STATE CORONER'S COURT
OF NEW SOUTH WALES

Inquest:	Inquest into the death of Colin Parker
Hearing dates:	14 to 16 August 2017; 7 & 8 November 2017; 1 December 2017
Date of findings:	22 December 2017
Place of findings:	NSW State Coroner's Court, Glebe
Findings of:	Magistrate Derek Lee, Deputy State Coroner
Catchwords:	CORONIAL LAW – cause and manner of death, syncope, atrial fibrillation, blunt force head injury, Liverpool Hospital, Campbelltown Hospital, inter-facility patient transfer, handover, reversal of anticoagulation, patient flow portal, consultant-to-consultant communication
File number:	2014/00142059
Representation:	Dr H Bennett, Counsel Assisting, instructed by Ms K Hainsworth (Crown Solicitor's Office) Ms A Horvath for the South Western Sydney Local Health District Mr M Lynch for Dr A Toufaili & Dr A Yang Mr R Sergi for Dr A Oon Ms K Williams for Mrs C Parker
Findings:	I find that Colin Parker died on 7 May 2014 whilst he was an inpatient at Liverpool Hospital, Liverpool NSW. The cause of Colin's death was complications of blunt force injures of the head. The blunt force head injuries were traumatic in nature and occasioned when Colin suffered an unwitnessed fall on 4 May 2014 after experiencing a syncope episode due to atrial fibrillation.

Recommendations made pursuant to section 82(1) of the *Coroners Act 2009*:

1. **I recommend to the Chief Executive, South Western Sydney Local Health District** that consideration be given to providing targeted education and training to all nursing and medical staff regarding the NSW Ministry of Health policy directive, *Clinical Handover – Standard Key Principles* (PD2009_060).

2. **I recommend to the Chief Executive, South Western Sydney Local Health District** that consideration be given to amending the *Patient Transfer: Inter-Facility Patient Transfer* (SWSLHD_PD2015_004) policy directive to require:

   (a) mandatory (rather than preferred) consultant-to-consultant referral, where consultants are immediately available, to expedite the transfer of time critical patients; and

   (b) in circumstances where consultants are not immediately available for time critical transfers, then clause 4.7 should be followed.

3. **I recommend to the Chief Executive, South Western Sydney Local Health District** that consideration be given to amending the *Patient Transfer: Inter-Facility Patient Transfer* (SWSLHD_PD2015_004) policy directive to replace the term "*Attending Medical Officer*", and its acronym, "*AMO*", with the term "*consultant*".

4. **I recommend to the Chief Executive, South Western Sydney Local Health District** that consideration be given to amending the *Patient Transfer: Inter-Facility Patient Transfer* (SWSLHD_PD2015_004) policy directive to require that in all cases of time critical inter-facility transfers, consultants should provide direct supervision and support (whether by phone or in person) to junior medical staff involved in the transfer process.

5. **I recommend to the Chief Executive, South Western Sydney Local Health District** that consideration be given to amending the *Patient Transfer: Inter-Facility Patient Transfer* (SWSLHD_PD2015_004) policy directive to require that in all cases of inter-facility transfers, all written documentation relating to medication prescribed and administered to a patient is to be immediately available at the receiving facility.

6. **I recommend that a copy of these findings be forwarded to the NSW Minister for Health**, together with a transcript of the evidence of Dr Sellapa Prahalath (Director of Medical Services, Campbelltown Hospital) given on 7 November 2017, for the Minister's consideration regarding Recommendation 7.

7. Having regard to the evidence given by Dr Sellapa Prahalath, **I recommend to the NSW Minister for Health** that consideration be given to the following matters as they apply to the inter-facility transfer of patients and the management of, and recording of information in, Patient Flow Portals within Local Health Districts:

   (a) Reviewing whether the creation of an additional patient category, with applicable principles, to govern the inter-facility transfer of patients deemed to require immediate clinical care and treatment to preserve life, is necessary; and

   (b) Reviewing whether the removal of any requirement to effect time critical and urgent inter-facility transfer of patients within a nominated time, for example "*<4 hours*" or "*<24 hours*", is likely to improve the timeliness and effectiveness of the patient transfer process between facilities.

Table of Contents

Introduction

1. In the early morning of 4 May 2014 Colin Parker suffered a sudden and unwitnessed fall whilst enjoying an otherwise ordinary night out with a friend. Colin suffered a head injury from the fall, and was admitted to hospital some 8 hours later. However, the seriousness of Colin's injury would not become apparent until some 29 hours later. After his injury was discovered Colin required emergency surgery within 2 hours. However surgery did not take place until some 6 hours later, by which time Colin was already showing signs of having suffered irreversible brain damage. Colin later died on 7 May 2014, leaving behind his beloved wife, his two precious young daughters, his family and many friends.

Why was an inquest held?

2. A Coroner's function and the purpose of an inquest are provided for by law as set out in the *Coroners Act 2009* (the Act). One of the primary functions of a Coroner is to investigate the circumstances surrounding a reportable death. This is done so that evidence may be gathered to allow a Coroner to fulfil his or her functions. A Coroner's primary function is to answer questions about the identity of the person who died, when and where they died, and what the cause and the manner of their death was. The manner of a person's death means the circumstances surrounding their death and the events leading up to it.

3. Colin's death was a reportable death because it was not the reasonably expected outcome of a health-related procedure[1], and because it occurred in unusual circumstances.[2] In the course of the coronial investigation into his death, evidence was gathered to allow the questions about his identity, and where and when he died, to be answered. The inquest was primarily focused on the cause and manner of Colin's death. In other words, what occurred between 4 May 2014 and 7 May 2014?

4. In the course of investigating the manner of Colin's death several issues were identified. Many of these issues concerned the care and treatment that Colin received at both Liverpool Hospital and Campbelltown Hospital. Both of these hospitals are health care facilities within the South Western Sydney Local Health District (**SWSLHD**). The coronial investigation gathered evidence about these issues from various health care professionals directly and indirectly involved in Colin's care in order to consider whether the care provided to Colin was adequate and appropriate. The coronial investigation also reviewed a number of policy directives created by the SWSLHD and the NSW Ministry of Health which governed the way in which treatment was provided to Colin and how his care was managed. This review was done to also consider whether any aspects of the policies were deficient and, if so, whether they could be improved upon.

Colin's life

5. At the conclusion of the evidence in the inquest the court was privileged to hear some moving and heartfelt words spoken by Colin's wife, Cindy Parker. Cindy commented that if the other people in the courtroom had had the honour of meeting Colin then they would understand the

[1] *Coroners Act 2009*, section 6(1)(e).
[2] *Coroners Act 2009*, section 6(1)(c).

significance of his death and the impact that it has had on those who did know and love him, most importantly, of course, his family.

6. Coronial investigations and inquests are necessarily concerned with gathering and examining evidence that relates to the last period of a person's life. Sometimes that period encompasses weeks and days; at other times, because of the suddenness of a person's death, that period might be only minutes or seconds. That evidence rarely tells us much about the person who died, their life, and the way in which their death has impacted their family and friends. Therefore it is important to recognise the life of that person in some small, but hopefully meaningful, way.

7. Colin died in the prime of his life. He had had successful career as a mechanical engineer and in the last two years of his life he had been working as a project manager for a large company. Most importantly, Colin and Cindy had raised two beautiful daughters: Lola, who was 6 years old at the time that Colin died, and Ruby, who was 7 years old.

8. Cindy described Colin as a rare and incredibly special person, someone who had a way of connecting with people and who was able to make others feel better about themselves simply by knowing him. Colin had an adventurous spirit, a carefree nature, and a quirky sense of humour. This is no doubt why others were drawn to him and why he was able to impart so much positivity in the lives of those who came to know him.

9. Colin had a kind nature, a warm and generous soul, and always selflessly put the needs of others ahead of his own. This meant, without doubt, that Colin was the best of fathers to Lola and Ruby, and a loving and devoted husband to Cindy. It is heart-rending to know that each of them now have been left with an enormous void in their lives that cannot be filled.

10. Whilst this has been only the briefest of glimpses into the warm, kind-hearted and generous person that Colin was, it has left an indelible mark. I am enormously grateful to Cindy for sharing her private and treasured memories, and for providing an important reminder of what an enormous loss she and her daughters have tragically suffered.

The factual background leading up to Colin's death

11. The inquest was focused primarily on the last 3 days of Colin's death life. The relevant events of these days are set out below. However, there are also events preceding these last 3 days which are important to help understand the reason why certain things occurred during these 3 days. These events are also described below.

January 2014 to March 2014

12. According to Cindy, at the time of Colin's death, his overall health was very good. Colin exercised regularly, he was within a healthy weight range, and he did not smoke or drink heavily.[3] Colin had previously been diagnosed with epilepsy as a child for which he had been prescribed tegretol, medication used in the treatment of epilepsy. In the 20 years that Cindy had known Colin he had only experienced one seizure.

13. On 10 January 2014 Colin was involved in a motorcycle accident in which he suffered fractures to his collar bone, ribs and pelvis. Whilst being treated by ambulance and hospital personnel it

[3] Exhibit 1, tab 12 at [9].

was discovered that Colin had a rapid and irregular heartbeat (rapid atrial fibrillation (**AF**)). Colin was treated at hospital and later discharged on 12 January 2014. He was advised to see his GP and seek a referral to a cardiologist who could investigate the issue of the rapid AF further.

14. With a referral from his GP, Colin saw Dr Ali Toufaili, a consultant cardiologist, on or about 26 February 2014. Dr Toufaili noted that, apart from the incident on 10 January 2014, Colin had not experienced any other episodes of AF. Dr Toufaili also noted that Colin was in sinus rhythm.[4] Given these findings, Dr Toufaili concluded that the AF was an isolated event associated with the motorcycle accident. Dr Toufaili did not prescribe any medication or treatment for Colin other than arranging for a baseline echocardiogram (**ECG**) and further review in about 3 months' time.[5] The ECG was later carried out on 10 March 2014. Colin subsequently saw Dr Toufaili again who noted that the ECG results were normal.[6]

Saturday, 3 May 2014

15. On Saturday 3 May 2014 Colin made plans to have a few drinks with a friend, David Woods. After picking up Mr Woods at about 8:40pm Colin drove to the Narellan Hotel. Over the course of the next several hours Colin and Mr Woods consumed about 5 schooners of beer and 5 glasses of mixed spirits whilst playing pool and chatting.

