



IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2021 005864

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)

Section 67 of the Coroners Act 2008

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| Findings of: | Sarah Gebert, Coroner |
| Deceased: | Shirley Hill Jones |
| Date of birth: | 24 June 1936 |
| Date of death: | 2 November 2021 |
| Cause of death: | 1(a) Complications of a left ankle fracture (operated) <u>Contributing factors</u> Pressure injury, advanced age, diabetes mellitus, ischaemic heart disease, cerebrovascular disease, hypertension |
| Place of death: | Baptcare Abbey Gardens Aged Care, 15 Tarwin Street, Warragul, Victoria |
| Catchwords: | Fracture, pressure injury, residential aged care, post- discharge care, palliation |

INTRODUCTION

1. On 2 November 2021, Shirley Hill Jones was 85 years old when she passed away following a fall.
2. At the time of her death, Shirley lived at Baptcare Abbey Gardens in Warragul.

THE CORONIAL INVESTIGATION

3. Shirley'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. As part of the investigation, I asked the Coroners Prevention Unit (CPU)¹ to review the medical care Shirley received in the lead up to her death.
7. This finding draws on the totality of the coronial investigation into Shirley's death, 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.²

¹ The CPU was established in 2008 to strengthen the coroner's prevention role and to assist in formulating recommendations following a death. The CPU is comprised of health professionals with training in a range of areas including medicine, nursing, public health and mental health. The CPU may also review the medical care and treatment in cases referred by the coroner as well as assist with research into public health and safety.

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.

Background

8. Shirley's medical history included ischaemic heart disease, a stroke, type two diabetes mellitus, hypertension,³ hyperlipidaemia,⁴ gastro-oesophageal reflux disease, and back pain.
9. Shirley resided at Baptistcare Abbey Gardens residential aged care facility (**RACF**). She ambulated using a four-wheeled frame and required minimal assistance with activities of daily living. In December 2020 Shirley sustained a fractured fifth metatarsal⁵ to the right foot following a fall which was conservatively managed.
10. On 1 August 2021, Shirley was out with her family for the day and sustained a fall attempting to get into a car, resulting in a left lateral malleolus (ankle) fracture.
11. The fracture was subsequently surgically repaired on 2 August 2021 at Latrobe Regional Hospital (**LRH**) and a plaster cast applied to the leg. Shirley was very keen to return to Abbey Gardens RACF and was discharged the following day. During the hospitalisation, other than a chronically elevated blood pressure, Shirley was clinically stable, alert, and oriented with adequate oral intake and well controlled pain using oral analgesia.
12. Mr Huy Vu, physiotherapist, reviewed Shirley on 4 August 2021, noting the post-operative instruction of left leg non-weight bearing for six weeks (until her outpatient orthopaedic follow-up appointment), and amended her mobility plan accordingly.
13. Shirley initially participated in the almost daily (and sometimes twice daily) physiotherapy sessions with Physiotherapist Vu.
14. In the subsequent two-week period, Shirley's physical rehabilitation progressed well despite being complicated by intermittent pain-related disruption of sleep, stress incontinence,⁶ a sacral pressure injury,⁷ buttock excoriation,⁸ and intermittent severe ankle pain for which 5mg of immediate release oxycodone PRN⁹ was administered with good effect (between one to three times per day).

³ Elevated blood pressure.

⁴ Elevated lipid level in the blood (including cholesterol).

⁵ There are five metatarsals in each foot adjoining the phalanges.

⁶ Inability to maintain continence during physical exertion.

⁷ The sacral pressure injury was identified on 15 August 2021. An air mattress and dedicated seat cushion had already been implemented by Abbey Gardens staff shortly after return to the facility following the surgery.

⁸ A plan was subsequently implemented to increase the frequency of checks/ changes of Shirley's incontinence pad, and to apply an appropriate cream to the excoriated skin.

⁹ An 'as required' prescription of medication.

15. However, on 17 August 2021, Shirley became dizzy and lethargic while being assisted to the toilet and was found to be severely hypotensive.¹⁰
16. Shirley was returned to bed and Dr Manish Agaskar, general practitioner, advised RACF staff to encourage oral fluids and withhold Shirley's regular blood pressure medications.¹¹
17. By that afternoon, Shirley's blood pressure had improved to 128/65mmHg, though her symptomatic orthostatic hypotension¹² persisted (with a systolic variance of approximately 20mmHg).
18. The three regular anti-hypertensive medications were mostly withheld (following consultation with a general practitioner) over the next week due to ongoing symptomatic hypotension and were later cancelled by her usual general practitioner, Dr Trish Kerbi, on 28 August 2021.
19. Coinciding with the onset of orthostatic hypotension, and also complicated by her ongoing ankle and chronic back pain, incontinence, lethargy and anxiety, Shirley's willingness and physical capability to participate in her rehabilitative physiotherapy deteriorated from the second half of August 2021.
20. By 27 August 2021, Shirley's oral intake was declining, which may have been the cause for a sustained mild hypoglycaemia¹³ of 3.8mmol/L. Treated with honey and orange juice, Shirley repeatedly vomited despite being given anti-nausea medication and so was transferred to West Gippsland Hospital.
21. Once at hospital, Shirley was assessed as clinically unremarkable, with stable vital signs and a normal blood sugar level of 6.0mmol/L. Shirley reported that honey made her nauseous. She was discharged back to Abbey Gardens RACF the same day.
22. On 2 September 2021, Dr Kerbi commenced Shirley on a five-day course of oral antibiotics (trimethoprim) for a urinary tract infection (**UTI**) after a urine test revealed an *Escherichia coli* (**E. coli**) infection.
23. On 7 September 2021, during a phone conversation between Shirley's family and Clio Milsome, Abbey Gardens RACF Residential Care and Services Manager, about another

