CORONER'S COURT
OF NEW SOUTH WALES

Inquest:	Inquest into the death of Peter Gretton
Hearing dates:	15 to 19 May 2023; 14 June 2023
Date of Findings:	1 August 2023
Place of Findings:	Coroner's Court of New South Wales, Lidcombe
Findings of:	Magistrate Derek Lee, Deputy State Coroner
Catchwords:	CORONIAL LAW – death in custody, cause and manner of death, metformin toxicity, renal impairment, care and treatment of inmate patient, vital sign observations, blood glucose level test, recognition of deteriorating patient, communication between clinicians, escalation of care, pathology collection and results, *Health Practitioner Regulation National Law (NSW)*
File number:	2019/2380
Representation:	Ms A Horvath SC, Counsel Assisting, instructed by Ms R Campbell (Crown Solicitor's Office) Ms T Berberian for The GEO Group Australia Pty Ltd, instructed by Sparke Helmore Lawyers Ms K Doust (NSW Nurses & Midwives Association) for Registered Nurse L Magazini Ms M Gerace for Justice Health & Forensic Mental Health Network, instructed by Makinson d'Apice Lawyers Ms L McFee for Dr N A Wahba, instructed by Barry Nilsson Lawyers

Findings:	Peter Gretton died on 2 January 2019 at Wagga Wagga Base Hospital, Wagga Wagga NSW 2650. The cause of Mr Gretton's death was complications of metformin toxicity on a background of undiagnosed renal impairment in a man with dilated cardiomegaly and coronary atherosclerosis, with diabetes mellitus and hypertension being significant conditions contributing to the death. Mr Gretton died of natural causes whilst in lawful custody serving a sentence of imprisonment. The precise cause of Mr Gretton's renal impairment cannot be determined on the available evidence although it is most likely that it developed within three to four weeks of 2 January 2019, and was progressive. This renal impairment was an underlying reason for the subsequent development of metformin accumulation and toxicity, resulting in severe biochemical derangements, in particular lactic acidosis and significant kidney failure.
Recommendations made pursuant to section 82, *Coroners Act 2009*	See Appendix A
Non-publication orders:	See Appendix B

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1. Introduction

1.1 Peter Gretton was in lawful custody serving a sentence of imprisonment at a correctional centre at the time of his death. In the early hours of the morning on 2 January 2019, Mr Gretton experienced chest pains and felt lightheaded and unwell. He sought assistance from correctional officers and healthcare staff and was taken to a clinic for treatment and observation.

1.2 Over the next several hours, Mr Gretton's condition continued to deteriorate, ultimately resulting in him being transferred to hospital shortly after 7:30am. Mr Gretton subsequently went into cardiac arrest. Despite eventually being stabilised, Mr Gretton's prognosis remained poor and he made no meaningful recovery. Despite all interventions, Mr Gretton suffered a second cardiac arrest that evening and was tragically pronounced life extinct.

2. Why was an inquest held?

2.1 Under the *Coroners Act 2009* (**the Act**) a Coroner has the responsibility to investigate all reportable deaths. This investigation is conducted primarily so that a Coroner can answer questions that are required to be answered pursuant to the Act, namely: the identity of the person who died, when and where they died, and what was the cause and the manner of that person's death.

2.2 When a person is charged with an alleged criminal offence, or sentenced after being convicted of a criminal offence, they can be detained in lawful custody. By depriving that person of their liberty, the State assumes responsibility for the care of that person. Section 23 of the Act makes an inquest mandatory in cases where a person dies whilst in lawful custody. In such cases the community has an expectation that the death will be properly and independently investigated.

2.3 A coronial investigation and inquest seeks to examine the circumstances surrounding that person's death in order to ensure, via an independent and transparent inquiry, that the State discharges its responsibility appropriately and adequately. This type of examination typically involves consideration of, where relevant, the conduct of staff from Corrective Services New South Wales (**CSNSW**) and Justice Health & Forensic Mental Health Network (**Justice Health**).

2.4 Mr Gretton was being held in lawful custody at Junee Correctional Centre (**Junee CC**) at the time of his death. Junee CC is managed by The GEO Group Australia Pty Ltd (**GEO**) under contractual arrangements with CSNSW. GEO provides health services to inmates at Junee CC under that contract and did so at the time of Mr Gretton's death. The coronial investigation sought to understand the circumstances which preceded the events of 2 January 2019 as well as, the care and treatment provided to Mr Gretton after he was taken to the clinic at Junee CC and before he was transferred to hospital.

2.5 In this context it should be recognised at the outset that the operation of the Act, and the coronial process in general, represents an intrusion by the State into what is usually one of the most traumatic events in the lives of family members who have lost a loved one. At such times, it is reasonably expected that families will want to grieve and attempt to cope with their enormous loss in private. That grieving and loss does not diminish significantly over time. Therefore, it should be

acknowledged that the coronial process and an inquest by their very nature unfortunately compels a family to re-live distressing memories several years after the trauma experienced as a result of a death, and to do so in a public forum. This is an entirely uncommon, and usually foreign, experience for families who have lost a loved one.

2.6 It should also be recognised that for deaths which result in an inquest being held, the coronial process is often a lengthy one. The impact that such a process has on family members who have many unanswered questions regarding the circumstances in which a loved one has died cannot be overstated.

3. Mr Gretton's life

3.1 Inquests and the coronial process are as much about life as they are about death. A coronial system exists because we, as a community, recognise the fragility of human life and value enormously the preciousness of it. Understanding the impact that the death of a person has had on those closest to that person only comes from knowing something of that person's life. Therefore, it is important to recognise and acknowledge the life of that person in a brief, but hopefully meaningful, way.

3.2 Mr Gretton was born in Australia but moved to the Malay Peninsula when he was a young child as his father was employed by the Royal Australian Airforce. The family later moved back to Australia and Mr Gretton completed primary and secondary school in Penrith.

3.3 Mr Gretton was a keen sportsperson. He played golf and hockey throughout school, and enjoyed surfing. When Mr Gretton finished school, he found work in a bank where he met his wife, Janet. They married several years later, and had three daughters together, Kristy, Jody and Ashley. Mr Gretton was a devoted husband and father. He worked a second job to support his family.

3.4 In 1991, Mr Gretton and his family moved to Albury after Mr Gretton received a promotion at work. He continued to play hockey, water polo and golf. Gretton was also known to enjoy fishing.

3.5 After receiving a redundancy, Mr Gretton pursued further study and obtained a diploma in accounting. He later obtained further employment and received a second redundancy. Unfortunately, Mr Gretton subsequently encountered financial difficulties and by the late 1990s, Mr Gretton was performing casual work to make ends meet.

3.6 In around 2000, Mr Gretton and his wife separated. This was a particularly difficult time for Mr Gretton. He later found work in the real estate industry, followed by work as an accountant. In around 2002 or 2003, Mr Gretton commenced a new relationship. This relationship later ended in 2017.

3.7 Mr Gretton's daughter, Jody, describes Mr Gretton as someone who knew how to make people laugh and who never took life too seriously. He was a kind and gentle soul, compassionate, empathetic and selfless. He was a loving father who imparted many life skills on his children. Jody has a particularly fond memory of when her father taught her how to ride a bike and seeing the delight on his face when she was able to ride without training wheels. This skill was followed by many others which Mr Gretton taught to his daughters: fishing, swimming, water skiing and driving.

3.8 Mr Gretton also coached his daughters' hockey teams. He had a strong sense of community and was involved in many sporting clubs, often holding official positions within them.

3.9 It is fitting to end with the beautiful words that Ashley shared at the conclusion of the inquest to describe her father:

> Dad was the soul of our family and our safe place. He was a humble and simple man. He grounded us and made us feel secure each in our own ways. He supported us all in chasing our dreams and helped us believe in ourselves. He protected us through life's ups and downs, and always knew how to put a smile on our faces. I'll take peace in the thousands of joyful memories that dad left us with and cherish his cheeky grin forever.

4. Mr Gretton's medical and custodial history[1]

4.1 Mr Gretton had a history of hypertension, atrial fibrillation, type 2 diabetes mellitus and hemochromatosis. Mr Gretton had been a smoker for about 20 years and drank heavily following his separation from his wife. In the five years before he entered custody, Mr Gretton was able to reduce his alcohol intake.

4.2 On 30 November 2017, Mr Gretton was arrested and charged with a number of dishonesty offences. He was later convicted and sentenced to a term of imprisonment of 4 years and 6 months, with a non-parole period of 2 years and 3 months. Ms Gretton entered custody at Junee CC on 24 May 2018. This was Mr Gretton's first time being incarcerated.

Reception into custody

4.3 Upon reception into custody, Mr Gretton underwent an initial health screening performed by Registered Nurse (**RN**) Loice Magazini which noted the following:

(a) Mr Gretton weighed 93.6 kilograms;

(b) His blood pressure was elevated at 149/75;

(c) His blood glucose level (**BGL**) was elevated at 8.9 mmol/L;

(d) He was taking medication for hypertension and diabetes; and

(e) He had been seeing a general practitioner (**GP**) at Lavington Clinic (**Lavington**) in Albury.

4.4 RN Magazini completed a Health Problem Notification Form (**HPNF**) which provided the following information to correctional officers regarding "*signs/symptoms to look for in this inmate*":

> First time in jail
> Diabetic – on med and
> Hypertensive – on meds

[1] This factual background has been drawn from the helpful opening submissions of Senior Counsel Assisting.

4.5 On or around 5 June 2018, RN Alisha Girdlestone completed two forms in relation to Mr Gretton: an Remote Site Assessment (**RSA**) and a further HPNF.

Transfer to Mannus Correctional Centre

4.6 On 7 June 2018, Mr Gretton was transferred to Mannus Correctional Centre (**Mannus CC**). At 11:50am on that day, during an intake screening, Mr Gretton's history of diabetes was noted. His BGL was checked and noted to be elevated at 7.7 mmol/L.

