



CORONERS COURT OF NEW SOUTH WALES

Inquest:	Inquest into the death of John Glen Laurenson
Hearing dates:	15-18 March 2021
Date of findings:	31 March 2021
Place of findings:	NSW Coroners Court - Lidcombe
Findings of:	Magistrate Elizabeth Ryan, Deputy State Coroner
Catchwords:	CORONIAL LAW – mandatory inquest - death of a person in custody – cause of death: ruptured brain aneurysm – did Justice Health and Forensic Mental Health Network and hospitals provide adequate care and treatment.
File number:	2017/185430
Representation:	<p>Counsel Assisting the inquest: P Dwyer of Counsel i/b NSW Crown Solicitor.</p> <p>The Laurenson family: F Way, Solicitor Advocate, Legal Aid NSW.</p> <p>Justice Health and Forensic Mental Health Network; South Eastern Sydney LHD: B Bradley of Counsel i/b Makinson d'Apice Lawyers.</p> <p>Commissioner, Corrective Services NSW: P Broad, Solicitor Advocate, NSW Department of Communities and Justice (Legal).</p> <p>Doctors L Mayer, P Wilson and K Sheldrick: T Hackett of Counsel i/b Avant Law</p> <p>Canberra Hospital: M Gerace of Counsel i/b ACT Government Solicitor.</p>

Findings:	<p>Identity The person who died is John Laurenson.</p> <p>Date of death: John Laurenson died on 20 June 2017.</p> <p>Place of death: John Laurenson died at Royal Prince Alfred Hospital, Camperdown Sydney.</p> <p>Cause of death: John Laurenson died as a result of the sequelae of a ruptured brain aneurysm.</p> <p>Manner of death: John Laurenson died of natural causes, at a time when he was a prisoner on remand at Bathurst Correctional Centre.</p>
Recommendations:	<p>To the CEO, Justice Health and Forensic Mental Health Network:</p> <p>That consideration be given to introducing a policy requiring that where an inmate has a known brain aneurysm, or where a brain aneurysm is identified during an inmate's period of custody, the inmate is referred to a GP Clinic as soon as possible and then referred for urgent review by a specialist neurosurgeon.</p>

Non-Publication Orders

Orders prohibiting publication of certain material pursuant to section 75(2)(b) of the *Coroners Act 2009* (NSW) have been made in this inquest.

Orders pursuant to section 65(4) of the *Coroners Act 2009* (NSW) have been made in this inquest.

Copies of both sets of orders can be found on the Registry file.

Introduction

1. Section 81(1) of the *Coroners Act 2009* [the Act] requires that when an inquest is held, the Coroner must record in writing his or her findings as to various aspects of the death.
2. These are the findings of an inquest into the death of John Laurenson.
3. On 20 June 2017 Mr Laurenson, aged 47 years, died at the Royal Prince Alfred Hospital, Camperdown Sydney. The cause of his death was a ruptured brain aneurysm. At the time of his death Mr Laurenson was a remand inmate of Bathurst Correctional Facility. He had been transferred to hospital after collapsing in his cell on the morning of 16 June 2017.
4. An inquest into the circumstances of Mr Laurenson's death is mandatory. This is because as an inmate, he relied on authorities to provide an adequate level of care for his health and welfare. In these circumstances an inquest is required to determine whether authorities have discharged their duty.
5. Mr Laurenson's family has requested that I refer to him as 'John', and this is how I name him in these findings.

The focus of the inquest

6. In this inquest there was no issue as to the medical cause of John's death. An autopsy report prepared by pathologist Dr Lorraine Du Toit-Prinsloo found that John died as a result of the '*sequelae of ruptured berry aneurysm*'. The radiology report noted extensive basal subarachnoid bleeding.
7. An aneurysm is a weakness in a blood vessel of the brain, which balloons and fills with blood. It can leak or rupture, causing life-threatening bleeding which can lead to massive brain injury and death.
8. The focus of the inquest was on the manner of John's death. The inquest sought to understand the circumstances which led to his ruptured brain aneurysm, and whether the care and treatment he received in custody was adequate.

John's life

9. John was born at Goulburn on 10 February 1970. He was the third child of his parents, and throughout his life he remained close to them. He had two brothers and a sister. He leaves behind two adult children A and B, and a step-daughter C.
10. John had previously worked in an abattoir but was unemployed when he entered custody on 8 November 2016. He had a lengthy criminal history,

much of it associated with his dependence on narcotics. John also struggled with overuse of alcohol, which led to liver complications.

