Digital Officer's efforts to develop a product that both meets the needs of many stakeholders needs and is so user-friendly that end-users (general practitioners) use it in preference to fax machines is a significant undertaking.

Conclusion

49. I consider the work being undertaken by the office of the Victorian Digital Health Officer has the most potential for decreasing the chances of recurrence of a similar event in the future.

50. To reduce misinterpretation, I will make a recommendation that the Victorian Department of Health consider amending the Statewide Referral Criteria aortic aneurysm page to clarify emergency department attendance. It is also prudent that FMIG imaging remind their radiologists of their obligations to contact referring doctors directly to discuss any significant unexpected, urgent, or critical clinical radiology findings.

FINDINGS AND CONCLUSION

51. Pursuant to section 67(1) of the Act I make the following findings:

(a) the identity of the deceased was YLM, born 26 June 1942;

(b) the death occurred on 25 October 2020 at Keilor Downs, Victoria, from ruptured abdominal aortic aneurysm; and

[15] The National Health Services Directory is a federal government funded national directory of health services and the practitioners who provide them.

(c) the death occurred in the circumstances described above.

RECOMMENDATIONS

Pursuant to section 72(2) of the Act, I make the following recommendations:

1. The Victorian Department of Health consider amending the wording of the Statewide Referral Criteria regarding aortic aneurysms to clarify which patients should be discussed with the vascular registrar or sent to an emergency department, including the significance of transient symptoms.

2. FMIG Imaging remind their radiologists of their obligations to contact referring doctors directly to discuss any significant unexpected, urgent, or critical clinical radiology findings.

I convey my sincere condolences to YLM's family for their loss.

Pursuant to section 73(1A) of the Act, I order that this finding be published on the Coroners Court of Victoria website in accordance with the rules.

I direct that a copy of this finding be provided to the following:

Senior next of kin

Professor Euan Wallace, Secretary, Department of Health

Dr Anthony Taranto, Director, FMIG Imaging

Dr Saima Rizvi, Keilor Downs Medi-Clinic

Mr Daniel Lewis, Melbourne Health (Royal Melbourne Hospital)

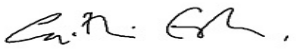
Professor Mike Roberts, Chief Executive Officer, Safer Care Victoria

Mr Neville Board, Chief Digital Health Officer, Department of Health

Mr Duane Findley, Chief Executive Officer, Royal Australian and New Zealand College of Radiologists

Senior Constable Jason McDonald, Victoria Police, reporting member

Signature:



Caitlin English, Deputy State Coroner

Date: 20 January 2022

NOTE: Under section 83 of the ***Coroners Act 2008*** ('the Act'), a person with sufficient interest in an investigation may appeal to the Trial Division of the Supreme Court against the findings of a coroner in respect of a death after an investigation. An appeal must be made within 6 months after the day on which the determination is made, unless the Supreme Court grants leave to appeal out of time under section 86 of the Act.