CORONERS COURT
OF NEW SOUTH WALES

Inquest:	Inquest into the death of Lesley Arndell
Hearing dates:	22 August - 30 August 2019; 11 November 2019; 4 December 2019.
Date of findings:	19 December 2019
Place of findings:	NSW Coroners Court - Lidcombe
Findings of:	Magistrate Elizabeth Ryan, Deputy State Coroner
Catchwords:	CORONIAL LAW – death of hospital patient from sepsis – was patient appropriately referred to private hospital – was there delay in surgery – was antibiotic treatment appropriate and timely – was management of patient's nutritional state appropriate – was there sufficient medical oversight of patient's condition – recommendations.
File number:	2015/198526
Representation:	Counsel Assisting the inquest: K Sant of Counsel i/b NSW Crown Solicitor's Office. The Arndell family: H Cooper, Legal Aid NSW. St Vincent's Private Hospitals Ltd t/as the Mater Hospital, and clinicians: M Windsor SC i/b Minter Ellison. Dr C Sandroussi, Dr C Smyth: L McPhee of Counsel i/b MDA National. Dr K Tonks: T Saunders of Counsel i/b Barry Nilsson Solicitors. Dr R Hislop: R Sergi of Counsel i/b HWL Ebsworth. Sydney Local Health District: P Rooney of Counsel i/b Makinson d'Apice. Dr Lusambili, Dr Kazemzadeh: J Hackett of Counsel i/b Avant Law. Dr A Kaffes: G Gregg of Counsel i/b Meridian Lawyers.

Findings:	**Identity** The person who died is Lesley Arndell **Date of death**: Lesley Arndell died on 6 July 2015. **Place of death**: Lesley Arndell died at The Mater Misericordiae Hospital, North Sydney, NSW. **Cause of death:** The cause of Lesley Arndell's death is multi organ failure due to abdominal sepsis. **Manner of death:** Lesley Arndell died in hospital following surgery for intra-abdominal cancer.

Recommendations pursuant to section 82 of the Act

That St Vincent's Private Hospital Ltd trading as the Mater Misericordiae Hospital consider:

1. Implementing a system whereby every patient with a history of bariatric surgery who is admitted to the Mater Hospital North Sydney for a serious medical reason or to have major surgery, be referred to a dietitian for nutritional assessment, correction of nutritional deficiencies if present, diet education and monitoring as needed.

2. Implementing a system whereby all patients transferred to the Mater Hospital North Sydney from another hospital have a medical admission completed on admission.

Section 81(1) of the *Coroners Act 2009 (NSW)* [the Act] requires that when an inquest is held, the Coroner must record in writing his or her findings as to the date and place of the death, and its cause and manner. In addition, pursuant to section 82 of the Act the Coroner may make recommendations in relation to matters which have the capacity to improve public health and safety in the future, arising out of the death in question.

These are the findings of an inquest into the death of Lesley Arndell.

Introduction

1. Lesley Arndell aged 61 years died at the Mater Misericoriae Hospital at North Sydney on 6 July 2015. She had been admitted there on 9 June 2015 in preparation for complex abdominal surgery, which took place on 27 June 2015.

2. In the days following the operation Lesley experienced severe abdominal pain, tachycardia and falling oxygen saturation. She had developed sepsis, and by the night of 5 July 2015 she was in severe shock. Despite the efforts of her treating team and ICU clinicians, Lesley suffered multi organ failure. She died the following night.

Issues at the inquest

3. The issues examined at inquest were:

- What was the cause of Lesley's death
- Whether, in view of her complex medical and surgical history, Lesley ought to have been transferred to the Mater Hospital to undergo the abdominal surgery
- Whether there was unnecessary delay in Lesley's surgery
- Whether the management of Lesley's nutritional condition was adequate at Royal Prince Alfred Hospital and at the Mater Hospital
- Whether the antibiotic treatment of Lesley's sepsis was appropriate and timely
- Whether there was sufficient medical oversight and review of Lesley after her discharge from the Intensive Care Unit on 3 July 2015
- Whether her deterioration from sepsis ought to have been detected earlier on 4 or 5 July 2015.

