

CORONER'S COURT OF NEW SOUTH WALES

Inquest: Inquest into the death of Peter Robin

Hearing dates: 3 to 5 February 2020

Date of findings: 28 February 2020

Place of findings: Coroner's Court of New South Wales at Lidcombe

Findings of: Magistrate Derek Lee, Deputy State Coroner

Catchwords: CORONIAL LAW - deep vein thrombosis, pulmonary embolism,

preoperative assessment, venous thromboembolism prophylaxis, venous thromboembolism risk assessment, oral and maxillofacial

surgery

File number: 2015/318867

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(Kennedys)

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Findings:

I find that Peter Robin died on 29 October 2015 at Nepean District Hospital, Penrith NSW 2750. The cause of Peter's death was pulmonary embolism with deep vein thrombosis an antecedent cause, and coronary artery atherosclerosis hypercholesterolaemia being other significant conditions contributing to Peter's death. Peter died as a result of natural disease process, in circumstances where an undetected deep vein thrombosis had formed in his right calf muscles sometime prior to dental surgery on 28 October 2015. Immobility as a result of the duration of surgery and anaesthesia, and Peter's age and obesity were secondary factors contributing to the formation and propagation of the pulmonary embolism.

Recommendations:

To the Chief Executive Officer, Healthscope Ltd and the Nepean Private Hospital:

- 1. I recommend that consideration be given to revising venous thromboembolism (VTE) risk assessment policy and forms used at Nepean Private Hospital, to effect the following changes: (a) to clarify the definition of "obesity" with reference to Body Mass Index; (b) to clarify the definition of "major surgery" with reference to the total time that a patient is expected to be under anaesthesia; (c) to provide a system where the total estimated surgery time can be reliably obtained, either from the surgeon or from other data; and (d) to record the identified risk factors, final VTE risk level and the prophylaxis determined for a patient.
- 2. I recommend consideration be given to whether venous thromboembolism risk assessment policy and forms used at Nepean Private Hospital should be revised to align with other guidance, including the NSW Health Policy Directive *Preventing Venous Thromboembolism* (PD2019_057) and the *Adult Venous Thromboembolism Risk Assessment Tool*.

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1. Introduction

- 1.1 On 15 July 2015 Peter Robin saw his dentist for a routine check-up. He was found to have a cyst in his left jawbone. As a result Peter was referred to an oral and maxillofacial surgeon for further assessment and treatment. Following two consultations Peter was booked in for day surgery at Nepean Private Hospital on 28 October 2015. Surgery proceeded on that day, reportedly without complication. After spending several hours in recovery Peter was later discharged home.
- 1.2 The following day, 29 October 2015, Peter spent an otherwise unremarkable morning out with his family. Shortly after returning home Peter collapsed and was found to be unresponsive. Emergency services were called and Peter was conveyed to hospital. Tragically, Peter could be not be revived and was later pronounced deceased.

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 they are required to answer 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. All reportable deaths must be reported to a Coroner or to a police officer.
- 2.2 The coronial investigation into Peter's death was able to answer most of the questions. However, the sudden and unexpected nature of Peter's collapse and subsequent death, so soon after his surgery and discharge from hospital raised a number of other questions. These questions centred around the adequacy and appropriateness of the care and treatment provided to Peter at hospital in the lead up to, during, and following his dental surgery. A number of issues were identified in this regard, which later formed the basis of the scope of the inquest.
- 2.3 It is with the benefit of hindsight, and with an opportunity for reflection, that an inquest is able to identify whether there have been any shortcomings, whether by an individual or an organisation, with respect to any matter connected with a person's death. An inquest seeks to identify such shortcomings, not for the purpose of assigning blame or fault but, rather, for the purpose of learning lessons from them so that they are, hopefully, not repeated.
- 2.4 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.
- 2.5 Inquests have a forward-thinking, preventative focus. At the end of many inquests Coroners often exercise a power, provided for by section 82 of the Act, to make recommendations. These

recommendations are made, usually, to government and non-government organisations, in order to seek to address systemic issues that are highlighted and examined during the course of an inquest. Recommendations in relation to any matter connected with a person's death may be made if a Coroner considers them to be necessary or desirable.

3. Recognition of Peter'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. Recognising the impact that a death of a person has, and continues to have, on the family and loved ones of that person can only serve to strengthen the resolve we share as a community to strive to reduce the risk of preventable deaths in the future.
- 3.2 Understanding the impact that the death of a person has had on their family only comes from knowing something of that person's life and how the loss of that life has affected those who loved that person the most. Therefore it is extremely important to recognise and acknowledge Peter's life in a brief, but hopefully meaningful, way.
- 3.3 Peter was born in 1959 at the Women's Crown Street Hospital in Sydney. Coincidentally this was the same hospital where his wife, Wendy Robin, was also born. Peter and his brother Nicholas were later adopted by Lorna and David Robin. The family lived together in Lane Cove on Sydney's lower North Shore and Peter enjoyed a happy and loving upbringing. He later attended Saint Ignatius College, Riverview and was a talented sportsperson, representing the school in rugby union and rowing. Peter also demonstrated musical ability and played French horn in the school brass band.
- 3.4 Following high school, Peter studied in the United States at Boise State University in Idaho. His sporting talents again led him to play college football, and Peter also generously gave his time as a volunteer with the Boise City Police Department.
- 3.5 Peter's father David was a navigator with the Royal Air Force (United Kingdom) and flew in the Avro Lancasters during the Second World War. Due to his father's military service, Peter had a great passion for all things naval and military, with a particular interest in history and geography. Peter's passion led him to start writing a book about his father, which he tragically was unable to finish.
- 3.6 In July 2004 Peter met Wendy. They immediately identified a shared love of coffee, music, books, animals, sports, travel and cars. One of Peter's most prized possessions was his Ford Mustang, which he had dreamed of his entire life, and which was being reassembled at the time of Peter's death. Sadly, Peter never had the opportunity to drive his dream car.
- 3.7 Peter's extensive knowledge and broad life experience meant that he was able to converse on a wide variety of topics. Indeed, he and Wendy spent many enjoyable hours talking about everything and nothing, simply enjoying each other's company.
- 3.8 Apart from his interest in history, Peter was also known to be a keen gardener who spent many happy hours outside performing all manner of gardening tasks. Peter also selflessly donated his