11. John was loved by his family, and they miss him deeply. His daughter A and son B attended each day of the inquest. At the close of the evidence A shared with the court their memories of their father, while B held up a photograph of him. Their tribute to John was deeply affectionate. A said: *'People couldn't help but like Dad. He was always joking around and always trying to make others laugh. He loved surrounding himself around people'*. She described weekends and holidays spent with her father, who was *'so much fun to be around'*. They would swim, go fishing and exploring. He was delighted when he became a grandfather to A's two young children. With her brother B he would go rock climbing and playing laser tag. In his spare time John also loved reading non fiction, especially history.
12. At the time of his death John's cell mate was T. T also wrote a warm tribute to John, recalling that while in custody John enjoyed reading books and listening to the rugby league on T's radio. John also liked to talk fondly to T about his children and his grandchildren. T described the night of John's death, and ended his tribute with the words: *'I never saw John again. As I write this now, I would have been in cell 63 with John now, listening to a game of footy.... I was his last friend'*.

The morning of 16 June 2017

13. At the time of his collapse John was housed at Bathurst Correctional Centre where he shared a cell with T. At about 8.15am on the morning of 16 June 2017 T awoke to the sound of a loud thud. He looked down from the top bunk to see that John was lying on the cell floor. John did not answer when T called to him. Nor did he move when T shook his shoulder, although his eyes were open.
14. T noticed a blood stain on John's pillow. He knew that John had brain aneurysms and was awaiting an operation. He pressed the cell emergency alarm button.
15. Correctional officers arrived almost immediately. They found John on the floor, largely not responding to stimuli. Emergency medical assistance was called, first from Justice Health staff and then an ambulance. John was taken to Bathurst Base Hospital, arriving there at 9.24am.
16. Urgent CT scans showed that John had suffered a large intracerebral bleed from the largest of his aneurysms. He was intubated and ventilated, then transferred by air ambulance to Royal Prince Alfred Hospital in Camperdown. He arrived there in a critical condition.
17. Despite emergency surgery at Royal Prince Alfred Hospital, John's condition continued to deteriorate as pressure built up around his brain. He did not respond to medical treatment, and on 18 June his treating team held

a meeting with John's family. It was decided to remove his life support. John was given palliative care and he was pronounced deceased at 4.30pm on 20 June 2017.

John's brain aneurysm

18. John had ongoing medical conditions of high blood pressure, which he managed with medication, as well as depression, anxiety and liver complications as a result of Hepatitis C.
19. Until 2015 John was unaware he had brain aneurysms. In May that year he suffered injuries from a car crash as he was driving through Nambour in southern Queensland. Imaging of his brain revealed three intracranial aneurysms. It was established that the aneurysms pre-existed John's car accident.
20. In August 2015 John's regular GP, Dr Himmat Moond, arranged for him to have a CT scan of his aneurysms and a follow up neurosurgical review at Canberra Hospital. John attended for the CT scan and neurosurgical review, but he did not attend two subsequent bookings at Canberra Hospital to undergo a Digital Subtractive Angiogram [DSA].
21. However on 8 March 2016 John did attend for an MRI scan of his brain. This confirmed that he had:
 - a 1.5cm x 2 cm right middle cerebral artery bifurcation aneurysm [a right MCA aneurysm]
 - a 3.5mm x 2mm anterior communication artery aneurysm
 - a 5mm pericallosal aneurysm.
22. John was told that he would '*likely require surgical treatment*' for his aneurysms. On 1 April 2016 he underwent a DSA at Canberra Hospital. This identified that in fact he had four brain aneurysms.
23. It does not appear that anyone at Canberra Hospital arranged a follow up appointment with John for neurosurgical review of the DSA results. In late April 2016 Dr Moond ascertained that this was the case, and provided John with contact details to make an appointment with Canberra Hospital's neurosurgical clinic.
24. John did not make the appointment. The next weeks were disruptive for him and included the following events:
 - from 10 April to 27 April 2017 John was an inpatient at Bega Mental Health Unit for depression and issues arising from his alcohol abuse
 - on 10 May 2016 he saw a gastroenterologist in relation to his liver impairment due to Hepatitis C.
25. Then on 27 May 2016 John was arrested on criminal charges, and commenced a four month prison sentence. These events disrupted any orderly follow up of treatment for his brain aneurysms.