¹⁰ Low blood pressure. Shirley's blood pressure was as low as 76/36mmHg on 17 August 2021.

¹¹ Shirley was on multiple antihypertensive agents for chronically elevated blood pressure: moxonidine, Avapro HCT (irbesartan and hydrochlorothiazide), and prazosin.

¹² Low blood pressure when changing from lying to sitting or standing position, which can result in dizziness or fainting. Also called postural hypotension.

¹³ Low blood sugar level.

matter, an oversight was identified that the left ankle plaster cast and sutures should have been removed three weeks earlier (two weeks after the operation).

24. The following day, Shirley was transferred to West Gippsland Hospital for removal of the plaster cast and sutures. The two surgical sites on the ankle were found to be healthy and healed well and no neurovascular deficit was noted. However, movement of the left lower leg was greatly reduced, and a 3x3 cm pressure injury was identified on the left heel. There was tissue breakdown and old blood from the left heel pressure injury (the blood had soaked through to the outer surface of the plaster), which was classified as unstageable.¹⁴
25. Shirley was subsequently returned to Abbey Gardens RACF with a plan for Physiotherapist Vu to fit a CAM boot¹⁵ and for Shirley to attend her previously planned Latrobe Regional Hospital outpatient orthopaedic appointment the following week.
26. On 11 September 2021, due to intermittent but severe ongoing left ankle pain requiring PRN Endone (oxycodone)¹⁶ for the previous few days – in addition to her weaning daily dose of Targin (oxycodone and naloxone) 5mg/2.5mg which Shirley had been on since the fall – Shirley's daughter insisted that her mother be transferred to hospital for further management.
27. Shirley was subsequently reviewed in the West Gippsland Hospital emergency department where she repeatedly denied pain throughout that afternoon and evening, and there were no signs of localised infection to the left ankle/leg, including at the 3x3 cm unstageable left heel pressure injury that had a dry wound cap. Shirley was briefly admitted to the Short Stay Unit, where she was found to have markers of inflammation/infection in her urine and blood,¹⁷ and was treated with another five-day course of oral antibiotics (cephalexin) for a UTI. It was recommended that Shirley's general practitioner increase her Targin dose, and she was discharged back to Abbey Gardens RACF that evening for ongoing physiotherapy.
28. On return to the RACF, Dr Kerbi preferred not to increase the Targin again, with PRN oxycodone still available to nursing staff to administer when required.

¹⁴ There are six classifications for types of pressure injuries, Grades I to IV increasing with severity, as well as suspected deep tissue injury and unstageable. An unstageable wound involves full thickness tissue loss with a base covered by slough and / or eschar, hence the true depth (and severity) of the wound being undetermined.

¹⁵ Controlled Ankle Motion boot – this orthotic device provides limb immobilisation to enable bone healing but can easily be removed and reapplied for hygiene needs.

¹⁶ Opioid analgesic medication.

¹⁷ Elevated white cell count and CRP on blood tests; leukocytes present on urine dipstick.

29. By mid-September 2021, Shirley was physically deconditioning, her food and fluid intake was reduced, anxiety and agitation were becoming more prominent, and she could no longer mobilise with assistance and was reluctant to be moved into a chair or wheelchair via a hoist.
30. On 14 September 2021, Dr Kerbi referred Shirley back to West Gippsland Hospital for further investigation of her recent clinical issues including intermittent severe left leg pain, anorexia, loose bowels, lethargy, loss of mobility, anaemia,¹⁸ low iron levels, hypercalcaemia,¹⁹ elevated inflammatory markers with no signs of infection, and postural hypotension despite cessation of her blood pressure medications.
31. Shirley was admitted to West Gippsland Hospital until 22 September 2021. Upon discharge, Shirley's orthostatic hypotension had resolved, the Latrobe Regional Hospital orthopaedic team²⁰ advised that she could weight bear on the left leg as tolerated, analgesia medications were titrated, her confusion resolved, oral and vaginal candidiasis²¹ were diagnosed and treated (the oral pain was managed with oral viscous lignocaine gel), the UTI was successfully treated,²² and an indwelling urinary catheter (**IDC**) was inserted, which was to be removed back at Abbey Gardens RACF once a groin rash resolved.
32. For a week after Shirley's most recent hospitalisation, her pain control was much improved (though her mouth remained uncomfortable), she was once again tolerating standing with mechanical assistance, her oral intake improved, and the IDC was removed.
33. However, on 29 September 2021 the intermittent severe leg pain returned (though at times she was more focused on her right leg than her left). Following effective pain relief from PRN oxycodone administration, Shirley reported her pain to be focused in the region of the right fifth metatarsal (the one she had fractured nine months prior). Dr Kerbi re-commenced pregabalin²³ (that had been used with some effect during her recent hospitalisation) to treat possible nerve pain.