Lesley Arndell's life

4. Lesley Arndell was born on 29 March 1954 in Parramatta, Sydney. When she grew up she chose a nursing career and worked all her life in many different areas of health care. She married twice and had three children: her daughter Siobhan and sons Joshua and Jesse. In 1991 she and her children moved to

the mid north coast of NSW to have a better family lifestyle. Then in 2012 Lesley and Siobhan moved to a hobby farm property near Taree where they cared for a number of animals.

5. In her statement Siobhan McKenna described her mother as '*the type of person that everyone instantly loved*'. She described a woman who was a warm and loving mother and respected professional, and who was intelligent, very caring, and with a great sense of humour and zest for life.

6. Siobhan's loving tribute to her mother was echoed by one of the nurses who cared for her at the Mater Hospital, and whose words were quoted by Counsel Assisting at the opening of the inquest:
'Mrs Arndell was lovely and was highly intelligent and interesting to speak to. She was a nurse and we had conversations about nursing ….She was involved in her healthcare and would ask lots of questions. She had a good rapport …'

7. Siobhan attended the entirety of the inquest, having travelled to Sydney from Scotland where she currently lives. Lesley's sister Rhonda also attended. It was clear that her family loved Lesley very much and miss her deeply.

Lesley's medical history

8. Lesley had a complex medical history which is described below, but she lived a full and active life.

9. Her medical history included obesity for which she had undergone bariatric surgery approximately twenty years earlier. The surgery was a procedure known as a bilio-pancreatic diversion [BPD]. As is intended with this type of surgery, Lesley's biliary anatomy had been altered. Her stomach area was reduced and part of her gut was by-passed, features designed to help her reduce her food intake. Another side-effect was that her ability to absorb nutrients from her food was limited. As this can lead to nutritional deficiencies, Lesley in common with many other bariatric patients used nutritional supplements of tablets and infusions.

10. Lesley was also intolerant of certain opioids and other analgesics to relieve severe pain. In addition she was thought to have a deficiency of anterior pituitary hormones.

Treatment at the Mayo Hospital and Royal Prince Alfred Hospital

11. In early 2015 Lesley began to experience abdominal pain and some of her liver function results were abnormal. She was admitted to Taree's Mayo Private Hospital on 20 May 2015 and was diagnosed with cholangitis. This is an infection of the liver's bile ducts, usually caused by an obstruction preventing the passage of bile into the small bowel. She was administered with Tazocin, an antibiotic commonly used where the sepsis has an abdominal source. Eight days later Lesley was transferred to Sydney's Royal Prince Alfred Hospital [RPAH] under the care of Dr Arthur Kaffes, a specialist

gastroenterologist and endoscopist. The purpose was to investigate what was obstructing her bile ducts.

12. At RPAH on 3 June Lesley underwent a procedure known as a percutaneous transhepatic cholecystectomy [PTC]. This procedure involves a needle being inserted into the liver and bile ducts, enabling images to be obtained of the biliary system. In Lesley's case the PTC procedure identified an adenocarcinoma in the head of the pancreas which was obstructing her bile ducts. This type of cancer is known to be very aggressive. During the procedure a catheter was placed into Lesley's bile duct to drain infected bile out into an external bag. This is known as a PTC drain. Lesley was again treated with the antibiotic Tazocin.

13. Lesley was then attended by Dr Charbel Sandroussi, a surgeon specialising in upper gastrointestinal, hepatobiliary, pancreatic and transplant surgery. Soon afterwards Lesley was transferred into his care, in order for her to undergo a complex operation known as a Whipple's Procedure.

14. The purpose of a Whipple's Procedure is to remove a cancer of the pancreas, duodenum or bile duct. In Lesley's case it would require removal of the head of the pancreas, duodenum, bile duct and distal stomach, and reversal of her bilio-pancreatic diversion. Multiple bowel anastomoses, which are surgical connections to rejoin blood vessels or parts of the intestines, would be required to enable her gastric continuity. The court heard that the operation has a 3-5% mortality rate, with most deaths due to anastomatic breakdown causing leakage of fluid from the bilary or pancreatic areas, leading to infection and septicaemia.

