IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

COR 2022 004305

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)

*Section 67 of the **Coroners Act 2008***

Findings of:	Coroner Dimitra Dubrow
Deceased:	Makayla Lee Wadeson
Date of birth:	15 October 2012
Date of death:	1 August 2022
Cause of death:	1(a) streptococcus pneumoniae and candida albicans pneumonia and empyema in a girl with pulmonary thromboembolism and deep vein thrombosis
Place of death:	331 Archer Street, Shepparton, Victoria, 3630

INTRODUCTION

1. On 1 August 2022, Makayla Lee Wadeson was 9 years old when she died at home after being discharged from Goulburn Valley Base Hospital two days prior.

2. Makayla was autistic and had a complex medical history which included ulcerative colitis, obesity, and iron deficiency anaemia requiring iron infusions. Makayla was under specialist care at the Royal Children's Hospital and was prescribed immunosuppressant medications to help manage her ulcerative colitis.

THE CORONIAL INVESTIGATION

3. Makayla'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.

4. 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.

5. 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.

6. Coroner Katherine Lorenz, as she then was, initially held carriage of this investigation. I took carriage of this matter upon my appointment in September 2024.

7. Victoria Police assigned an officer to be the Coroner's Investigator for the investigation of Makayla's death. The Coroner's Investigator conducted initial inquiries on the Court's behalf, including taking statements from witnesses and submitted a coronial brief of evidence. The Court obtained additional statements and medical records from the hospital.

8. This finding draws on the totality of the coronial investigation into the death of Makayla Lee Wadeson including evidence contained in the coronial brief. 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.[1]

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

Circumstances in which the death occurred

9. In mid-July 2022, Makayla developed a fever and wasn't eating. She was vomiting and only drinking water. Makayla's mother found it difficult to get an appointment at various clinics and was advised to take Makayla to the hospital instead.

10. However, by this stage Makayla was eating again and the fever had gone and so Makayla's mother took her to another GP instead. Makayla refused to leave the car and the GP came out to assess her. After review, the GP also recommended that Makayla go to the hospital.

11. This did not occur, and Makayla's mother stated that at this time her father was unwell and no one else was available to look after Makayla. A few days later, Makayla's mother contacted her ex-partner, Makayla's father, who came to visit. Eventually, Makayla's parents got her to agree to go to the hospital, and the three presented to the Emergency Department (**ED**) at Goulburn Valley Health (**GV Health**) at about 11pm on 29 July 2022.

12. The triage assessment records "HZ[2] ?ear infection, increased shortness of breath and cough" and comments on:

    - Cough, vomiting episodes
    - ?ear infection, foul smelling discharge both ears
    - ?shortness of breath (SOB), ? increased work of breathing (WOB)
    - ?clear chest

13. The triage nurse also recorded autism and low iron in the "Past History Relevant to Presentation" section. There is no indication that the triage nurse was aware of a diagnosis of ulcerative colitis. Observations at triage were recorded as:

    - Oxygen saturation (SaO2) 95%

[1] 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.

[2] HZ is an unusual abbreviation in this setting. Generally, 'HZ' would be taken to mean 'herpes zoster', the chicken pox virus.

- Temp 36.2
- Respiratory rate 30
- Heart rate 146

14. These were not plotted on an observation chart and appear to be the only observations taken at this attendance. The triage nurse assigned triage Category 4.

15. Triage categories are used to guide hospital staff to see patients according to how sick they are. Each category is associated with a timeline for how quickly a patient requires treatment and should be seen.

16. The categories are as follows:

- Triage Category 1 (need for resuscitation): requires treatment immediately;
- Triage Category 2 (emergency): requires treatment within 10 minutes;
- Triage Category 3 (urgent): requires treatment within 30 minutes;
- Triage Category 4 (semi-urgent): requires treatment within 1 hour; and,
- Triage Category 5 (non-urgent): requires treatment within 2 hours.

17. The attending doctor, a GP working as a locum ED Registrar, saw Makayla within 40 minutes. The ED Registrar recorded a past medical history of febrile convulsion, bilateral grommets, speech delay, and noted that immunisations were up to date. No reference is made to Makayla's ulcerative colitis or the immunosuppressive medication she was taking.

