IN THE CORONERS COURT

OF VICTORIA

AT MELBOURNE

Court Reference: COR 2017 2291

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 60(2)

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

Findings of:	**Paresa Antoniadis Spanos, Coroner**
Deceased:	David Sheppard
Date of birth:	19 November 1940
Date of death:	15 May 2017
Cause of death:	Intracranial Haemorrhage Secondary to Blunt Head Trauma (Fall) in the Setting of Chronic Myeloid Leukaemia
Place of death:	St Albans, Victoria

I, PARESA ANTONIADIS SPANOS, Coroner,

having investigated the death of DAVID SHEPPARD without holding an inquest:

find that the identity of the deceased was DAVID SHEPPARD born on 19 November 1940

and that the death occurred on 15 May 2017

at Sunshine Hospital, 176 Furlong Road, St Albans, Victoria

from:

1 (a) Intracranial Haemorrhage Secondary to Blunt Head Trauma (Fall) in the Setting of Chronic Myeloid Leukaemia

Pursuant to section 67(1) of the *Coroners Act 2008*, I make findings with respect to the following circumstances:

Background

1. David Sheppard was a 76 year old man who resided in Lauriston with his wife and their seven dogs. Mr Sheppard was his wife's primary carer.
2. Mr Sheppard's medical history included glaucoma, haemochromatosis and sciatica.
3. Mr Sheppard was admitted to Sunshine Hospital, Western Health, on three occasions in the month prior to his death. During his first admission, on 11 April 2017, Mr Sheppard was diagnosed with acute myeloid leukaemia (**AML**). Against the advice of his clinicians, Mr Sheppard self-discharged to return home and care for his wife.
4. On his second admission, from 15 April 2017 to 21 April 2017, Mr Sheppard's diagnosis was revised to chronic myeloid leukaemia (**CML**) in blast crisis.[1] Mr Sheppard commenced chemotherapy with the intent of controlling, rather than curing, the disease as clinicians were of the view that a cure was not feasible.
5. Mr Sheppard was discharged on hydroxyurea oral medication after his first admission, and cytarabine injections after his second. These were both temporary treatment measures whilst awaiting the required Pharmaceutical Benefit Scheme (**PBS**) approval for Imatinib Mesylate, a medication used for the treatment of leukaemia.

[1] Blast crisis is the terminal phase of CML.

6. Between his second discharge on 21 April 2017 and his third and final admission on 29 April 2017, Mr Sheppard had suffered a fall at home and sustained an injury to his right eye.

Circumstances immediately proximate to death

7. On 29 April 2017, Mr Sheppard re-presented to Sunshine Hospital profoundly unwell with neutropenic sepsis and pancytopenia.[2] He also disclosed a fall at home a few nights earlier. Treatment was initiated and he was admitted to the haematology ward. A resuscitation plan was documented on admission that included restrictions on treatment - Mr Sheppard was not for cardiopulmonary resuscitation (**CPR**) or admission to the intensive care unit (**ICU**).

8. During this admission, Mr Sheppard had ongoing severe confusion thought to be secondary to the sepsis. Despite prolonged antibiotic therapy and regular review by the haematology, ICU and infectious diseases teams Mr Sheppard's clinical condition did not improve.

9. On 2 May 2017, Mr Sheppard had an unwitnessed fall in the ward and underwent an urgent Computed Tomography scan of the brain (**CTB**) which showed a subdural haemorrhage (that is, bleeding outside the brain), measuring 1.3 centimetres in diameter, with minimal midline shift.[3] The haemorrhage was radiologically assessed as being chronic in nature.[4]

10. In the days that followed, Mr Sheppard had further falls. He showed signs of ongoing sepsis with no improvement in his clinical condition.

11. On 5 May 2017, a second CTB showed progressive subdural haematoma, increased midline shift and brain herniation.[5] Mr Sheppard had a low blood platelet count (thrombocytopaenia), putting him at increased risk of bleeding, and was considered unsuitable for neurosurgical intervention. The decision was taken in conjunction with

[2] Pancytopenia is a reduction in red and white blood cells and platelets, in this case a side effect of the chemotherapy, which results in anaemia, increased risk of infection and bleeding.
[3] A midline shift occurs when the pressure exerted by the build-up of blood and swelling around the damaged brain tissues is powerful enough to push the entire brain off centre.
[4] Chronic indicates the blood has been there for some time, often weeks, and this is determined by the density of the blood on the scan.
[5] Uncal herniation refers to changes seen on the CT scan due to increased pressure within the skull due to the bleed.

family to treat him palliatively. Mr Sheppard was kept comfortable until he passed away on 15 May 2017.

Medical cause of death

12. On 17 May 2017, Senior Forensic Pathologist Dr Matthew Lynch from the Victorian Institute of Forensic Medicine (**VIFM**), reviewed the police report, post-mortem computer assisted tomography scanning of the whole body (**PMCT**) and performed an external examination.

13. Dr Lynch advised the external examination showed findings consistent with the clinical history and PMCT revealed left subdural haematoma with midline shift, increased lung markings and possible splenomegaly (enlarged spleen).

14. Dr Lynch's report concluded it would be reasonable to attribute Mr Sheppard's death to *intracranial haemorrhage secondary to blunt head trauma (fall) in the setting of chronic myeloid leukaemia.*

Family Concerns

15. Mr Sheppard's son David Sheppard raised concerns about the lack of advice provided to the family regarding possible side effects or complications of the chemotherapy when his father was discharged on 21 April 2017, and about the adequacy of fall prevention strategies at Sunshine Hospital.