15. I should note that at the inquest there was no dispute that the decision to perform the Whipple's Procedure was an appropriate one, as Lesley's cancer was undoubtedly life-threatening.

`

At the Mater Hospital, 10-27 June 2015

16. It had been decided that the Whipple's Procedure would be performed by Dr Sandroussi at the Mater Hospital in North Sydney. On 9 June therefore Lesley was transferred there from RPAH.

17. A medical admission to the Mater was not performed. A Career Medical Officer [CMO] Dr Merrin Thanopoulos attended Lesley on 10 June and recorded her medications. RPAH had prepared a Discharge Referral letter which included Lesley's medication history and also a summary of her pathology results. These showed low scores for her serum total protein and albumin, lymphocyte count, calcium and potassium.

18. On 11 June Dr Katherine Tonks, an endocrinologist, advised Dr Sandroussi that Lesley's Whipple's Procedure should be postponed while she investigated the nature and extent of her endocrine issues. Dr Tonks reviewed Lesley on several occasions between the period 10 and 26 June. As a result of her investigations it was identified that contrary to what had previously been

thought, Lesley did not have a pituitary hormone deficiency. This had some importance as it meant Lesley would not need perioperative hormone replacements, which can make a patient more susceptible to postoperative infection. Dr Tonks' investigations were complete by 18 June and Dr Sandroussi arranged her surgery for the first available date after that, being 27 June.

19. On 10 June and again on 26 June Lesley was attended by Ms Jill Mason, a dietitian at the Mater Hospital. Ms Mason recorded that Lesley was eating well and tolerating all food. Biochemistry results were noted as '*not available'*. Ms Mason was not aware of Lesley's previous bariatric surgery

20. During the period 10 to 26 June Lesley's biochemistry results continued to show low levels of protein, albumin, globulin, vitamin D and potassium. The PTC drain which had been inserted while she was at RPA was kept in place. It was checked daily and showed no signs of blockage or infection.

The Whipple's Procedure and its aftermath

21. The Whipple's Procedure was performed by Dr Sandroussi on 27 June 2015, together with the planned reversal of Lesley's BPD. There is no issue as to the competence and skill with which Dr Sandroussi performed this complex surgery. Afterwards Lesley was transferred to the Intensive Care Unit [ICU] into the care of ICU specialist Dr Robert Hislop. Here she again received Tazocin for 48 hours as a prophylaxis against post-operative infection.

22. It appears Lesley progressed well for a few days. She commenced food and her nausea was managed. She was transferred out of ICU into a ward on 3 July. That evening however her pain levels increased, with a pain score of six out of ten throughout the night despite use of patient-controlled analgesia. Her nurse recorded that she was '*vague*'. Lesley also complained of '*heaviness*' in her arms and legs.

23. Lesley's nurses were concerned about her on the night of 3 July and contacted the overnight CMO Dr Elnawsra on two occasions. The evidence is not clear if all the above symptoms were reported to him. It appears that he attended Lesley personally after the first call, but he did not make any notes of his attendance. After a visit to the toilet at 4.30am Lesley's blood pressure dropped and Dr Elnawsra was again contacted. He did not attend but he gave a telephone order for a bolus of IV fluid, after which her blood pressure improved. Again he made no note of this contact.

Events on 4 July

24. These events may be summarised as follows:

- during the afternoon Lesley had low blood pressure and hallucinations, and a '*numb feeling'* in her arms and legs. Anaesthetist Dr Catherine Smythe directed her pethidine be ceased.

- Dr Sandroussi attended at 6pm. He directed that IV fluid therapy commence and that Lesley's patient-controlled analgesia be replaced with the oral pain-reliever Targin.

- at 8pm Lesley had an episode of incontinence of which she was unaware due to her numbness.