18. The ED Registrar noted a history of purulent discharge from both ears for the past few days and recorded no fever, vomiting, sore throat, cough or runny nose. There was no fever at the time, and the ED Registrar documented Makayla's observations as within normal limits.

19. Except for the triage nurse's assessment there is no other nursing assessment or observations recorded. Pus was observed in both ear canals with intact ear drums in both ears. There were no signs of mastoiditis, a rare complication of ear infection.

20. The ED Registrar assessed the heart sounds as normal, and the lungs were clear with air entry equal on both sides. There were no signs of Makayla working harder to breath or stridor (noisy upper airway breathing). Capillary refill time, a measure of circulation, was normal.

21. The ED Registrar made a diagnosis of otitis externa – infection of the ear canal. A swab of the ear discharge was taken, sofradex ear drops and oral cephalexin were prescribed, and Makayla was discharged.

22. Makayla's mother raised concerns about a possible chest infection and was informed that Makayla was breathing normally but if she was worried, she could use Ventolin. This was not provided in hospital.

23. Makayla's parents were advised to follow up with their GP or return to the ED if Makayla became worse. Following discharge from hospital in the early hours of 30 July 2022, Makayla's mother filled the prescription for antibiotics the following day and administered two doses to Makayla.

24. Makayla's breathing apparently worsened over the day and Makayla's mother contacted Makayla's father who came to see her. After this, Makayla's mother reported that she was still worried about Makayla's breathing and was advised by Makayla's father to call an ambulance. Makayla's mother contacted a friend who suggested using a steam vaporiser and Ventolin.

25. Further concern prompted another call to Makayla's father who called an ambulance. While on the phone to Triple Zero, Makayla stopped responding and an ambulance arrived around 6am on 1 August 2022. Mobile Intensive Care Ambulance (**MICA**) paramedics joined at 6.16am.

26. Unfortunately, Makayla was deceased and unable to be revived.

Identity of the deceased

27. On 1 August 2022, Makayla Lee Wadeson, born 15 October 2012, was visually identified by her father, Richard Wadeson, who completed a statement of identification.

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

Medical cause of death

29. Forensic Pathologist Dr Sarah Parsons from the Victorian Institute of Forensic Medicine (**VIFM**) conducted an autopsy on 4 August 2022 and provided a written report of the findings.

30. The autopsy showed bronchopneumonia (lung infection) and a pleural empyema (a pocket of infection next to the lung). Swabs of the empyema grew the bacteria *Streptococcus*

pneumoniae and lung swabs grew the yeast *Candida albicans*. *S. pneumonia* is the most common pathogen associated with pleural empyema and is the main cause of community acquired pneumonia in children and the elderly. *C. albicans* can also cause infection including pneumonia.

31. The autopsy also showed thromboembolii (blood clots) in multiple section of the lung along with deep venous thrombosis (**DVT**) in the right calf. Dr Parsons explained that pulmonary thromboembolism (clots in the lung) is usually a complication of DVT. DVT mostly occur in the legs or pelvis.

32. The risk factors for the development of pulmonary thromboembolism include prolonged immobilisation, cancer, trauma, surgery within the past few months, obesity, varicose veins, long distance travel, smoking, inherited thrombophilic disorders and advanced age. For Makayla, the relevant risk factors are obesity and infection.

33. It is unusual to have this in a child and it is mostly seen in children with congenital heart disease or infection. Other conditions that increase the risk are nephrotic syndrome (a kidney disorder), soft tissue infection, infective endocarditis (infection of the heart valves), and sickle cell disease.

34. The autopsy also showed healed ulcerative colitis. Dr Parsons commented that this did not appear to have caused or contributed to the death.

35. Toxicological analysis of post-mortem samples identified the presence of methylamphetamine in urine but not in blood. Dr Parsons commented that this is in keeping with ingestion and metabolism of the drug.