4.7 The following day, Mr Gretton was seen by Dr Krishnaswamyrao Suresh Badami. Mr Gretton's BGL was checked again and noted to be 6.7 mmol. A HbA1c blood test (a test used to diagnose type 2 diabetes) was ordered for Mr Gretton and arrangements were made for a diabetic review to occur on 17 June 2018.

4.8 On 13 June 2018, Mr Gretton's BGL was checked again and noted to be 3.1 mmol/L.

4.9 On 17 June 2018, RN Leanne Harmer-Annetts conducted a chronic disease screen for Mr Gretton. It was noted that Mr Gretton had a family history of hypertension, chronic kidney disease and Multiple Sclerosis. His weight was recorded as 91.6 kg and his blood pressure as 114/74. Mr Gretton's BGL was noted to be 7.7% from the HbA1c test, which was above the recommended range.

4.10 On 24 June 2018, RN Angela Crosthwaite made three attempts to perform an electrocardiogram (**ECG**) for Mr Gretton. The ECG was initially abandoned because a clear result could not be obtained, However, a ECG was eventually successfully performed and Mr Gretton was placed on a waitlist for a medical officer to review the ECG results.

4.11 On 3 August 2018, Dr Badami saw Mr Gretton again. Dr Badami noted the elevated BGL reading from the HbA1c test but considered that it could be managed with medication. Mr Gretton was advised to take his medication nightly with food for the next three months to see whether that lowered his HbA1c.

4.12 On 5 August 2018, Mr Gretton's BGL was noted to be elevated at 10.4 mmol/L. When Mr Gretton was retested the following afternoon, his blood sugar level had dropped to 4.6 mmol/L.

4.13 Between 1 September 2018 and 22 October 2018, Mr Gretton was seen by nursing staff on 14 occasions for a number of complaints including various injuries and pain in the elbow, groin and knee. He was given medication for pain relief. However, there is no evidence that Mr Gretton's BGL was checked during this period.

Review on 23 October 2018

4.14 On 23 October 2018, Mr Gretton underwent an ECG test and was later reviewed by Dr Mary-Frances Foley via a telehealth appointment. Dr Foley noted that Mr Gretton's BGL that day was 5.8 mmol/L. Dr Foley diagnosed that Mr Gretton had slow atrial fibrillation and prescribed five days of clexane, followed by medication for Mr Gretton's atrial fibrillation and high blood pressure, and Metformin for his diabetes.

4.15 Dr Foley also made the following requests:

(a) Mr Gretton's medical records from Lavington. An authority, which had previously been signed by Mr Gretton, was re-signed and sent to Lavington the following day;

(b) Mr Gretton's pathology results, specifically thyroid function tests, liver function tests, full blood count and electrolytes, urea and creatinine. Dr Foley noted that these results were required with some urgency and were to be attached to a request that Mr Gretton needed to be reviewed again after his blood had been taken.

4.16 On 24 October 2018, Justice Health requested Mr Gretton's medical records from Lavington. On the same day, a summary of Mr Gretton's records were sent by Lavington. These records indicate that when Mr Gretton was last seen in late 2017:

(a) his father had died of renal failure;

(b) his medication remained unchanged at the time that he entered custody;

(c) he underwent a series of tests every six months with his BGL results in the range of 6.9 and 7.4 mmol/L (which was slightly above the target range for diabetes control); and

(d) there was no reference to Mr Gretton having slow atrial fibrillation.

4.17 There is no evidence that the records from Lavington were ever reviewed by either Justice Health or GEO staff.

Return to Junee Correctional Centre

4.18 On 1 November 2018, Mr Gretton was transferred from Manus CC back to Junee CC due to his decreased mobility.

4.19 On 2 November 2018, Mr Gretton was seen by Dr Darren Corbett, a GP, in relation to ongoing knee pain. An x-ray was ordered but no blood tests were requested as Dr Corbett noted that Dr Foley's order for blood tests from 23 October 2018 was still "*pending*".

4.20 On 27 November 2018, RN Nicole Clark collected blood from Mr Gretton for the tests ordered by Dr Foley on 23 October 2018. RN Clark noted that Mr Gretton weighed 75 kilograms. This represented a significant weight loss from May 2018 when it was recorded that Mr Gretton weighed 93.6 kilograms

4.21 On 28 November 2018, Mr Gretton was seen by a GP, Dr Nachaat Anwar Wahba, to discuss his x-ray results and a knee sprain. There was no discussion regarding Mr Gretton's diabetes, atrial fibrillation, hypertension or his rapid weight loss.

4.22 On 28 December 2018, Mr Gretton was moved to a new cell. His cellmate noted retrospectively that Mr Gretton spent a significant amount of time in bed and appeared to have some form of medical condition.

4.23 On 31 December 2018, Mr Gretton called his daughter, Kristy, and was noted to be extremely upset and distressed. Mr Gretton stated that his cellmate wanted him out of the cell and that he was struggling to understand his cellmate or to get along with him.

5. The events of 2 January 2019

5.1 In the early hours of the morning (possibly at around 2:00am) on 2 January 2019, Mr Gretton woke and went to the basin in his cell to wash his face and pour a cup of water over his head. These movements woke up Mr Gretton's cellmate. Mr Gretton told his cellmate that he had possibly hurt his hip.

5.2 A short time later, Mr Gretton used the call button in his cell to seek assistance from correctional officers. Mr Gretton reported experiencing chest pain, and feeling lightheaded and unwell. The correctional officer who answered the call told Mr Gretton to sit or lie down and that staff were on their way.

Attendance at Mr Gretton's cell

5.3 Correctional officers went to inform RN Magazini, who was the nurse on night shift duty. RN Magazini left the clinic where she was based at 2:49am. Approximately two minutes later, a number of correctional officers arrived at Mr Gretton's cell. He was found sitting on the edge of his bed, wearing only underpants, and appeared flushed and in pain. Mr Gretton was also observed to be rubbing the centre and left side of his chest, and to be complaining of chest pain. One of the attending correctional officers used a hand held video camera to record Mr Gretton.

5.4 RN Magazini went into the cell, performed a brief assessment, after which she asked for Mr Gretton to be taken to the clinic. Although RN Magazini was of the view that Mr Gretton was not clammy or sweating, one of the correctional officers in attendance, Correctional Officer (**CO**) Cosmas Ntini, noted that Mr Gretton's bed was wet and that he had removed all of his clothing other than his underpants.

5.5 Mr Gretton dressed himself but appeared unsteady on his feet. He was able to move unassisted and sit down in a wheelchair which had been brought by the attending correctional officers. However, it was noted that his movements were slow and tentative and that he remained flushed.

Arrival at the clinic

5.6 Mr Gretton was taken to the clinic by wheelchair and arrived at 2:56am. He slowly moved onto a gurney and was observed to be in obvious pain.

5.7 RN Magazini took Mr Gretton's vital signs and noted that his blood pressure was 152/95, pulse was 100, oxygen saturation was 98%, temperature was 36.2 and respiratory rate was 20. Mr Magazini asked Mr Gretton where he was feeling pain. Mr Gretton ran his hand over his chest from left to right and back again and indicated that his pain score was a 7 out of 10.

5.8 These observations were recorded on a Standard Adult General Observation (**SAGO**) chart as having been taken at 3:30am. These observations meant that Mr Gretton's blood pressure and pain level

were in the Yellow Zone, whilst his BGL was extremely low and equivalent to also being in the Yellow Zone.

5.9 RN Magazini left the treatment room for a short time and returned with a cup of water and some aspirin for Mr Gretton. Mr Gretton drank the water with dissolved aspirin and requested more. At around 3:04am, Mr Gretton was recorded on handheld footage to be groaning and complaining of pain, indicating that it was still a 7 out of 10.

5.10 At some stage, RN Magazini attempted to perform an ECG. However, due to his pain, Mr Gretton was unable to lie still so that a reading could be obtained. Later, an ECG was able to be performed.

5.11 RN Magazini gave Mr Gretton a nitroglycerin tablet to put under his tongue to relieve his chest pain and angina. Although Mr Gretton initially had difficulty holding the tablet he was eventually able to place it under his tongue. Mr Gretton subsequently indicated that he was thirsty and requested more water, and was provided with some.

5.12 At around 3:31am, Mr Gretton was taken to a bathroom by wheelchair to use the toilet. CCTV footage shows Mr Gretton needing to hold onto the toilet surround in order to steady himself. Mr Gretton returned approximately five minutes later.

First call to Dr Wahba

5.13 At some stage prior to 4:00am, RN Magazini called Dr Wahba and received advice to give Mr Gretton a 5mg tablet of Endone. RN Magazini retrieved the drug from the drug safe and gave it to Mr Gretton. At that time, Mr Gretton reported that his pain level was still 7 out of 10, with the pain still in his chest but slightly lower. After swallowing the tablet, Mr Gretton later stated that the pain had moved lower and was in his abdominal area.

5.14 At around 3:38am, Mr Gretton was again assisted to the bathroom by wheelchair to use the toilet. He was again noted to be unsteady and holding his head. Mr Gretton returned at around 3:57am.

5.15 At around 4:15am, RN Magazini checked Mr Gretton's BGL and noted that it was extremely low at 1.4 mmol/L. However, on the SAGO chart it was noted that Mr Gretton's blood sugar level was 2.3 mmol/L at 4:10am, with a reading of 1.4 mmol/L at 3:30am.

5.16 RN Magazini gave Mr Gretton three glucose tablets and a glass of milk. At around this time RN Magazini took further observations of Mr Gretton with the following results:

(a) respiratory rate had dropped to below 20;

(b) oxygen saturations had dropped to 97%;

(c) blood pressure was still raised at 153/98;

(d) heart rate had dropped to 98; and

(e) temperature was just below 36.

5.17 On the basis of the above vital signs measurements, Mr Gretton's blood pressure, pain score and BGL all still remained in the Yellow Zone.

5.18 Between 4:19 AM and 4:25am, Mr Gretton was assisted to the bathroom again, and he was again noted to be unsteady on his feet, needing to hold onto the sink.