- throughout the night of 4 July Lesley was again recorded as hallucinating. Her pain scores ranged from four to seven out of ten, the pain consisting of spasms of abdominal and back pain.

- Lesley's nurse RN Lazarus contacted the overnight CMO Dr Ali Kazemzadah at 3.10am, informing him of Lesley's pain levels. The evidence is unclear to what extent `she informed him of Lesley's other symptoms of unusual limb sensations, possible serotonin toxicity, episodes of hallucinations, and intermittent agitation. Dr Kazemzadah did not attend but prescribed diazepam.

- at 7.00am Dr Kazemzadah conducted ward rounds but did not review Lesley. He suggested to RN Lazarus that staff inform Dr Sandroussi of the night's events prior to giving her morning dose of Targin.

Lesley's deterioration on 5 July

25. By 8.00am on Sunday 5 July Lesley's pain score was 8 out of 10, her blood pressure was dropping and her respiratory rate increasing. Around 8.15am two nurses separately made phone calls to Dr Sandroussi expressing concern about her deteriorating condition. In response Dr Sandroussi made an order for IV fluids and a full set of blood tests, and said he would come in to attend her. Then at 9.00am anaesthetist Dr Smyth rang Dr Sandroussi, very concerned about Lesley's reported pain levels. Dr Sandroussi did not direct that a CMO examine Lesley as he himself was on his way in.

26. By 10.00am Lesley's recorded pulse rate and oxygen saturations put her in the yellow zone, meeting hospital protocols for a rapid response. Her attending nurse RN Gibson was concerned, but as she was expecting Dr Sandroussi's attendance shortly she did not activate one.

27. Dr Sandroussi examined Lesley at 10.15am. He found she had increasing right-sided abdominal pain, was tachycardic, had a heart rate of 130bpm and oxygen saturations of 93% with the assistance of a Hudson mask. He suspected she had biliary sepsis. He ordered a CT scan of her abdomen to check whether her PTC drain had moved, causing bile to leak into her peritoneal cavity. However the scan showed this not to be the case. The source of infection was therefore elsewhere.

28. Dr Sandroussi re-commenced Lesley's Tazocin, reasoning that she had previously responded well to this medication and had not been using it for several days. He told the court he was also not satisfied from his own research that prolonged exposure to Tazocin necessarily increased a patient's resistance to it. The first dose was administered at midday; in retrospect Dr

Sandroussi considered this could and should have been given earlier. Dr Sandroussi took the further steps of unclamping and flushing Lesley's PTC tube to remove infected bile, and administering Fentanyl for her pain.

29. Throughout the morning Lesley's condition worsened and in early afternoon a rapid response was called. She was transferred back into ICU at 12.50pm, once again into the care of ICU specialist Dr Robert Hislop.

In the Intensive Care Unit

30. In ICU Lesley's treatment with Tazocin continued, with the addition of Vancomycin early in the afternoon. Her blood pressure continued to fall and the ICU treating team attempted to support it with noradrenalin, vasopressin and fluid therapy; however her condition did not improve.

31. By 8.15pm that night Dr Hislop considered that Lesley was severely shocked, with hypovolaemia and sepsis secondary to biliary peritonitis. Hypovolaemia describes a situation where an inadequate volume of blood circulates to the body's organs. By the late evening Lesley's condition was considered so unstable that Dr Hislop decided to intubate and artificially ventilate her.

32. Dr Hislop was most concerned to note that after ventilation Lesley's central venous pressure increased very significantly. This usually signifies that the heart is unable to pump sufficient blood back into the arterial system. Dr Hislop now suspected that in addition to suffering septic shock and hypovolaemia Lesley was experiencing obstructive shock, perhaps as a result of a tension pneumothorax. This was confirmed at 1.45am with the results of a chest x-ray. A tension pneumothorax is created when pressure in the chest cavity (in this case as a result of ventilation) causes the lung to compress and collapse, pushing on the heart and diminishing its cardiac output.