- time to contributing to, and volunteering in, his local community. He valuably raised funds for the Royal Flying Doctor Service and was an accomplished Toastmasters Club member.
- 3.9 Peter was an exceedingly hard worker with a strong work ethic, often arriving early at work so that he could be at his most productive and assist his colleagues with their tasks. He had a keen sense of responsibility, rarely taking a day off work and placing great importance on his role as a team leader. In every aspect of his life, Peter displayed qualities of sensitivity, genuineness, loyalty, dedication and selflessness. Peter had a strong faith and was always supportive of family and friends, being exceptionally generous with his time and empathy.
- 3.10 In 2014 Peter left his employment and transitioned to semi-retirement. However, he had plans to re-enter the workforce, and combine his love of coffee and speaking with people by operating a coffee truck business. Tragically, Peter was never able to embark upon this new wonderful planned adventure.
- 3.11 More significantly, Peter's sudden and unexpected death created an immeasurable void in the lives of those closest to him, in particular his soulmate, confidante, and loving wife, Wendy. At the conclusion of the evidence in the inquest Wendy honoured those in the courtroom by conveying some heartfelt and deeply painful memories of Peter and the effect that his loss has had on her, her daughter, Rachel, and Peter's family. It is most distressing to know that Peter's death has taken away from Wendy her advocate and unwavering support in life's challenges, her foundation, and her best friend.

4. Peter's relevant medical history¹

- 4.1 Peter had a number of relevant health conditions for which he had been prescribed medication. He had a history of epilepsy (with no seizures for over 30 years), depression, high cholesterol, and was overweight.
- 4.2 On 12 March 2015 Peter saw his general practitioner (GP) for a swollen foot caused by a rose thorn injury. He was prescribed antibiotics and the swelling resolved after a few weeks. Later on 27 April 2015 Peter saw his GP again, complaining of low mood and feeling tired. Blood tests and an ECG were performed, the latter of which noted that Peter had shortness of breath on exertion but no chest pain. As a result, no specific cardiac conditions were identified.
- 4.3 Peter returned to see his GP on 7 May 2015. It was noted that his blood pressure was elevated, and that he had raised cholesterol and fasting glucose levels. Peter also reported a history of vomiting at night over the past 10 years and, as a result was referred to a gastroenterologist. Further blood tests were ordered and Peter was also referred to a dietician, whom he subsequently saw on four occasions.
- 4.4 Peter had another appointment with his GP on 14 May 2015. At that time he was advised to continue with his appointments with the dietician and to return for further blood tests in six months. Over the next several months Peter made efforts to reduce his weight with healthier diet choices and regular exercise.

¹ The factual background has been drawn from the helpful opening address of Counsel Assisting.

- 4.5 On 9 July 2015 Peter underwent an endoscopy in relation to his reflux. The procedure was performed under general anaesthesia with no issues identified. During the procedure, which was short, Peter was not provided with any mechanical or pharmacological prophylaxis.
- 4.6 On 15 July 2015 Peter saw his dentist, Dr Mary Zaky, for a routine check-up. An x-ray was performed and upon its review an incidental finding of a cyst in Peter's left mandible was identified. Dr Zaky noted that Peter was asymptomatic and referred him to Dr Richard Conway, an oral and maxillofacial surgeon, for assessment and further management.
- 4.7 Dr Conway first reviewed Peter on 18 August 2015. Dr Conway diagnosed four impacted wisdom teeth, one of which (tooth 38) was associated with surrounding pathology causing bone destruction. Dr Conway was concerned that the cyst seemed to be eroding the lingual cortex of bone and was close to the inferior alveolar nerve. Dr Conway discussed these findings with Peter and plans were made to obtain a computed tomography (CT) scan.
- 4.8 Dr Conway reviewed Peter for a second time on 25 August 2015 following the CT scan. It confirmed the presence of a large cyst associated with tooth 38 (with queries raised about smaller cysts associated with the remaining wisdom teeth) which caused thinning and bulging of the cortex, and was also intimately associated with the inferior alveolar nerve. Dr Conway again discussed these findings with Peter, and a plan was made to remove the four wisdom teeth and resect the cyst associated with tooth 38. During this consultation Dr Conway discussed with Peter the indications for surgery, the procedure itself and the recognised complications with the surgery. Dr Conway also discussed with Peter that it was anticipated the procedure would be carried out as day surgery under general anaesthetic with a possible overnight admission, depending on how the procedure went. Dr Conway subsequently wrote to Dr Zaky on 25 August 2015, confirming the plan discussed with Peter.
- 4.9 In the days leading up to the surgery Peter complained of feeling unwell. He told Wendy that he had been feeling drained of energy, with bouts of dizziness and an upset stomach. Notwithstanding, Peter decided to proceed with the planned surgery.

5. Events of October 2015

- 5.1 At about 7:45am on 28 October 2015 Peter attended Nepean Private Hospital (the Hospital) with Wendy. Clinical Nurse Specialist (CNS) Julie Essery took observations and reviewed Peter prior to surgery. Peter completed a patient history in which his height was recorded as 1.66 metres and his weight as 95 kilograms. Although a calculation of Peter's Body Mass Index (BMI) was not performed at the time, if it had been it would have resulted in a BMI of 34.5, indicating that Peter was obese. In completing his patient history form Peter reported that he was not suffering from a fever, cold, cough or sore throat. However, it appears that Peter did not report to anyone that he had been feeling unwell in the days preceding the surgery.
- 5.2 CNS Essery completed a Venous Thromboembolism (VTE) assessment form in which she identified that Peter was at low risk of VTE. Dr Conway and Dr Philip Corke, the anaesthetist for the

procedure, both subsequently reviewed Peter. They both also assessed Peter for risk of VTE although these assessments were not documented.