16. At about 1:45am Colin went to the bathroom. He returned about 5 minutes later and told Mr Woods, "*I think I just passed out in the toilet. I think I bumped my head*".[7] Mr Woods asked Colin if he was alright and Colin said that he was. Mr Woods also asked Colin what had happened and Colin said that he didn't know. Mr Woods saw that Colin appeared fine and could see no injuries to Colin's head.

17. The two friends decided to finish their drinks and left the hotel at about 2:00am to walk home. Colin arrived home at about 2:30am. Cindy was awake at the time and noticed that whilst Colin looked tired he was talking "*normally and coherently*".[8]

Sunday, 4 May 2014: pre-admission to Campbelltown Hospital

18. Shortly after 9:00am the next morning Colin went downstairs to join Cindy and his daughters who were having breakfast at the time. Cindy noticed that Colin appeared pale and tired and joked that he may have been feeling the effects of the previous night. Colin remarked that he didn't feel hung over and said, "*I just don't feel right*".[9] Colin later took his own pulse and said to Cindy that it seemed irregular and rapid, and that he thought he was having another episode of AF.

19. As a result, Cindy dropped Colin at the Harrington Park Medical Centre where he saw a GP. A short time later Colin rang Cindy (who had returned home by this stage) to tell her that the GP had discovered that Colin had very low blood pressure and an irregular heartbeat, and that he had been instructed to go to hospital immediately. Colin and Cindy decided that it would be

[4] The normal regular rhythm of the heart set by the natural pacemaker of the heart called the sinoatrial (or sinus) node.
[5] Exhibit 1, tab 12 at [10].
[6] Exhibit 1, tab 15 at [6].
[7] Exhibit 1, tab 13 at [8].
[8] Exhibit 1, tab 12 at [16].
[9] Exhibit 1, tab 12 at [18].

quicker if Cindy drove Colin to hospital, rather than call and wait for an ambulance. Cindy picked up Colin and drove him to Campbelltown Hospital.

20. On the way there, Colin told Cindy he had passed out in the bathroom at the Narellan Hotel. Colin said that he had no memory of the incident other than waking up lying on the floor with no idea how long he had been unconscious.[10]

Sunday, 4 May 2014: admission to Campbelltown Hospital emergency department

21. Cindy arrived at Campbelltown Hospital at about 10:30am and dropped Colin at the emergency department. After parking her car Cindy returned to the emergency department where she saw Colin speaking to a nurse in the triage office. Upon review the triage nurse noted that Colin said that he felt light-headed and that he appeared pale.[11]

22. Dr Thiyagesan Karthigesu was the Career Medical Officer working in the Campbelltown emergency department on 4 May 2014. Dr Karthigesu reviewed Colin at 10:48am noting that he had a referral letter (from the GP at Harrington Park Medical Centre) indicating that he had developed AF following his motorcycle accident, that he had experienced an episode of syncope[12] the previous night whilst drinking, and that he had an irregular heart rate.[13] Dr Karthigesu took a history from Colin and noted that Colin "*was very orientated when providing this history*".[14] Dr Karthigesu recorded that Colin reported drinking heavily the previous evening, and that whilst sitting at a table his friend told him that he had appeared to experience a brief loss of consciousness which lasted for less than a minute and which Colin described as an episode of "*faintness*".[15] Dr Karthigesu considered the possibility that Colin may have suffered a seizure and, in order to investigate this further, asked Colin for Mr Woods' phone number. However, Colin was unable to provide it as he didn't have the number on him at the time.

23. Dr Karthigesu then examined Colin, noting that an ECG confirmed that Colin was still in AF, that Colin's blood pressure was stable, and that his pulse rate was irregular. Dr Karthigesu asked Colin if he was experiencing any pain or discomfort. Colin reported that he had mild chest pain and palpitations, along with some neck pain although he described this as a long standing condition. Dr Karthigesu noted that Colin did not report any headache or head pain and did not observe Colin to be suffering from any such conditions. On examination, Dr Karthigesu was unable to "*identify tenderness in any areas*".[16] Dr Karthigesu noted that Colin was well oriented, neurologically stable and had a Glascow Coma Scale[17] (**GCS**) score of 15/15. Dr Karthigesu prescribed pantoprazole[18], aspirin and normal saline intravenously.

24. After his review, Dr Karthigesu formed the impression was that Colin was experiencing AF as a result of some sort of cardiac event. Dr Karthigesu asked Dr Hashim Kachwalla, the on duty consultant cardiologist, to review Colin. Dr Kachwalla, together with his registrar (Dr Fedil Metti), assessed Colin and found that he was in AF with tachycardia.[19] Dr Kachwalla formed a

[10] Exhibit 1, tab 12 at [21].
[11] Exhibit 1, tab 27.
[12] The temporary loss of consciousness.
[13] Exhibit 1, tab 23 at [8].
[14] Exhibit 1, tab 23 at [9].
[15] Exhibit 1, tab 23 at [9].
[16] Exhibit 1, tab 23 at [10].
[17] A neurological scoring system, with scores ranging from 3 to 15, used to assess the level of consciousness in a person according to their eye, verbal and motor responses.
[18] Medication used to treat stomach and oesophagus problems, such as acid reflux.
[19] A heart rhythm disorder where the heart beats faster than normal while at rest.

plan for Colin to be admitted to the Coronary Care Unit (**CCU**) and prescribed metoprolol[20] and clexane.[21] Dr Kachwalla asked Dr Karthigesu to advise him (or the cardiologist on call) when Colin's heart rate had come back under control, at which point he could be admitted to the CCU.

Sunday, 4 May 2014: admission to Campbelltown Hospital Coronary Care Unit

25. By about 1:00pm Colin was feeling better and his heart rate had come down and was under control. The clexane prescribed by Dr Kachwalla had been given to Colin shortly before this time. Dr Karthigesu called Dr Kachwalla to advise him of Colin's improved condition. Dr Kachwalla indicated that Colin could be transferred to the CCU and Dr Karthigesu arranged for this to occur with Colin being admitted to the CCU at about 2:20pm.

26. Cindy later visited Colin in the CCU and found him to be in good spirits. She and their daughters stayed with Colin until about 5:00pm when they left. Cindy made arrangements with Colin to return the following day after 12:00pm.

27. Later that evening, at around 8:30pm, it was noted that Colin was still in AF and so plans were made for Colin to remain admitted overnight.[22] At 11:00pm Colin was given a second dose of clexane.

Monday, 5 May 2014: assessment in the Coronary Care Unit

28. By about 11:00am on Monday 5 May 2014 Colin was noted by nursing staff to be alert and oriented, with a normal sinus rhythm, and GCS score of 15/15.[23] Dr Aileen Oon saw Colin at about 12:00pm. Dr Oon was a Basic Physician Trainee (**BPT**) undertaking a cardiology rotation in the CCU. That morning, she had received a verbal handover from Dr Kachwalla regarding Colin and was told that Colin had been admitted the previous day following an unwitnessed episode of syncope and collapse. Dr Oon became aware that Colin was in rapid AF when first admitted and subsequently prescribed anticoagulation medication in the form of clexane. As part of the handover, Dr Oon was also told that Colin had previously seen Dr Toufaili, and that if Colin's AF reverted to sinus rhythm he would be fit to be discharged but that Dr Toufaili would need to be advised before discharge occurred.

29. Upon examination, Dr Oon described Colin as looking well and that he was alert and conversive. Dr Oon took a history from Colin in which she noted that he had been drinking during a night out when he went to the bathroom and found himself on the floor after apparently "*blacking out*". Colin also told Dr Oon that he had epilepsy, took tegretol, and that he had been seizure-free for many years. Colin said that he did not think that he had had a seizure, but could not remember whether he had hit his head or experienced any other trauma. When Dr Oon asked Colin if he thought he could have hit his head, Colin replied, "*I may have*" but could not provide any details of the fall.[24] When asked if he had any pain Colin indicated that the back of his head (the occipital region) was tender and that he had some chest pain on the left side, believing that he may have

[20] A beta-blocker used to slow heart rate.
[21] Anticoagulant medication used to prevent the risk of stroke.
[22] Exhibit 1, tab 27, page 103.
[23] Exhibit 1, tab 27, page 104.
[24] Exhibit 1, tab 19 at [21].

"*cracked a rib*".[25] Colin also denied any history of hypertension, strokes or diabetes, and said that he "*felt well and was keen to go home*".[26]

30. Based on the history provided, Dr Oon decided to assess Colin for any signs of trauma. Colin reported that he had mild tenderness at the back of his head. Dr Oon visually inspected the areas and did not see any obvious signs of possible trauma (such as swelling, bruising or bleeding). Dr Oon auscultated Colin's chest which was clear and had dual heart sounds. Dr Oon did not identify any suspected fractures or abnormalities with Colin's ribs, apart from some tenderness. Colin denied having any pain in his back or neck and Dr Oon found no tenderness on examination.

31. Dr Oon discussed the ECG results with Colin and explained that, from a cardiology perspective, he could probably go home as he was in sinus rhythm. However Dr Oon explained that she needed to clarify with Dr Toufaili whether continued anticoagulation was required as Colin's CHADS score[27] was essentially zero. Dr Oon also told Colin that she would probably request a CT brain scan (**CTB**) before he left hospital, given the history of potential head trauma, to ensure that nothing was missed.[28] If everything was normal, then Colin would probably be discharged.

Monday, 5 May 2014: arrangements made for a CT scan

32. Following her review Dr Oon called Dr Toufaili and told him about the history she had elicited from Colin and her examination findings. Dr Oon asked Dr Toufaili about Colin's anticoagulation therapy and was advised that Colin should be kept on aspirin and metoprolol. Finally, Dr Oon sought Dr Toufaili's advice about arranging for a CTB and was told that that was a matter for her to decide.