33. Dr Sandroussi inserted a catheter into Lesley's pleural cavity to release the air pressure. Despite this correction Lesley still required extremely high levels of noradrenaline to maintain adequate blood pressure. This indicated to Dr Hislop that Lesley's shock state was very advanced. He now concluded that she had sustained global ischaemic damage and was unlikely to survive. Despite intensive treatment over the remainder of the night and the next day, Lesley suffered progressive multi organ failure. She died at 8.42pm on the evening of 6 July.

The expert witnesses at the inquest

34. Determining the issues at inquest involved complex medical evidence, with which the court was assisted with expert evidence from relevant medical disciplines. In addition where relevant the opinions of Lesley's treating clinicians were sought.

35. The expert witnesses who provided reports and gave evidence at the inquest were:

- Associate Professor Richard Lee, intensive care specialist and anaesthetist
- Dr Christopher Vickers, gastroenterologist and hepatologist, St Vincent's Clinic.
- Professor Jonathan Fawcett, specialist surgeon with a sub-specialty in hepatic biliary surgery and liver transplant surgery
- Professor Neil Merrett, surgeon in upper gastroenterology and pancreas, Professor of Surgery, Western Sydney University.
- Dr Koroush Haghighi, hepatic biliary surgeon and transplant surgeon, Prince of Wales public and private hospital.
- Associate Professor David Andreson, infectious diseases specialist and medical microbiologist.
- Ms Deirdre Mathai, senior clinical dietitian, Royal North Shore Hospital.

What was the cause of Lesley's death?

36. Expert opinion was unanimous that Lesley died as a result of overwhelming bacterial sepsis. The evidence was not unanimous as to the cause of the sepsis. What was uncommon and in fact exceptional in her case according to Dr Vickers, was the rapidity with which her condition deteriorated, leaving insufficient time for a controlled surgical intervention to identify the source of sepsis and correct it in time to save her life. Dr Fawcett and Dr Merrett commented in similar terms on the unusual speed of Lesley's deterioration.

37. One of two possible causes of Lesley's sepsis was identified as the development of bacterial cholangitis, and the other a breakdown of the pancreatic anastomosis, two conditions which, as A/Professor Lee observed, were not necessarily exclusive of each other.

38. In his oral evidence Dr Sandroussi thought anastomatic leak to be an unlikely cause of Lesley's sepsis. He noted that there was no visible breakdown of the anastomoses when he performed the laparotomy in the early hours of 6 July. Furthermore, amylase levels derived from the abdominal drain near the anastomosis were low, compared with the very high levels in the sample taken from the PTC catheter. He therefore concluded the most likely cause of sepsis was bacterial cholangitis.

39. In his first report, fellow surgeon Dr Haghighi was of the view the most likely cause of the sepsis was breakdown of the pancreatic anastomosis. However after examining images from the CT scan taken on 5 July 2015, he submitted a supplementary report in which he concurred with Dr Sandroussi that the amylase level results made it more likely the sepsis was due to bacterial cholangitis rather than anastomatic breakdown.

40. In their reports and evidence however, Dr Vickers and surgeons Dr Merrett and Dr Fawcett concluded a failure of the pancreatic anastomosis was the most likely cause of the sepsis. In his report Dr Fawcett noted (and A/Professor Lee concurred) that it was not uncommon to be unable to identify a leak at laparotomy, as the breakdown could be tiny and not accessible to inspection. Dr Haghighi as well as Dr Vickers agreed that Lesley was at

higher risk than the general population for anastomatic breakdown due to her previous surgeries, previous biliary sepsis, and malabsorption.

41. In expressing the above opinions these witnesses made no criticism of Dr Sandroussi's surgical competence, noting anastomotic breakdown to be a common complication of the Whipple's Procedure due to the difficulty of suturing pancreatic tissue. I accept their opinions on this point.