- 5.3 Peter was taken to the anaesthetic bay at about 9:40am and Dr Cork inserted an intravenous cannula at 9:45am. The procedure commenced at 9:48am and a Time Out was called at 9:53am. The procedure was completed without complications, with Peter's four wisdom teeth removed and the cyst resected. Peter left the procedure room at 11:06am, 73 minutes after the Time Out. According to Dr Conway the actual procedure took about 45 minutes, taking into account a period to allow the anaesthesia to take effect, and then a further period for it to wear off.
- 5.4 Following the procedure, Dr Conway gave instructions for Peter to be nursed at 45 degrees, for a soft diet to be commenced, and for routine observations to be conducted. Peter was also prescribed antibiotics and analgesia. At about 11:45am Dr Conway reviewed Peter in recovery. He noted that Peter was comfortable and alert, that haemostasis² had been maintained, and that Peter was stable.
- 5.5 Peter later left recovery at about 12:30pm and walked to a reclining chair in the day of surgery admission centre (DOSAC). He complained to Wendy that he was feeling peripherally cold in his toes and fingers. Around this time Peter's heart rate began to fall. It was recorded initially as 40 beats per minute at 12:20pm but had increased to 53 beats per minute at 12:25pm. However at 1:10pm a nurse manually recorded Peter's heart rate to be about 40 beats per minute. The nurse contacted Dr Corke, who at the time was in theatre with Dr Conway attending to another patient, to advise him of the findings. Dr Conway himself was not advised of the findings.
- 5.6 Dr Corke requested that an ECG trace be conducted. This was subsequently performed and the results provided to Dr Corke whilst he was still in theatre. Dr Corke reviewed the trace, found that it showed Peter to be in sinus rhythm with a hear rate of about 80 beats per minute, with no acute changes. Dr Corke later went to review Peter in person and noted that Peter reported having no pain. Dr Corke formed the view that Peter could be discharged and noted that Dr Conway would contact him later.
- 5.7 At about 3:30pm an Assistant in Nursing recorded that Peter had been seen by Dr Conway and had been given a discharge information sheet. Peter's cannula was removed and he was discharged shortly afterwards. At around this time Peter told Wendy that he was feeling unwell.
- 5.8 Dr Conway subsequently phoned Wendy at 4:37pm. Both Dr Conway and Wendy have different recollections of their conversation. According to Dr Conway he confirmed that Peter had received his post-operative instructions, and that neither he nor Wendy had any questions about them. Wendy said that Peter was comfortable and had started taking antibiotics and analgesia. A plan was made for Peter to be reviewed in two weeks' time, or sooner if required.
- 5.9 However Wendy recalled that Dr Conway apologised for not seeing Peter at the Hospital before he was discharged, said that he had heard there had been complications, and that the surgery was longer and more difficult than expected.

² The body's normal physiological response for the prevention and stopping of bleeding from a cut or injury, and is the first stage of wound healing.

- 5.10 Later that night Peter took two Endone tablets and went to bed. He woke up the following morning, 29 October 2015, at about 7:00am. Peter took two more Endone tablets, followed by his usual morning medication and a smoothie. Peter and his family later went out shopping. When they returned home later Peter had a pastry. After he finished, Peter said that he was going to sit on the lounge but subsequently collapsed.
- 5.11 Emergency services were called and cardiopulmonary resuscitation was initiated. Paramedics arrived on the scene within about 10 minutes and Peter was taken to Nepean District Hospital. Tragically, Peter could not be resuscitated and was subsequently pronounced deceased at 2:12pm.

6. 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 matters to be considered. That list identified the following issues:
 - (a) What was the cause of Peter's death?
 - (b) What policies and procedures were applicable to day surgery patients at Nepean Private Hospital at the date of death, particularly regarding the risk of thromboembolism and the use of prophylaxis?
 - (c) Was Peter appropriately assessed for the risk of thromboembolism, prior to and after surgery?
 - (d) Were appropriate prophylaxis measures put in place to reduce the risk of thromboembolism?
 - (e) Was the post-surgery advice and treatment appropriate, including the decision to discharge?
- 6.2 In order to assist with consideration of some of these issues, opinion was sought from the following experts as part of the coronial investigation:
 - (a) Associate Professor Mark Adams, consultant cardiologist;
 - (b) Professor David David, consultant oral and maxillofacial surgeon;
 - (c) Associate Professor Paul Forrest, consultant anaesthetist;
 - (d) Associate Professor Anthony Grabs, consultant vascular and general surgeon;
 - (e) Associate Professor Ross McPherson, consultant anaesthetist;
 - (f) Professor Frank Monsour, consultant oral and maxillofacial surgeon.
- 6.3 Each of the experts provided reports which were included in the brief of evidence. Further, Professor David, Associate Professor Grabs and Professor Monsour all gave evidence concurrently

during the inquest. Given the way in which the evidence unfolded during the inquest, in particular from the expert witnesses, it is proposed to deal with each of the issues in the format set out below.

7. What was the cause of Peter's death?

- 7.1 Following his death Peter was taken to the Department of Forensic Medicine in Sydney where a postmortem examination was performed by Professor Tim Lyons on 4 November 2015. The significant clinical findings observed at autopsy included:
 - (a) Numerous small lengths of thrombus in both the right and left pulmonary artery and their main branches;
 - (b) Thrombus formation in the small vessels of the deep veins of the right calf; and
 - (c) Very well established coronary artery disease.
- 7.2 In his subsequent autopsy report dated 30 November 2015 Professor Lyons noted that the identified thrombus "would have caused collapse and sudden death". Ultimately, Professor Lyons opined that the direct cause of death was pulmonary embolism, with deep vein thrombosis an antecedent cause. Professor Lyons also noted that coronary artery atherosclerosis and hypercholesterolaemia were significant conditions which contributed to Peter's death.
- 7.3 Given the autopsy findings attempts were subsequently made to determine the age of the thrombus. Opinion was sought from Dr Issabella Brouwer, Chief Forensic Pathologist for NSW. Dr Brouwer noted that it is not possible to accurately date deep vein thrombosis. However, she noted that the deep vein thrombi had formed in the right calf muscles sometime prior to Peter's death, with propagation and dislodging of new thrombi resulting in fatal pulmonary thromboemboli. Dr Brouwer also noted that "the right calf muscles had a chronic, well-organised histological appearance with multiple haemosiderin-laden macrophages⁴ which are generally accepted to be present after at least 1-3 weeks". On this basis Dr Brouwer concluded from the histological findings that it appeared that the deep vein thrombosis may have been present prior to 28 October 2015.
- 7.4 In evidence Associate Professor Grabs explained that because no saddle embolus⁶ was demonstrated at autopsy he was left with some doubt to what extent the pulmonary arteries may have been blocked and therefore whether myocardial ischaemia played a role in Peter's death. Notwithstanding, Associate Professor Grabs later indicated in evidence that despite this, Peter's death could ultimately be attributed to pulmonary embolism. Associate Professor Grabs explained in evidence that the most significant factor relating to the formation of fatal pulmonary thromboemboli was the existing deep vein thrombosis (DVT) in Peter's right calf. Associate Professor Grabs considered immobility as a result of the duration of surgery and anaesthesia, and

³ Exhibit 1, Tab 5, page 3.