33. At around 1:39pm Dr Oon asked Dr Anes Yang, an intern, to arrange for a CTB. A short time later, Dr Toufaili called Dr Oon and told her that a CTB should be arranged. Dr Oon confirmed that she had done so. Dr Toufaili told Dr Oon that if the CTB results were normal Colin could be discharged on aspirin.[29]

34. At around 3:00pm Colin told nursing staff that he had a headache, which was a new symptom for him.[30] Colin rated the pain as 5 out of 10. He was given paracetamol and the nursing staff asked Dr Yang to review Colin. Upon review Dr Yang found[31] that Colin had a GCS score of 15 with no nausea, vomiting or photophobia.[32]

35. Dr Yang reviewed Colin again about 15 minutes later and noted that his headache had worsened and that the paracetamol had had little effect. By this time Cindy had arrived in the CCU and saw that Colin was hunched over and in discomfort. When she asked what was wrong Colin said that he had a bad migraine. Colin was becoming increasingly anxious by this stage and expressed his concern that he would suffer a stroke because of his AF and headache.[33] The nursing staff

[25] Exhibit 1, tab 19 at [21].
[26] Exhibit 1, tab 19 at [21].
[27] A clinical prediction score for estimating the risk of stroke in patients with AF. The score is used to determine if treatment with anticoagulation therapy is required.
[28] Exhibit 1, tab 19 at [28].
[29] Exhibit 1, tab 19 at [31].
[30] Exhibit 1, tab 26, page 107.
[31] Exhibit 1, tab 24 at [5].
[32] Discomfort or pain to the eyes due to light exposure or physical sensitivity of the eyes.
[33] Exhibit 1, tab 20 at [11].

attempted to reassure Colin and arrangements were made for his CTB (which had originally been booked for 5:30pm) to be brought forward.

Monday, 5 May 2014: results of the CT scan

36. At around 3:40pm Colin was taken for his CTB. By this point, Colin was quite distressed and appeared to be in pain. Nursing staff also noted that Colin appeared to be sensitive to light and irritated by the noise of the CT machine.[34] The CT scan was performed at around 4:06pm and revealed an acute left frontotemporal subdural haematoma; left frontal lobe parenchymal haematoma/haemorrhagic contusion[35] with 7mm midline shift.[36]

37. Following the CTB Colin was taken back to the CCU. Neurological observations were performed which revealed Colin's GCS to be 15/15 but he was describing his headache pain as being 9 out of 10.[37]

38. After being told the CTB results Dr Yang called Dr Oon, who at the time was seeing patients in a different ward, to advise her of the scan results. Dr Oon instructed Dr Yang to urgently call the neurosurgical registrar at Liverpool Hospital to advise them of Colin's condition in anticipation that he would need to be transferred there, and to cease all anticoagulation (including clexane) on the medication chart.[38] Dr Oon hurriedly returned to the CCU and on the way she called Dr Toufaili to update him. Dr Toufaili agreed with Dr Oon's instructions to Dr Yang.

39. Acting on Dr Oon's instructions, Dr Yang called one of the neurosurgical registrars at Liverpool Hospital, conveying Colin's CTB results. Dr Yang was told that because of Colin's history of a syncopal episode and possible trauma that she would have to call the trauma hotline at Liverpool. Dr Yang did so and was told by the trauma registrar that a neurosurgical consultant would have to accept Colin's care before a transfer could be arranged.

40. Dr Oon arrived back in the CCU at about 4:20pm and told Colin and Cindy about the CTB results. Colin said that he had a frontal headache and felt nauseous. On examination Dr Oon noted that Colin had left eye ptosis (drooping) and that his left pupil was dilated and sluggish in response to light. Dr Oon also noticed that Colin occasionally had difficulty following instructions and that he appeared to become more confused during the examination.[39] During this period Cindy sent a number of text messages to her brother (who was a paramedic) in which she described, and expressed grave concern about, Colin's deteriorating condition.[40]

41. At about 4:50pm registered nurse Elizabeth Cui began entering Colin's details in the Patient Flow Portal (**the Portal**), software used for the inter-hospital transfer of patients. However, because a consultant at Liverpool Hospital had not yet accepted Colin's care, the Portal entry could not be completed. Dr Yang called Liverpool Hospital and conveyed Colin's condition to Dr Giles Moseley, one of the neurosurgical registrars. At the time Dr Moseley was in surgery with the on call consultant neurosurgeon, Dr Balsam Darwish. After being told about Colin, Dr

[34] Exhibit 1, tab 20 at [14].
[35] A form of intracerebral bleeding within the functional tissue of the brain.
[36] Shift of the brain past its centre line that is often associated with high, life-threatening intracranial pressure.
[37] Exhibit 1, tab 20 at [17].
[38] Exhibit 1, tab 19 at [37].
[39] Exhibit 1, tab 19 at [41].
[40] Exhibit 1, tab 14, Annexure 1.

Darwish agreed to accept Colin for urgent admission to the neurosurgical unit at Liverpool. This allowed the Portal entry to be completed by 5:06pm.

42. By this time Colin's condition was worsening rapidly. At around 5:00pm his GCS had dropped to 14. By 5:30pm it had fallen to 13, and by 6:15pm it had fallen further still to 11.

Monday, 5 May 2014: transfer to the Intensive Care Unit

43. During the afternoon, Dr Oon called the Campbelltown Hospital Intensive Care Unit (**ICU**) registrar, Dr Jeorge Reyes, and discussed whether Colin should be moved to the ICU whilst waiting to be transferred to Liverpool Hospital. Dr Reyes told Dr Oon that there were no available beds in the ICU and that he would come to review Colin after he finished with another patient. A short time later Dr Oon returned to review Colin and saw that he had become further confused and did not appear well. Dr Oon formed the view that Colin was experiencing raised intracranial pressure due to his subdural haematoma.[41] Dr Oon called Dr Reyes again and told him about Colin's deteriorating condition. Dr Reyes said that he would review Colin immediately.

44. Sometime between about 6:00pm and 6:20pm Dr Reyes assessed Colin in the CCU. He noted that Colin's GCS by this time was 9 and told Dr Oon that Colin needed to be moved to the Campbelltown ICU to be intubated (to protect his airway) before he was transferred to Liverpool.[42] Dr Reyes was subsequently called away to attend to another patient in a critical condition.

45. Colin was later moved to the ICU and was intubated sometime after 6:40pm by the anaesthetic registrar at the request of Dr Reyes.[43] By 7:20pm the ICU had taken over Colin's care. At this time it was noted that Colin's GCS was still at 9 and that his left pupil was fixed and dilated, with his right pupil having a sluggish reaction.[44] Because Colin had been intubated he could no longer be transferred by road ambulance and had to be transferred by the state-wide medical retrieval service with a physician and paramedic present (**the retrieval team**).[45] Dr Moseley called Dr Darwish to provide an update on Colin's condition and Dr Darwish made arrangements to remain in and around the hospital in anticipation of Colin's arrival.

Monday, 5 May 2014: transfer to Liverpool Hospital

46. The retrieval team arrived at the ICU at 7:36pm. By this time Colin had been given two units of fresh frozen plasma, protamine[46], and prothrombinex.[47] The retrieval team left Campbelltown at about 8:15pm and arrived at Liverpool at 9:15pm. After being advised that the retrieval team had left Campbelltown, Dr Moseley informed Dr Darwish, the anaesthetic registrar and the operating theatre staff of Colin's imminent arrival as a Category 1 case (highest urgency surgical case).

47. Colin arrived in the Liverpool ICU at about 9:30pm and was seen by Dr Moseley. He explained to Cindy (and Colin's brother-in-law) that Colin required urgent neurosurgical intervention but

[41] Exhibit 1, tab 19 at [50].
[42] Exhibit 1, tab 24I at [10].
[43] Exhibit 1, tab 24I at [15]; Exhibit 1, tab 27, pages 109, 141.
[44] Exhibit 1, tab 27, page 109.
[45] Exhibit 1, tab 17 at [10].
[46] Medication used to reverse the effects of heparin.
[47] Medication made up of blood clotting factors to treat and prevent bleeding.

that based on his clinical signs (including fixed dilated pupils) his prospects of recovery, even with surgery, were poor.[48] Dr Darwish examined Colin about 5 minutes later and also confirmed that Colin's pupils were fixed and dilated, indicating that Colin had sustained severe brain injury and possible brain death, meaning that surgery was futile.[49] However, in an attempt to do everything possible for Colin, Dr Darwish decided to proceed with surgery.

48. Surgery commenced at 10:30pm with a craniotomy and evacuation of the subdural haematoma performed by Dr Darwish with Dr Moseley assisting. Colin was returned from the operating theatre to the ICU at 11:45pm. At the time his left pupil was noted to be fixed and dilated at 4mm with the right pupil at 3mm with a "*very, very sluggish reaction*".[50] At 12:30am, it was noted that Colin had no corneal reflex and that his pupils were fixed, the left pupil at approximately 8mm and the right pupil at approximately 6mm.[51] At 1:30am it was noted that Colin's right pupil had become equally fixed and dilated with his left pupil (both at 8mm).[52]

Tuesday, 6 May 2014 & Wednesday, 7 May 2014

49. On 6 May 2014 Colin underwent a further CTB which showed severe ischaemic injury to the brain from high intracranial pressure.[53] After reviewing the CTB results, Dr Darwish asked his senior neurosurgical registrar to meet with Colin's family to inform them that Colin had irreversible brain injury that was incompatible with survival.

50. Colin later died at 6:30pm on 7 May 2014.

What was the cause of Colin's death?

51. Colin was later taken to the Department of Forensic Medicine at Glebe where Dr Rebecca Irvine, forensic pathologist, performed a postmortem examination on 13 May 2014. Dr Irvine concluded that Colin's brain injuries were "*almost certainly traumatic in origin*" and likely sustained on the evening of 3 May 2014.[54] Dr Irvine also noted that the subdural haematoma and intraparenchymal haemorrhage were very unlikely to have been spontaneous even in the setting of therapeutic anticoagulation, and that the scalp tenderness supported the likelihood of a traumatic event having occurred. Taking these matters into account, Dr Irvine concluded in her autopsy report that Colin died from complications of blunt force injuries of the head.[55]

52. Professor Michael Besser, a consultant neurosurgeon, was briefed to consider a number of issues arising from the circumstances of Colin's death. Professor Besser's opinion is contained within a number of reports which he prepared and which were tendered into evidence during the course of the inquest. Professor Besser also gave evidence during the inquest. Professor Besser explained that blunt trauma to Colin's occipital region (the back and lower part of the skull) resulted in a contra coup (where the injury site is opposite to the site of impact) haemorrhagic contusion.[56] This was caused by movement of the brain from the force of the impact. This movement also resulted in the likely rupture of a vein resulting in a subdural haemorrhage.