In custody: May to September 20

26. John's prison sentence was for the period 27 May 2016 to 26 September 2016. He served this part of this sentence at South Coast Correctional Centre, Nowra.
27. While he was in custody John, in common with most NSW prisoners, received his primary health treatment from the Justice Health and Forensic Mental Health Network ['Justice Health']. He had a screening assessment which recorded that he had brain aneurysms. Justice Health staff then requested and received material from Canberra Hospital which included the results of the DSA performed on 1 April 2016. They also sought and received John's medical records from Dr Moond.
28. During this period of incarceration John received treatment for his conditions of hypertension and depression, but he did not receive any treatment for his brain aneurysms.
29. However it would not be correct to say that John's aneurysms were ignored. On 1 June 2016 he was reviewed by the visiting GP, who noted that John was *'fully aware of the importance of neurosurgery follow up and is happy to wait until release in September 2016'*. The GP (who was not a witness at the inquest) may have had the impression that John was under the management of Canberra Hospital's neurosurgical clinic, and that given John's release date of 26 September little would be gained by intervening with earlier action.
30. If this was the GP's assumption, unfortunately it did not quite reflect the reality. John did not have any follow up appointment with Canberra Hospital. Nor does it appear that Canberra Hospital took any action to contact him for follow up after his DSA on 1 April 2016. In this sense, it would not be correct to describe his life threatening condition as under management.
31. It can be seen from the above that a complex of factors underlay the failure of Justice Health, during this incarceration, to advance treatment for John's aneurysms. Nevertheless, the effect was that four months passed during which an opportunity was missed for Justice Health to initiate early treatment for John's very serious condition.

In custody: November 2016 to June 2017

32. Six weeks after being released to parole in September 2016 John commenced another period of custody, after being refused bail on offences allegedly committed in 2013 and 2014. It was during this incarceration that John suffered the fatal rupture of his brain aneurysm.
33. On 16 November 2016 a Justice Health nurse again completed a reception screening assessment. This noted *'brain aneurysms x 3'* and high blood

pressure for which John used medication. The nurse recommended that John be housed in *'a low risk cell/pod where assault could be minimised as the outcome could potentially be fatal if patient sustained injury to the brain'*. In addition, she recommended that he be placed in a *'two out cell'*, meaning that he needed to share a cell with another inmate. The purpose of this was to increase John's chances for emergency help, if he should suffer an episode which incapacitated him.

34. Both recommendations were appropriate, and were implemented.

The appointment with Dr Mayer

35. On 15 November 2016 John had an appointment with visiting GP Dr Linda Mayer. Dr Mayer has been employed with Justice Health since 2011. John was the tenth of her eleven patients listed for review that day.
36. Dr Mayer was aware from John's file that he had a history of *'at least 4 cerebral aneurysms, 2015'*, and that he was in the process of alcohol withdrawal treatment. She was also able to review his DSA and MRI results from Canberra Hospital. In addition, John told her that his maternal grandmother had died of a brain clot.
37. Dr Mayer found John to be *'reasonably concerned about his health and diagnosis of the brain and neck aneurysms'*. She too was very concerned, and she prepared a referral for John to be reviewed by a specialist on an urgent basis. She also directed that his blood pressure be measured each day, and that he continue his use of blood pressure medication. As a caring doctor, Dr Mayer was also concerned about the hereditary implications of John's aneurysms. She directed that his children be contacted with a recommendation that they undergo screening.
38. Unfortunately when Dr Mayer prepared John's specialist referral, she erroneously selected the specialist discipline *'vascular'*, and not *'neurosurgical'*. At the inquest Dr Mayer expressed genuine regret for her error. She explained that she was most likely rushed that day and did not give full thought to what the appropriate specialty would be. Since then, she said, she has paid extra attention to her patient referrals, and has also tried to limit interruptions to her patient consultations.
39. John's appointment with the Vascular Clinic took place at Sydney's Prince of Wales Hospital [POWH] on 22 December 2016. The doctor who reviewed him noted the error of specialty, and directed that he be referred to POWH's Neurosurgery Clinic.
40. Unfortunately the result was a further delay in getting treatment for the aneurysms. John was placed back on the prison wait list to see a visiting GP so as to secure a second, correct referral. The second GP appointment did not take place until 10 January 2017, on which date Dr Mica Spasojevic made a second referral on an urgent basis, this time for a neurosurgical review at POWH. The appointment was fixed for 6 March 2017.

41. As can be seen from the above, despite Dr Mayer's intention on 15 November 2016 that John receive an urgent specialist review for his aneurysms, he did not receive one for almost four months. One reason for this delay was Dr Mayer's incorrect referral to the Vascular Clinic. Compounding the delay was the Vascular Clinic's referral of John back to the prison GP list to secure a correct referral.
42. Thus almost a year passed after John's Canberra radiology established a serious neurological condition, before he received a specialist review.