¹⁸ Low haemoglobin level.

¹⁹ Elevated serum calcium level.

²⁰ In lieu of the planned six-week post-surgery Latrobe Regional Hospital outpatient appointment.

²¹ Also called thrush, a common oral and vaginal fungal infection.

²² Repeat urine culture testing during the hospitalisation was negative for organism growth.

²³ An anticonvulsant and anxiolytic medication used to treat neuropathic pain as well as other conditions.

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

Circumstances in which the death occurred

34. In early October 2021, Dr Kerbi noted that Shirley's pain control was much improved, and her left heel pressure injury had a thick slough to the wound base. Shirley was referred to an outreach wound nurse service for review.
35. By mid-October 2021, Shirley was too physically deconditioned to stand (with assistance). She was gradually losing weight due to the decreased oral intake, which along with ongoing intermittent left leg pain and her moderate anaemia,²⁴ may have been contributing to her lethargy and recurrence of her confusion. A urine dipstick was negative for leukocytes (inflammatory markers). A swallow assessment was conducted by a speech pathologist in light of Shirley's decline, from which she was assessed to already be on the correct modified diet.
36. On 20 October 2021, Shirley was transferred to West Gippsland Hospital once again for management of hypercalcaemia. Attributed to dehydration and excessive prescribing of vitamin D, the medical team treated Shirley with intravenous (IV) fluids and her vitamin D medication was ceased. While a CT brain scan was unremarkable, further blood tests to confirm the calcium level was normalising were unable to be obtained despite multiple attempts (which Shirley eventually refused).
37. In the setting of Shirley's functional and cognitive decline, the treating team noted that a prolonged delirium or new onset dementia could also be the cause of her confusion. She was discharged back to Abbey Gardens RACF on 22 October 2021.
38. Dr Kerbi subsequently referred Shirley to Dr Michael Farber, Geriatrician, for urgent review, highlighting that she remained anaemic, with an elevated white cell count and no obvious source of infection, declining renal function,²⁵ and hypercalcaemia.
39. On 28 October 2021, Dr Kerbi examined Shirley, noting that she had markedly clinically deteriorated and was not responding to gentle rousing. Following discussion with Shirley's daughter, Dr Kerbi documented that Shirley was not for further hospital transfers.

²⁴ Dr Kerbi noted in her records (30 September 2021) that she was going to enquire with Shirley's family if they would agree to her having a faecal occult blood test, as if it was positive, the next step would be a gastroscopy and colonoscopy. The outcome of this discussion was not documented.

²⁵ 16 September 2021: Creatinine 48micromol/L, Urea 4.9mmol/L, eGFR 86ml/min; 19 October 2021: Creatinine 94micromol/L, Urea 10.5mmol/L, eGFR 48ml/min.

40. The following day, with Shirley no longer able to swallow her medications and struggling to eat and drink, Dr Kerbi commenced palliative care following Shirley's daughter, Sara, advising that all the family agreed with the change in medical management.
41. Shirley subsequently passed at 10.30am on 2 November 2021.

Identity of the deceased

42. On 2 November 2021, Shirley Hill Jones, born 24 June 1936, was visually identified her daughter, Shirley-Ann Wainer.
43. Identity is not in dispute and requires no further investigation.

Medical cause of death

44. Forensic Pathologist, Dr Joanna Glengarry, from the Victorian Institute of Forensic Medicine (**VIFM**), conducted an external examination on 3 November and provided an initial written report of her findings dated 8 November 2021. Dr Glengarry provided a further report dated 1 November 2023 following review of the CPU's advice (see further below). Dr Glengarry also noted that she had not been provided with Shirley's medical comorbidities at the time of completing her first report, which she believed were also significant contributors to her demise.
45. The post-mortem examination revealed the region of the left heel had two areas of pressure injury. Laterally, there was an unstageable pressure ulcer with black eschar over the top, and no current evidence of infection. The medial aspect had a superficial pressure injury without skin breach, and no evidence of current infection.
46. In my discussions with Dr Glengarry, she noted that it was clear that Shirley had a downhill clinical spiral after the ankle fracture, with multiple additional medical events superimposed, all of which have culminated in her decline and death, given her age and comorbidities.
47. She explained that limb fractures carry a high mortality, both acute and delayed, in the elderly and comorbid. Shirley had the additional physiological 'insults' of pressure injury with infection (however, Dr Glengarry noted that there was no infection at the time of death).
48. In Dr Glengarry's opinion, pressure injuries were a likely contributor to Shirley's death (as were her age and comorbidities) as they required hospitalisation due to infection earlier – but to what extent could not be clarified – along with the other contributing factors.