[48] Exhibit 1, tab 17 at [23].
[49] Exhibit 1, tab 22 at [6].
[50] Exhibit 1, tab 17 at [27].
[51] Exhibit 1, tab 18 at [17].
[52] Exhibit 1, tab 17 at [28].
[53] Exhibit 1, tab 22 at [9].
[54] Exhibit 1, tab 5, page 4.
[55] Exhibit 1, tab 5, page 2.
[56] Exhibit 1, tab 25, report of 15/11/15, page 7.

Professor Besser noted that the anticoagulation medication that Colin had been given exacerbated the subdural and intraparenchymal haemorrhages. These injuries led to brain swelling, the increase of intracranial pressure, and compromise of blood supply to the brain. Eventually brain stem compression occurred leading to herniation and brain death.

53. **CONCLUSION:** Blunt force injury to the rear, lower part of Colin's head resulted in a contra coup haemorrhagic contusion and intraparenchymal haemorrhage, and a rupture of vein resulting in a subdural haemorrhage. Anticoagulation medication which had been prescribed to Colin exacerbated the haemorrhages. These injuries in turn resulted in a fatal increase in intracranial pressure which caused brain stem compression leading to herniation and death. I therefore concluded that Colin died from complications of blunt force injuries of the head.

What was the manner of Colin's death?

54. Both Dr Irvine and Professor Besser concluded that Colin's intracranial injuries were the result of blunt trauma to the back of his head. This occurred when Colin suffered an unwitnessed fall in the bathroom at around 1:45am on 4 May 2014, after which he told Mr Woods that he had bumped his head. As Colin had a past history of epilepsy the possibility was raised that he had suffered a seizure resulting in a fall and a strike to his head. However, Professor Besser noted that Colin was on prophylactic anticonvulsant medication, had reported no seizures for the past 10 years, and there was no report of incontinence which usually accompanies seizures. On this basis, Professor Besser concluded that it was unlikely that Colin's head injury was a result of an epileptic seizure.

55. Colin himself told Mr Woods that he thought he passed out in the toilet and bumped his head. According to Professor Besser, this is consistent with Colin's atrial fibrillation with hypotension resulting in a fainting episode during which Colin struck his head.

56. **CONCLUSION:** The blunt force injury to the rear, lower part of Colin's head occurred when he suffered an unwitnessed fall in the early morning of 4 May 2014 at the Narellan Hotel. Although there is no direct evidence that Colin suffered an episode of AF, the circumstantial evidence is symptomatically inconsistent with Colin's existing condition of epilepsy. Given that Colin was in AF when he presented to hospital some hours later I conclude, on balance, that the fall was caused by an episode of AF which caused Colin to faint and strike his head, resulting in the traumatic injury.

Issues examined by the inquest and a Coroner's power to make recommendations

57. Until his transfer to Liverpool Hospital, Colin had been admitted to Campbelltown Hospital for approximately 34 hours. Colin generally received care and treatment that was both adequate and appropriate during that time. However, the coronial investigation identified certain specific shortcomings in the care and treatment provided to Colin. The coronial investigation also identified certain other specific issues indirectly related to Colin's care and treatment. The identification of these matters suggested that there is scope for improvement in general patient care within SWSLHD.

58. From a Coroner's perspective, the power to make recommendations which might lead to such improvement is an extremely important one. This power is provided for by section 82(1) of the

Act. 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.

59. The coronial investigation into the death of a person is one that, by its very nature, involves much grief and trauma. The emotional toll that such an investigation, and any resulting inquest, places on families and friends of a deceased person is enormous. A coronial investigation seeks 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. It seeks to identify them not to assign blame or fault but, rather, so that lessons can be learnt from mistakes and so that, hopefully, these mistakes are not repeated in the future. The mere assigning of blame or fault rarely produces a positive outcome and often only serves to add to the anguish that a family member may be experiencing. If families of deceased persons must re-live painful and distressing memories that an inquest brings with it then, where possible, there should be some hope for some positive outcome. The recommendations made by Coroners are made with the hope that they will lead to some positive outcome by improving general public health and safety.

60. In this matter, the independent expert opinion provided by Professor raised a number of matters which shaped the issues which the inquest examined. Other issues were also identified from other evidence gathered during the coronial investigation, and evidence heard during the inquest itself. These issues are summarised below:

    (a) Was an adequate and appropriate history taken from Colin in the emergency department?

    (b) Was an adequate and appropriate handover conducted between physicians within the Coronary Care Unit?

    (c) Were adequate and appropriate arrangements made for the CT scan?

    (d) Was there an adequate and appropriate clinical response after the results of the CT scan became known?

    (e) Were adequate and appropriate arrangements made for Colin's transfer to Liverpool Hospital?

61. The identified shortcomings, and other indirectly related issues, will be discussed in detail below. Where necessary or desirable, recommendations have been made in the hope that these shortcomings are not repeated and so that improvements to patient safety can be made.

Was an adequate and appropriate history taken from Colin?

62. In the emergency department on 4 May 2014 Dr Karthigesu learned that Colin had experienced a syncope episode for less than a minute. However, Dr Karthigesu did not know that Colin had fallen, bumped his head, and found himself on the floor.[57] Dr Karthigesu formed the initial impression that Colin's syncope episode was a cardiac issue related to his history of AF.[58] However, with Colin's history of epilepsy, Dr Karthigesu formed a differential diagnosis that the

[57] Transcript 14/8/17, T24.20.
[58] Transcript 14/8/17, T23.4.

syncope episode may have been related to a neurological issue.[59] As a result Dr Karthigesu intended to obtain Mr Woods' phone number from Colin so that he could investigate the possibility of a seizure further.[60]

63. Ultimately, however, Dr Karthigesu did not make this enquiry and did not document his intention, nor the basis for it, in Colin's progress notes. Dr Karthigesu explained that he was in too much of a hurry to complete the progress notes entry.[61] Dr Karthigesu similarly did not record his differential diagnosis in Colin's progress notes, even though it was his usual practice to do so.

64. When Dr Kachwalla assessed Colin in the emergency department he did not have access to Colin's progress notes. Dr Kachwalla had only received a brief verbal handover from someone in the emergency department to the effect that Colin had a history of AF and had presented with heart palpitations, dizziness and hypotension.[62] Dr Kachwalla was not aware that Colin had a history of epilepsy or that he had suffered a fainting episode. If he had been aware that Colin had suffered a fainting episode Dr Kachwalla said that he would have attempted to elicit a history from Colin to establish whether he had suffered any injury from the fainting episode, specifically whether he had bumped his head.[63] If this history had been established Dr Kachwalla would have arranged for a CTB before prescribing any anticoagulant.[64]

65. Colin's history of dizziness prompted Dr Kachwalla to ask Colin if he had suffered any injuries.[65] Whilst Colin mentioned the motorbike accident he was involved in several months earlier, no mention was made of the fainting episode in the bathroom. This enquiry was not documented in Colin's progress notes.[66] On this basis, and because Dr Kachwalla was unaware of Colin's history of epilepsy, Dr Kachwalla did not consider that the history of dizziness related to a neurological issue.[67]

66. Mrs Parker's solicitor submitted that a recommendation should be made for Dr Karthigesu to be referred to the NSW Medical Council to review his clinical management of Colin. In considering whether such a recommendation is necessary or desirable, it is important to draw a distinction between a departure from a clinician's usual practice, and conduct by a clinician which may be regarded as a departure from acceptable and competent medical practice.

67. Dr Karthigesu acknowledged that, in some respects, he did not follow his usual practice when he saw Colin on 4 May 2014. Specifically, he did not document in Colin's progress notes his differential diagnosis of a possible neurological issue, nor document his intention to investigate this issue further by obtaining a collateral history. However, there is no evidence (such as from an independent expert, like Professor Besser) that establishes that this amounted to a departure from acceptable and competent medical practice. The referral of the conduct of a person to an investigative and disciplinary administrative body is a serious matter and one that carries

[59] Transcript 14/8/17, T22.9.
[60] Transcript 14/8/17, T21.29.
[61] Transcript 14/8/17, T21.48.
[62] Exhibit 1, tab 16 at [6].
[63] Transcript 14/8/17, T41.23.
[64] Transcript 14/8/17, T45.33.
[65] Transcript 14/8/17, T44.1.
[66] Transcript 14/8/17, T44.19.
[67] Transcript 14/8/17, T44.24.

potentially grave consequences. There needs to be a clear, cogent and exact evidentiary basis to ground any recommendation for such a referral.[68]

68. **CONCLUSION:** The history taken from Colin in the emergency department was inadequate in the sense that, regrettably, an opportunity was missed to further investigate the cause and effect of his syncopal episode in the early hours of 4 May 2014. Although the evidence of Dr Karthigesu was given with the benefit of hindsight, it seems probable that further investigation would have been conducted to determine whether the syncope episode resulted in any injury. If a CT scan had been conducted as part of this investigation, it appears likely that Colin's intracranial pathology would have been detected on 4 May 2014 rather than on 5 May 2014.

69. Dr Karthigesu's failure to document his differential diagnosis and intended further investigation was a departure from his usual practice due to pressures of time. There is no evidence that allows a conclusion to be reached that this failure amounted to a departure from acceptable and competent medical practice. Therefore I conclude that it is neither necessary nor desirable for a recommendation to be made that Dr Karthigesu's conduct on 4 May 2014 be referred to the NSW Medical Council for review.

Was an adequate and appropriate handover conducted between physicians within the Coronary Care Unit?

70. After his assessment Dr Kachwalla admitted Colin under his care to the CCU for observation. The next morning, Dr Kachwalla asked Dr Oon to arrange for Dr Toufaili to take over Colin's care. By doing so Dr Kachwalla was following an established practice within the CCU where, for reasons of continuity, the care of patients would be transferred to consultants who had previously seen them.