⁴A type of white blood cell of the immune system involved in the detection and destruction of bacteria and other harmful organisms.

⁵ Exhibit 1, Tab 22, page 4.

⁶ A large pulmonary embolism that straddles the bifurcation of the pulmonary trunk, extending to the left and right pulmonary arteries. If large enough, it can obstruct both pulmonary arteries resulting in right heart failure and, in the absence of prompt treatment, death.

Peter's age and obesity to be secondary factors contributing to formation and propagation of the pulmonary thromboemboli. It should also be noted that in his report Associate Professor Adams offered the following opinion: "The coronary artery disease is unlikely to have played a significant role in Mr Robin's death and although coronary artery disease is present at autopsy there are no signs of acute ischaemia to suggest this play a role in his death". \(\text{?} \)

7.5 **Conclusions:** Although the absence of a demonstrated saddle embolus at autopsy raised the possibility of myocardial ischaemia, there is no convincing evidence to support this. Rather, the evidence established that ultimately the cause of Peter's death can be attributed to pulmonary embolism, emanating from deep vein thrombosis which had formed in Peter's right calf muscles prior to surgery on 28 October 2015. Accordingly, the cause of Peter's death is pulmonary embolism with deep vein thrombosis an antecedent cause.

8. Was it appropriate to proceed with surgery on 28 October 2015?

- 8.1 Peter had a significant medical history and had complained of feeling unwell in the days preceding surgery. As a result, a number of issues arose in relation to whether Peter's pre-surgical workup and the decision to proceed with the surgery itself were appropriate.
- 8.2 In his statement dated 2 December 2019 Dr Conway explained that he considered that it was appropriate to proceed with surgery given concerns associated with how close the cyst was to the inferior alveolar nerve, and the degree of bone destruction that had occurred by the time of his second consultation with Peter on 25 August 2015. Dr Conway went on to explain: "Further reasoning [sic] were my concerns that a condition producing multiple cystic bony erosions needed to be surgically diagnosed and secondly, to prevent ongoing bone destruction and complications of non-treatment such as an undiagnosed aggressive lesion such as an odontogenic keratocystic tumour, infection, pathologic jaw fracture and tooth damage". In evidence, Dr Conway adhered to these reasons and emphasised that whilst the differential diagnosis was a cyst by the time of his second consultation, surgery offered the opportunity to establish diagnostic certainty.
- 8.3 In his report dated 14 January 2019 Professor David expressed the view that surgery was not sufficiently indicated. This was essentially for two reasons: firstly, whilst it was possible that the cysts may have caused problems in the future, Peter was asymptomatic as at August 2015; secondly, Peter's medical history (hypercholesterolaemia, raised fasting blood glucose levels, reflux oesophagitis, hypertension, epilepsy and recent episode of shortness of breath) necessitated consultation with his GP in order to determine his fitness for the procedure and general anaesthetic. In evidence, Professor David described the procedure as inevitable but not urgent. He said that the question of its timing would have been influenced by input from Peter's GP as well as any specialist consults that might have been arranged.
- 8.4 In his report dated 12 December 2019 Professor Monsour considered that Professor David had "seriously understated" the potential seriousness of the presumed odontogenic pathology identified in Peter.⁹ Professor Monsour expressed the view that the potential risk of severe

⁷ Exhibit 1, Tab 22B, page 3.

⁸ Exhibit 1, Tab 11A at [2.2].

⁹ Exhibit 1, Tab 22D at [32].

infection and potential erosion of the lingual cortex extending into the sublingual region "demanded interventional surgical management and eradication as a matter of some urgency". ¹⁰ In evidence, Professor Monsour maintained that it was essential to advance surgical planning (in circumstances where there was still only a provisional diagnosis and no definitive assessment) but agreed that it was a question of timing. Ultimately, Professor Monsour considered that the procedure was indicated on what he described as a "semi-urgent basis".

8.5 **Conclusions:** The evidence established that surgery would inevitably be required to address Peter's dental pathology. However, there was a divergence of opinion amongst the experts as to its timing. Whilst the surgery was not urgent, there was a need to obtain diagnostic certainty as well as to mitigate the possibility of more significant complications if the pathology was left untreated. In this regard, in terms of timing alone, it could not be said that it was inappropriate to proceed with surgery on 28 October 2015. Ultimately, however, the overall question of appropriateness requires consideration of whether adequate consultation was conducted with Peter's GP regarding his medical history. This issue is discussed further below.

9. Was adequate consultation conducted with Peter's GP?

- 9.1 The transcript of Dr Conway's pre-operative consultation notes records the following on 18 August 2015: "Past medical and surgical history noted. Nil known drug allergies". In his report of 14 January 2019 Professor David considered that Dr Conway's pre-surgical assessment of Peter "was not reasonable and appropriate". This was because, in Professor David's opinion, Dr Conway's emphasis on Peter's dental issues appeared to have overshadowed the wider and more important issues of Peter's general health. Professor David noted that there was no indication that Peter's well recorded medical history had been obtained and taken into account by Dr Conway, nor was there any evidence of Dr Conway writing to Peter's GP after the decision was made to proceed with surgery. It should be noted that at the time of preparing his report Professor David did not have available to him a copy of the letter sent by Dr Conway to Dr Zaky dated 25 August 2015 which was also copied to Peter's GP, Dr Reham Addas. This letter from Dr Conway to Dr Zaky was only provided when Dr Conway made a subsequent statement dated 2 December 2019.
- 9.2 In his report, Professor Monsour considered that Professor David's criticism of Dr Conway's presurgical workup was unjustified. Professor Monsour noted that Dr Conway had conducted two comprehensive consultations, copied his letter to Dr Zaky to Dr Addas, and that Peter had not disclosed any significant issues with respect to his recent medical history which would have triggered further enquiry and investigation by Dr Conway. In this regard, Professor Monsour considered that due to Peter's chronic depression or other unknown factors, he may have been reserved in disclosing his symptoms and other potentially significant issues to Dr Addas.
- 9.3 In contrast, Professor David considered that it is a surgeon's responsibility to obtain all necessary information to formulate a treatment plan that is in the best interests of a patient, notwithstanding that the patient themselves may display communication difficulties. Further, Professor David noted that the letter copied to Dr Addas only referred to management of Peter's dental issues; it

¹⁰ Exhibit 1, Tab 22D at [27].