36. Dr Parsons provided an opinion that the medical cause of death was *1(a) streptococcus pneumoniae and candida albicans pneumonia and empyema in a girl with pulmonary thromboembolism and deep vein thrombosis*. Dr Parsons also provided an opinion that the death was from natural causes.

37. I accept Dr Parsons' opinion.

CPU REVIEW

38. Dr Parsons noted that Makayla presented to hospital two days before her death and was discharged. Dr Parsons recommended for this presentation to be reviewed by a paediatrician considering the significant disease processes identified at autopsy. The Coroners Prevention

Unit (**CPU**)[3] were requested to review this case to comment on the medical care provided to Makayla at this presentation. This included input from a paediatrician.

39. The CPU reviewed all the materials including medical records and statements from clinicians at GV Health. This included a statement from the Acting Director of ED at GV Health which included some details of GV Health's review into Makayla's death.

40. GV Health performed a 'desktop' review which was completed by the interim director of ED and the Nurse Unit Manager (**NUM**). The review identified that Makayla had an elevated heart rate, but this was not appreciated by clinicians. This also meant that Makayla ought to have been triaged at Category 3 and not Category 4. The review also noted that no further observations were taken and there were no recommendations arising from the review.

41. The CPU noted that DVT and pulmonary embolism (**PE**) are uncommon in children and although Makayla had some risk factors, a full and thorough assessment in the ED may not have led to that diagnosis. The CPU also provided an opinion that the ED Registrar was suitably qualified and experienced to manage paediatric cases.

42. However, the CPU were concerned that there was a potential to diagnose pneumonia at the ED presentation which may have prevented Makayla's death. The CPU noted that it was possible that Makayla deteriorated rapidly from discharge and that the ED Registrar's assessment that Makayla was not systemically unwell would have been reasonable in that case.

43. Regardless, the CPU noted several specific concerns with Makayla's management at GV Health. The relevant concerns were:

    a) The treating clinicians did not recognise that Makayla was immunosuppressed.

    b) Makayla was under-triaged and her vital signs were not documented in a Victorian Children's Tool for Observation and Response (**ViCTOR**) chart nor recognised as abnormal.

Immunosuppression

[3] The CPU was established in 2008 to strengthen the coroners' prevention role and assist in formulating recommendations following a death. The CPU is comprised of health professionals and personnel with experience in a range of areas including medicine, nursing, mental health, public health, family violence and other generalist non-clinical matters. The unit may review the medical care and treatment in cases referred by the coroner, as well as assist with research related to public health and safety.

44. From the records provided by GV Health, it appears that other hospital attendances are recorded on a separate system. It is not known if this is easily accessible to staff in ED. The diagnosis of ulcerative colitis was well documented in the broader GV Health. However, the ED record only shows previous ED encounters which did not list ulcerative colitis as a diagnosis.

45. The ED Registrar stated that had the diagnosis of ulcerative colitis been known to them, then they would have discussed the case with the paediatric team. This may have led to a longer period of observation or admission which may have detected Makayla's subsequent deterioration or persisting abnormalities.

46. The CPU commented that the ED Registrar appeared to have asked these relevant questions and so it was unclear as to how this information was not obtained. I note that there can be a discordance in what a doctor is asking and what patients and families interpret as a doctor is asking. This miscommunication is neither party's fault and is often an inherent difficult faced by clinicians and families, especially in what can be a heightened environment in an emergency department. While an accurate and comprehensive electronic medical record does not replace taking a thorough medical history as part of a medical assessment, having an up-to-date and accurate electronic medical record can be an important fail-safe in this regard.

Abnormal Observations

47. The CPU noted that a heart rate of 146bpm is abnormal and this appears to not have been appreciated by clinicians at GV Health. The ED registrar stated that they would have reviewed the vitals from the triage note, and that Makayla's vital signs broadly appeared to be normal. The registrar could not recall if they noted the heart rate specifically as being abnormal.

48. Had Makayla's abnormal observations been recognised, this ought to have prompted more frequent observations which may have detected a deterioration or persisting abnormalities triggering reassessment, a longer period of observation, or possibly admission. This may have alerted clinicians to the fact that Makayla was systemically unwell prompting further investigation and treatment which may have prevented Makayla's death.