71. Dr Kachwalla's request for care to be transferred to Dr Toufaili was not documented[69] and Dr Toufaili did not confirm (to Dr Oon or to anyone else) that he had formally accepted care for Colin. To the contrary, Dr Toufaili told Dr Oon that he declined to accept care for Colin. As Colin's AF had resolved and preparations were being made for his discharge, Dr Toufaili did not feel that he could offer anything further with respect to Colin's treatment.[70] Dr Toufaili's position was not communicated to Dr Kachwalla, who only made the assumption that care had been accepted in the absence of any indication to the contrary. [71] However, whilst Dr Toufaili did not formally accept care for Colin, he accepted care on a practical level by providing advice and instructions to Dr Oon.[72]

72. Apart from the above inconsistences in the verbal handover, there were also documentary inconsistences within the CCU. For example, Colin's progress notes contained a sticker identifying him as having been admitted under Dr Kachwalla's care.[73] However, within the CCU there was also a whiteboard listing the names of patients and the names of consultants under whose care patients had been admitted. This white board was regularly updated by ward clerks in the CCU, even if the progress note stickers were not.[74] The evidence is silent as to whether

[68] *Briginshaw v Briginshaw* (1938) 60 CLR 336.
[69] Transcript 14/8/17, T51.35.
[70] Transcript 15/8/17, T32.19.
[71] Transcript 14/8/17, T52.4.
[72] Transcript 15/8/17, T50.44.
[73] Transcript 14/8/117, T49.39.
[74] Transcript 14/8/17, T67.12.

Colin's name on the whiteboard had been updated to reflect that he was under the care of Dr Kachwalla or Dr Toufaili.

73. A policy directive issued by the NSW Ministry of Health titled *Clinical Handover – Standard Key Principles*[75] (**the Handover policy directive**) applied at the time of Colin's death. It sets out a number of key principles associated with patient handover process. Some of those principles include ensuring that all important findings or changes of condition are documented, and ensuring that a receiving clinician comprehends, acknowledges and accepts responsibility for a patient.

74. **CONCLUSION:** The handover of Colin's care from Dr Kachwalla to Dr Toufaili did not follow key principles set out in the Handover policy directive. The handover was not documented and there was no acknowledgment or acceptance of care by Dr Toufaili. Despite this, it does not appear that the failure to comply with the Handover policy directive had any direct adverse impact on the management of Colin's care in the sense that Dr Oon was left in any doubt as to who she should seek advice and instructions from regarding Colin's care. Dr Oon understood that Dr Toufaili had accepted care for Colin[76] which is, in practical if not formal terms, what had occurred. Nonetheless, it is not difficult to envisage situations where non-compliance with the Handover policy directive may lead to adverse outcomes for patients. I therefore conclude that a recommendation is desirable to mitigate the possibility of any future non-compliance with the Handover policy directive.

75. **RECOMMENDATION 1**: I recommend to the Chief Executive, South Western Sydney Local Health District that consideration be given to providing targeted education and training to all nursing and medical staff regarding the NSW Ministry of Health policy directive, *Clinical Handover – Standard Key Principles* (PD2009_060).

Were adequate and appropriate arrangements made for the CT scan?

76. Dr Oon ordered the CTB for Colin at about 1:39pm at the end of her ward round.[77] She felt that a CTB was warranted because Colin had presented with a history of a fall and he had told Dr Oon that he may have hit his head, even though he could not specifically recall doing so. Although Colin was not (at the time) displaying any neurological deficit or symptoms,[78] and had been admitted for almost 24 hours with no issues recorded,[79] Dr Oon wanted to satisfy herself that Colin was not presenting with any pathology.[80] Accordingly Dr Oon sought advice from Dr Toufaili who agreed with her approach.

77. When the CT was requested by Dr Yang (at Dr Oon's instructions) it was booked to take place at 5:30pm. At around 3:00pm Colin began complaining of a headache, the pain from which was worsening quickly. In response, arrangements were made to bring forward the CTB to 3:40pm.

78. The NSW Ministry of Health policy directive, *Closed Head Injury in Adults – Initial Management* (**the Closed Head Injury policy directive**), provides that patients with high risk mild head

[75] Exhibit 1, tab 31.
[76] Transcript 14/8/17, T81.26.
[77] Transcript 15/8/17, T15.3.
[78] Transcript 14/8/17, T78.28.
[79] Transcript 14/8/17, T79.30.
[80] Transcript 15/8/17, T2.33.

injury, moderate head injury and severe head injury should all have "*early*" CT scanning.[81] It also notes that for patients with mild head injuries, where a CT scan is indicated, "*it is reasonable to suggest that CT scans should be performed shortly after a decision is made that one is necessary*".[82] The policy directive does not stipulate a timeframe for what constitutes an "*early*" scan or one that is "*performed shortly after a decision is made*".

79. Mrs Parker's solicitor submitted that a recommendation should be made that the reference to "*early*" CT scanning should be replaced with the phrase "*urgent within one hour*". These matters were not put to Professor Besser, nor raised by Professor Besser in his report. The issue regarding the timeframe within which a CTB ought to have been performed was not raised with any other medical professional other than Dr Toufaili, who indicated that it should have been performed ideally within an hour of being ordered.[83] However, Dr Toufaili was not asked to explain his reasoning as to how he nominated this timeframe.

80. **CONCLUSION:** It is logical to conclude that had the CTB take place within an hour of being ordered, that is at around 2:40pm as opposed to 3:40pm, Colin's serious intracranial pathology would have been identified more promptly. In turn, this may have allowed for additional time within which Colin's transfer to Liverpool for emergency surgery could have been effected. However, as will be discussed further below, it is unclear whether an additional hour would have materially altered the outcome.

81. Two things seem clear from the clinical evidence. Firstly, at the time that Dr Oon ordered the CTB there were no neurological findings to indicate that an urgent or immediate CTB was warranted. Colin had been admitted for almost 24 hours and had shown no symptoms to suggest that he was not neurologically intact. The evidence shows that the CTB was ordered because Dr Oon wanted to, appropriately, ensure that there was no intracranial pathology on the background of Colin's presentation with a possible strike to his head from an unwitnessed fall. Secondly, once it became apparent that Colin was displaying a new symptom, a headache which was rapidly worsening in a short period of time, there was appropriate escalation with the bringing forward of the CTB by almost two hours. I therefore conclude that adequate and appropriate arrangements were made regarding the CTB.

82. Professor Besser was not critical of the timing of the CTB. Indeed he notes that the CTB was "*given more urgent priority*" when Colin complained of headache.[84] The Closed Head Injury policy directive already provides that CT scans should be performed early and shortly after a decision for one is made. There was insufficient evidence at the inquest, apart from the evidence of Dr Toufaili, to ground a recommendation that the Closed Head Injury policy directive be amended to provide for a specific timeframe within which a CT scan should be performed.

Was there an adequate and appropriate clinical response after the results of the CT scan became known?

83. According to Professor Besser, once the result of Colin's CTB became known certain steps needed to be taken. Most critically, surgery to evacuate the haematoma and control the bleeding needed to be performed within one to two hours of 3:00pm (when Colin complained of severe

[81] Exhibit 1, tab 33A, pages 8, 27.
[82] Exhibit 1, tab 33A, pages 8, 26.
[83] Transcript 15/8/17, T35.22.
[84] Exhibit 1, tab 25, report of 19/5/17, page 3.

headache) and certainly by 4:00pm (when the results of the CTB became known).[85] However, Professor Besser also identified other 4 steps which needed to be taken.

84. Firstly, the effects of the anticoagulation medication given to Colin up until that point needed to be reversed. The medication in question was clexane and aspirin. Aspirin had been prescribed by Dr Karthigesu because of Colin's chest pain on presentation in the emergency department.[86] Whilst Dr Karthigesu told Dr Kachwalla about the aspirin[87] it appears that Dr Oon may not have known that it had been prescribed.[88] In order to counter the platelet dysfunction caused by the aspirin, a platelet transfusion was required.[89] However, it appears that this never occurred. As soon as Dr Oon became aware of the CTB results she instructed Dr Yang to case all anticoagulants including clexane. Whilst Dr Oon was aware of the need to reverse the clexane[90] she had, at that time, no experience in doing so. It appears that at some stage Dr Oon sought advice from Dr Moseley[91] at about 5:30pm and was advised that fresh frozen plasma, intravenous protamine and platelets needed to be administered.[92] In order to reverse the effects of clexane, administration of prothrombin was required. However it appears that no prothrombin was administered to Colin until 6:00pm[93], and that fresh frozen plasma was not commenced until 7:50pm.[94] Whilst Dr Oon confirmed the need for protamine to be given with the haematology department at Liverpool, it appears that there was a delay in its administration because the dosage could not be immediately calculated in the absence of an anti-xa level.[95]

85. Secondly, intubation to control the airway and gas exchange was required as soon as possible.[96] However Colin was not intubated until after 6:40pm, by which time he was already suffering the effects of raised intracranial pressure.

86. Thirdly, mannitol (an osmotic diuretic) needed to be administered to assist with reducing intracranial pressure. This was not given at any time whilst Colin was in Campbelltown Hospital and was only given after Colin arrived in the ICU at Liverpool.

87. Fourthly, reduction of Colin's fluid intake was required with Colin's head elevated at 30 degrees. As Dr Oon had not, at that time, managed a neurological presentation like Colin's before, she spoke to the neurosurgery team at Liverpool and advice about this step was given by Dr Moseley.[97] This was recorded retrospectively in Colin's progress notes by Dr Oon[98] but the notes do not otherwise indicate whether this step was carried out.