¹¹ Exhibit 1, Tab 11A.

¹² Exhibit 1, Tab 22, page 12.

provided no information about Peter's general medical condition, nor did it seek advice from Dr Addas about Peter's welfare during surgery. On this basis, Professor David concluded that there was "no sense of a multidisciplinary approach in preparation for [Peter's] surgery". 13

- In evidence Professor David expressed the view that verbal communication between a surgeon and 9.4 GP regarding a patient's medical history was mandatory component of pre-surgical workup of a patient. He considered that it was essential to have as much information about a patient as possible, so that the information could be used to minimise harm in relation to a potentially dangerous intervention such as surgery. In the end, Professor David limited his criticism of Dr Conway to a failure to follow up (by way of a phone call) the letter copied to Dr Addas to ensure that a comprehensive picture of Peter's medical background, relevant to the decision to proceed with surgery, had been obtained.
- Professor Monsour ultimately adopted a similar position in his evidence, agreeing that in a patient 9.5 such as Peter, a 56-year-old with a known medical history, some further information should have been pursued in order to obtain a more comprehensive medical background. However Professor Monsour sought to emphasise that it was not possible to say whether or not such enquiry would have disclosed any significant information which might have varied the eventual clinical course.
- 9.6 Dr Conway himself felt that the letter had been sent to Dr Addas (noting that it was posted on 11 September 2015) with sufficient opportunity for him to respond and raise any issue regarding the planned surgery. Further, Dr Conway said in evidence that he felt that Peter was an accurate historian and that he had given a full picture of his general health. Dr Conway went on to specifically explain that he considered Peter's history of cellulitis, hypertension, raised fasting glucose, and prescription for antidepressant medication, and that none of these issues gave rise to a cause for concern. Dr Conway also explained that, in other instances, he had previously made enquiries with a GP in order to better understand a patient's general health, but that this approach had to be assessed on an individual patient basis. Dr Conway expressed the view that such an enquiry was not warranted in Peter's case for the reasons given in evidence.
- 9.7 There is no evidence that Peter disclosed to Dr Conway (or any other clinician) his complaints of dizziness and feeling unwell in the days preceding surgery that he reported to Wendy. In evidence, Dr Conway said that Peter's presentation on the day of surgery was in keeping with his presentation during his previous two consultations. Dr Conway was asked whether the decision to proceed with surgery would have likely been altered if Peter had disclosed that he experienced dizziness and was feeling unwell. Dr Conway said that he would take pause to question Peter about his symptoms, how long they had been present, and how they were affecting him with a view to seeking a consultation and discussing the issue with Dr Corke. Dr Conway went on to explain that he personally always took a conservative approach and had a low threshold for cancellation of surgery if an issue raised by a patient warranted further investigation.
- 9.8 Even if some further enquiry had been made with Peter's GP, it is not possible to conclude that this would have resulted in a different outcome. It should be noted that Associate Professor Adams expressed the view that:

¹³ Exhibit 1, Tab 22.1, page 5.

- (a) it was not entirely clear if Peter had any definite cardiac symptoms that would have warranted further investigation;
- (b) preoperative investigations could have identified cardiac abnormalities but may not have greatly changed the approach to surgery; and
- (c) there was no clear indication to conduct any preoperative investigation based on current guidelines for preoperative assessment.
- 9.9 On a similar basis, it is not possible to reach a conclusion as to whether or not further enquiries with Dr Addas would have identified the existing DVT. The highest that Professor David was able to put the matter was that if Dr Conway had made an enquiry with Dr Addas this might have led to a further chain of enquiry which may in turn have discovered the underlying DVT issue.
- 9.10 **Conclusions:** Peter's age and medical history were appropriately taken into account by Dr Conway as part of his pre-operative assessment of the appropriateness of proceeding with surgery. However, the expert evidence established that one further step of enquiry ought to have been conducted by Dr Conway by way of consulting directly with Dr Addas in relation to obtaining a full clinical picture of Peter's general health relevant to surgery.
- 9.11 Notwithstanding the absence of this further step, there is no evidence to suggest that such an enquiry would have materially altered the clinical course. This is because further preoperative investigation was not indicated and, even if performed, would have unlikely changed the approach to surgery. The evidence does not allow for a conclusion to be reached that further preoperative assessment would have likely identified Peter's underlying DVT.

10. Was an adequate VTE risk assessment performed?

- 10.1 According to the NSW Health *Prevention of Venous Thromboembolism* (PD2019_057) Policy Directive (the NSW Health Policy Directive) VTE involves the formation of a blood clot within the deep veins, most commonly of the legs or pelvis. These blood clots may become dislodged and then obstruct the pulmonary artery or one of its branches, and is regarded as "a significant preventable adverse event for hospitalised patients". ¹⁴ It is noted that the incidence of developing a VTE has been shown to be 100 times greater among hospitalised patients than those in the community.
- 10.2 Each of the clinicians involved in Peter's care on 20 October 2015 took a different approach in relation to the issue of VTE risk assessment. CNS Essery completed the Hospital's VTE risk assessment form (the VTE Form) for Peter. The VTE form listed a number of criteria for surgical patients which, if any criteria were met, would place the patient in a high risk category. Relevantly, one of the criteria included if the patient was undergoing major surgery and was more than 40 years old. Major surgery is defined as intra-abdominal surgery and all other operations of more than 45 minutes duration. If none of the criteria associated with a high risk category are met, then

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¹⁴ Exhibit 1, Tab 49A.

the patient is regarded as being at low risk. However for low-risk surgical patients a number of additional risk factors are listed, one of which is, relevantly, obesity.