42. In their evidence at the inquest A/Professor Lee and Dr Vickers acknowledged Dr Sandroussi's comments that evidence of significant anastomosis had not been observed when he performed the laparotomy. Despite this both were firmly of the view that cholangitis was unlikely to have been the sole cause of Lesley's sepsis. In Dr Vickers' view, (an opinion also expressed by Dr Merrett), once Dr Sandroussi had unclamped Lesley's PTC drain so as to drain the area, it was unlikely that she would have succumbed so rapidly to overwhelming sepsis had cholangitis been the sole cause. A/Professor Lee considered a combination of cholangitis and anastomotic leak was most likely.

43. The weight of the evidence favours the conclusion that cholangitis alone cannot adequately explain Lesley's rapid deterioration and death from sepsis. I find on the balance of probabilities that an anastomatic leak had occurred which led to the development of infection, sepsis and death. This conclusion does not exclude the possibility that Lesley had also developed bacterial cholangitis.

Did the tension pneumothorax contribute to Lesley's death? **If so ought it to have been identified at an earlier stage?**

44. In his evidence at the inquest Dr Hislop was firmly of the view that Lesley's tension pneumothorax had contributed to her death to a significant degree. He acknowledged she was suffering septic and hypovolaemic shock, but believed that her condition had been significantly compromised as a result of the increased central venous pressure imposed by the tension pneumothorax. He was regretful that he had not ordered a chest x-ray at an earlier stage that night, which would have identified the tension pneumothorax sooner. At the inquest he expressed heartfelt sympathy to Lesley's family members, reiterating his regret that he had not, in his own opinion, done the best job possible for her that night.

45. At the inquest A/Professor Lee was asked for his opinion as to the role which the tension pneumothorax had played in Lesley's death. He was doubtful that it had contributed to any significant degree. The fact that Lesley's condition did not improve despite intervention to address the pneumothorax, indicated to him it was not a significant element in her decline. In his view it was best regarded as a complication of her unfolding medical crisis which Dr Hislop and Dr Sandroussi had appropriately handled. Nor was A/Professor Lee willing to be critical of Dr Hislop for not directing a chest x-ray earlier, noting that he had had a great deal to contend with in attempting to stabilise Lesley's condition.

46. The evidence therefore does not provide any basis to be critical of Lesley's doctors in relation to their detection and treatment of her tension pneumothorax. Nor does it establish that had the tension pneumothorax been detected earlier this would have made a difference to the outcome.

In view of Lesley's complex medical and surgical history, should she have been transferred to the Mater to undergo the Whipple's Procedure?

47. In his report and evidence Dr Vickers was critical of the decision to transfer Lesley to the Mater for the Whipple's Procedure. In his view taking into account Lesley's complex needs, the Mater was unlikely to offer sufficient onsite coverage of capable medical and nursing staff to handle the emergencies which may arise.

48. All experts agreed that Lesley's condition and her complicated medical background required surgery at a hospital with high levels of service capability. Most agreed further that by comparison with private hospitals, public hospitals are generally able to provide greater depth of medical cover due to the volume of medical staff available onsite for patient review. An added advantage was identified, being the availability to the surgeon of a team usually consisting of a registrar and resident medical officers, who would be expected to be familiar with the patient's history and condition.

49. In Dr Haghighi's opinion however, the care model of a private hospital offered the benefit of greater involvement on the part of the consultant, who would ordinarily be directly contacted by nursing staff if they held concerns about the patient. It was agreed that the effectiveness of this model relied on the consultant being readily available for discussion and/or attendance, and if unable to attend himself or herself, to direct that a CMO attend instead. It would also fall to nursing staff, instead of junior medical staff, to assess whether it was necessary to call the consultant.

50. A/Professor Lee commented further that the Mater was a leading private hospital, equipped and experienced in the performance of major upper gastrointestinal cancer surgeries. He noted that it provides 24 hour cover with the service of two onsite Registrars to cover wards and the ICU. In his opinion, with which Dr Haghighi agreed, Lesley's care and management at the Mater would have been commensurate with that which she would have received at the RPA had she remained there.

51. There was therefore some divergence of expert opinion as to the optimum care model for a patient in Lesley's circumstances. Given this, it is not appropriate in my view to conclude that Lesley ought not to have been transferred to the Mater for her surgery. The evidence established that the Mater provided 24 hour on site medical cover for patients, and operated a system which escalated care directly to the consultant where needed.