The Neurosurgical Clinic consultation

43. On 6 March 2017 John was taken to the outpatient Neurosurgical Clinic at POWH. Here he was reviewed by Dr Kyle Sheldrick, a fourth year neurosurgical registrar.
44. The court heard that the POWH outpatient Neurosurgery Clinic involves patients being reviewed by neurosurgical registrars. Their cases are then discussed with the consultant neurosurgeon supervising the clinic. On 6 March 2017 the consultant was Dr Peter Wilson.
45. Dr Sheldrick's notes of his review of John are scant. However on 10 March 2017 he prepared a more detailed letter of his review. This recorded that:
 1. John's largest aneurysm was 17mm in diameter (Dr Sheldrick derived this information from Dr Spasojevic's referral form)
 2. although previous brain scans existed he had not had access to them at the review, and would arrange for them to be transferred to POWH
 3. John was a non smoker and *'does not have high blood pressure'*
 4. he had explained to John that *'these are very serious findings'* and that the large aneurysm *'would almost certainly require treatment'*, the real question being what kind of treatment.
46. Dr Sheldrick's note that John did not have high blood pressure was surprising. At the inquest and in his coronial statement Dr Sheldrick explained that John had replied *'no'* when asked if he had high blood pressure. Yet John was aware he suffered from this condition and had disclosed it, and his medication, in his November 2016 screening assessment. At the inquest Dr Sheldrick did not agree with the suggestion that John may have interpreted his question as enquiring if he had high blood pressure *at that particular time*. Dr Sheldrick agreed he had not followed up with questions as to whether John had a history of this condition, or if he was using medication to manage it.
47. Dr Sheldrick decided that John's case needed to be discussed at the next Multi Disciplinary Team [MDT] meeting, which was to take place on 14 March 2017. The purpose of the referral to the MDT was to review John's scans and determine the appropriate treatment for his condition.

48. Dr Sheldrick discussed this proposal with Dr Wilson, who agreed it was appropriate.

The MDT meeting on 14 March

49. The MDT meeting is a weekly meeting of senior consultants in Vascular and Neurosurgery. The attending specialists manage patients with cerebrovascular pathology from POWH and other hospitals. At this meeting between ten to twenty patients are discussed, usually, according to Dr Wilson, within the space of an hour.
50. In his statement Dr Wilson described the purpose of the MDT as '*to discuss surgical management and the optimal approach*' to a patient's treatment. Typically the patients' cases are presented to the meeting by neurosurgical registrars. As Dr Wilson noted, given the limited time available to discuss each patient, the registrar's summary needs to be very concise. Even so the expectation of the MDT members is that the registrar gather and present all available information relevant to the patient's level of risk.
51. Unfortunately, as will be seen, the MDT members did not have before them certain information that was critical to assessing John's risk.
52. According to Dr Wilson, at the meeting on 14 March 2017 the group viewed '*relevant imaging*' of John's aneurysms, and discussed his relevant risk factors for rupture. They determined that his large aneurysm required surgical intervention, being craniotomy and clipping. They settled on a plan to bring him back to the Clinic on 23 June 2017 to explain the proposed surgery and to obtain his consent. He would then be booked in for the surgery within 90 days following that appointment.
53. As we know, John did not survive to make the 23 June appointment.
54. In setting this time table, the court heard that the MDT had reference to international studies which attempt to predict risk of rupture. The MDT members assessed that John's large aneurysm had '*a very low risk of rupture within the total time frame of 6 months*'. Dr Wilson told the court that it is uncommon for vascular aneurysms to change over time, and that John was not showing any alarming symptoms such as severe headaches.
55. In his second statement Dr Wilson acknowledged that '*in a perfect world*' it would be preferable to treat such aneurysms immediately, but this was not possible given the number of patients to be treated and the limited resources of the public health system.
56. Expert evidence at the inquest was that in fact, John's risk for rupture of his large aneurysm was high and that he required urgent treatment.
57. At the inquest Dr Wilson was asked about the factors which the MDT had taken into account in assessing that John's risk for rupture was low. Dr

Wilson was largely in agreement with Professor Besser, that the most significant risk factors for a patient with an unruptured aneurysm were:

1. the size of the aneurysm
2. whether the aneurysm was growing
3. the existence of multiple aneurysms
4. the existence of other features such as hypertension and impaired coagulopathy (the ability of the blood to clot).