5.19 It appears that RN Magazini tested Mr Gretton's blood sugar level again at around 4:35am and obtained a reading of 2.3 mmol/L.

Second call to Dr Wahba

5.20 Around this time, RN Magazini called Dr Wahba again and reported that she had checked Mr Gretton's BGL which was 1.4 mmol/L. RN Magazini indicated that when she gave Mr Gretton a glucose tablet, his chest pain resolved and had not returned, and that his BGL had improved to 2.3 mmol/L. RN Magazini also reported that Mr Gretton was feeling better with no shortness of breath, and was calmer, less anxious, alert, oriented and stable. Although Mr Gretton's chest pain had resolved, he was now reporting abdominal pain which had troubled him for the previous few days as he was constipated.

5.21 Dr Wahba enquired about the results of a troponin test but RN Magazini indicated that it had not been performed because Mr Gretton's chest pain had resolved. Dr Wahba informed RN Magazini that a troponin test was still required and to advise him of the results. Dr Wahba also instructed RN Magazini to give Mr Gretton intravenous glucose 50% because his BGL results were still in the hypoglycaemic range.

5.22 According to RN Magazini, Dr Wahba only instructed her to administer the glucose solution to Mr Gretton. RN Magazini gave Mr Gretton three more glucose tablets with milk sometime between around 4:50am to 5:06am. RN Magazini reported that Mr Gretton's blood sugar level remained at 2.3 mmol/L but this was not documented.

5.23 Between 4:48am and 4:54am, Mr Gretton was taken to the toilet again by wheelchair. He once again was holding his head and had difficulty standing, needing to hold onto the sides of the door to stabilise himself.

Third call to Dr Wahba

5.24 RN Magazini states that she called Dr Wahba again at around 5:39am. He reportedly told her to administer 50mls of a 50% glucose solution to Mr Gretton. Between about 5:45am and 5:55am, RN Magazini tried unsuccessfully to insert a cannula into Mr Gretton's arm, but was unable to do so because his veins had collapsed.

Fourth call to Dr Wahba

5.25 Sometime around 6:00am, RN Magazini called Dr Wahba again. At this time, Dr Wahba offered to come in to the clinic and attend Mr Gretton.

5.26 At around this time, RN Magazini recorded a third set of observations which noted that Mr Gretton's:

(a) oxygen saturations had dropped to 96%;

(b) blood pressure had dropped to 105/65 (which was now in the Red Zone);

(c) heart rate had dropped to 80;

(d) temperature was about 35.8°;

(e) BGL was 2.6 mmol/L; and

(f) pain score was still a 7 out of 10.

5.27 Between 5:45am and 6:30am, Mr Gretton was recorded on the handheld camera footage to be breathing deeply with a markedly abnormal deep sighing pattern. His respiratory rate was also not normal and indicative of ongoing and severe pain. Mr Gretton appeared restless and attempted to remove his oxygen mask. He eventually removed his t-shirt and his legs appear to be covered in sweat whilst his cheeks remained flushed.

5.28 GEO records indicate that Dr Wahba arrived at Junee CC at 6:52am and reached the clinic at 6:57am. At this time, Mr Gretton was complaining of lower abdominal and upper lumbar midline back pain.

Transfer to hospital

5.29 At 7:07am, an ambulance was called. By 7:13am, Mr Gretton's blood pressure had dropped to 105/65. Following the arrival of paramedics, Mr Gretton was placed in an ambulance by 7:49am for transfer to Wagga Wagga Base Hospital (**WWBH**).

5.30 Whilst en route to hospital, Mr Gretton went into cardiac arrest. He was intubated and ventilated with resuscitation efforts commenced. Mr Gretton arrived at WWBH shortly before 9:00am. He was stabilised and a computed tomography (**CT**) scan of the brain showed no evidence of traumatic cranial injury or other significant pathology.

5.31 However, blood tests revealed significant metabolic acidosis. Mr Gretton was noted to have a pH of 6.49 with elevated lactate of 23. Mr Gretton's renal function tests were also significantly elevated.

5.32 During the imaging procedures, Mr Gretton's blood pressure fell. He was given intravenous adrenaline and transferred to the intensive care unit. Throughout the day, Mr Gretton's blood pressure continued to decline.

5.33 Following consultation with medical staff at St Vincent's Hospital in Sydney, it was considered that Mr Gretton was a poor candidate for extracorporeal membrane oxygenation (**ECMO**) due to his prolonged period of cardiac arrest and the significant likelihood of a poor neurological outcome.

5.34 Mr Gretton's cardiac function continued to deteriorate. Despite all interventions, Mr Gretton suffered a fatal cardiac arrest at 6:56pm and was later, tragically, pronounced life extinct.

6. Postmortem examination

6.1 Mr Gretton was later taken to the Department of Forensic Medicine at Newcastle where a post-mortem examination was performed by Dr Hannah Elstub, forensic pathologist, on 9 January 2019. The post-mortem examination revealed the following relevant findings:

(a) an enlarged heart with a dilated right and left ventricle, together with a thickening of the left ventricle and inter ventricular septum;

(b) significant atherosclerosis of all three major coronary arteries;

(c) biochemical testing confirmed the presence of elevated renal function markers, creatinine and urea, together with elevated beta-hydroxybutyrate indicating ketoacidosis; and

(d) routine toxicology showed an elevated level of metformin within the range seen in cases of metformin toxicity resulting in lactic acidosis.

6.2 Dr Elstub noted that metformin toxicity resulting in lactic acidosis and hypoglycaemia appears to have developed during therapeutic dosing, on a background of previously undiagnosed renal impairment. Dr Elstub considered the renal impairment to be most likely due to systemic hypertension but that diabetes mellitus may have been a contributing factor. Dr Elstub also noted that Mr Gretton had a number of serious underlying medical conditions (including significant coronary atherosclerosis, dilated cardiomyopathy, hypertension and diabetes mellitus) that were likely contributing factors.

6.3 In the autopsy report dated 11 December 2019, Dr Elstub described the cause of death as complications of metformin toxicity on a background of renal impairment in a man with dilated cardiomegaly and coronary atherosclerosis, with diabetes mellitus and hypertension being other significant conditions contributing to the death.

7. What issues did the inquest examine?

6.1 Prior to the commencement of the inquest a list of issues was circulated amongst the sufficiently interested parties, identifying the scope of the inquest and the issues to be considered. That list identified the following issues for consideration:

(1) The adequacy of the medical care provided to Mr Gretton by Justice Health and GEO from the time of his incarceration until 31 October 2018, including the adequacy of the handovers between Justice Health and GEO.

(2) The adequacy of the medical care of Mr Gretton whilst an inmate at Junee CC between 1 November 2018 and 2 January 2019.

(3) The adequacy of the response by GEO and staff at Junee CC to Mr Gretton's acute presentation on 2 January 2019.

(4) The adequacy of the pathology collection processes at each of Junee CC and Mannus CC including a consideration of the following matters:

(a) The process for requesting, collecting and reporting on pathology in each of Junee CC and Mannus CC;

(b) Timeframes for collection and reporting of pathology when pathology is marked as urgent.

(c) What happens to a pathology request or report when an inmate is transferred between facilities?

(d) Does this process change when an inmate is transferred between public and private facilities?

(e) How do Justice Health and GEO interact with external pathology agencies (i.e. Laverty) and what issues are commonly encountered?

6.2 For convenience, some of the issues are dealt with together below.

6.3 In order to assist with consideration of some of the above issues, opinions were sought from the following independent experts:

(a) Professor Anthony Brown, senior emergency medicine physician, senior staff specialist at Royal Brisbane and Women's Hospital Emergency and Trauma Centre ; and

(b) Professor Kate Wyburn, senior staff specialist nephrologist at Royal Prince Alfred Hospital, Head of the Division of Medicine, Deputy Director of Renal Medicine and Head of Kidney Transplantation.

6.4 Both experts provided reports, which were included in the brief of evidence tendered at inquest. Both experts also gave evidence during the inquest.

7. What was the cause and manner of Mr Gretton's death?

7.1 Professor Wyburn opined that Mr Gretton's clinically significant renal impairment occurred within 3 to 4 weeks of 2 January 2019 and was progressive. She considered it more likely that the renal impairment developed prior to, and was an underlying reason for, the subsequent development of metformin accumulation and toxicity. Professor Wyburn was asked whether she could explain how Mr Gretton might have developed acute kidney failure from 27 November 2018 (when his blood tests showed that his kidney function was within the normal range) to his rapid deterioration on 2 January 2019. Professor Wyburn explained:

> So if I have those results, and they were relatively stable and then within the normal range at the end of November, I don't think, without an incident, that you would expect at all for him to have developed that degree of renal failure within that time period at all. And for that reason, I would never have suggested that I repeat the bloods within, you know, a shorter time period than that, which we see.

7.2 When asked why Mr Gretton developed metformin toxicity, given that he had been on metformin for many years, Professor Wyburn opined:

> So, I think it's very hard to be absolute because we don't have any event or medical review between the end of November and the start of the following year. Really, for Metformin toxicity to develop, it would usually be in the context of worsening renal function. Metformin is excreted essentially by the kidneys, so if the kidney function gets worse and the Metformin builds up and toxicity develops. If people get sick for another reason, such as low blood pressure or gastro illness or another sort of antecedent illness, that can also increase the likelihood, I guess, of developing Metformin toxicity. But I think this picture probably looks like the renal function got worse and again, I can't specifically say why. And then as the renal function got worse, the Metformin levels have increased and then it's just progressed, unfortunately, from there.

7.3 Professor Wyburn was asked whether Mr Gretton would have been showing any outward symptoms that his renal function was worsening. She explained:

> So in terms of renal function, unfortunately, in many cases, it's very silent until really there is very little kidney function remaining. So there are very few outward symptoms with chronic kidney disease as kidney disease worsens until you really get to end stage kidney disease. Some people might develop a rash for example, or decreased appetite but a lot of the symptoms otherwise are - particularly with mild to moderate renal disease - are not particularly symptomatic and therefore not particularly noted by others. So it's largely the blood tests that would alert you before the symptoms.