49. Dr Glengarry provided an opinion that the medical cause of death was “*1(a) Complications of a left ankle fracture (operated)*”. Dr Glengarry listed the following as contributing factors: pressure injury, advanced age, diabetes mellitus, ischaemic heart disease, cerebrovascular disease, hypertension.
50. I accept Dr Glengarry’s opinion and will direct that the cause of death be amended in line with her amended report.

FAMILY CONCERNS

51. Shirley’s family provided a detailed and thorough submission about their concerns regarding her medical treatment during the months preceding her death. These included:
- (a) correct pain management;
 - (b) delay in removing the plaster cast (which revealed a pressure injury and post-operative bleeding);
 - (c) the existence of mouth ulcers which tested positive for herpes simplex;
 - (d) the state of Shirley’ toes (gangrene / septicaemia);
 - (e) whether Shirley had a UTI or sepsis that was not treated;
 - (f) that her family were pushed into end-of-life care when Shirley could have been saved; and
 - (g) Shirley was not provided adequate pain relief in the days preceding her death and a catheter was not provided.

CORONERS PREVENTION UNIT REVIEW

52. In light of those concerns, I obtained advice from the CPU regarding the care Shirley received in the lead up to her death. This process involved obtaining statements from:
- (a) Dr Kerbi;
 - (b) Clio Milsome, Residential Care and Services Manager at Baptcare;
 - (c) Luka Djurovic, Associate Nurse Unit Manager at Latrobe Regional Hospital;
 - (d) Mr Andries de Villiers, orthopaedic surgeon; and

- (e) Dr Letitia Clark, Acting Chief Medical Officer of the West Gippsland Healthcare Group.

Delay in removing Shirley's plaster cast

- 53. The Latrobe Regional Hospital discharge summary, signed 4 August 2021, provided the following instructions:
 - (a) Shirley's surgically repaired left ankle was to be elevated on three or more pillows;
 - (b) a general practitioner review in two weeks' time to remove the sutures and change to a CAM boot; and
 - (c) non-weight bearing for six weeks until an outpatient follow-up review.

Abbey Gardens RACF

- 54. Ms Milsome noted that the discharge paperwork accompanying Shirley upon her return from Latrobe Regional Hospital to Abbey Gardens RACF on 3 August 2021 following surgical repair of her ankle fracture, was a collection of medical, nursing, and allied health progress notes as well as information about discontinued medications. The orthopaedic team progress notes medical summary did include a discharge plan, but she noted it made *no mention* of a request for general practitioner follow up in two weeks to review the wound, remove stitches, and replace the plaster with a CAM boot. The discharge plan did include "*follow up with ADV in two weeks*". Ms Milsome confirmed with the hospital that 'ADV' refers to consultant orthopaedic surgeon Mr Andries de Villiers.
- 55. Ms Milsone explained that the standard process of managing a returning resident was followed by staff, with handover of discharge information from the paperwork communicated to the RACF physiotherapist, nursing, and other relevant staff on the day Shirley returned. Dr Kerbi was also notified by phone and the discharge paperwork received, which was placed in a folder for the doctor to review upon her next visit.
- 56. The CPU noted that the formal discharge summary (dated 4 August 2021) was only sent to Dr Kerbi, who brought a copy to Abbey Gardens RACF upon her visit on 5 August 2021. Notably, it was in this discharge summary that the ongoing medical management plan included a change from what was documented in the original discharge paperwork, with reference to a requested general practitioner review in two weeks for removal of stitches and fitting a CAM boot.