49. The CPU agreed with the acting ED director that Makayla should have been triaged at Category 3 and not Category 4. However, this would not have made a difference in the outcome as Makayla was seen in an appropriate timeframe for a Category 3 triage.

50. The CPU were particularly concerned that Makayla's observations were not recorded in a ViCTOR chart. ViCTOR is a suite of standarised charts which incorporate age-related vital signs for children across five age groups and are intended for you in paediatric wards and emergency departments. Observations such as heart rate, respiratory rate, and blood pressure are plotted on a chart which is also colour coded to provide a visual cue when observations are abnormal or critical. The CPU commented that had these observations been plotted, this may have assisted in recognising Makayla's elevated heart rate.

51. Irrespective of the use of ViCTOR charts and recognition of abnormal observations, the CPU noted that according to GV Health policy, Makayla ought to have had repeat observations based on her triage category. Even if Makayla was under-triaged at Category 4, the policy requires observations to occur every 60 minutes. Adherence to this policy may have also noted persisting abnormalities or deterioration.

Other Concerns and CPU Recommendations

52. The CPU also suggested that this case was a sentinel event and should have been reviewed with a formal Root Cause Analysis (**RCA**) and reported to Safer Care Victoria (**SCV**) rather than a 'desktop' review only.

53. Sentinel events are adverse patient safety events that result in serious harm or death of a patient while in the care of a health service as well as any misdiagnoses that lead to serious harm or death even after discharge. Health services must report sentinel events to SCV with a broad aim to learn from the event to prevent similar deaths or harms occurring in the future.

54. There are 11 categories of Sentinel Events. 10 national categories and one Victorian category. The Victorian category is designed to capture all adverse patient safety events resulting in serious harm or death not captured by the other 10 categories. There are 10 subcategories to assist health services in properly identifying Sentinel Events.

55. The CPU made five recommendations for the coroner's consideration. These were:

    a) That improvements in the GV Health medical records system (for example, an integrated EMR) to ensure current medical diagnoses and medications are easily accessible to all users who open the medical record.

    b) That GV Health review their policy regarding non-recording of paediatric observations on a ViCTOR chart unless they were being admitted to an ED bed.

c) That GV Health review their paediatric observation practices in ED to ensure that paediatric patients receive the required level and number of observations appropriate to their condition and triage category.

d) That GV Health review their paediatric triage guidelines in relation to children with abnormal observations.

e) To consider that GV Health Quality Manager discuss with the Safer Care Victoria sentinel event team to clarify their understanding of what constitutes a reportable patient safety incident.

56. The CPU noted that in August 2023, SCV launched the Safer Care for Kids program. Part of this program is to mandate the use of ViCTOR charts in all paediatric settings.

Proposed Recommendations and Response from GV Health

57. After reviewing all the evidence, the following shortlisted recommendations were proposed:

a) That GV Health use ViCTOR charts to record all observations in paediatric cases including observations taken at triage in the emergency department.

b) That GV Health make changes to their electronic medical record to ensure current medical diagnoses and medications are easily accessible to all users who open the record.

58. GV Health were provided a draft copy of this finding for an opportunity to respond. GV Health also commented on the proposed recommendations.

59. GV Health provided further information about the review process in this case. The case was considered by GV Health's Clinical Risk Panel on three occasions. GV Health explained that this panel is responsible for monitoring and reviewing serious clinical incidents and complaints, identifying sentinel events and Serious Adverse Patient Safety Events (**SAPSEs**), and determining methods of review and the membership of review panels.

60. The first review occurred on 9 August 2022 where a clinical timeline and review by the Clinical Director and NUM were discussed by the panel. The panel concluded that the were no evident causal links between the ED presentation and the death.

61. The second review occurred on 30 November 2022 after the incident was re-opened following receipt of the Court's request for a prepared statement about Makayla's presentation. The learnings evident from the preparation of the statement and previous review included strengthening repeat observations prior to discharge and attending to blood sugar levels on paediatric patients. These learnings were communicated to ED staff and no further action was required at the time.