58. With reference to these, Dr Wilson agreed that John's aneurysm was a very large one. He also acknowledged the presence of multiple aneurysms, a further risk factor. He stated however that the MDT had no evidence of other risk factors such as hypertension or impaired coagulopathy. As noted, Dr Sheldrick had recorded that John denied having high blood pressure. And Dr Wilson asserted that there was no evidence that John was coagulopathic.
59. An important question for the inquest was whether the MDT had access to evidence that John's large aneurysm was growing, a strong risk factor for rupture. Growth can be evidenced by serial scanning. In John's case a comparison between his 2016 scans and those performed in Queensland in 2015 when his aneurysms were first discovered would have shown that the largest aneurysm was increasing in size.
60. It cannot be known with certainty what images were available to the MDT members when they reviewed John's case. This is because the minutes of the meeting are scant and do not disclose this information. Unsurprisingly given the lapse of time, Dr Wilson was unable to recall this detail. Nor could the hospital records assist him. Dr Wilson explained that in the case of radiology from sources external to POWH, this is uploaded onto the POWH system for review and then removed soon afterwards.
61. It is however unlikely that the MDT members were aware of the existence of the 2015 brain scans. At the inquest Dr Sheldrick stated that he had not been aware of them, and hence had arranged only for the 2016 scans to be transferred to POWH. He had noted these from Dr Spasojevic's referral. Her referral had not specifically noted the 2015 scans, although their existence might have been inferred from her notation: *'Intracranial aneurysms x 4. Incidental finding post MVA May 2015'*.
62. At the inquest Dr Sheldrick said that if he had been aware of the 2015 scans he would certainly have obtained them. He was well aware of their high clinical value in assessing John's risk for rupture.
63. Dr Wilson's evidence provides a further indication that the MDT members did not have the 2015 scans, and hence evidence that John's large aneurysm was growing. Dr Wilson told the court that the plan for John would have been very different if the MDT members had had evidence of growth. He would have recommended that John be immediately admitted as an inpatient to the POWH's Annex for inmates, where he would receive further scanning and, most likely, surgery on an urgent basis.

64. John's family were understandably very distressed to hear that there were opportunities for him to have received treatment for his aneurysms at a stage which may have saved his life.

Was the care and treatment provided to John adequate?

65. I will now turn to assess whether John received adequate care and treatment for his aneurysms at Canberra Hospital, Prince of Wales Hospital, and while he was in custody.
66. The court had the assistance of two experts in addressing this question. The first expert was Professor Michael Besser AM, who has thirty years' clinical experience as a consultant neurosurgeon. He was formerly the Head of Department of Neurosurgery at Royal Prince Alfred Hospital, and continues as consultant emeritus neurosurgeon there and at the Royal Alexandra Hospital for Children. The second expert was Dr Laughlin Dawes, a subspecialist neuroradiologist. He provided relevant evidence about the size of John's largest aneurysm.
67. In his reports and evidence Dr Besser made certain criticisms of the health care John had received. His overall conclusion in his first report was that *'... earlier medical intervention may have prevented [John's] fatal intracerebral haemorrhage'*, and that delay in treatment for his condition *'contributed significantly'* to his death.
68. I will deal with each of the health facilities in turn.

Canberra Hospital

69. Dr Besser's criticism of Canberra Hospital's involvement in John's health care was two-fold.
70. First, in his view the reports arising from John's 2016 scans at Canberra Hospital were inaccurate. He considered the DSA report had understated the actual size of John's largest aneurysm and that the more accurate measurement was 2.5cm size in its largest diameter. For Dr Besser, the significance of this was that had the aneurysm's size been correctly reported it would have been classified as a *'giant aneurysm'*, which is associated with much higher rates of mortality. The correct classification would have elevated John's risk for rupture.
71. Dr Dawes concluded that the maximal external dimension of the large aneurysm was in fact 2.3cm. At the inquest Dr Besser conceded that Dr Dawes had arrived at the more accurate measurement, as he had used a more sophisticated measuring method.
72. Dr Besser maintained the view that an aneurysm having a 2.3cm diameter required urgent medical review. There was however no real dispute as to

this, as Dr Wilson agreed that John's aneurysm was very large and that this increased his risk for rupture.

73. Secondly, Dr Besser was critical of Canberra Hospital for taking no action to contact John for neurosurgical assessment, after having performed imaging in March and April 2016 which revealed a very serious condition.
74. It appears this was the case. Dr Himmat Moond's patient notes record that on 22 April 2016 he rang Canberra Hospital's Neurosurgery Clinic and learnt that John had no forthcoming appointments there. When Dr Moond saw John the next week he reminded him of the need to call the Neurosurgical Clinic for this purpose. However, soon afterwards John was arrested and incarcerated at South Coast Correctional Centre.
75. It is of course important that individuals accept responsibility for their own health care, and that this be encouraged by health clinicians. It is also acknowledged that John had previously missed appointments booked for him at Canberra Hospital.
76. However given the seriousness of John's health situation as disclosed by the Canberra Hospital radiology, and the disruptive circumstances of his life due to his mental health and substance dependencies, there may be a case for health organisations to take a more proactive approach in cases like his. Had this happened in John's case, it is likely he would have received a neurosurgical review during the period he was at South Coast Correctional Centre, several months before his appointment at POWH in March 2017.
77. NSW Coroners have no jurisdiction to make recommendations to persons or organisations outside NSW. However in submissions advanced on behalf of Canberra Hospital, Ms Gerace of Counsel told the court that Canberra Hospital would review the findings made in this inquest, with a view to considering whether any changes to its procedures in this area would be appropriate and feasible.
78. I welcome this invitation, and will forward these findings to the Director-General of Canberra Hospital.