- 10.3 CNS Essery said in evidence that, based on her experience, the removal of four wisdom teeth would be regarded as general dental surgery, and that this type of surgery normally took around 30 minutes. However, CNS Essery was unable to explain exactly how she arrived at an estimate for how long Peter's surgery would take. She went on to say that it would not be her general practice to discuss the expected surgery duration with the surgical team, unless there was a specific reason to do so. In cross-examination CNS Essery initially said that she could not recall whether she knew that Peter's procedure was not only limited to removal of four wisdom teeth, but also included transposition of nerve and graft with infuse procedure as well. However, CNS Essery later acknowledged that this information was likely available to her and agreed that therefore she may have misjudged how long the procedure was likely to take. On this basis, CNS Essery also acknowledged that perhaps she should have contacted Dr Conway to determine whether or not the surgery was likely to take longer than 45 minutes.
- 10.4 In relation to the obesity criteria, CNS Essery said that she performed a visual assessment of Peter and did not consider him to be obese. However, she acknowledged that performing a BMI calculation would allow for a more accurate determination as to whether a patient is obese. To this extent CNS Essery explained that in 2015 it was not usual practice to perform a BMI calculation for a patient, but that such a practice had become more prevalent in the 12 to 18 months preceding the inquest (due in part to the increase in the volume of bariatric surgery). It should be noted that the current NSW Health Adult Venous Thromboembolism Risk Assessment Tool (the VTE Tool) identifies a number of VTE risk factors including: "Obesity (BMI > 30kg/m²)". The Hospital's VTE Form contained no such reference of BMI calculation with respect to obesity. Further, evidence provided by the Hospital's Director of Nursing indicated that in 2015 there was no policy document which provided guidance to clinicians on the use of the VTE Form.¹⁵
- 10.5 In evidence Dr Corke said that he performed his own independent assessment of Peter's risk of VTE. In doing so Dr Corke said that he applied both a risk rating system provided for by the American Society of Anaesthesiologists (ASA) as well as the VTE Tool. The VTE Tool identifies major surgery (where the operating time is more than 45 minutes and/or involves the abdomen) as a VTE risk factor, and also allows for three assessment categories: Higher Risk, Moderate Risk and Lower Risk.
- 10.6 In evidence Dr Corke said that he formed the view that Peter was obese but explained that he considered obesity to be a common condition (to the extent that, in Dr Corke's opinion, it had almost become the norm), and that this did not place Peter in the Higher Risk category. Dr Corke went on to explain that in his experience he considered that the surgery would be less than 45 minutes (and likely at around 30 minutes), but noted that he did not discuss the length of the surgery with Dr Conway as this was not his usual practice. On this basis, Dr Corke concluded that Peter fell within the Lower Risk category. However, Dr Corke acknowledged that he did not document this assessment.

¹⁵ Exhibit 1, Tab 20A at [5].

- 10.7 Dr Conway said in evidence that he also performed an independent assessment of Peter's risk of VTE. He said that this was performed prior to the day of surgery and was done using an algorithm on the website of the Royal Australian College of Surgeons (RACS). Dr Conway explained that the result of this assessment led him to conclude that Peter was within a high risk category. Indeed, Dr Conway explained that by virtue of his age alone Peter would be considered to be high risk. Accordingly, Dr Conway explained that he then followed the RACS algorithm as to the appropriate type of mechanical prophylaxis to be used. As already noted above, Dr Conway said in evidence that he estimated that the surgery would take 45 minutes, but that this included time for the anaesthesia to both take effect and to wear off. Like Dr Corke, Dr Conway also did not document this assessment.
- 10.8 It should be noted that in evidence Dr Conway said that during the time out he discussed Peter's VTE risk assessment with both Dr Corke and RN Sally Kasalo, the anaesthetic nurse assisting Dr Corke. Both Dr Corke and RN Kasalo said that they could not recall such a discussion, although Dr Conway said that he was confident it had occurred. When asked whether there had been a distinct discussion about VTE risk assessment, Dr Conway said that he thought that the discussion was more focused on the type of intervention to be used.
- 10.9 In evidence each of the three experts acknowledged a degree of inconsistency between each of the approaches taken to perform a VTE risk assessment and, on this basis, urged the need for greater consistency. However each of the experts also indicated that the use of such tools and approaches should not be entirely prescriptive and, more importantly, should not prevent the appropriate use of clinical judgement. In this regard, the experts emphasised the importance of the Time Out procedure in providing clinicians with an opportunity to discuss whether the risk assessment performed was appropriate, and whether the method of prophylaxis was adequate.
- 10.10 In evidence all the experts agreed that the pure weight of a patient is not a good marker of potential problems associated with DVT risk, and that BMI is the correct measurement to take in this regard (subject to the exercise of clinical judgement in the case of certain patients with large muscle mass). All of the experts also agreed that it would be beneficial to obtain a useful measure of the commencement and conclusion of surgery, with Professor David noting that the morbidity process begins at the time of anaesthesia. Finally, all of the experts agreed that it would be desirable to record the results of a patient's VTE risk assessment. Associate Professor Grabs considered this to be of importance so as to allow proper auditing to be conducted to ensure that the best care available is provided to patients.
- 10.11 As already noted above, neither Dr Conway nor Dr Corke documented the VTE risk assessment survey performed in relation to Peter. Currently, it appears that the Hospital has existing policies to address this issue. The Healthscope Policy and Procedure document, Venous Thromboembolism (VTE) Prophylaxis for Adult Patients (Ref 8.06, Issued May 2018), provides that "the VTE risk assessment and prophylaxis orders will be documented in the patient's medical record, the care plan, medication chart and VTE risk assessment form". 16 It also provides that the "documentation will indicate what communication/education has occurred between the patient and treating Medical Officer" and that "documentation of both mechanical and chemical prophylaxis is

¹⁶ Exhibit 1, Tab 43.

required on the National Inpatient Medication Chart". It should also be noted that section 2.2.3 of the NSW Health Policy Directive provides that "systems introduced by [public health organisations] should support clinicians to documents: that a risk assessment has been completed; the outcome of the risk assessment".¹⁷