7.4 Professor Wyburn gave evidence that whilst there was evidence of possible early chest infection, she could not be sure whether this presented a contaminated culture. Overall, Professor Wyburn considered that if Mr Gretton had advanced sepsis and deeply established chest infection, this would have been more apparent on the chest x-ray that was performed at hospital, and his oxygen saturations might have been lower.

7.5 Having watched the handheld video footage of Mr Gretton, Professor Brown expressed the view that Mr Gretton's respiratory rate was considerably higher than that recorded on the SAGO chart. Professor Brown explained that a respiratory rate of around 30 would have been a reflection of severe metabolic acidosis that was manifested by a very high lactate, resulting in lactic acidosis. Professor Brown explained that metabolic acidosis causes a compensatory rise in a person's respiratory rate. When asked what steps will be taken for a person with a respiratory rate above 30, Professor Brown explained that a raised respiratory rate is consistent with a number of respiratory problems and by itself does not indicate the cause of the problem, but that it is "*symptomatic of something significant*". Professor Brown went on to explain:

> And there is really a linear relationship, as the respiratory rate goes up, the likelihood of a significant cause goes up until eventually if the respiratory rate is very, very high, the patient will simply not be

> able to keep going and will have a respiratory failure. So that's why we - but I agree with you that you would not be able to say, "Oh, this must be due to lactic acid". All you could say is, "I'm surprised that a man who is not known to be sick until tonight has got a respiratory rate that is double normal", and you would - I think it should be an alert to ask for medical help. And I did suggest in my report that the doctor should have been asked to come in earlier.

7.6 Professor Brown explained that if Mr Gretton had arrived at a hospital emergency department prior to cardiac arrest he would have had a venous blood gas taken on arrival which would have revealed very severe metabolic acidosis. However, Professor Brown acknowledged that this would have presented a very challenging situation to diagnose Mr Gretton with coincidental acute renal failure, due to the cause unknown, with severe metabolic acidosis from lactic acidosis. Professor Brown opined:

> I don't believe that necessarily, there would have been enough time to organise to treat these two conditions fully enough for there to be a difference in outcome. I defer to Professor [Wyburn], that to have been able to deal with an acute renal failure, a massive acidosis, and a seriously sick patient would have required early dialysis, and it's not uncommon for a patient to not survive that, particularly when they are in extremis. So I am not able to say that even had Mr Gretton arrived at an ED – and I worked out perhaps two hours earlier would have been reasonable if he'd been - if the doctor had been called in - I don't believe that he would have survived, and I believe that was the suggestion of Professor [Wyburn] as well, given his biochemical derangements.

7.7 Professor Brown considered that ECMO would not of itself had had any impact on kidney failure or lactic acidosis, and that this would not have been a potential pathway for Mr Gretton's treatment. Professor Brown suggested that even if ECMO had been used, Mr Gretton was still a very seriously ill patient in acute renal failure who may well have not survived.

7.8 Professor Wyburn expressed a similar view that Mr Gretton already had severe lactic acidosis by 2:00am and suspected that his level of lactic acid was already very high by that stage. She considered that an increase over the next few hours would not have "*made a large difference*". Professor Wyburn opined:

> But that degree of lactic acidosis is - I would have said, you know, almost unsurvivable regardless of all the other comorbidities as well. So I don't think that the end result would have been different by a couple of hours; being in the emergency department earlier.

7.9 Professor Brown agreed:

> I don't think there would have been any change at all in his lactic acid in say the last 12 hours. I think it was sitting at an - literally a near fatal level. And I agree with Professor [Wyburn] that this type of lactic acid, where it's not due to a brief circulatory or hypoxic event, this type of lactic acidosis doesn't clear. It's, it's - and that's why it's fatal. Because your body simply cannot sustain metabolic function if it is bathed in acid essentially, and you can't reverse it.

7.10 Professor Brown was unable to provide an explanation for the chest pain which Mr Gretton complained of when he first contacted correctional staff. Professor Brown expressed the suspicion that this pain was related to Mr Gretton's acidosis, or that the possibility of sustaining a high

respiratory rate is exhausting and that could equally manifest as pain. Similarly, the back pain which Mr Gretton complained of whilst in the clinic was "not really a manifestation of acidosis" but may have been a result of him becoming exhausted or may have been an "*unmasked*" musculoskeletal disability that Mr Gretton had been complaining about in September or October 2018.

7.11 **Conclusions:** Mr Gretton's renal function deteriorated in the period immediately preceding 2 January 2019. During this period, Mr Gretton would have shown few outward symptoms of deteriorating kidney function. Although the possibility of advanced sepsis or deeply established chest infection can most likely be excluded, the cause of this acute deterioration is not clear on the available evidence. By 2:00am on 2 January 2019, Mr Gretton already had severe lactic acidosis and it is unlikely that there was any change in his level of lactic acid in the 12 hours preceding his death. During this period, Mr Gretton's lactic acid level was already at a near fatal level.

7.12 If Mr Gretton had arrived at hospital prior to cardiac arrest, a venous blood gas would have revealed very severe metabolic acidosis. It is unlikely that there was sufficient time to treat Mr Gretton's acute renal failure and lactic acidosis so as to materially alter the eventual outcome.

8. Pathology collection processes

8.1 As the Clinical Nurse Consultant in Population Health at Junee CC in late 2018, RN Clark operated a pathology clinic every day where she took between about 10 and 25 pathology collections per day. RN Clark described the process for collection of blood samples from inmates in November 2018 in this way:

(a) a clinician could make a request for an inmate's blood to be taken on the Justice Health electronic Health System (**JHeHS**);

(b) once taken, the clinician who took the blood confirmed on JHeHS that it had been collected;

(c) JHeHS would generate a form and labels for the blood specimen which were printed out and picked up by Laverty twice per day;

(d) Laverty contacted the GP or the medical clinic by phone directly if the pathology results triggered an alert or were of concern;

(e) otherwise, the blood results were faxed to the relevant correctional centre and then scanned and uploaded onto JHeHS for a doctor to review;

(f) the doctor on duty in would see a list of pathology results pending on JHeHS and review them to determine which inmates needed to be seen; and

(g) medical administration staff would book these inmates for an appointment on the Patient Administration System (**PAS**) with a doctor to review their pathology results.

Collection of blood sample from Mr Gretton on 27 November 2018

8.2 Whilst RN Clark took a blood sample from Mr Gretton on 27 November 2018, she has no independent recollection of doing so. RN Clark gave evidence that it was her usual practice to keep track of the blood samples she collected by entering details of them into a pathology register. For Mr Gretton's blood sample, RN Clark recorded that the pathology was ordered by a GP and that it was for the purposes of metabolic monitoring.

8.3 RN Clark was asked how she was advised of the need to collect a blood sample from Mr Gretton, given that the original request was made almost 4 weeks earlier by Dr Foley at a different correctional centre. RN Clark explained:

> Well, normally what happens is on the - when they come in from another gaol, so when a patient - I call them patients - come in from another gaol, they then screened either physically in front of you or at other gaols, but we do it physically, they look at their files, they look at PAS, and they also look at JHEHS and they see what is outstanding and what needs to be followed up.
>
> So, it should occur at the time of the screening process, transferring in and out of prison. So, obviously I didn't do the screening as far as the notes say. I can only assume that on the day - and obviously we shouldn't assume, but on the day, [Endorse Enrolled Nurse (**EEN**) Tracie Cudmore], did a fit for work examination, so an assessment, and obviously during that assessment, she has noticed that, that he had outstanding pathology on the system and she probably has asked me, because she's quite a, you know, a thorough nurse, she actually probably had asked me to do the pathology, so I just did it.

8.4 For her part, EEN Cudmore gave evidence that she could not recall whether she asked RN Clark to take Mr Gretton's bloods or if Mr Gretton was waiting to have his bloods taken. RN Clark gave evidence that in late 2018 it was her experience that pathology marked as urgent (as in Mr Gretton's case) should be available within seven days.

Availability of pathology results

8.5 Ahmad Ismail, a Quality Officer at Laverty, gave evidence that the results for the blood sample taken from Mr Gretton were finalised on 29 November 2018. This is consistent with the expected turnaround time (1 business day) for the blood tests ordered for Mr Gretton, as well as the actual turnaround time (less than 1 business day).

8.6 Mr Ismail gave evidence that, ordinarily, Laverty provides electronic access to blood test results through a web portal called Medway. The blood test results will appear on Medway if the requesting doctor code has a Medway account. However, in Mr Gretton's case the doctor code did not have a Medway account.

8.7 Mr Ismail gave evidence that Mr Gretton's pathology results were not put onto Medway, and were not sent to either GEO or Justice Health by email. Mr Ismail confirmed that having regard to an audit trail for the blood sample collected from Mr Gretton on 27 November 2018, the pathology results were not provided to either GEO or Justice Health prior to 2 January 2019.

Follow-up process for outstanding pathology results

8.8 RN Clark was asked whether there was any system in place in November 2018 to "chase up" pathology results if they had not been received by a correctional centre from a pathology service (in this case, Laverty). RN Clark explained:

> Well, there is really no-one's job. It was just - we - there were some issues obviously back when the system was put into place, that is why I - because I collected so many bloods, I realised that there was an issue, and I had reported it to my health services manager at the time, Jan Temaru, I had done an IT request to Justice Health, I had informed the Laverty director at Wagga, that there was an issue, and obviously it was sort of a - I suppose you can call it ad hoc, it was just like, well, sort of I tried to myself, personally tried to chase up the bloods as often as I could.
>
> So, that's why we created the pathology register, so that we knew who had pathology, who had swabs, what day they were collected on, the reason why, so that's why it's got the "reason", so who's responsible for it, and then that's how it sort of become apparent that were not getting some pathology results

8.9 RN Clark said that if it had been her job to chase up outstanding blood results marked as urgent she would have done so within two or three days. However, she said that it was the responsibility of primary health care clinicians to perform this function.