Justice Health

79. I have noted that during John's incarceration from May to September 2016, Justice Health did not take any steps to arrange specialist review of his aneurysms, of which its staff were aware. During this period John did receive appropriate treatment for his other medical and psychological conditions, in particular his hepatitis. Furthermore, Justice Health clinicians may have been under the impression that John was under the active management of Canberra Hospital for his aneurysms. These circumstances provide some explanation for their lack of action.
80. Even so, John's incarceration presented an opportunity for him to receive a timely specialist neurosurgical review of his life threatening condition. It is

for this reason that Counsel Assisting has proposed a specific recommendation which is discussed later in these findings.

81. As regards John's care and treatment during his incarceration commencing in November 2016, this has been described above in some detail. During this period Justice Health staff took active steps to advance the treatment of John's aneurysms. Unfortunately, as noted, Dr Mayer's error in making an incorrect specialist referral resulted in a delay of many weeks before this could happen.
82. Dr Mayer's error provides a further basis for the recommendation proposed by Counsel Assisting. The purpose is to provide clear guidance to visiting GPs that in the rare cases where they are presented with an inmate with aneurysms, neurosurgery is the correct discipline to which that inmate should be referred.

Prince of Wales Hospital

83. In his reports and evidence Dr Besser was critical of certain treatment decisions made in John's case within POWH.
84. His principal criticism was the failure of the MDT members to place John in a higher risk category for rupture. While Dr Besser fully approved Dr Sheldrick's decision to refer John's case to the MDT meeting, he asserted that there was no evidence that the MDT members had taken into account John's additional risk factors of hypertension and coagulopathy, nor the evidence of growth which would have been evident from a comparison between the 2015 and 2016 scans. Had they done so, his condition would have been treated with the urgency it required.
85. I will deal with these criticisms in turn.
86. At the inquest Dr Wilson agreed that hypertension was a risk factor for rupture of an aneurysm, but maintained there was no evidence before the MDT that John suffered this condition. This is correct. As noted, Dr Sheldrick had incorrectly recorded that John did not have hypertension. There is no reason to disbelieve Dr Sheldrick's evidence that when he reviewed John, John had denied having high blood pressure. However it would have been preferable if Dr Sheldrick had followed up his question with further ones which would likely have clarified that John did indeed suffer from hypertension, albeit medicated. This was a missed opportunity to obtain accurate and relevant information for the benefit of the MDT.
87. I note Dr Wilson's evidence, that even had John's hypertension been known to him this would not have altered the MDT's treatment plan or the time table for it. The likely response would have been to direct that John's blood pressure be monitored on a daily basis.
88. Regarding coagulopathy, it is correct that the material presented to the MDT did not record any such impairment. However both Dr Wilson and Dr

Sheldrick asserted that this correctly presented the situation. John's last recorded measurement of his INR (a measure of clotting ability) was taken in February 2017. Although the notation on the report interpreted John's measure as outside the normal range, Dr Wilson and Dr Sheldrick disagreed with this. As a result the evidence remains unclear on this point, and does not enable me to find that the additional risk factor of coagulopathy was present in John's case.

89. Among the medical witnesses however there was no disagreement that progressive enlargement was a strong risk factor for rupture, and was a determinant for urgent intervention. The evidence establishes that this feature was present in John's case. Dr Besser and Dr Dawes had each examined John's scans performed in 2015 and 2016, and confirmed that his large aneurysm was increasing in size.
90. At the review on 6 March 2017 Dr Sheldrick did not elicit from John that relevant radiology had been performed in 2015. Dr Sheldrick was therefore unaware of its existence. It followed that the MDT members were likewise unaware of the critical information which this material would have provided. I have referred to Dr Wilson's evidence, that had he had access to the 2015 scans his treatment plan would have been a much more urgent one.
91. At the inquest Dr Besser declined to be critical of any of the individual doctors for the absence of the 2015 imaging. He acknowledged that developing a proper treatment plan in the absence of sufficient imaging is a difficult task. He regarded the incomplete nature of the material before the MDT as the result of systemic shortfalls which will unfortunately occur from time to time in a public health system that has limited resources.
92. Having carefully reviewed the evidence, I accept that on the basis of the material before the MDT members on 14 March 2017, it cannot be said their treatment decision was an unreasonable one. But it is very unfortunate that a series of missed opportunities led to the absence, at this critical meeting, of material that was highly relevant to John's level of risk. The result was that treatment for John's aneurysms, already delayed, was delayed still further.
93. Dr Besser's remaining criticisms were directed at the systems in place at POWH. In his opinion, John's case demonstrated that POWH did not provide the registrars of its Neurosurgical Clinic with sufficient clinical support and supervision. In his view it would have been better for a patient with John's complex presentation to have been reviewed by a senior specialist.
94. Dr Martin Mackertich, who is the Director of Clinical Services at POWH, gave evidence at the inquest in rebuttal of this criticism. He described the outpatient Neurosurgical Clinic as a '*consultant supervised*' clinic, where registrars have 'in person' access to a consultant at all times. In his view this arrangement represented the most appropriate use of the resources available. Furthermore, as a fourth year neurosurgery registrar Dr

Sheldrick was expected to have the expertise and experience to competently review a patient such as John and prepare his case for presentation to the MDT. Dr Wilson concurred with this opinion, and agreed with Dr Mackertich that a review performed by a consultant rather than an experienced registrar would have made little or no difference to the outcome.