57. Ms Milsome conceded that Abbey Gardens RACF nursing staff did not thoroughly review the 4 August 2021 formal discharge summary with changes to the previously documented plan but noted that the RACF would usually only receive one copy of a discharge summary/paperwork that would accompany the resident when they return from hospital.
58. Ms Milsome explained that the usual process for follow up post-surgery is for the hospital to arrange an appointment for the resident to re-present to hospital (approximately two weeks post-surgery) and advise the RACF of this appointment time. Ms Milsome conceded that Abbey Gardens RACF nursing staff neglected to follow up with Latrobe Regional Hospital regarding the typically anticipated outpatient appointment at an appropriate time.
59. She noted that neither Abbey Gardens RACF nor the general practitioner have the equipment to remove plaster or sutures, which is why such post-surgery procedures are always performed at the hospital.
60. The Abbey Gardens RACF internal review of the delay in removing Shirley's plaster and stitches and fitting a CAM boot concluded it was a result of a lack of consultation with Dr Kerbi.
61. Ms Milsome noted that Abbey Gardens RACF 'Readmission from Hospital Checklist' instructs staff to obtain a copy of a hospital discharge summary if one is not provided by the hospital. Following the internal review, the checklist was reviewed, updated, and circulated to staff. The updated document includes the phrase, "*ensure discharge instructions are followed up and documented in progress notes and / or diary*".
62. The CPU considered that it would be reasonable to presume that nursing staff at the time believed the discharge paperwork that accompanied Shirley on 3 August 2021 was the final discharge summary (or the only discharge paperwork that was going to be received), and therefore it is unlikely the updated checklist would have made any difference in this case. The CPU suggested that Baptcare consider amending the 'Readmission from Hospital Checklist' to include a reference to confirming and documenting dates of planned follow-up care and future appointments.

Dr Kerbi

63. The hospital discharge summary was sent to Dr Kerbi's clinic on 4 August 2021.
64. In her statement, Dr Kerbi stated she was unaware of the medical management plan for her to remove Shirley's plaster and sutures and fit a CAM boot. She explained that this would not be usual practice and she has never been asked to remove plaster and review a wound post-operatively in her 34 years practising as a general practitioner which she said is always done by the orthopaedic surgeons. She noted that she did not receive a phone call from the Latrobe Regional Hospital orthopaedic team about removal of the cast.

Latrobe Regional Hospital

65. ANUM Djudurovic explained that Shirley had a Plaster of Paris slab (commonly known as a back slab), which is typically a plaster cast supporting the back of the leg from below the knee to the bottom of the foot and toes. The slab is affixed to the leg with a crepe bandage. No special equipment is required to remove the plaster.
66. He considered that the request in the Latrobe Regional Hospital discharge summary sent to Dr Kerbi for ongoing medical care two weeks post-surgery was clear and reasonable. For post discharge management of fractured ankles, requests for a general practitioner review of the wound at the 1-2 week mark is very common, with a surgical consultant review usually scheduled around the 6-8 week mark.
67. ANUM Djudurovic noted that Shirley's post-discharge plan for management of her surgically repaired fractured ankle was standard practice and that a general practitioner should be able to review a wound and remove stitches. If the post-discharge management plan regarding the plaster and surgical wound was too complex for the general practitioner or RACF, this should have been escalated to either Latrobe Regional Hospital or the orthopaedic consultant in a timely manner so guidance and education could have been provided.
68. Mr de Villiers similarly noted that it is standard practice to refer post-orthopaedic surgery patients to their general practitioner for follow up, who would remove the bandages, review the wound, and alert the surgical service if there were any issues.

Physiotherapist Vu

69. Physiotherapist Vu unfortunately incorrectly documented on 4 August 2021 that the plaster cast was to remain on Shirley's ankle for six weeks.

Conclusion regarding delay in removal of the plaster cast

70. Dr Kerbi expressed a discordant view to ANUM Djurovic and Mr de Villiers regarding the standard post-discharge management of orthopaedic surgery patients at Latrobe Regional Hospital.
71. Shirley's plaster was removed from her leg in hospital on 8 September 2021. The plaster cast was noted to be a back slab at the base and split plaster toward the top – that is, following its application, a cut had been made along the length of a circumferential section of plaster around the leg to allow for limb swelling. The CPU acknowledged that without unravelling the bandages, it may have appeared the plaster was a full cast of the leg requiring a specialised cutting tool to remove.
72. Nonetheless, the delay to removing the plaster was not due to a lack of medical equipment or supplies, but occurred in the circumstances described above.
73. Mr de Villiers noted that when the cast was eventually removed, the surgical site had healed perfectly albeit the presence of a pressure sore. However, he also noted that pressure sores in an 86-year-old patient who is diabetic and known to have issues with blood circulation is exceptionally common, even in the best nursing hands, and almost unpreventable if patients have low mobility. He considered the pressure injury to her heel would not have been prevented even if she had been changed into a CAM boot at the two-week mark.
74. Mr de Villiers also noted that there was no infection in the region of the left heel pressure injury. Shirley was never treated for any septic related episodes at West Gippsland Hospital (during her repeated presentations between late August 2021 and late October 2021). He therefore considered the pressure injury was very unlikely to have caused the demise of Shirley.
75. In contrast, the CPU was of the opinion that a CAM boot at the two-week mark *may* have prevented or reduced the severity of Shirley's pressure injury and, whilst the possibility that the pressure injury may still have occurred even if the plaster had been removed two weeks post-surgery cannot be excluded, they considered the injury would not have been as severe.
76. The CPU further noted that while the pressure injury did not worsen after the removal of the plaster, and also did not appear to be infected, it likely contributed to Shirley's protracted lower limb pain, anxiety, decreased mobility, and physical deconditioning. However, in the

setting of Shirley's advanced age and other comorbidities, these issues may also have been caused by the ankle fracture and surgical repair itself.