88. The clinical steps identified by Professor Besser were either not taken in a timely manner, or not taken at all. However, Professor Besser acknowledged that even if they had been taken, Colin's condition may still have deteriorated. Similarly, Dr Darwish explained that anticoagulation reversal was advocated whilst waiting for Colin to be transferred to Liverpool. However, Dr Darwish would not have waited for the reversal to take effect and would have proceed with

[85] Exhibit 1, tab 25, report of 19/5/17, page 4.
[86] Transcript 14/8/17, T18.46.
[87] Transcript 14/8/17, T19.1.
[88] Transcript 14/8/17, T77.37; 15/8/17, T44.4.
[89] Exhibit 1, tab 25, report of 15/11/15, page 10.
[90] Transcript 15/8/17, T4.30.
[91] Transcript 16/8/17, T38.40.
[92] Exhibit 1, tab 27, page 116.
[93] Exhibit 1, tab 27, page 128.
[94] Exhibit 1, tab 27, page 132.
[95] A test to measure the activity of heparins and monitor anticoagulant therapy.
[96] Exhibit 1, tab 25, report of 19/5/17, page 4.
[97] Transcript 16/8/17, T30.23.
[98] Exhibit 1, tab 27, page 117.

surgery immediately, regardless.[99] Both Professor Besser and Dr Darwish agreed that the most critical step in response to the results of the CTB becoming known was emergency surgery in the form of a craniotomy in order to prevent irreversible brain damage and death.[100]

89. The Closed Head Injury policy directive provides that anticoagulated patients with any evidence of haemorrhage on CT scan "*should have early rapid reversal of anticoagulation*".[101] Mrs Parker's solicitor submitted that a recommendation should be made that the Closed Head Injury policy directive be amended to use the phrase "*urgent use of agents that can effect rapid reversal of anticoagulation*". As the Closed Head Injury policy directive already refers to "*early rapid reversal*" it appears that this submission is effectively advocating the use of the word "urgent". It should be noted that the Closed Head Injury policy directive already notes that patients who are shown to have a traumatic injury on CT scan "*should be strongly considered for short term reversal of their anticoagulation as they are at high risk of acute deterioration and death*".[102]

90. **CONCLUSION:** Once the results of the CTB became known, the clinical response was suboptimal. There was delay in administering both prothrombin and fresh frozen plasma at Campbelltown and mannitol was not administered at all until Colin arrived at Liverpool. Dr Oon immediately recognised the need to cease all anticoagulation medication and appropriately sought advice regarding short term anticoagulation reversal. However, Dr Oon was not experienced with managing such a clinical situation which contributed to the delay in reversal. It also appears that the clinical response, appropriately, was focused primarily on the concurrent need to arrange for Colin's expeditious transfer to Liverpool, as well as the management of his deteriorating condition. Ultimately however, whilst the anticoagulation reversal would have been ideal, the evidence indicates that it would not have materially affected the outcome.[103]

91. There is no evidence to suggest that the need for immediate cessation of anticoagulation and its reversal was not recognised. Indeed, this was the first instruction given by Dr Oon to Dr Yang after being told the CTB results. It therefore does not appear that failure to recognise the urgency of the required clinical response contributed to the delay in the response itself. Rather, the response was impeded by other considerations. The Closed Head Injury policy directive already clearly sets out the need for early rapid reversal of anticoagulation and identifies the serious risks that patients are exposed to. I therefore conclude that it is neither necessary nor desirable for a recommendation to be made that the Closed Head Injury policy directive be amended.

Were adequate and appropriate arrangements made for Colin's transfer to Liverpool Hospital?

92. Once the results of the CTB were known, the most critical step in Colin's care and treatment was for an emergency craniotomy to be performed to evacuate the haematoma and relive the intracranial pressure. This was to take place at Liverpool Hospital. The results of the CTB were available at just after 4:00pm on 5 May 2014 but Colin did not arrive at Liverpool Hospital until just over 5 hours later. This was despite the urgency of Colin's transfer being categorised as life-threatening on the Portal and requiring transfer within 4 hours. By the time of Colin's arrival at

[99] Transcript 16/8/17, T39.16.
[100] Exhibit 1, tab 25, report of 19/5/17, page 5.
[101] Exhibit 1, tab 33A, page 33.
[102] Ibid.
[103] Transcript 16/8/17, T45.2.

Liverpool Hospital any emergency surgery was effectively rendered futile as Colin had suffered irreversible brain damage.

93. According to Professor Besser once there was evidence of raised intracranial pressure, there was a one to two hour window for an emergency craniotomy to be performed to avoid irreversible brain damage and death.[104] Intracranial pressure was suspected at around 3:00pm, when Colin complained of headache which quickly worsened, and confirmed at just after 4:00pm when the CTB results were known. This meant that, in Professor Besser's opinion, emergency surgery should have been performed by 6:00pm in order to preserve Colin's life.[105] However, by that stage, Colin had not yet departed from Campbelltown Hospital.

94. During the inquest, frequent reference was made to the fact that Liverpool Hospital was "*only 20 minutes up the road*" from Campbelltown Hospital. In such circumstances, and having regard to all of the above, the ultimate question to be asked is why did it take so long for Colin's transfer to be effected? It appears that, tragically, the following factors combined to hamper Colin's expeditious transfer from Campbelltown Hospital:

    (a) The most senior doctor in the CCU on 5 May 2014 Dr Oon, was a basic physician trainee with less than four years of postgraduate experience. Much of the clinical decision-making regarding Colin's rapidly deteriorating condition from 3:00pm onwards was left to Dr Oon. Furthermore, on that day Dr Oon was required to cover the entire CCU as the second registrar was on leave and the replacement locum registrar had called in sick.[106]

    (b) When Dr Oon was told the results of the CTB she was not in the CCU but rather in a different ward.

    (c) Dr Yang, was tasked with arranging for Colin's urgent transfer to Liverpool. Dr Yang was in her first year of postgraduate clinical work, had only been at Campbelltown Hospital for 11 weeks, and had only been in the CCU on rotation for 3 weeks. Whilst Dr Yang had previously been involved in the handover of patients between teams within a hospital she had little to no experience managing the logistics of the transfer of a patient between hospitals, particularly in an urgent situation.[107]

    (d) After being told by Liverpool Hospital to contact the trauma hotline to arrange the transfer because there were no beds available for Colin in the Liverpool ICU, Dr Yang spent more than 30 minutes[108] on the hotline to little effect.

    (e) Ms Cui, the CCU nursing team leader, was responsible for entering the details of Colin's transfer on the Portal. However, it appears that Ms Cui's only experience was in arranging for the transfer of cardiology patients from the CCU at Campbelltown to the "cath lab" at Liverpool, a process which did not require arranging for a bed to be available at Liverpool.[109] The responsibility of finding available beds usually belonged to the Patient Flow Manager (before 3:00pm) or the After Hours Manager (**AHM**) (after

[104] Exhibit 1, tab 25, report of 19/5/17, page 5; Transcript 7/11/17, T79.23.
[105] Transcript 7/11/17, T85.38.
[106] Transcript 15/8/17, T13.18.
[107] Transcript 15/8/17, T77.46.
[108] Transcript 15/8/17, T78.21.
[109] Transcript 16/8/17, T12.33.

3:00pm), both commonly referred to as the Bed Manager. However, it appears that when Ms Cui encountered difficulty finding a bed for Colin she did not escalate it in a timely manner with the AHM at the time, Fiona Tilson.

(f) Dr Yang initially had difficulty identifying a consultant at Liverpool under whose care Colin could be admitted. Dr Oon recognised this difficulty and took over from Dr Yang.[110]

(g) It appears that there was uncertainty regarding who was responsible for arranging for the transport to take Colin to Liverpool. Whilst Dr Oon thought that Ms Cui was booking the transport,[111] Ms Cui herself said that she could not recall who made the call for the ambulance.[112] It appears that at some stage Dr Oon was asked about the type of medical retrieval service which should be used. Whilst Dr Oon was unfamiliar with the types available she indicated that whatever type which would transport Colin in the quickest amount of time should be used.[113]

(h) It appears that the actual on call cardiology consultant for 5 May 2014 was never asked to be involved in Colin's care or, specifically, involved in his transfer to Liverpool. Instead Dr Toufaili took on that role. Whilst Dr Toufaili recognised that Dr Oon needed assistance in managing Colin's transfer and recognised that if he were to call a consultant at Liverpool it might expedite the transfer[114], no such call was made.

(i) Although difficulties had been encountered identifying a consultant at Liverpool under whose care Colin could be admitted, Ms Cui did not seek assistance from Ms Tilson until 4:20pm. Although Colin had been entered on the Portal in a life threatening patient category[115], this was not communicated to Ms Tilson. Ms Tilson was only told that Colin's condition was urgent, not life-threatening. If she had been told the latter, Ms Tilson would have suggested that a call be made to the admitting officer in the emergency department at Liverpool so that Colin could be admitted via the emergency department. There was also no discussion at this point about arranging for a transport to take Colin to Liverpool.[116]

(j) After speaking to Ms Cui, Ms Tilson indicated that she would call the Bed Manager at Liverpool to find a bed for Colin. However by 4:43pm, when Ms Cui called a second time, Ms Tilson had not made any call because she had not heard back that there had been any clinician-to-clinician discussion regarding Colin.[117] It appears that Ms Tilson did not make this call until about 5:10pm, at which time she had identified that a bed in the neurosurgical unit was required.[118]

(k) Ms Tilson was initially told that there were no neurosurgical beds available at Liverpool but was told by the Bed Manager that enquiries would be made to accommodate Colin. Ms Tilson was told that she would receive a call back in 10 to 15

[110] Transcript 15/8/17, T8.44.
[111] Transcript 15/8/17, T9.18.
[112] Transcript 16/8/17, T13.18.
[113] Transcript 15/8/17, T9.44.
[114] Transcript 15/8/17, T47.6.
[115] Exhibit 1, tab 27A.
[116] Transcript 7/11/17, T7.36.
[117] Transcript 7/11/17, T9.10.
[118] Transcript 7/11/17, T11.2.

minutes and believes that she received one,[119] however she was unable to recall whether a bed had actually been found for Colin by 5:30pm.[120] Unfortunately with Colin's GCS score dropping at this time, his condition was quickly worsening, meaning that Dr Oon raised with Dr Reyes the possibility of Colin being transferred to the ICU. However, there were no beds available in the ICU and Dr Reyes was unable to review Colin immediately.

(l) Dr Reyes was unable to assess Colin until sometime between 6:00pm and 6:20pm. By this time Colin's GCS score was 9. It had been 15 shortly after 4:00pm when the CTB was completed. As Colin's GCS had dropped by more than 2 points, it appears that a Medical Emergency Team (**MET**) call should have been made[121] for Dr Reyes and the MET team to attend earlier. This would have resulted in Colin being intubated in the CCU rather than having to await transfer to the ICU for intubation to take place.[122] However, even if this had occurred, Colin would still need to be moved to the ICU.[123] Dr Reyes formed the view that Colin needed to be moved to the ICU to be intubated however, as he was called away to attend to another patient, this didn't occur until about 6:40pm when the intubation was performed by the anaesthetic registrar.