Applicable policy regarding pathology results

8.10 As at January 2019, GEO did not have its own specific pathology policy. However, RN Clark stated that the medical staff were aware of the pathology collection process and procedure as it was part of the training on using JHeHS arranged by Justice Health. In addition, RN Clark stated that "*everyone knew they had to follow Justice Health's policy*".

8.11 Clause 3.4 of the Justice Health *Pathology Results Management Procedure* states:

> It is the responsibility of the collecting clinician to also place a photocopy of the request form into the Health Centres pathology folder. This folder will hold all requests which have been actioned but for which no results have yet been received. These copies can be carbon copies of the original request, or a photocopy, and will be filed alphabetically by surname.
>
> The pathology folder will be checked each day by a designated staff member. The folder does not need to be checked by the treating clinician, and can be delegated to administrative staff. If results are found to be outstanding greater than seven (7) days, the Nurse in Charge (NIC) or NUM must be advised and the pathology support team is to be notified via email pathology.support@justicehealth.nsw.gov.au or phone (02) 9289-5093 to follow up the result.

8.12 The GEO *Pathology Services* Policy (MP334) was introduced on 13 November 2020. Clause 3.5 of this policy deals with pathology collection and results. Erin Godwin, GEO Health Services Manager at Junee CC, gave evidence agreeing that this policy contains no reference to what steps are to be taken to ensure that outstanding pathology results are not overlooked.

8.13 Ms Godwin was asked whether there would be any difficulty with Junee CC having a weekly review of outstanding pathology results to allow for follow-ups to be conducted with a pathology provider. Ms Godwin indicated the following:

> I don't see an issue. We have gone over – myself and my clinical quality coordinator – the Justice Health procedure, and we have discussed implementing their paper version of a weekly review. However, we believe it would be more efficient if we could find a way with Justice Health on JHeHS, that they're automatically flagged – red flagged if they're not back within a certain amount of days, which is not currently an option.

8.14 However, Ms Godwin went on to explain:

> So currently our GP follows – he comes in at 5.30 in the morning and follows up all pathology requests. And when he doesn't have a result, he contacts myself and we contact Laverty. However, given the Justice Health policy, as I said, my clinical quality coordinator and I have discussed implementing the paper weekly review until we can get an electronic system hopefully organised.

Significance of the pathology results

8.15 The pathology results for the blood sample taken from Mr Gretton on 27 November 2018 did not become available until 15 January 2019, 13 days after Mr Gretton's death. Professor Wyburn expressed the following views regarding these results:

(a) the biochemistry results are in the normal range and demonstrate a normal range of kidney function with no specific concerns raised;

(b) the thyroid function tests are also normal;

(c) the full blood count demonstrates moderate anaemia and thrombocytosis which would warrant follow up and potentially further investigations if persisting or worsening; and

(d) even if the pathology results had been available in November 2018 this would not have impacted Mr Gretton's treatment regime significantly.

8.16 **Conclusions:** It is evident that despite an urgent order being made on 23 October 2018 for blood tests to be performed for Mr Gretton, with the results to be reviewed by a medical officer, a blood sample was not taken from Mr Gretton until 27 November 2018. The reason for this delay is unclear. However it appears that when Mr Gretton presented for a fitness for work assessment, the outstanding request became apparent and was fulfilled by RN Clark.

8.17 Consistent with the expected turnaround time for the urgent tests ordered for Mr Gretton, the pathology results were finalised two days later. Although Laverty had a system in place for the results to be available electronically through the Medway web portal, it appears that because the requesting doctor code did not have a Medway account Mr Gretton's pathology results were not available on Medway. Indeed, the evidence establishes that Mr Gretton's pathology results were not made available to GEO or Justice Health at any time prior to 2 January 2019.

8.18 Even if the pathology results had been made available, the expert evidence establishes that they were not of concern and demonstrated a normal range of kidney function. Importantly, the pathology results would not have impacted Mr Gretton's management in any significant way.

8.19 Notwithstanding, it can easily be accepted that pathology results that were available within two days of a blood sample being taken, but which were not actually made available until approximately six weeks later, potentially poses risks for the management of inmate patients. The evidence establishes that at the relevant time, Junee CC clinicians followed an "ad hoc" system, loosely based on the relevant Justice Health policy which existed at the time, to reconcile blood samples that had been taken from inmate patients with outstanding pathology results.

8.20 Although GEO has since introduced a policy which deals with pathology collection and results, it does not explicitly provide for any guidance or system as to how outstanding pathology results are to be recognised in a timely manner and not overlooked. It is therefore necessary to make the following recommendation.

8.21 **Recommendation:** I recommend to the Managing Director, The GEO Group Australia Pty Ltd, that GEO give consideration to amending the *Pathology Services* Policy (MP334) to provide that pathology requests are to be reviewed weekly by clinical staff to ensure that results are obtained in a timely manner, consistent with pathology service expected turnaround times, and that senior nursing clinicians are to be advised of any outstanding result of more than seven days so that the pathology request can be escalated.

9. Management of Mr Gretton on 2 January 2019

9.1 It is evident from the statements and evidence given by Dr Wahba and RN Magazini that their recollections of their discussions on 2 January 2019 contain a number of inconsistencies.

Dr Wahba's version of events

9.2 Dr Wahba was asked whether, in the approximately 12 months prior to 2 January 2019 that he had been doing on-call overnight shifts, nursing staff had previously asked him to attend the clinic to review a patient. Dr Wahba gave this evidence:

> This is what sort of calls that I can - they, they want me to come for, and usually it is non-urgent thing. If there is urgent I have only one answer: urgent is hospital, this patient is - will be treated in Junee or will not be treated in this place, or will treat in a hospital. This is the fine cut. So this is my role to, okay what the scenario saying, what was the problem after asking several questions, while

this patient is fit to be staying here or not. If he's not here, he's there in the hospital. He's not in the Junee, Junee Medical Centre.

9.3 Dr Wahba gave evidence that on 2 January 2019 he was contacted before 4:00am. He said that he could not recall when he was told that Mr Gretton was diabetic, but understood that he was on medication for diabetes. He said that RN Magazini's description of Mr Gretton's chest pain was not in keeping with a cardiac condition and that further investigation was required. He said that RN Magazini did not tell him that she had checked Mr Gretton's low glucose level.

9.4 Dr Wahba said that he gave no specific instructions as to how frequently Mr Gretton's observations needed to be recorded. However, he gave evidence that his expectation was that observations would occur every 10 to 15 minutes provided that Mr Gretton's condition did not deteriorate.

9.5 Dr Wahba gave evidence that the second call from RN Magazini was about 30 minutes after the first call at around 4:30am. Dr Wahba agreed that RN Magazini told him that she had checked Mr Gretton's BGL which was 1.4 mmol/L. He also agreed that RN Magazini told him that Mr Gretton's chest pain had resolved when given oral sugar.

9.6 Dr Wahba said that he understood that by this time Mr Gretton was complaining of stomach pain. He gave evidence that he was told this was related to Mr Gretton's inability to go to the toilet during the previous two days.

9.7 Dr Wahba gave evidence that he asked RN Magazini about the results of the troponin test and that she told him she had not performed it because Mr Gretton reported that his chest pain had gone. Dr Wahba indicated that the test still needed to be performed and that at a later stage RN Magazini said that she did not know how to use the i-STAT machine (a portable blood analyser that is used to perform critical care test, including cardiac troponin).

9.8 Dr Wahba said that he could not recall RN Magazini advising that she had trouble performing an ECG because Mr Gretton was moving around due to his pain. Dr Wahba gave evidence that he assumed that a cannula had already been inserted because he discussed with RN Magazini giving Mr Gretton glucose intravenously.

9.9 Dr Wahba gave evidence that when he spoke to RN Magazini about 10 to 15 minutes later, he realised that his previous instruction for glucose to be given intravenously had not occurred.

9.10 Dr Wahba gave evidence that between around 5:35am and 5:45am he was not told that Mr Gretton was experiencing pain and wanted relief. Instead, Dr Wahba said that he was told that Mr Gretton had chest pain followed by abdominal pain, that he had been given Panadol and was waiting for it to take effect.

9.11 Dr Wahba said that he left home at around 6:00am and that it takes approximately 30 to 40 minutes to drive to Junee. On this basis, he expressed doubt that he arrived at 6:55am. This is despite GEO records showing that Dr Wahba accessed the front gate at 6:52am and CCTV footage showing Dr Wahba entering the clinic at 6:57am. Notwithstanding, Dr Wahba gave evidence of his belief that he arrived earlier.

9.12 Dr Wahba also gave evidence that:

(a) if he had been told that Mr Gretton had a higher respiratory rate (than 20), then he did not need to review Mr Gretton and he would have instead arranged for Mr Gretton to be transferred to hospital with respiratory distress;

(b) he could not recall being told Mr Gretton could not see, was dizzy and that his vision was blurred;

(c) he could not recall being told that Mr Gretton complained of being lightheaded when he initially reported chest pain whilst in his cell; and

(d) if he had been told that Mr Gretton was dizzy and could not see then he would have advised that there was no need to wait for him to arrive at the clinic, and that an ambulance needed to be called for Mr Gretton to be transferred instead to hospital.

9.13 RN Magazini' solicitor asked Dr Wahba whether, in hindsight, he would attend the clinic earlier if he received a call through the night from a nurse concerned about a patient in a "similar situation". Dr Wahba answered in this way:

> The whole reassurance that I get. I reassured that "Everything is fine, patient is stable, he just have chest pain, just abdominal pain, back pain", without a root of the problem. I don't know the problem so I ask too "Will I come?" This is why I'm asking I come. If the - if I'm having any sign of concern, I will not come, I'm going to send him directly. Why wasting 45 minutes you said about between the gate and the - sorry, between the home and the - why I will wait? I will not wait.

RN Magazini's version of events

9.14 RN Magazini gave evidence that there were no other patients in the clinic overnight on 2 January 2019 apart from Mr Gretton.