95. Secondly, Dr Besser described as '*poor*' the minuting system used by the MDT members to record their decisions. It did not permit identification of the neuroradiological images discussed for each patient. Nor did it require the members to document their reasons for the treatment decision at which they had arrived.
96. POWH has acknowledged the need for improvements to the quality of the MDT documentation. Dr Mackertich told the inquest that a new template document was being developed at POWH for use at the MDT meetings. The new template will now identify the medical officer who will be responsible for arranging and actioning follow up and assessments. The new template will also require that the imaging which has been reviewed is identified. Discussions are underway as to how the template will also document detail as to the clinical reasons for the treatment plan.
97. These are positive developments, and obviate the need for me to make any recommendations regarding the form of MDT minutes.

Conclusion re care and treatment

98. I accept the submission of Counsel Assisting, that the evidence does not provide a basis for overt criticism of any of the individuals involved in John's care. There were however opportunities for John to have received more timely treatment for his condition of aneurysms, which may have prevented his death.
99. These were, first, the absence while he was in custody of referral to a specialist, followed by referral, during his second incarceration, to an incorrect specialty. John was then subject to a treatment plan which, for the reasons set out above, did not take account of information that was highly relevant to his level of risk and failed to provide him with the urgent response he required.
100. The question then is, whether there is a basis for making recommendations that are necessary or desirable, arising out of John's untimely death.

Question of recommendations

101. At the close of the evidence Counsel Assisting proposed a single recommendation. Three further recommendations were proposed in submissions on behalf of John's family.

Recommendation proposed by Counsel Assisting

102. It was proposed by Counsel Assisting that Justice Health consider introducing a policy that, in cases where an inmate has a known brain aneurysm or where such an aneurysm is discovered during a period in custody, the inmate be referred to the visiting GP as soon as possible, and then be referred for urgent review by a specialist neurosurgeon.
103. The rationale for this recommendation can be found in the evidence. First, as an experienced and caring GP Dr Mayer recognised that John's condition needed urgent referral to a specialist. Unfortunately she selected the wrong type of specialist. The proposed recommendation would provide clear guidance to Justice Health staff as to the appropriate specialty in such cases.
104. Secondly, for reasons which have been described, the South Coast Correctional Centre did not take action to ensure that John's life threatening aneurysms received the early treatment they required. The proposed recommendation would provide clear guidance to Justice Health staff that early specialist referral for this condition is important.
105. Dr Besser and Dr Wilson agreed that visiting GPs could not be expected to make the risk assessment required in such cases, and that it was therefore important for inmates with this condition to be sent for specialist neurosurgical review. Dr Wilson stated further that the incidence of aneurysms within the inmate population is likely very low, and that therefore implementing this policy would not involve a significant increase in resources.
106. This recommendation was supported by John's family. It was not supported by Justice Health, on two grounds.
107. The first was that the proposed recommendation contravened the principle that patients have the right of autonomy over their own health needs, a right that, it was submitted, was not removed when a person entered custody. The question of specialist referral for John had been considered at South Coast Correctional Centre, but John was, on the submission of Mr Bradley, under active management in the community and was content to wait until his release in September 2016.
108. However the evidence does not support that John was under active management at Canberra Hospital while he was an inmate at South Coast Correctional Centre. Even if he was, that will not necessarily be the case with other inmates who live with this life threatening condition.
109. The second basis was that the proposed recommendation was inconsistent with Justice Health policy that treatment pathways for inmates generally be reserved for those conditions where the custodial environment elevates the risk profile for adverse events. On this basis Justice Health has developed treatment protocols for conditions such as asthma and heart disease.

Where this was not the case, there was no basis to develop treatment protocols that were applicable only to GPs working in the prison setting.

110. Contrary to this submission however, the inquest heard evidence that the custodial environment *does* increase the risk profile for inmates with brain aneurysms. Head injury from assault was clearly recognised as a risk factor for rupture when Justice Health staff recommended for John a 'two out' cell placement in a low risk environment.
111. In my view the need for this recommendation is supported by the evidence, including that of the two neurosurgeon witnesses Dr Besser and Dr Wilson. It is appropriate and desirable, and I intend to make it.