62. The third review occurred on 8 December 2022 after the forensic pathologist's report and toxicology results were provided to GV Health and tabled at the Clinical Risk Panel for discussion. The panel confirmed that there was no causal link between Makayla's presentation, treatment, and management and the causes of death identified in this report.

63. Each of the three reviews determined that this was not a Sentinel Event and GV Health disagreed with the assessment by the CPU that this case ought to have been reported to SCV with a formal RCA.

64. In relation to the proposed recommendations, GV Health indicated that they have commenced work to implement the use of ViCTOR charts at triage in the emergency department in preparation for the Safer Care for Kids program. GV Health identified that a single electronic record is desirable and indicated that they will continue to lobby for the necessary funding to implement this.

COMMENTS

Pursuant to section 67(3) of the Act, I make the following comments connected with the death.

Presence of methylamphetamine

1. The presence of methylamphetamine in Makayla's system which was suggestive of ingestion is obviously concerning. Both of Makayla's parents commented on the toxicology findings in their respective statements to the Court. Both parents disclosed recreational drug use, including amphetamines, and stated that any drug use was always well away from Makayla. Any drugs in the house were stored in a hidden area out of reach.

2. About a week prior to the death, both parents used amphetamines in the form of 'speed' which may or may not have been cut with methylamphetamine. Neither parent could provide an explanation for how Makayla came to have methylamphetamine in her system. Regardless,

the medical evidence suggests that it did not contribute to the death. As such, I have not investigated the presence of methylamphetamine in Makayla's system any further.

Whether the case was a Sentinel Event

3. I note that the statement referred to in GV Health's response identified that Makayla's heart rate at triage was *"higher than usual for a nine year old and no repeat vital signs were taken."* In my opinion, this is a failure to recognise and respond appropriately to physiological signs that indicate clinical deterioration which resulted in death. This falls into subcategory 3 (deteriorating patients) of the Victorian Sentinel Event category 11.

4. It was open for the panel on 8 December 2022 based on the materials before them to make the causal link between the unrecognised elevation in Makayla's heart rate and the disease processes outlined in the forensic pathologist's report. I find it difficult to accept GV Health assertion that this was not a Sentinel Event.

5. I do not intend to make recommendations relating to the review process by GV Health in this case. However, these issues are still well within the remit for coronial comment and recommendation as matters connected with a death under coronial investigation and in my function to promote public health and safety. A copy of the finding will be provided to SCV for their consideration.

Other comments

6. As the proposed recommendations haven't yet been fully implemented by GV Health, I still consider it appropriate to make them as doing so will require a further response and update from GV Health within 3 months.

FINDINGS AND CONCLUSION

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

a) the identity of the deceased was Makayla Lee Wadeson, born 15 October 2012;

b) the death occurred on 1 August 2022 at 331 Archer Street, Shepparton, Victoria, 3630, from *streptococcus pneumoniae and candida albicans pneumonia and empyema in a girl with pulmonary thromboembolism and deep vein thrombosis*; and

c) the death occurred in the circumstances described above.

1. Having considered all the evidence, I am unable to find whether Makayla's death was preventable. Instead, I find that the key prevention opportunity was Makayla's presentation to GV Health – recognition of Makayla's elevated heart rate and the flow on effects from such recognition would have been Makayla's best chance at survival.

RECOMMENDATIONS

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

(i) That GV Health use ViCTOR charts to record all observations in paediatric cases including observations taken at triage in the emergency department.

(ii) That GV Health make changes to their electronic medical record to ensure current medical diagnoses and medications are easily accessible to all users who open the record.

I convey my sincere condolences to Makayla'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:

Richard Wadeson, Senior Next of Kin
Keesha Strauss, Senior Next of Kin
Ambulance Victoria
Department of Education
Royal Children's Hospital
Goulburn Valley Health
Commission for Children and Young People
Safer Care Victoria
SC Amelia Boyd, Coroner's Investigator

Signature:

Coroner Dubrow

Date : 10 October 2024

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.