9.15 RN Magazini agreed that she did not take any observations of Mr Gretton in his cell. She said that she was aware that Mr Gretton was unsteady on his feet and that he had chest pain could not recall him mentioning any light-headedness. She said that she did not see that Mr Gretton's bed was wet. However she explained that in January it was usually very hot with no conditioning and that it was possible his bed may have been wet for these reasons.

9.16 RN Magazini gave evidence that the first call to Dr Wahba was before or around 3:40am. At that time Mr Gretton had chest pain and she had tried unsuccessfully to perform an ECG. RN Magazini gave evidence that she had given Mr Gretton aspirin and nitroglycerin but that he was still experiencing pain.

9.17 RN Magazini was asked why she did not ask Dr Wahba for help or to attend the clinic at this time. Initially, RN Magazini gave evidence that she did ask Dr Wahba to attend the clinic. When asked why she made no mention of this apparent request in her statement, RN Magazini sought to explain:

> I didn't - I can say, you know, is some informations that you don't tend to document everything. I didn't have the time to put everything on the paper. I was trying to concentrate only very important things because, don't forget I was the only nurse. The nurse we supposed to document, the nurse we supposed to resuscitate the patient, the nurse we supposed to do everything, because I wasn't looking after Mr Gretton only. There were eight hundred and something inmates. If something happens, and, you know, arises, you need to attend to all those things, because you are the nurse who is medically trained and you are working with officers who are officers, one, and non-medical.
>
> So I wouldn't say I managed to document everything. I was focussing only important points. That's the things I was documenting. But ringing doctor, it was, you know, saying I need help, because when you do other things - usually for small things we usually do things without calling them, but on this issue, because I knew I need help, that's why he was telling me give Endone and see - at one point he said "I'm coming", and then he was on his way coming.

9.18 RN Magazini said that she did not remember whether she told Dr Wahba that Mr Gretton's blood sugar level was low at 1.4 mmol.

9.19 RN Magazini acknowledged in evidence that she recorded Mr Gretton's observations at 3:30 AM, 4:10am, and 6:30am. She was asked why no observations were recorded between 4:10am and after 6:00am. Initially, RN Magazini said that this may have been due to the morning shift starting at 6:00am and handover occurring around that time, However, RN Magazini later gave evidence that she could not recall whether she performed any observations during this period.

9.20 RN Magazini agreed that testing Mr Gretton's troponin level of was significant given he complained of chest pain. She also gave evidence that she was aware of the relevant Justice Health *Adult Emergency Response Guidelines* which applied to patients presenting with a clinical emergency and that she was, as at January 2019, familiar with the *Chest Pain Guidelines*. The latter provides for the following:

> **Call ambulance** if 1st presentation, symptoms > 10 mins, or clinically concerned [original emphasis]

9.21 RN Magazini agreed that 2 January 2019 represented Mr Gretton's first presentation with chest pain and that he had been experiencing this pain for at least 40 or 50 minutes. When asked if there was a reason why she did not call an ambulance, RN Magazini explained:

> Like what I said, his pain, he just, he didn't have the chest tightness, the pain wasn't coming to the jaws, he was not sweating and he didn't have the epigastric and upper back pain, so then I had to work around the other symptoms to say -ask him if he open his bowels, because most of the patients, you know, inmates usually present with the chest pain which can be resolved after either they get the Gaviscon or you give them lactose, they open their bowels. So I was trying to look at all these things before I called the ambulance.

9.22 The SAGO chart indicates that RN Magazini recorded Mr Gretton's BGL as 1.4 mmol/L, 2.3 mmol/L and 2.6 mmol/L at 3:30am, 4:10am, and 6:05am, respectively. The *Hypoglycaemia Guidelines* provide that if a patient's BGL is less than 4 mmol/L and is responding to commands that BGL tests are to be repeated every 15 minutes until the results are within range.

9.23 It is evident that RN Magazini's entries in Mr Gretton's SAGO chart do not record BGL results with such frequency. When asked about this evidence, RN Magazini referred to her progress notes entry which records the following:

> At 0415hrs the sugar (BGL) was checked it was 1.4 mmol/L, three glucose tablets given followed with a glass of milk. He was still conscious talking. After 15 mins the sugar went up to 2.3 mmol/L 0435hrs. The above regiment was repeated at 450hrs and the sugar remain [sic] at 2.3 mmol/L. Dr on call informed Glucagon given at 0520hrs, sugar was 1.9 mmol/L, repeated again at 0535 hrs remain at 1.9 mmol/. Dr on call informed again ordered to give Glucose 50% 50mls after 10mins sugar checked it was 2.6 mmol/L.

9.24 As to why she did not document these results on the SAGO Chart, RN Magazini initially said:

> Yes, like the other ones between 15 minutes, because there was no way to record the 15 minute one in between because I was following the time that was there, I, I didn't put them. Like the 1.9, if you look on my statement, the other ones are in the statement, they are not on the chart, on the chart.

9.25 However, RN Magazini then went on to say the following:

> Like I, I didn't have time to you know, just really follow all the documentation, because I, I was supposed to share my time between documentation and the patient.

9.26 RN Magazini agreed that the *Chest Pain Guidelines* indicate, that as part of a patient's management, a 14-16g IV cannula is to be inserted if possible. RN Magazini agreed in evidence that the first time she attempted to insert a cannula was at some point after 5:30am (and that she was unable to do so because Mr Gretton's veins were collapsed) and she had not tried to insert a cannula at any earlier point in time.

9.27 RN Magazini gave evidence that she was concerned that Mr Gretton's abdominal pain may have been because he had not had a bowel movement. However, when asked whether she was aware that Mr Gretton had been to the toilet several times in the early hours of the morning on 2 January 2019, RN Magazini said that she could not recall. RN Magazini also gave evidence that she could not recall whether Mr Gretton had opened his bowels or whether he had soiled himself.

9.28 RN Magazini agreed that she did not check Mr Gretton's troponin levels at any stage. She gave evidence that she was overwhelmed and that she may have skipped some procedures. RN Magazini also gave evidence that she could not recall telling Dr Wahba that she did not know how to use the i-STAT machine. RN Magazini gave evidence that she "*used to use it and check it as well*".

9.29 It was suggested to RN Magazini that she had not, at any time prior to 6:00am, asked Dr Wahba to attend the clinic. RN Magazini rejected this and said that Dr Wahba kept instructing her to administer glucose to Mr Gretton, and that Dr Wahba told her that he was on his way. It was pointed out to RN Magazini that she did not document anywhere in her statement that she had asked Dr Wahba to come in.

9.30 RN Magazini initially agreed that she did not do so, and sought to explain that as her statement was made in 2022, she could not recall all the events of 2 January 2019. RN Magazini gave evidence that

she "*overlooked*" including her request to Dr Wahba in her statement. When asked why she was able to recall this request in 2023 at the time of the inquest and not in 2022, RN Magazini sought to explain that when the handheld video footage of Mr Gretton was played during her evidence it refreshed her memory, and that Mr Gretton's death had affected her.

9.31 As to the video footage itself, RN Magazini agreed that it showed Mr Gretton breathing hard and intensely, and that he was in respiratory distress with a high respiratory rate. RN Magazini also agreed that Mr Gretton's respiratory rate could not have been between 15 and 20, and that it was more like above 30. RN Magazini gave evidence that she could not recall whether she told Dr Wahba that Mr Gretton was in respiratory distress, or that he had complained of dizziness and blurred vision.

9.32 It was suggested to RN Magazini that before her last phone call with Dr Wahba, there was no discussion regarding him attending the clinic. RN Magazini gave this evidence regarding any conversation with Dr Wahba prior to 6:00am about him coming in:

> I can't say the discussion wasn't there because I can't justify because it's not written there but I know that I was calling him to come in. That's my first call, yes I told him that the patient got this and that and I was told to give the Endone, and then Endone didn't work, and then that's when he, he start to say "I'm coming in", but along that way he was giving me orders of what to do. Try the cannula, and I said the cannula is not working. "Give the glucagon", and given the glucagon and then give the glucose but he was on his way to come in.

9.33 RN Magazini was asked whether there was anyone else that she could call, such as the Health Services Manager. RN Magazini said that she knew that "*the best person to call was [a] doctor*" and not of the Health Services Manager. RN Magazini went on to explain that the "*next pathway was to call the ambulance*". However, RN Magazini went on to explain:

> But because there was an assurance that the doctor was on his way coming, that's another thing probably that make me to delay the other way, because I was waiting for the doctor to come in. Because after that's you see the manager or you see that the doctor or it was hospital.

9.34 RN Magazini rejected the suggestion that it was not until after 6:00am that she received assurance from Dr Wahba that he was coming in. When asked whether she could recall when she received that assurance, RN Magazini said that she could not "*pinpoint the exact time*" but knew "*there was an assurance that he was coming in*".

Communication between clinicians

9.35 It is evident that Dr Wahba did not consider anything that RN Magazini reported regarding Mr Gretton's condition to be of concern. Dr Wahba's evidence indicates that if Dr Wahba held any such concern, based upon what he was told by RN Magazini, he would have arranged for Mr Gretton to be transferred to hospital. This is because, as Dr Wahba explained, there would have been little point in waiting for 45 minutes for him to arrive at the clinic when arrangements could be made for a transfer to hospital to be effected in the meantime.

9.36 This evidence is broadly consistent with the evidence of Dr Gary Nicholls, the Justice Health Clinical Director Primary Care. When asked about his view regarding whether an ambulance should have

been called for Mr Gretton, after he reported lower chest pain even after being given aspirin, Endone and nitroglycerin, Dr Nicholls said:

> If a patient is sick, then they should go to hospital. I guess Justice Health and prison health is an ambulatory system. We look after patients with chronic illness and if they become acutely unwell, they go to hospital. You call an ambulance.