(m) As Colin had by this stage been intubated he could no longer be transported by road ambulance to Liverpool. Instead he required transport via the retrieval team. The call to the retrieval team was not made until about 6:30pm.

(n) After the retrieval team arrived at 7:36pm it took approximately half an hour to stabilise Colin. The retrieval team departed Campbelltown at 8:15pm and arrived at Liverpool at 9:15pm.

95. At the time of Colin's death a policy directive issued by the SWSLHD in September 2013 and titled *Patient Transfer: Inter-Facility Patient Transfer* (**the 2013 Transfer policy directive**) governed the transfer of patients between facilities within the District. The 2013 Transfer policy directive was replaced in April 2015 by a new policy directive with the same title (**the 2015 Transfer policy directive**).

96. For present purposes, the 3 most relevant differences between the two versions of the policy directives are:

(a) the 2015 Transfer policy directive introduced different categories of transfer dependent on a patient's condition, such as *time critical* transfers to take place within 4 hours and *urgent* transfers to take place within 24 hours;

(b) the 2013 Transfer policy directive indicated that Attending Medical Officer (**AMO**) to AMO communication will often expedite transfer, whereas the 2015 Transfer policy directive stipulated that such communication is *preferred* in time critical and urgent transfer cases; and

[119] Exhibit 1, tab 24H at [14].
[120] Transcript 7/11/17, T12.12.
[121] Transcript 7/11/17, T26.35.
[122] Transcript 7/11/17, T26.10.
[123] Transcript 7/11/17, T34.33.

(c) the 2015 Transfer policy directive provides (at clause 4.7) that if significant issues arise that impede or delay transfers the matter should be referred to senior facility management immediately, and that if the issue remains unresolved at that level the matter should be escalated to the SWSLHD Executive on call.[124]

97. Professor Besser was critical of the lack of supervision and support of junior medical staff by consultant physicians, and the lack of direct consultant-to-consultant discussion regarding Colin's treatment.[125] For example, Professor Besser opined that if Dr Toufaili had spoken directly with Dr Darwish, the latter would have said that Colin needed urgent intubation, intravenous mannitol and immediate transfer to Liverpool for a craniotomy.[126] This led Professor Besser to conclude that consultant-to-consultant referral, and subsequent discussions, should be mandated for time critical transfers in the 2015 Transfer policy directive, rather than simply expressed as preferred.[127] Dr Sellapa Prahalath, the Director of Medical Services at Campbelltown Hospital, gave evidence at the inquest. Dr Prahalath was taken to the conclusion reached by Professor Besser in one of his reports and agreed with it.[128]

98. Counsel for the SWSLHD submitted that mandating consultant-to-consultant communication regarding inter-facility patient transfers would be unnecessarily restrictive, and possibly inconsistent with sound clinical care. It was submitted that the unavailability of a consultant (who might be in surgery) could delay an otherwise routine transfer that did not require the involvement of a clinician above the level of registrar. It was also submitted that the unavailability of a consultant might delay a time critical transfer.

99. Instead it was submitted that a degree of agility is required when effecting inter-facility patient transfers. It was further submitted that the most effective way to ensure that time critical transfers are effected is by escalation of issues which may delay or impede transfers to senior facility management or District executives, in accordance with the 2015 Transfer policy directive. Dr Prahalath explained that since 2014, education about the 2015 Transfer policy directive within the District has resulted in bed managers and after hours managers showing less hesitation in escalating matters to the hospital executive on call, such as the hospital general manager, when obstacles are encountered.[129]

100. **CONCLUSION:** A constellation of factors combined to prevent the expeditious transfer of Colin from Campbelltown to Liverpool Hospital meaning that the transfer itself was inadequate and appropriate steps were not taken. The relative inexperience of junior medical personnel and nursing staff who had not previously encountered a situation like the one they faced on 5 May 2014 meant that there was miscommunication, a failure to appreciate the urgency of Colin's clinical situation and the necessary response, and difficulty overcoming administrative impediments. This ultimately and tragically resulted in emergency life-preserving surgery being delayed until it was too late to alter the clinical outcome for Colin.

101. The question that remains is whether any corrective action can, or needs to, be taken in order to mitigate the risk of such a situation occurring again. The expert evidence given at inquest suggests that the involvement of senior medical personnel would be likely to lead to improved

[124] Exhibit 1, tab 30, page 6.
[125] Exhibit 1, tab 25, report of 15/11/15, page 11.
[126] Transcript 7/11/17, T74.23.
[127] Exhibit 1, tab 25, report of 30/5/16, page 3.
[128] Transcript, 7/11/17, T62.39.
[129] Transcript 7/11/17, T61.35-45.

clinical outcomes. However, there is force to the submission made by counsel for the SWSLHD that consultant-to-consultant communication should not be mandated for all inter-facility transfers. Making such communication mandatory would not appear to be necessary for routine transfers, or perhaps even transfers categorised as urgent (requiring transfer within 24 hours), as referred to in the 2015 Transfer policy directive for the reasons set out above. The evidence establishes that education about the 2015 Transfer policy directive has resulted in less reluctance to escalate matters to persons at senior management or executive levels who appear to be best placed to overcome the administrative difficulties encountered in Colin's transfer.

102. Notwithstanding, it seems that the issue is not about identifying who is able expedite a time critical transfer, but rather who is able to identify that escalation is required and best able to effect such an escalation. For example, it did not occur to Ms Tilson that escalating the matter to more senior administrative staff at Campbelltown might have resulted in a more rapid transfer.[130] Similarly, none of the medical staff at registrar level at Campbelltown and Liverpool sought to escalate Colin's transfer when difficulties were encountered. The evidence suggests that a senior medical officer, such as a consultant, is most likely able to recognise the need for escalation. Dr Prahalath agreed that "*someone senior*" should be involved in the transfer process.[131] Further, Dr Prahalath agreed with Professor Besser's opinion that consultant-to-consultant communication should be mandatory in time critical transfers. The combined effect of this evidence strongly indicates that the 2015 Transfer policy ought to be amended to reflect this. In order to allow for appropriate agility when consultants are not immediately available, clause 4.7 of the 2015 Transfer policy should be followed.

103. **RECOMMENDATION 2**: I recommend to the Chief Executive, South Western Sydney Local Health District that consideration be given to amending the *Patient Transfer: Inter-Facility Patient Transfer* (SWSLHD_PD2015_004) policy directive to require: (a) mandatory (rather than preferred) consultant-to-consultant referral, where consultants are immediately available, to expedite the transfer of time critical patients; and (b) in circumstances where consultants are not immediately available for time critical transfers, then clause 4.7 should be followed.

Other matters identified during the inquest

104. During the course of the inquest other matters connected with Colin's death were identified which gave rise to the necessity or desirability for recommendations to be made. Several of the matters concerned the 2015 Transfer policy directive. Each matter is discussed below.

Availability of emergency surgery at Campbelltown Hospital

105. As attempts were being made to transfer Colin to Liverpool, part of Dr Toufaili's advice to Dr Oon included enquiring whether a general surgeon at Campbelltown was able to perform the emergency craniotomy.[132] Dr Oon discussed this with the surgical registrar and was informed that Campbelltown was not equipped to perform neurosurgical procedures and that they could only be performed at Liverpool.[133]

[130] Transcript 7/11/17, T11.35.
[131] Transcript 7/11/17, T61.15.
[132] Transcript 15/8/17, T47.21.
[133] Exhibit 1, tab 19 at [57].

106. It appears that clinical services that are available at different hospitals are delineated by the NSW Ministry of Health. Dr Upul Premawardhana, the Director of Cardiology at Campbelltown Hospital, indicated that Campbelltown Hospital is designated as "*No Planned Service*" with respect to neurosurgical procedures on the basis that it lacks appropriately trained clinical staff and surgical equipment to perform such procedures.[134] Liverpool Hospital is the designated neurosurgical facility within the SWSLHD. Dr Prahalath agreed that in the absence of clinical competence and necessary equipment it would be unsafe to proceed with any type of neurosurgical procedure.[135] Professor Neil Merrett, the Director of Surgery at Campbelltown Hospital, shared the views of Dr Premawardhana and Dr Prahalath indicating that the general surgeons at Campbelltown were not suitably trained or credentialed to provide emergency neurosurgical care .[136]

107. Professor Besser was critical of the positions taken by the general surgical team at Campbelltown Hospital, Dr Premawardhana, Dr Prahalath, and Professor Merrett. He opined that all general surgeons (and indeed all medical practitioners) are instructed in emergency surgery for life threatening intracranial haematoma and that the necessary equipment to perform such surgery would have been available at Campbelltown.[137]

108. **CONCLUSION:** This is a complex issue that raises a number of considerations. The issue was insufficiently canvassed at the inquest to allow a definitive conclusion to be reached. However, the evidence suggests that there are two principles relevant to the issue, which may not necessarily be inconsistent with one another. On the one hand, it is clear that the NSW Ministry of Health has designated that only specific facilities within Local Health Districts are credentialed to perform certain types of clinical procedures. On the other hand, if faced with an imminently life-threatening situation, any medical practitioner may hypothetically, by virtue of their training, be *capable* of performing an emergency surgical procedure provided that the necessary surgical equipment is available. However, whether a procedure *could* be performed does not necessarily mean that it *should* be performed. The potential adverse outcome for a patient is obviously the most critical matter for consideration. Professor Besser agreed that the individual prerogative of a medical practitioner would factor heavily into such a consideration.[138] For these reasons, it is not possible to reach a conclusion as to whether emergency surgery for Colin *should* have been performed at Campbelltown Hospital. Indeed, there is no direct evidence to confirm that the necessary equipment to do so was available on 5 May 2014.