52. What can be accepted however is that the identified benefits of the private care model rely on the ready availability of the consultant to perform regular reviews and identify issues at an early stage; and in the event that the

consultant is not accessible, the availability of other medical staff to attend the patient if need be. The appropriate question therefore is whether that is what occurred in Lesley's case. This question is addressed later in these findings.

Was there unnecessary delay in Lesley's surgery after admission to the Mater?

53. In his report Dr Vickers opined that Lesley's surgery had suffered unnecessary delay due to the investigations performed by endocrinologist Dr Tonks. At the inquest Dr Vickers retracted this criticism, with the benefit of supplementary evidence from Dr Tonks about the endocrinal investigations she had performed over the period 10 to 18 June. These investigations had been of benefit, in that they had established Lesley was not deficient in anterior pituitary hormones as had previously been thought. She was thus able to cease her hydrocortisone medication, a treatment which is known to increase the postoperative risk of delayed wound healing and infection.

54. On 18 June 2015 Dr Tonks documented that her investigations were complete. Dr Sandroussi then scheduled Lesley's Whipple's surgery for the next available date being 27 June 2015.

55. I find there was no unnecessary delay in the scheduling of Lesley's surgery.

Was the antibiotic treatment of Lesley's sepsis appropriate and timely?

56. A/Professor Lee was critical of the decision on 5 July to treat Lesley's sepsis with the antibiotic Tazocin. He acknowledged that the choice of antibiotic at that stage could not await testing for bacterial identification and antibiotic sensitivities. However in his view, her treating team ought to have anticipated that her prolonged previous exposure to Tazocin made it unlikely it would be effective against the organism that was now causing her sepsis. In his report dated 7 August 2019 he commented:
'In the clinical context of 5 July it should have been judged that the bacteria causing her septic shock was not likely to have been sensitive to Tazocin and more likely than not was resistant to Tazocin'.

57. A/Professor Lee expressed the further view that had a more appropriate antibiotic been chosen on 5 July the outcome for Lesley would likely have been different.

58. At the inquest it was asserted that A/Professor Lee ought not to have assumed that the E.coli bacterium subsequently identified in Lesley's blood culture was *in fact* resistant to Tazocin. Specialist microbiologist Professor Andreson was not willing to conclude this was the case, noting that the bacterium's susceptibility to Tazocin had not been tested. This is correct: a culture from Lesley's blood collected at 8.25am on 5 July identified the organisms E.coli and Enterococcus faecium, and a further sample collected at 3.10pm on 6 July showed the E.coli organism only. The E.coli organism was subsequently shown to be susceptible to the antibiotics Meropenem and Gentamicin among others, and resistant to the antibiotic known as Timentin. It was not tested for its susceptibility to Tazocin.

59. In further support of his challenge Professor Andreson relied on Australian surveillance data which identified that only an approximately 30% of strains which are resistant to Timentin are also resistant to Tazocin. He acknowledged the study did not differentiate between the patients' length of exposure to these antibiotics.

60. As submitted by Counsel Assisting, both A/Professor Lee and Professor Andreson are highly qualified to comment on the effectiveness of antibiotics. Weighing up their respective qualifications and experience does not help to resolve their difference of opinion on this point. Professor Andreson has undoubted expertise in the antimicrobial treatment of pathogens. A/Professor Lee's extensive experience in the clinical care of septic patients carries weight also.

61. It was submitted by Counsel Assisting that the evidence supported A/Professor Lee's conclusion at least on the balance of probabilities. Dr Sant urged that the specifics of Lesley's presentation needed to be taken into account. She cited A/Professor Lee's evidence that the research relied upon by Professor Andreson was a population study and not specific to Lesley's circumstances. Of significance was that the culture from blood collected some 27 hours after Lesley had been recommenced on Tazocin continued to grow E.coli. This she submitted provided further evidence of the likelihood that in Lesley's case the pathogen was resistant to Tazocin.