77. The CPU advised that it did not appear that the heel pressure injury directly related to Shirley's death, however the associated effects of the injury may have contributed to her clinical decline.

Correct pain management

78. Shirley had chronic back pain for which Dr Kerbi prescribed long term Targin 5mg/2.5mg at night. Attempts to wean the analgesia further in April 2021 had been unsuccessful.
79. Following the ankle fracture and surgery, Dr Kerbi temporarily increased Shirley's Targin to 5mg/2.5mg morning and 10mg/5mg night, before gradually reducing the dose back to Shirley's baseline prescription on 26 August 2021.
80. A PRN order of immediate release oxycodone 5mg was also utilised (and generally had a very good effect) by the RACF nursing staff between one and three times per day, diminishing in frequency of use over the course of the month.
81. Abbey Gardens RACF nursing and care staff ensured Shirley's left leg was elevated as per the post-operative instructions when Shirley was not mobilising (with assistance) or participating in physiotherapy. PRN oxycodone was still used intermittently in September 2021 after removal of the cast due to severe and sudden onset left ankle pain. Shirley also developed significant indigestion, and so Dr Kerbi commenced her on esomeprazole²⁶ and PRN Gaviscon, with good effect.
82. Following Shirley's brief hospitalisation on 11 September 2021, the discharge summary recommended Dr Kerbi increase Shirley's Targin dose. However, Dr Kerbi elected not to increase the dose, but rather rely on the Abbey Gardens RACF nursing staff to judiciously utilise an existing PRN oxycodone order.
83. On 14 September 2021, Dr Kerbi referred Shirley back to West Gippsland Hospital due to an array of medical issues including her ongoing intermittent leg pain, which was much improved upon discharge on 22 September 2021.

²⁶ A protein pump inhibitor medication, that reduces the acid content in the stomach.

84. A week later the bouts of severe leg pain recurred and so Dr Kerbi prescribed pregabalin, possibly with some effect.
85. By late October 2021, with the intermittent leg pain persisting almost three months after sustaining the fracture and approximately five weeks after the plaster was removed and the heel pressure injury identified, Dr Kerbi referred Shirley to Dr Farber for urgent review due to her multifactorial clinical issues. However, Dr Farber did not to review Shirley prior to the commencement of palliative care a week later.
86. The CPU considered Dr Kerbi's medical management of Shirley's ongoing leg pain (prior to the commencement of palliative care) to be reasonable.
87. The CPU explained that increasing analgesic medications in an 85-year-old with multiple chronic comorbidities, including declining renal function, requires caution. Whilst Shirley continued to experience intermittent severe left leg pain, the CPU considered that it was reasonably managed by Abbey Gardens RACF nursing staff utilising the PRN oxycodone order as well as non-pharmacological methods.

The existence of mouth ulcers which tested positive for herpes simplex

88. The earliest documented complaint of Shirley's mouth pain was on 13 September 2021, one day prior to her admission to West Gippsland Hospital where she was diagnosed with oral candidiasis and oral herpes simplex virus 1 (cold sores).
89. The CPU advised that the candida infection was appropriately treated with a topical antifungal medication, while the mouth pain was managed with an oral viscous lignocaine gel. The West Gippsland Hospital discharge summary suggested Dr Kerbi consider an antiviral medication if the cold sores became severe or recurrent.
90. In a speech pathologist review on 18 October 2021, Shirley's oral mucosa was described as normal. The CPU noted that prior to the resolution of these oral infections, Shirley's mouth pain may have contributed to her decreased oral intake.
91. The oral viscous lignocaine gel was not continued upon Shirley's return to Abbey Gardens RACF as her next of kin did not consent to its prescription.

Shirley's toes (gangrene / septicaemia)

92. In the family letter of concern, Shirley's toes are described on 27 October 2021 as "*mottled blue black and I suspected gangrene or septicaemia*".
93. Dr Kerbi examined Shirley's toes on 28 October 2021, noting that her right lower leg and foot was cooler than the left side and had a mottled appearance, but there was "*no evidence of blackness*" (ischaemia / necrosis).
94. The CPU advised that in the setting of an elderly person with ischaemic heart disease and diabetes mellitus who is near the end of their life, such a finding is not unusual.
95. It is also notable that there was no comment of such findings in the forensic pathologist's post-mortem examination report.

Did Shirley have a UTI or sepsis which was not treated?