Use of terms within the 2015 Transfer policy directive

109. Initially Dr Prahalath indicated that the acronym AMO used in the 2015 Transfer policy directive referred to "*Admitting Medical Officer*". However he was later taken to the definition[139] within the document which indicates that the acronym instead refers to "*Attending Medical Officer*". It should also be noted that the term "*consultant*" is also used interchangeably with AMO in the document. Dr Prahalath agreed that there is "*room for confusion*"[140] with the use of the acronym and thought it was better for the document to simply use the term "*consultant*".

[134] Exhibit 1, tab 24A at [17].
[135] Transcript, 7/11/17, T63.5.
[136] Exhibit 1, tab 24D, Annexure I.
[137] Exhibit 1, tab 25, report of 19/5/17, page 3.
[138] Transcript 7/11/17, T80.31.
[139] Exhibit 1, tab 30, page 7.
[140] Transcript 7/11/17, T69.3.

110. **CONCLUSION:** The use of different terms with the same meaning in the 2015 Policy Directive has the potential to be unnecessarily confusing. For avoidance of confusion there should be consistency of terms, particularly as they relate to identifying medical officers who are involved in effecting timely inter-facility patient transfers.

111. **RECOMMENDATION 3:** I recommend to the Chief Executive, South Western Sydney Local Health District that consideration be given to amending the *Patient Transfer: Inter-Facility Patient Transfer* (SWSLHD_PD2015_004) policy directive to replace the term "*Attending Medical Officer*", and its acronym, "*AMO*", with the term "*consultant*".

Supervision of junior medical staff

112. Dr Toufaili advised Dr Oon to seek advice from the haematology department[141] regarding the reversal of anticoagulation medication. When Dr Oon discovered that there were no beds available for Colin within the Liverpool ICU Dr Toufaili advised that should be Colin transferred directly to the Liverpool emergency department so that he could be immediately admitted.[142] It is clear that the advice provided by Dr Toufaili was beneficial to Dr Oon notwithstanding that Dr Oon was unable (through no fault of her own) to put the advice into effect.

113. Professor Besser opined that consultants should closely supervise and support junior medical staff in all time critical transfers.[143] In Colin's case this meant taking more direct involvement in Colin's care in a situation where junior medical staff had not previously encountered a neurosurgical emergency, and identifying the critical clinical steps to be taken and bypassing the non-critical ones.[144] Whilst Dr Prahalath was unsure exactly what close supervision meant (whether it meant over the phone or in person) he agreed with the general proposition that there should be close supervision of junior medical staff by consultants.[145]

114. **CONCLUSION:** Junior medical staff can clearly benefit from the experience of consultants, particularly in dealing with emergency clinical situations of which they may have no experience. In Colin's case it is impossible to know whether direct consultant involvement would have expedited the transfer process enough to alter the clinical outcome. Even Professor Besser acknowledged that this was speculation on his part.[146] However, for the reasons outlined above, the evidence at least establishes that senior clinicians who are directly involved in the transfer process are best placed to influence the expedition of transfer.

115. **RECOMMENDATION 4:** I recommend to the Chief Executive, South Western Sydney Local Health District that consideration be given to amending the *Patient Transfer: Inter-Facility Patient Transfer* (SWSLHD_PD2015_004) policy directive to require that in all cases of time critical inter-facility transfers, consultants should provide direct supervision and support (whether by phone or in person) to junior medical staff involved in the transfer process.

[141] Transcript 15/8/17, T36.17.
[142] Transcript 15/8/17, T36.41.
[143] Exhibit 1, tab 25, report of 30/5/16, page 3.
[144] Transcript 7/11/17, T77.13.
[145] Transcript 7/11/17, T62.43.
[146] Transcript 7/11/17, T82.46.

Availability of medication documentation

116. By the time Colin arrived at Liverpool, there was incomplete documentation of the medication that he had been given up to that point. As a result Dr Darwish was unaware that Colin had been given aspirin[147] and it was unclear whether he had been given mannitol at Campbelltown. It appears that Colin was only given mannitol by the retrieval team, but this itself was not documented. As a result Professor Besser opined that written documentation of all medication given to a patient should be available at the point of transfer.[148] Again, Dr Prahalath agreed with this opinion.[149]

117. **CONCLUSION:** For obvious reasons, receiving facilities ought to be provided with complete and accurate information regarding medication given to transferred patients. In Colin's case the deficiency in medication documentation was not material to the surgery that was to be performed. However, it is not difficult to envisage situations where patient care may be compromised if this documentation is incomplete or inadequate.

118. **RECOMMENDATION 5:** I recommend to the Chief Executive, South Western Sydney Local Health District that consideration be given to amending the *Patient Transfer: Inter-Facility Patient Transfer* (SWSLHD_PD2015_004) policy directive to require that in all cases of inter-facility transfers, all written documentation relating to medication prescribed and administered to a patient is to be immediately available at the receiving facility.

Additional patient category for transfers

119. When Colin was entered on the Portal his transfer was classified as life threatening with transfer to be effected in under 4 hours. This timeframe is mirrored by the 2015 Transfer policy directive which defines the most urgent of cases as being time critical transfers required due to a patient's condition, with transfer to take place within 4 hours. According to Dr Prahalath there is no other category which requires a patient to be transferred in less than 4 hours.[150]

120. Dr Prahalath indicated that he is not aware of Campbelltown Hospital giving any consideration to introducing any new patient categories but expressed the view that "*four hours for a life threatening [situation] is a life time, it's far too long*".[151] Similarly Dr Premawardhana agreed that there would be virtue in the creation of a category of patients requiring immediate transfer within, for example, an hour.[152] Dr Premawardhana also agreed that a category of less than 4 hours was "*probably inadequate*" in some life threatening situations.[153]

121. Later in evidence, Dr Prahalath indicated that by placing a time limit on transfers might give the impression of simply the upper limit by which transfers had to be effected, rather than urging for transfers to be effected in the shortest time possible within such a limit.[154] Dr Prahalath succinctly summarised the issue by commenting that "*life threatening is life threatening, I don't think you should put a time [on] it*".[155]

[147] Transcript 16/8/17, T39.6.
[148] Exhibit 1, tab 25, report of 30/5/16, page 3.
[149] Transcript 7/11/17, T62.47.
[150] Transcript 7/11/17, T64.4.
[151] Transcript 7/11/17, T64.8.
[152] Transcript 7/11/17, T56.38.
[153] Transcript 7/11/17, T56.49.
[154] Transcript 7/11/17, T69.45.
[155] Transcript 7/11/17, T69.32.

122. **CONCLUSION:** These comments from the Director of Medical Services and the Director of Cardiology of a major facility within a large Local Health District obviously carry with them some considerable force. The combined effect of their evidence suggests two matters of critical importance: firstly, that placing time limits by which patient transfers should be effected may create a sense of complacency rather than urgency; and secondly, the current shortest timeframe by which transfers should be effected may not adequately encompass the most urgent clinical situations. In Colin's case, the evidence established that once the intracranial pathology had been confirmed, transfer was required to be effected in less than 2 hours. This is clearly less than half the time required for a time critical transfer had the 2015 Transfer policy directive been applicable in May 2014.

123. The patient categories referred to above are not used exclusively in the Portal or within the 2015 Transfer policy directive. They are used more broadly within other policy directives disseminated by the NSW Ministry of Health and within policy documents and guidelines relevant to other Local Health Districts. Any amendment of the 2015 Transfer policy directive would have implications for such policy directives and documents. For these reasons, the NSW Ministry of Health is best placed to consider whether the views expressed by Dr Prahalath and Dr Premawardhana warrant further consideration and are likely to improve clinical outcomes for patients.

124. **RECOMMENDATION 6:** I recommend that a copy of these findings be forwarded to the NSW Minister for Health, together with a transcript of the evidence of Dr Sellapa Prahalath (Director of Medical Services, Campbelltown Hospital) given on 7 November 2017, for the Minister's consideration regarding Recommendation 7.

125. **RECOMMENDATION 7:** Having regard to the evidence given by Dr Sellapa Prahalath, I recommend to the NSW Minister for Health that consideration be given to the following matters as they apply to the inter-facility transfer of patients and the management of, and recording of information in, Patient Flow Portals within Local Health Districts: (a) Reviewing whether the creation of an additional patient category, with applicable principles, to govern the inter-facility transfer of patients deemed to require immediate clinical care and treatment to preserve life, is necessary; and (b) Reviewing whether the removal of any requirement to effect time critical and urgent inter-facility transfer of patients within a nominated time, for example "*<4 hours*" or "*<24 hours*", is likely to improve the timeliness and effectiveness of the patient transfer process between facilities.

Findings

126. Before turning to the findings that I am required to make, I would like to acknowledge and thank Dr Hayley Bennett, Counsel Assisting and Ms Kathleen Hainsworth, instructing solicitor from the NSW Crown Solicitor's Office. I am grateful not only for their valuable assistance and significant contributions both before, and during, the inquest, but also for the compassion that they have shown in what has been a genuinely tragic matter. At the beginning of the inquest I told Colin's family that I aimed to conduct the inquest in a way that would be respectful to, and dignify, Colin's memory. I would like to acknowledge the assistance of counsel for all the interested parties in, hopefully, achieving that aim.

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

Identity
The person who died was Colin Parker.

Date of death
Colin died on 7 May 2014.

Place of death
Colin died whilst he was an inpatient at Liverpool Hospital, Liverpool NSW 2170.

Cause of death
The cause of Colin's death was complications of blunt force injuries of the head.

Manner of death
The blunt force head injuries were traumatic in nature and occasioned when Colin suffered an unwitnessed fall on 4 May 2014 after experiencing a syncope episode due to atrial fibrillation.

Epilogue

128. These findings have been delivered at a time of year when Colin should have been preparing to spend a joyous, festive, and wonderful holiday season with Cindy, Lola and Ruby. It is most distressing to know that each of them, and all of Colin's family and friends, will now never be able to enjoy such treasured moments together. It is such moments which in turn become lifelong memories. There is no doubt though that the loving memories that Cindy, Lola and Ruby have of Colin will remain with them always.

129. On behalf of the Coroner's Court, and the counsel assisting team, I offer my deepest and most sincere condolences to Colin's family for their tragic loss.

130. I close this inquest.

Magistrate Derek Lee
Deputy State Coroner
22 December 2017
NSW State Coroner's Court, Glebe