The family's recommendations

112. Three further recommendations were advanced on behalf of John's family.
113. The first was that Justice Health ensure that recommendations are made to Corrective Services NSW to detain prisoners with known life-threatening conditions at a metropolitan correctional centre. Underpinning this recommendation is the distress John's family must have felt, knowing that when he suffered his fatal rupture he was at Bathurst Correctional Centre and had to be air-lifted to an appropriate treating hospital in Sydney.
114. The family's distress is very understandable, but I do not consider this recommendation can feasibly be made in this inquest. I did not hear evidence of how many NSW inmates suffer a life threatening condition, by comparison with the number of placements available in metropolitan prisons. In addition there are no doubt many other factors to be taken into account when deciding inmate placement, including proximity to family. The evidence was not sufficient for me to be able to find this recommendation to be appropriate.
115. The second proposal was that the Minister for Health review funding for Justice Health GP clinics to ensure they can provide the highest standard of general care.
116. At the inquest Dr Mayer told the court that while working at the Main Clinic at South Coast Correctional Centre she was often rushed, sometimes had to borrow equipment from other consulting rooms at the Clinic, and usually could not access the midday peer support teleconference because she was reviewing patients.
117. Despite this, I did not hear sufficient evidence to be in a position to find that the Clinic was not sufficiently resourced.
118. Thirdly, it is proposed that the Minister for Health advocate for discussion of improved medical record sharing at the national level. This proposal was prompted by the absence of the 2015 scans when the MDT members formed their risk assessment of John's condition. The family's submission

was that there did not appear to be any system for the POWH staff to search for and obtain John's medical images from Queensland. The consequences of the absent 2015 scans were indeed very significant.

119. It appears to me however that improved medical record sharing was the purpose of the My Health Record scheme, implemented nationally in 2016. The scheme provides for a centralised database of personal health records, and allows a healthcare provider such as POWH to access online a patient's records from elsewhere in Australia.
120. It is possible that in 2017 there was not yet sufficient capacity for this scheme to be used by POWH staff to identify and access John's 2015 scans. I did not hear evidence on this point, or on the related one of whether this course would now be possible and would remedy the problem exposed in this inquest. Given the uncertainty, I am not able to adopt this proposal.
121. Finally, there were two other matters that did not go to the manner of John's death, but were important to his family. The first was Dr Mayer's request in 2016 that John's children be made aware of his aneurysms and consider being screened for it. For reasons which are unclear, Dr Mayer's request was not put into action. Certainly John's daughter and son were unaware of it. This was an unsatisfactory failure of communication.
122. Secondly, John's daughter A and his son B experienced additional distress during John's last days and hours, by behaviour of the attending Corrective Services officers which they found discourteous and insensitive. A wrote that while she and B were with John, the officers in the hospital room were watching videos on their mobile phones with the volume turned up. At times they were laughing. This was hurtful and distressing to A and B as they attended their father in his last hours.
123. Mr Terrence Murrell, General Manager of Corrective Services' Statewide Operations, provided evidence of policies which mandate courteous and respectful behaviour on the part of officers who are supervising an inmate patient. He advised that in response to the concerns raised by A, the current policies have been referred for review. This will involve consideration of whether further training of officers is required. The family welcomed this response, as do I.

Conclusion

In closing, and on behalf of the coronial team, I offer my sincere and respectful sympathy to John's family. I hope this inquest has answered some of the questions that have concerned them and which have added to their sadness at his loss.

I acknowledge the excellent assistance I have received from Counsel Assisting the inquest Dr Dwyer and Ms McGee of NSW Crown Solicitor, and also from the other

legal representatives appearing in the inquest. I also thank Detective Sergeant Andrew Tesoriero for his investigation and preparation of the matter for inquest.

Findings required by s81(1)

As a result of considering all of the documentary evidence and oral evidence heard at the inquest, I am able to confirm that the death occurred and make the following findings in relation to it.

Identity

The person who died is John Laurenson.

Date of death:

John Laurenson died on 20 June 2017.

Place of death:

John Laurenson died at Royal Prince Alfred Hospital, Camperdown Sydney.

Cause of death:

John Laurenson died as a result of the sequelae of a ruptured brain aneurysm.

Manner of death:

John Laurenson died of natural causes, at a time when he was a prisoner on remand at Bathurst Correctional Centre.

Recommendation pursuant to section 82 of the Act

To the CEO, Justice Health and Forensic Mental Health Network:

That consideration be given to introducing a policy requiring that where an inmate has a known brain aneurysm, or where a brain aneurysm is identified during an inmate's period of custody, the inmate is referred to a GP Clinic as soon as possible and then referred for urgent review by a specialist neurosurgeon.

I close this inquest.

E Ryan

Deputy State Coroner
Lidcombe

Date 31 March 2021