96. The CPU advised that Shirley's E. coli UTI was reasonably and appropriately treated by Dr Kerbi with the antibiotic trimethoprim on 2 September 2021.
97. The following week, Shirley's E. coli UTI was found to be still present during her brief presentation to West Gippsland Hospital, and so the (newly trimethoprim-resistant) infection was appropriately treated with the antibiotic cephalexin.
98. During Shirley's admission to West Gippsland Hospital between 14 and 22 September 2021, evidence of a UTI was no longer present upon laboratory urine testing.
99. In mid-October 2021, as Shirley's gradual functional and clinical decline continued, a urine dipstick test performed at Abbey Gardens RACF was negative for markers of infection.
100. During Shirley's final hospitalisation for hypercalcaemia between 20 and 22 October 2021 (other medical issues identified were dehydration, functional decline, delirium/ cognitive decline), a formal urine test was documented as part of the medical management plan, though it appears that one was never performed. It is unclear why this was the case, though Shirley's double incontinence and resistance to clinical investigations and care may have been contributory.
101. After the commencement of palliative care on 29 October 2021, a urinary catheter was inserted in the early afternoon of 1 November 2021 at the request of Shirley's family due to a concern about urinary retention. The registered nurse who inserted the catheter commented that the

urine was clear. However, at 3.00pm the family of Shirley noted the urine was cream coloured²⁷ and they described it as “*thick pus*”. It is asserted in the family letter of concern that the (probable) UTI is evidence of negligence, and palliative care should not have been commenced.

102. The CPU considered that there were no specific signs or symptoms of a UTI prior to this new clinical finding one day before Shirley’s death. With Shirley’s reduced food and fluid intake, poor mobility, ongoing double incontinence, and a week of COVID-19 exposure-related isolation at Abbey Gardens RACF until 28 October 2021, which all increased her risk of developing a UTI (amongst an array of potential pathologies) and if Shirley did have a UTI at the time of her death, it is not possible to determine when it developed, nor whether it contributed to her clinical state.
103. The CPU noted that the family’s assertion that an untreated UTI can lead to sepsis²⁸ is correct. However, Shirley had unremarkable vital signs in the week prior to commencement of palliative care on 29 October 2021 and there was little clinical evidence suggestive of sepsis.

Family pushed into end-of-life care when Shirley could have been saved

104. At Shirley’s final West Gippsland Hospital admission from 20 to 22 October 2021, her vital signs were within normal limits, but she was dehydrated, pale, cachectic, and confused.²⁹ Subcutaneous fluids were administered after multiple failed attempts to insert an IV cannula.
105. She was subsequently discharged without confirming her elevated calcium level was declining nor further monitoring of a mildly elevated lactate³⁰ level or testing her urine for infection.
106. The treating medical team hypothesised that a haematological or solid organ malignancy may have been a possible cause for the hypercalcaemia,³¹ and upon noting Shirley’s subacute decline since her ankle fracture, documented that she was “*likely approaching end of life*”.
107. While some appropriate investigations and treatments were undertaken, as Shirley eventually refused any further tests, medications, or care, she was discharged back to Abbey Gardens

²⁷ A photo of the cream-coloured urine in the collection device was included in the family letter of concern.

²⁸ Sepsis is the body’s overwhelming and potentially life-threatening response to infection that can lead to tissue damage, organ failure, and death.

²⁹ On 22 October 2021, Shirley was not oriented to place or time, unable to recall what she had for lunch or where she usually resided.

³⁰ Elevated lactate can be a marker of emerging or actual critical illness and is associated with increased morbidity and mortality.

³¹ Hypercalcaemia can be caused by hyperparathyroidism, hypothyroidism, malignancy, excessive vitamin D intake, excessive calcium intake, and more.

RACF with a plan for a general practitioner review in one week. The West Gippsland Hospital discharge summary also noted that Shirley's Advance Care Plan indicated a wish for initiation of comfort care if she deteriorated, which contributed to the decision for her to be discharged.

108. Shirley's family and Dr Kerbi both appeared to be frustrated by the diagnoses and management provided to Shirley during her multiple hospitalisations at West Gippsland Hospital in September and October 2021 due to multiple ongoing medical issues, such as anaemia, chronic mildly elevated inflammatory markers with no obvious source of infection, a gradual decline in renal function, hypercalcaemia, and physical and cognitive decline. The CPU noted that Dr Kerbi reasonably referred Shirley to a geriatrician following her last discharge from West Gippsland Hospital.
109. During Shirley's previous week-long hospitalisation, concluding on 22 September 2021, radiological and pathology investigations for various conditions including thyroid dysfunction and cancers were undertaken. However, other than the detection of pancreatic cysts and non-specific lung nodules on CT scan (requiring periodic monitoring), no new diagnoses were made. The West Gippsland Hospital discharge summary provided a comprehensive medical management plan³² including advice to Dr Kerbi to consider reducing Shirley's vitamin D medication, and monitor for an improvement in her elevated corrected calcium level.
110. The CPU also considered that West Gippsland Hospital's medical management of Shirley during her multiple presentations between August and October 2021 was reasonable, with numerous appropriate investigations, treatments, and recommendations for ongoing care provided. During Shirley's final West Gippsland Hospital admission, it was identified that she was likely approaching end of life. One week after her discharge, palliative care was commenced.
111. The CPU considered that Dr Kerbi's medical management of Shirley was reasonable. She identified and managed numerous health issues and referred Shirley appropriately to other health services when required.
112. The CPU advised that Dr Kerbi's decision to commence palliative care on 29 October 2021 in the setting of a gradual and persistent decline in health following Shirley's ankle fracture despite multiple interventions, investigations, and hospitalisations was reasonable. Dr Kerbi