- 10.12 **Conclusions:** It is evident that the two most relevant factors (apart from Peter's age) which invited consideration in relation to VTE risk assessment were whether Peter was obese, and the anticipated duration of the surgery. It is equally evident that there was a difference of opinion between CNS Essery and Dr Corke as to whether Peter was obese. This difference of opinion was most likely a result of the fact that, unlike with surgical procedures that occur at present at the Hospital, a BMI calculation was not performed. It should be noted however that in 2015 it was not standard practice to perform such a calculation, and that it appears that the Hospital did not have in existence a policy document which guided clinicians on the use of the VTE Form. Different calculations were also made regarding the estimated duration of Peter's surgery. However, of most relevance with respect to the assessment of VTE risk was the time that Peter was expected to be under anaesthesia.
- 10.13 The end result was that the different approaches taken regarding Peter's VTE risk assessment resulted in assignment of different risk categories. However, as discussed further below, the question of what type of VTE prophylaxis was to be used for Peter was ultimately a matter for Dr Conway to determine. On this basis, having assessed that Peter was in a high risk category, Dr Conway considered that two forms of mechanical prophylaxis were to be used. As will also be discussed further below, the expert evidence established that this prophylaxis was appropriate.
- 10.14 Notwithstanding the end result in Peter's case, the expert evidence clearly established the need for clarification in relation to the issue of whether a patient is obese, the time that a patient is expected to be under anaesthesia, and a reliable estimate of the duration of surgery. Further, given the expert evidence establishing the importance of documenting a patient's VTE risk assessment and risk level, as well as the need for consistency, it is necessary to make the recommendations below.
- 10.15 One point regarding the need for consistency should be noted. In evidence Professor David said that he did not consider it to be useful to have a Moderate Risk category (such as that found in the VTE Tool). Associate Professor Grabs explained that the introduction of a Moderate Risk category occurred many years ago and provided clinicians with a choice between the use of mechanical or pharmacological prophylaxis. However Associate Professor Grabs expressed the view that this tended to create a degree of confusion, and that without a Moderate Risk category it was more likely (and preferable) that a clinician would assess a patient's VTE risk to be high rather than low.

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¹⁷ Exhibit 1, Tab 49A.

- 10.16 In this regard, it is noted that a VTE risk assessment performed for Peter using the VTE Tool would have likely resulted in him being placed in a Moderate Risk category. In contrast, Dr Conway considered Peter to be at high risk based upon the assessment that he performed. Two observations should be made here: firstly, it is recognised that attempting to achieve consistency across public and private health services is a complex issue; and secondly, the expert evidence emphasised the ultimate need for the appropriate exercise of clinical judgement in any VTE risk assessment.
- 10.17 **Recommendation 1:** I recommend that the Chief Executive Officer, Healthscope Ltd and the Nepean Private Hospital, consider revising venous thromboembolism (VTE) risk assessment policy and forms used at Nepean Private Hospital, to effect the following changes: (a) to clarify the definition of "obesity" with reference to Body Mass Index; (b) to clarify the definition of "major surgery" with reference to the total time that a patient is expected to be under anaesthesia; (c) to provide a system where the total estimated surgery time can be reliably obtained, either from the surgeon or from other data; and (d) to record the identified risk factors, final VTE risk level and the prophylaxis determined for a patient.
- 10.18 **Recommendation 2:** I recommend that the Chief Executive Officer, Healthscope Ltd and the Nepean Private Hospital give consideration to whether venous thromboembolism risk assessment policy and forms used at Nepean Private Hospital should be revised to align with other guidance, including the NSW Health Policy Directive *Preventing Venous Thromboembolism* (PD2019_057) and the *Adult Venous Thromboembolism Risk Assessment Tool*.

11. What prophylaxis was used for Peter?

- 11.1 The NSW Health Policy Directive identifies that prophylaxis should be commenced as early as possible during a patient's admission, or commenced as scheduled after immediate care and risk assessment is carried out, in order to assist in reducing the risk of VTE. There are two types of prophylaxis: pharmacological and mechanical. Pharmacological prophylaxis may consist of agents such as heparin and direct thrombin inhibitors. It is noted that the risk of bleeding related to surgery is the main complication of pharmacological prophylaxis, and that the decision to commence pharmacological prophylaxis should be made after considering the benefits of treatment against the risks associated with such treatment. Mechanical prophylaxis may consist of graduated compression stockings and intermittent pneumatic compression devices.
- 11.2 In her statement Wendy said that when she saw Peter in recovery she could not recall if he was wearing any compression stockings (or anything else on his legs).¹⁸ However, Wendy recalled touching the top of Peter's toes and noting that they were very cold. Wendy's recollection raises questions about what type of prophylaxis was used during the surgery, and whether this was continued whilst Peter was in recovery.
- 11.3 This issue also arises because there is an apparent inconsistency in the relevant documentation relating to VTE prophylaxis. The Registered Nurses Intraoperative Report, completed by the intheatre scrub scout, RN Faye Taylor, records that both thromboembolic-deterrent (TED) stockings

¹⁸ Exhibit 1, Tab 9 at [13].

and Sequential Compression Device (SCD) were used as anti-embolic devices. However the Operation Check List completed by RN Kasalo appears to indicate that TED stockings were not prescribed to Peter. This is in contrast to RN Kasalo's statement in which she notes that VTE prophylaxis in the form of TED stockings and SCDs were applied.

- 11.4 In his statement Dr Conway said that TED stockings and SCDs were applied to both of Peter's calves throughout the operation and were activated in accordance with RACS guidelines. In his statement, Dr Corke said that Peter had SCDs in place during surgery. This is supported by the Anaesthetic Record completed by Dr Corke which identifies that calf compression was utilised during surgery. Dr Corke also expresses the belief that Peter had TED stockings in place preoperatively, and that they were worn throughout Peter's stay in hospital. Both Dr Conway and Dr Corke adhered to these positions in their evidence.
- 11.5 **Conclusions:** it is not possible to determine with any certainty why the Operation Check List appears to be inconsistent with both the other contemporaneous records, and also the recollections of the different clinicians involved in Peter's surgery. Having regard to both the Intraoperative Report and Anaesthetic Record the source documentation establishes that both TED stockings and SCDs were utilised during surgery, and are most likely still in place whilst Peter was in recovery up until the point of discharge. However, it doesn't appear that any mechanical prophylaxis was used beyond the point of discharge.