9.37 RN Magazini's evidence regarding whether she requested Dr Wahba to attend the clinic was confused, inconsistent and contradictory. It is difficult to understand precisely what, if anything, RN Magazini sought to communicate to Dr Wahba regarding his attendance at the clinic. Ultimately, the evidence suggests that RN Magazini most likely did not make any request of Dr Wahba to attend the clinic. RN Magazini makes no mention in her 2022 statement of making such a request and only sought to advance this proposition during her evidence at the inquest in 2023. RN Magazini's partial explanation that her duties on 2 January 2019 prevented her from making such a request of Dr Wahba is unconvincing. Whilst it is correct that RN Magazini was the only nurse on duty, and therefore responsible for all of the inmates in the correctional centre, RN Magazini herself indicated that Mr Gretton was the only patient in the clinic at the relevant time. Further, there is no evidence that during the relevant period, RN Magazini was attending to any other inmate patients.

9.38 Notwithstanding, the tenor of RN Magazini's evidence is that she considered Dr Wahba's various instructions regarding Mr Gretton's management, and in particular the administration of Endone, to represent an indication that he would be attending the clinic. It is unclear why RN Magazini came to this belief, and she was unable to provide an explanation for this in her evidence.

9.39 In his report, Professor Brown expressed the view that Junee CC should formalise a list of medical conditions that result in a RN automatically calling in a doctor, whether during hours or after hours, and not feeling pressure to do so. Professor Brown elaborated on this in evidence:

> [T]he kind of reticence to call a doctor in in the middle of the night - which I entirely understand, it's much harder than just asking somebody who's already there to see the patient - to kind of relieve some of the angst about, when do I call, you know, what should be a trigger, how sick is my patient? If you formalise a list and say, it doesn't matter what you think, but if they trigger any of these, please call the doctor on call. Now, that is something that would have to be worked out locally.
> […]
> But things like chest pain, severe abdo pain, difficulty breathing; these are all symptoms. And then abnormal vital signs exactly as you say, can be taken either visually or from the chart, and you could come up with a checklist and say, if any of these happens, mandate, call in the doctor. And then there's no kind of waiting, should I/shouldn't I, and there's no confusion.

9.40 Professor Brown agreed that such a list would resolve any risk of miscommunication between a doctor and a nurse about whether a nurse believes that they have called in a doctor.

9.41 Ms Godwin was asked about the view expressed by Professor Brown and whether there would be any difficulty with creating a list of symptoms as contemplated by Professor Brown:

> There would – it would raise a – a couple of issues in that it is not in line with Justice Health. Justice Health don't have such a policy and we follow Justice Health. Also, it would raise the issue of what

symptoms come under that heading, who decides that, and should there be an incident in the future, would an independent party have right to criticise what we chose to put in that bracket and what we didn't.

9.42 However, Ms Goodwin agreed that GEO group has access to medical practitioners, including emergency physicians, who might be able to provide input into the creation of any such list. When asked what would be the difficulty in formulating a list of conditions that would require the attendance of a doctor, Ms Goodwin said that she was not sure. However, she agreed that it would not compromise patient safety for GEO to put in place such a policy.

9.43 It was submitted on behalf of GEO that the approach taken by Justice Health to the management of a deteriorating patient is based upon the Between the Flags approach developed by the Clinical Excellence Commission. It was further submitted that it would be "*counter-productive*" for GEO to develop a list of conditions outside of this general approach. Instead, it was submitted that any recommendation should instead be that GEO revise any relevant policy regarding management of a deteriorating patient and its Clinical Emergency Response System to ensure that it is not inconsistent with any applicable Justice Health policies.

9.44 However, the evidence establishes that the clinic at Junee CC on 2 January 2019 was not functioning as part of the Justice Health ambulatory system as described by Dr Nicholls. Further it is evident that despite being aware that some of Mr Gretton's vital signs were within the Yellow Zone under the Between the Flags approach, RN Magazini encountered obstacles in managing Mr Gretton's care and escalating his treatment. The opinion expressed by Professor Brown in this regard seeks to avoid any doubt regarding the need to seek review by a medical officer and escalate a patient's care. It is therefore necessary to make the following recommendation.

9.45 **Recommendation:** I recommend to the Managing Director, The GEO Group Australia Pty Ltd, that GEO give consideration to formulating a list of presenting symptoms or vital sign observations in a patient that will cause a nursing staff member at Junee Correctional Centre to automatically request review of the patient by a medical officer, whether during hours or after-hours.

Use of an i-STAT

9.46 Ms Godwin gave evidence that:

(a) nurses who join Junee CC who are not trained in the use of an i-STAT machine are provided with training regarding use of the machine during their orientation period;

(b) nurses use the machine "quite regularly" and that if RN Magazini did not know how to use the machine, that would be inconsistent with Ms Godwin's understanding of the nurses currently working at Junee;

(c) currently there is no ongoing training provided to nurses to keep their skills up-to-date in relation to the i-STAT machine; and

(d) currently there is no formal auditing process regarding correct use of the machine but "*that will be changed*".

9.47 Having regard to the evidence given by Ms Godwin, it is desirable to make the following recommendation.

9.48 **Recommendation:** I recommend to the Managing Director, The GEO Group Australia Pty Ltd, that GEO give consideration to providing further education and training to nursing staff at Junee Correctional Centre to ensure competency regarding use of the i-STAT machine, and for these skills to be audited.

Vital sign observations

9.49 Professor Brown was asked to express an opinion regarding the regularity of observations performed for Mr Gretton between 3:30am and 7:30am. He said:

> Look, I think there's a difference between recording observations as a written record and standing next to a patient and eyeballing them. And we know that RN Magazini was at Mr Gretton's bedside throughout. This is not - this was not an intensive care unit or intensive care situation, although I do note that RN Magazini did not use all the monitoring equipment. I don't think I can - I think doing observations as often as Mr Gretton had is actually perfectly acceptable because we can't pretend this is intensive care.
>
> My concern is simply that there appears to be a disconnect between what's visible on the, the video and what is written down. But I think the simple thing is the reason to do observations is to highlight a patient who is unwell. And that's why the observation chart is colour-coded. If you believe the patient is unwell, and all you had to do on the video was look at Mr Gretton, then the simple thing would have been trigger - call in doctor - the doctor on call; that's all I would have expected. I don't think doing lots and lots of observations is the point. I think number 1, call the doctor, number 2, call the ambulance; that's the only trigger that should have happened.

9.50 Appendix One of the Junee CC *Recognition and Management of the Deteriorating Patient* Policy (**RMDP Policy**), effective from May 2022, sets out minimum vital sign and observation monitoring requirements. Depending on the status of a patient, it sets out the minimum set of vital signs to be observed, and the minimum frequency of assessment. For example, a patient under observation in the health centre is to have their vital signs (respiratory rate, oxygen saturation, heart rate, blood pressure, level of consciousness and temperature) taken at least half hourly.

9.51 Having regard to the infrequency of observations on 2 January 2019, the absence of consistently documented observations at that time, and the relatively recent introduction of the RMDP Policy, it is desirable to make the following recommendation.

9.52 **Recommendation:** I recommend to the Managing Director, The GEO Group Australia Pty Ltd, that GEO give consideration to conducting an audit of patients presenting to the clinic at Junee Correctional Centre to ensure that vital sign observations are being taken in accordance with the *Recognition and Management of the Deteriorating Patient* Policy.

Escalation of care

9.53 The Justice Health Clinical Emergency Response System – Adult Heath Centres stipulates that if a patient has any one rapid response criterion present:

> YOU MUST INITIATE A RAPID RESPONSE BY CALLING 000 TRANSFERRING THE PATIENT TO THE LOCAL EMERGENCY DEPARTMENT BY AMBULANCE
> AND
> 1. You must initiate appropriate clinical care including the use of JH&FMHN emergency response protocols
> 2. Repeat and record observations as indicated by the patient's condition
> 3. Follow normal JH&FMHN policy for transfer of patient to hospital and inform the senior nurse manager/After Hours Nurse Manager [original emphasis]

9.54 Ms Godwin explained that as Junee CC did not have a policy in place at the time it followed Justice Health policy.

9.55 Clause 3.9.3.1 of the RMDP Policy provides:

> If a Custodial Patient's observations enter the red zone (based on vital sign observations and/or other additional criteria), the red zone response instructions on the SAGO and CERS are to be activated and followed.

9.56 Clause 3.9.3.4 goes on to provide:

> The nurse-in-charge is the lead in Rapid Response and will coordinate the Custodial Patient's management during the response, including liaising with senior custodial staff.

9.57 In addition, after noting that the decision to contact NSW Ambulance is a clinical decision, clause 3.9.4.2 goes on to note that:

> Nursing staff are permitted to request the attendance of the NSWA at the Centre to assist in the management of a of a Custodial Patient during a Rapid Review Process.

9.58 Ms Godwin gave evidence that, in essence, in the event of a rapid response, the nurse on duty should initiate appropriate clinical care, and they should then contact the nurse in charge or the GP on call. This is followed by contact be made with NSW Ambulance.

9.59 When asked why a nurse is not calling for an ambulance for a patient is reviewed by a more senior clinician, Ms Godwin gave this evidence:

> I can't speculate, but if a patient had one criteria in a red zone and they contacted the doctor, the doctor might not say this is worthy of an ambulance. If a patient's blood pressure is in a red zone, a medication can be given to reduce a patient's blood pressure immediately rather than immediately call an ambulance.

9.60 Ms Godwin agree that a vital sign recorded in the red zone is frequently a sign that a patient is deteriorating, and that patient may be more than 30 minutes away from care at hospital. In these

circumstances, Ms Godwin indicated that she could not think of any reason why there would be an alteration from the previous policy of a nurse initiating a rapid response by calling Triple Zero.

9.61 Appendix Two of the Junee CC Recognition Policy describes the Clinical Review Process Criteria for Yellow Zone observations for an Attending Nurse as follows:

- Initiate appropriate clinical care
- Repeat and increase frequency of observations as indicated by your patient's condition
- Consult promptly with the Nurse-in-Charge to decide whether a CLINICAL REVIEW (or other CERS) call should be made.
- Document an A-G assessment, reason for escalation, treatment and outcome in the patient health record.