³² Following the admission Dr Kerbi documented her consideration of one of the West Gippsland Hospital recommendations to investigate Shirley's anaemia and whether Shirley's next of kin would agree to endoscopy, if required. It is unclear if any such investigations were planned.

noted that Shirley was experiencing rapid day-to-day deterioration that was not reversible, she had irreversible weight loss, profound weakness, increasing loss of ability to swallow, and she was refusing or unable to take medication, food and fluids.

Pain management and catheter insertion during palliative care

113. Palliative care was commenced on 29 October 2021 at the RACF, with multiple doses of injectable opioid analgesia and antipsychotic (commonly used in palliative care for relief from symptoms of agitation/ delirium) administered on 29 and 30 October 2021.
114. There is regular progress note documentation detailing attendance by staff to Shirley in addition to regular communication with Shirley's family during this time, as well as an End-of-Life Care pathway document that was meticulously completed two-hourly throughout the last five days of Shirley's life.
115. The majority of the commentary in the progress notes during 29 and 30 October 2021 record that Shirley was comfortable or asleep.
116. A continuous infusion of opioid analgesia/ antipsychotic medication was commenced on 31 October 2021, with Shirley also receiving additional boluses of medication for breakthrough pain/ distress/ excess oral secretions.
117. The CPU noted that unfortunately death is not always a peaceful process, and can be distressing for loved ones. However, from review of the records, the palliative care provided by staff at Abbey Gardens RACF appears to have been reasonable.

Conclusion

118. Shirley was sent to hospital to have her overdue leg plaster removed (revealing the pressure injury). The possibility that the pressure injury may still have occurred even if the plaster had been removed two weeks post-surgery cannot be excluded. While Mr de Villiers said it would not have been prevented, the CPU believed the injury would not have been as severe.
119. Days later, Shirley briefly returned to hospital due to significant leg pain (primarily or in part related to the pressure injury) before soon spending a week in hospital due to a multitude of medical issues (including leg pain). Shirley physically deconditioned the following month (and had another hospital admission), with the presence of the pressure injury likely one of many contributing factors.

120. While Shirley had persistent mildly raised inflammatory/ infection markers in blood tests for the two months prior to death, the CPU considered it was not possible to definitively say that the pressure injury was ever infected as it was never described as appearing infected in any of the records reviewed.
121. With numerous ongoing health issues and various differential diagnoses considered and either ruled out or unable to be confirmed in the weeks prior to her death, the CPU was unable to determine why Shirley deteriorated to the point where palliative care was reasonably commenced.
122. Shirley's pressure injury was no doubt one of many conditions that contributed to the significant decline in her health in the months prior to her death as it was the cause of pain, anxiety, hospital presentations, and reduced mobility. However, the CPU considered it was very likely a combination of many of the health complications discussed above rather than one single issue that led to her deterioration.
123. I accept and agree with the CPU's advice.

FINDINGS AND CONCLUSION

124. Pursuant to section 67(1) of the Act I make the following findings:
 - (a) the identity of the deceased was Shirley Hill Jones, born 24 June 1936;
 - (b) the death occurred on 2 November 2021 at Abbey Gardens Aged Care, 15 Tarwin Street, Warragul, Victoria, from complications of a left ankle fracture (operated). Pressure injury, advanced age, diabetes mellitus, ischaemic heart disease, cerebrovascular disease, and hypertension were contributing factors; and
 - (c) the death occurred in the circumstances described above.

RECOMMENDATIONS

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

1. I **recommend** that **Baptcare** consider amending its Residential Aged Care 'Readmission from Hospital Checklist' to include a reference to confirming and documenting dates of planned follow-up care and future appointments.

DIRECTION

Pursuant to section 49(2) of the Act, I direct the Registrar of Births, Deaths and Marriages to amend the cause of death to “*1(a) Complications of a left ankle fracture (operated)*” with pressure injury, advanced age, diabetes mellitus, ischaemic heart disease, cerebrovascular disease, and hypertension listed as contributing factors.

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

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

Shirley-Ann Wainer, senior next of kin

Sara Feehan

Baptcare

Abbey Gardens Aged Care

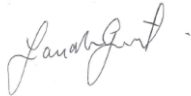
Dr Trish Kerbi, Warragul Family Medicine

Latrobe Regional Hospital

West Gippsland Healthcare Group

Leading Senior Constable Stephen Cranston, Victoria Police, reporting member

Signature:



Coroner Sarah Gebert

Date: 28 March 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.