12. Was the VTE prophylaxis appropriate?

- 12.1 In evidence Dr Corke indicated that the determination of what prophylaxis to use for a patient was ultimately a surgical decision. However, Dr Corke explained that he did not consider that pharmacological prophylaxis was appropriate in Peter's case due to the risk of bleeding and the risk of a haematoma forming which could cause obstruction in the area of the airway. Dr Corke said that he could not recall whether he discussed this with Dr Conway
- 12.2 Notwithstanding, Dr Conway also identified similar contraindications to the use of pharmacological prophylaxis, namely: (a) the risk of bleeding in the area close to the airway, and in an area that would be difficult to clinically monitor; (b) the possibility of haematoma formation at the site of cyst removal potentially leading to wound breakdown and post-operative infection; and (c) the surgical plan was for Peter to be an ambulatory patient.
- 12.3 In evidence each of the experts agreed that Dr Conway gave appropriate consideration to the use of pharmacological prophylaxis. In particular, Associate Professor Grabs said that in terms of VTE prophylaxis he would have recommended a single dose of low molecular weight heparin, intermittent pneumatic calf compression and graduated compression stockings until Peter was fully mobile. However, given the greater risk of bleeding in dental surgery relative to the risk of DVT in a day surgery patient, Associate Professor Grabs was ultimately not critical of the withholding of pharmacological prophylaxis in Peter's case. Indeed, each of the experts agreed in evidence that as part of this consideration pharmacological prophylaxis was appropriately ruled out given the location of surgical site and the risk of bleeding.

12.4 **Conclusions:** The expert evidence established that appropriate consideration was given to both mechanical and pharmacological prophylaxis. Given the contraindication to the use of pharmacological prophylaxis it was appropriately withheld. The expert evidence established that the resultant mechanical prophylaxis used was appropriate.

13. Was appropriate post-surgery care and treatment provided?

- 13.1 Peter arrived in recovery at 11:10am. The Recovery Ward Report and the Adult General Observation Chart both indicate that regular and appropriate observations of Peter were taken up until 1:10pm. At that time, RN Sonia Amos, who was the nurse on shift in recovery, manually checked Peter's pulse which was 40 beats per minute. On this basis RN Amos called Dr Corke, who at that time was still in theatre. Dr Corke requested an ECG, which was subsequently performed and RN Amos sent the results to the operating theatre for Dr Corke to review.
- 13.2 Dr Corke formed the view that the ECG results showed normal sinus rhythm and a heart rate of about 80 beats per minute. In evidence Dr Corke said that he did not consider it necessary to discuss the ECG with Dr Conway because he did not identify any abnormality in the ECG results.
- 13.3 Dr Corke subsequently attended on Peter and reviewed him in the DOSAC area, although precisely when this occurred was not documented and is not known. In evidence Dr Conway said that Peter appeared to be fine and comfortable, and was exhibiting no pain or any other sign that caused Dr Corke to have any concerns. Dr Corke said that there was nothing to suggest that Peter had not fully recovered and that from an anaesthetic perspective he was suitable for discharge. Dr Corke recorded in the clinical notes: "ECG: S/R 80/min. No acute changes. No pain. Can go home. Dr Conway will call later". In her statement Wendy said that during Dr Corke's review Peter said that he "felt fine". Assistant in Nursing Colin Ren recorded an entry in the progress notes at 3:30pm that Peter was tolerating a cool, soft diet and had been deemed suitable for discharge.
- 13.4 Associate Professor Adams indicated that he could not identify any cardiac issue that developed post operatively other than the variable heart rate that was lower than usual for Peter. Associate Professor Adams considered this to be most likely related to the anaesthetic and post-surgery effects, noting that it is not uncommon following surgical procedures or with pain that there can be increased vagal tone leading to a lower than usual heart rate in a patient. Associate Professor Adams considered that it was possible that Peter's low heart rate could have been an early sign of pulmonary embolus, but noted that there was no fall in blood pressure or shortness of breath. Ultimately, Associate Professor Adams was not critical of the adequacy of investigation performed and treatment provided in relation to Peter's lower than usual heart rate.

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¹⁹ Exhibit 1, Tab 9, page 3.

13.5 **Conclusions:** Appropriate observations were conducted of Peter up until 1:10pm whilst he was in recovery. At that time an apparent abnormality with Peter's heart rate was identified which resulted in further investigation and review. The expert evidence established that this investigation and review was appropriate, and that Peter's lower than usual heart rate was most likely attributable to the effects of surgery, including anaesthesia. It should be noted that although no general observations of Peter were documented after 1:10pm, Peter was still being attended to, most notably by Dr Corke who conducted a review which identified no abnormality which suggested that it was inappropriate to discharge Peter.

14. Acknowledgments

- 14.1 Before turning to the findings that I am required to make, I would like to acknowledge, and express my gratitude to Jake Harris, Counsel Assisting, and his instructing solicitor, Clara Potocki of the NSW Crown Solicitor's Office. Their assistance during both the preparation for inquest, and the inquest itself, has been invaluable and of the highest standard. I also thank them for the sensitivity and empathy that they have shown in this matter.
- 14.2 I also thank Senior Constable Troy Thornton for his role in the coronial investigation, and for compiling the original brief of evidence.
- 15. Findings pursuant to section 81 of the Coroners Act 2009
- 15.1 The findings I make under section 81(1) of the Act are:

Identity

The person who died was Peter Robin.

Date of death

Peter died on 29 October 2015.

Place of death

Peter died at Nepean District Hospital, Penrith NSW 2750.

Cause of death

The cause of Peter's death was pulmonary embolism with deep vein thrombosis an antecedent cause, and coronary artery atherosclerosis and hypercholesterolaemia being other significant conditions contributing to Peter's death.

Manner of death

Peter died as a result of natural disease process, in circumstances where an undetected deep vein thrombosis had formed in his right calf muscles sometime prior to dental surgery on 28 October 2015. Immobility as a result of the duration of surgery and anaesthesia, and Peter's age and obesity were secondary factors contributing to the formation and propagation of the pulmonary embolism.

16. Epilogue

- 16.1 It is heartbreaking to know that Peter's untimely death prevented him from completing many of his life's dreams, ambitions and adventures. There is no doubt that the dreams, ambitions and adventures that Peter was able to share with Wendy and his family and friends will endure lovingly in their memories.
- 16.2 On behalf of the Coroner's Court of New South Wales, and the Assisting Team, I offer my deepest sympathies, and most sincere and respectful condolences, to Wendy and all of Peter's family and friends for their deeply painful and overwhelming loss.
- 16.3 I close this inquest.

Magistrate Derek Lee Deputy State Coroner 28 February 2020 Coroner's Court of NSW