  Consider the following:
- What is usual for your patient and are there documented 'ALTERATIONS TO CALLING CRITERIA'?
- Does the trend in observations suggest deterioration?
- Is there more than one Yellow Zone observation or additional criteria?
- Are you concerned about the patient?

9.62 Ms Godwin explained that if a patient has more than one yellow zone observation, the attending nurse is required to take that, and the patient's presentation, into consideration before making a decision about the next step, and checking whether there is any altered calling criteria. Ms Goodwin agreed that, from her experience in public hospitals, nurses who recorded observations in the Yellow Zone know exactly whether and to whom they are to escalate their concerns. She also agreed that the purpose of the between the flags system is to assist clinical staff to recognise a deteriorating patient and know what next steps are to be taken. She also agreed that if the criteria is being used in a way which leaves the discretion entirely with the attending nurse, it is being used in different way than in public hospitals.

9.63 Despite the above, Ms Godwin gave evidence that she did not have any concerns in relation to patient safety being implemented in what Counsel Assisting described as a more "ad hoc fashion". However, Ms Goodwin agreed that there was always a risk that a clinician may have tunnel vision about a particular cause for a patient's condition, thereby missing out on the broader picture, and not escalating the care of that patient. Ms Goodwin agreed that this is one of the reasons why there is a fixed escalation pathway in public hospitals for observations in the yellow zone.

9.64 Ms Godwin gave evidence that the RMDP Policy could be clarified this to indicate precisely what a nurse should be doing in hours compared to after-hours. Ms Goodwin also agreed that it would be beneficial for all clinical staff to have embedded training regarding exactly what steps they are to take when they want to escalate care. Ms Godwin was asked what training is provided to nurses at Junee about requesting a doctor to come in after hours. Ms Godwin explained:

> The nurses are told that they are – they are absolutely to request a doctor, verbalise that they want them to attend and demand that they attend. And if, for some reason, the doctor did not then to escalate to calling New South Wales Ambulance.

9.65 In addition, Ms Godwin explained that this Policy does not require nursing staff to discuss the decision or gaining approval of a GP before requesting NSW Ambulance, and that a nurse in charge equally does not have to attain such approval prior to arranging a patient's transfer to hospital.

9.66 Having regard to the evidence given by Ms Godwin as to the scope for greater clarity regarding the RMDP Policy, it is necessary to make the following recommendation.

9.67 **Recommendation:** I recommend to the Managing Director, The GEO Group Australia Pty Ltd, that GEO give consideration to ensuring that clinical staff are appropriately trained regarding how care for a patient may be escalated if one or more of the patient's vital signs are documented to be in the Yellow Zone.

Health Practitioner Regulation National Law (NSW)

9.68 Section 151A(2) of the *Health Practitioner Regulation National Law (NSW)* provides:

> If a coroner has reasonable grounds to believe the evidence given or to be given in proceedings conducted or to be conducted before the coroner may indicate a complaint could be made about a person who is or was registered in a health profession, the coroner may give a transcript of that evidence to the Executive Officer of the Council for the health profession.

9.69 The evidence given by RN Magazini establishes that she:

(a) did not correctly document Mr Gretton's respiratory rate, and that his correct respiratory rate of at least 30 represented respiratory distress which warranted transfer to hospital;

(b) did not commence recording Mr Gretton's observations until 3:30am, 35 minutes after he arrived at the clinic;

(c) only recorded Mr Gretton's observations at 3:30am, 4:10am and 6:00am, and acknowledged that she did not complete proper documentation regarding Mr Gretton in circumstances where Mr Gretton was the only patient in the clinic;

(d) did not follow the *Hypoglycaemia Guidelines* by repeating BGL tests for Mr Gretton following the initial test taken at 3:30am; and

(e) did not follow the *Chest Pain Guidelines* in circumstances where Mr Gretton presented with chest pain for the first time, and his chest pain lasted well in excess of 10 minutes.

9.70 It was submitted on behalf of RN Magazini that:

(a) when she gave evidence she was "*deeply upset and regretted what had occurred on 2 January 2019*";

(b) she is now no longer registered as a nurse;

(c) she is not working in any health care role and

(d) *"she does not pose a threat to the health and safety of the community*".

9.71 As set out above, section 151A(2) makes no provision for the matters submitted on behalf of RN Magazini. Whilst such matters may be relevant to a future question of mitigation should any subsequent proceedings reach that stage, they have no bearing upon consideration of the terms of section 151A(2). Instead, for the reasons set out above, the evidence in the proceedings indicates that a complaint could be made about RN Magazini. It is therefore necessary to make the following recommendation.

9.72 **Recommendation:** I recommend that a transcript of the evidence of RN Loice Magazini given during the *Inquest into the death of Peter Gretton* be forwarded to the Executive Officer of the Nursing and Midwifery Council New South Wales.

10. Findings pursuant to section 81(1) of the Act

12.1 Before turning to the findings that I am required to make, I would like to acknowledge, and express my gratitude to Ms Anne Horvath SC, Senior Counsel Assisting, and her instructing solicitor, Ms Rebecca Campbell from the Crown Solicitor's Office. The Assisting Team has provided enormous assistance during the conduct of the coronial investigation and throughout the course of the inquest. I am extremely grateful for their meticulousness, and for the sensitivity and empathy that they have shown during all stages of the coronial process.

12.2 I also acknowledge the assistance of Detective Senior Constable Cassandra Falconer in compiling the initial brief of evidence.

12.3 The findings I make under section 81(1) of the Act are:

Identity

The person who died was Peter Gretton.

Date of death

Mr Gretton died on 2 January 2019.

Place of death

Mr Gretton died at Wagga Wagga Base Hospital, Wagga Wagga NSW 2650.

Cause of death

The cause of Mr Gretton's death was complications of metformin toxicity on a background of undiagnosed renal impairment in a man with dilated cardiomegaly and coronary atherosclerosis, with diabetes mellitus and hypertension being significant conditions contributing to the death.

Manner of death

Mr Gretton died of natural causes whilst in lawful custody serving a sentence of imprisonment. The precise cause of Mr Gretton's renal impairment cannot be determined on the available evidence although it is most likely that it developed within three to four weeks of 2 January 2019, and was progressive. This renal impairment was an underlying reason for the subsequent development of metformin accumulation and toxicity, resulting in severe biochemical derangements, in particular lactic acidosis and significant kidney failure.

11. Epilogue

13.1 There is no doubt that Mr Gretton's death was tragic and untimely, and that his loss has had a devastating effect on his family members and those closest to him. At the conclusion of the inquest, to Mr Gretton's daughters spoke of the heartbreak and pain that they continue to feel from their father's loss.

13.2 On behalf of the Coroners Court of New South Wales, I offer my sincere and respectful condolences, to Mr Gretton's children, Kristy, Jody and Ashley; grandchildren, Lachlan and Carly; mother, Shirley; brother, Thomas; sister, Kym; and other loved ones for their loss.

13.3 I close this inquest.

Magistrate Derek Lee
Deputy State Coroner
1 August 2023
Coroners Court of New South Wales

Inquest into the death of Peter Gretton

Appendix A

Recommendations made pursuant to section 82, *Coroners Act 2009*

1. I recommend to the Managing Director, The GEO Group Australia Pty Ltd, that consideration be given to the following matters:

   (a) amending the *Pathology Services* Policy (MP334) to provide that pathology requests are to be reviewed weekly by clinical staff to ensure that results are obtained in a timely manner, consistent with pathology service expected turnaround times, and that senior nursing clinicians are to be advised of any outstanding result of more than seven days so that the pathology request can be escalated;

   (b) formulating a list of presenting symptoms or vital sign observations in a patient that will cause a nursing staff member at Junee Correctional Centre to automatically request review of the patient by a medical officer, whether during hours or after-hours;

   (c) providing further education and training to nursing staff at Junee Correctional Centre to ensure competency regarding use of the i-STAT machine, and for these skills to be audited;

   (d) conducting an audit of patients presenting to the clinic at Junee Correctional Centre to ensure that vital sign observations are being taken in accordance with the *Recognition and Management of the Deteriorating Patient* Policy; and

   (e) ensuring that clinical staff are appropriately trained regarding how care for a patient may be escalated if one or more of the patient's vital signs are documented to be in the Yellow Zone.

2. I recommend, pursuant to section 151A(2) of the *Health Practitioner Regulation National Law (NSW),* that a transcript of the evidence of Registered Nurse Loice Magazini given during the *Inquest into the death of Peter Gretton* be forwarded to the Executive Officer of the Nursing and Midwifery Council New South Wales.

Magistrate Derek Lee
Deputy State Coroner
1 August 2023
Coroners Court of New South Wales

Inquest into the death of Peter Gretton

Appendix B

Non-publication orders made pursuant to section 74, *Coroners Act 2009*

1. Pursuant to section 74(1)(b) of the Coroners Act 2009 (the Act) and the Coroner's implied powers, until further order, the following material contained within the brief of evidence tendered in the proceedings is not to be published:

   (a) The names, Master Index Numbers and other personal information of any persons in the custody of GEO Group and Corrective Services New South Wales (CSNSW), other than Mr Gretton.
   (b) The direct contact details, including telephone numbers and email addresses, of GEO Group Correctional officers' and CSNSW employees and officers that are not publicly available.
   (c) Closed circuit television footage and any other video footage within the Junee Correctional Centre at Tabs 60, 61 and 62 of the brief of evidence.
   (d) Images of any inmate in GEO Group or CSNSW custody.
   (e) The Staff Rosters at Tab 47 and Tab 48 of the brief of evidence.
   (f) The GEO Group – Junee Correctional Centre – "Death in Custody" Policy EP013 at Tab 88 of the brief of evidence.

2. Pursuant to section 65(4) of the *Coroners Act 2009* (NSW), a notation be placed on the Court file that if an application is made under section 65(2) of that Act for access to the documents referred to above on the Court file, that the material shall not be provided until GEO Group and The Commissioner of CSNSW has had an opportunity to make submissions in respect of that application.

Magistrate Derek Lee
Deputy State Coroner
1 August 2023
Coroners Court of New South Wales