Coronial Investigation

16. Mr Sheppard's clinical management at Sunshine Hospital was considered by the Health and Medical Investigation Team[6] (**HMIT**). The HMIT reviewed the Victoria Police Report of Death for the Coroner, the Medical Examiner's Report, the E-Medical deposition form and medical records from Western Health. The HMIT also invited haematologist, Dr Duncan Carradice, from Western Health, to provide a statement responding to David Sheppard's concerns.

[6] The HMIT is part of the Coroners Prevention Unit (CPU) established in 2008 to strengthen the prevention role of the Coroner. CPU assists the Coroner to formulate prevention recommendations and comments and monitors and evaluates their effectiveness once published. HMIT is staffed by practising physicians and nurses who are independent of the health professionals or institutions involved. They assist the Coroner's investigation of deaths occurring in a healthcare setting by evaluating the clinical management and care provided and identifying areas of improvement so that similar deaths may be avoided in the future.

Statement of Dr Carradice

17. In relation to the concerns around Mr Sheppard's discharge on 21 April 2017, Dr Carradice advised that self-administration of cytarabine by appropriate patients as therapy for AML, is common practice and provides significant quality of life benefits.

18. Nursing notes documented that Mr Sheppard was comfortable with the technique and at a chemotherapy education session on 21 April 2017, Mr Sheppard was provided with information about potential side effects. He was also given verbal and written information about Western Health's chemotherapy support clinic. On discharge, a follow up blood test was arranged and an appointment with the haematology clinic on 27 April 2017, which Mr Sheppard did not attend.

19. Furthermore, Dr Carradice advised that Western Health has a clearly defined falls prevention policy and falls prevention procedures (**Falls Guidelines**). The Falls Guidelines require a falls risk screen on all patients upon admission. That said, Dr Carradice acknowledged that the Patient Admission and Discharge Planning Tool and Patient Risk Screening Assessment and Management Tool (**Risk Tool**), completed on Mr Sheppard's admission, were not filled out correctly, with neither form identifying his recent history of falls. The Risk Tool was completed daily from 29 April 2017 to 2 May 2017, and none of the forms had an indication of his recent falls history or that falls prevention education was provided to Mr Sheppard. Dr Carradice conceded that it therefore appears that a full assessment and falls prevention plan was not undertaken in compliance with the Falls Guidelines.

20. Mr Sheppard's fall on 2 May 2017 was reported on RiskMan (a software tool on which risk-related incidents are reported), in line with Western Health's Risk Management Policy on Incident reporting. The Western Health internal investigation concluded that the risk assessment was current and noted that action was taken to move Mr Sheppard close to the nurse's station and obtain a lo-lo bed for him and made no further recommendations.

21. Dr Carradice was also invited to make any further comments that might assist the coronial investigation. Dr Carradice commented that, if available, Imatinib Mesylate would have been immediately administered to Mr Sheppard. The PBS requirement for submission of a written authority prescription, by post and the need to await receipt of the return script, involved a clinically inappropriate delay for a patient with

Blast Crisis Chronic Myeloid Leukaemia. Provision of the PBS authority by phone or facsimile would allow immediate treatment but was not available due to PBS regulations.

HMIT conclusions and recommendations

22. Having considered the available material, the HMIT concluded that the decision on 5 May 2017 to provide symptom-directed care only appeared appropriate, in the context of refractory[7] leukaemia, refractory sepsis and worsening subdural haematoma, despite maximal therapy.

23. It was noted that, whilst there was non-compliance with Western Health's Falls Guidelines, some falls prevention strategies were in place for Mr Sheppard. Nevertheless, the HMIT recommended Western Health ensure the Risk Tool was filled in correctly for every patient. Ultimately this would not have changed Mr Sheppard's outcome, however, more detailed assessment and documentation of Mr Sheppard's falls risk and falls prevention education to him and his son would have helped alleviate David Sheppard's concerns.

24. The HMIT agreed that if the process of acquiring PBS authority could be made more efficient, such as by electronic submission, it would mean patients such as Mr Sheppard could benefit from treatment with Imatinib Mesylate sooner. However, the HMIT was mindful that treatment with Imatinib Mesylate would only at best control the leukaemia and not cure it.

25. The HMIT recommended sharing this information with PBS to see if actions can be undertaken to streamline the process of obtaining an authority script for Imatinib Mesylate so patients with acute leukaemia can be treated immediately.

Findings

26. I find that David Sheppard died from *intracranial haemorrhage secondary to blunt head trauma (fall) in the setting of chronic myeloid leukaemia*.

27. The available evidence does not support a finding that there was any want of clinical management or care on the part of the staff of Western Health that caused or contributed to Mr Sheppard's death.

[7] The term 'refractory' in medicine is specifically applied to a disease that does not respond to treatment.

Recommendations

Pursuant to section 72(2) of the Coroners Act 2008, I make the following recommendation on a matter connected with the death relating to public health:

1. The Department of Health (Commonwealth) review PBS regulations and consider whether actions can be undertaken to streamline the process of obtaining authority script for Imatinib Mesylate so that patients with leukaemia can be treated expeditiously and optimally, whether treatment is considered potentially curative or otherwise.

Publication

Pursuant to section 73(1A) of the Act, I order that this finding and comments be published on the Internet in accordance with the rules.

Distribution of finding

The family of David Sheppard

Dr Duncan Carradice, Western Health

Commonwealth Department of Health, Pharmaceutical Benefits Scheme

Sen/Const William Calleja (#37115), Coroner's Investigator, c/o Keilor Downs Station

Signature:

PARESA ANTONIADIS SPANOS

Coroner

Date: 2 October 2019