62. Taking the above into account I find on the balance of probabilities that the organism which led to Lesley's sepsis was resistant to Tazocin.

63. If I am wrong about this however, there can be no controversy that there was an *appreciable risk* such a resistance had developed. This was the opinion of Professor Andreson, Dr Vickers, Dr Fawcett, Dr Hislop and Dr Merrett. In the opinion of all five with the exception of Dr Merrett, the risk was such that it would have been appropriate to commence Lesley on a different antibiotic. This too was Dr Hislop's view.

64. Submissions on behalf of Dr Sandroussi were that it would not be appropriate to criticise him on his choice of antibiotics, in light of the comments made by Dr Merrett and Dr Haghighi at the inquest. These were that since Tazocin had proved effective for Lesley in her previous exposure to it, it was a not unreasonable decision on Dr Sandroussi's part to administer it again. Dr Fawcett said he was '*not sure'* he would be critical of Dr Sandroussi's decision.

65. In light of the above evidence I accept that criticism of Dr Sandroussi for his choice of Tazocin ought not to be made. Nevertheless it is open find, and I do, that his choice was not an optimum treatment decision and that it would have been appropriate for him to have selected a different antibiotic.

66. At the inquest Dr Sandroussi conceded he should have ensured the Tazocin dose was administered to Lesley immediately, and not two hours later at around midday.

67. A related question, and one of great poignancy for Lesley's family, was whether her death might have been prevented had a different antibiotic been selected on 5 July. In A/Professor Lee's opinion, an expeditious use of a more appropriate antibiotic would likely have changed the outcome, as in his view there would still have been sufficient time for it to have taken effect.

68. None of the other medical experts who were asked to respond to this assertion agreed with it. Dr Fawcett considered it '*at the least improbable'* that a different approach to antibiotic usage would have helped Lesley, due to the rapidity of her decline. Dr Vickers agreed, stating in his report: '*I do not think any aggressive or alternative antibiotic regime would have helped Mrs Arndell at this time…. The overwhelming shock that Mrs Arndell went through was a fulminant Gram –ve shock brought about most likely by a combination of both bacteria and the endotoxins produced by the bacteria.'*

69. In his report and evidence Professor Andreson was also strongly of the view that by 5 July no antimicrobial therapy could have averted Lesley's death: '*Even when there is no deep undrained focus of infection, antibiotics simply do not work this quickly'.* His opinion relied in part on a study from the early days of penicillin usage for patients with community-acquired pneumonia, known as the Austrian and Gold research. According to Professor Andreson, this research indicated there was an average 48 hour lag between penicillin initiation and observable survival benefit. Professor Andreson noted that even with appropriate antibiotic therapy some patients died within this timeframe, indicating that for some patients their clinical course is so severe that they cannot be helped. He concluded this was the case with Lesley.

70. A/Professor Lee was highly sceptical of the applicability to Lesley's case of a study which examined a different illness caused by a different type of infection, and which did not differentiate as to when the patients commenced their penicillin, or for how long they had been ill before they commenced it. He maintained the view that when Lesley's antibiotic therapy commenced on 5 July she could still have received a favourable outcome with the appropriate antibiotic, as this was probably prior to the onset of septic shock.

71. Counsel Assisting submitted that on this point the court should prefer the opinion of A/Professor Lee, based on his extensive clinical experience treating septic patients on a daily basis. It was, she wrote, well within his expertise to assess that Lesley's condition on 5 July was surviveable with the right antibiotic therapy.

72. It is appropriate to place significant weight on A/Professor Lee's very considerable clinical experience. However his opinion as to Lesley's prognosis runs counter not only to that of Professor Andreson, but also to that of other experienced clinicians. Dr Fawcett and Dr Vickers are not intensivists but each is highly qualified to express an opinion as to the prospects of a

patient who is ill with sepsis following complex gastrointestinal surgery. Furthermore Dr Hislop, also an intensivist, was reluctant to be definitive about the period that could be expected to pass before a patient improved after antibiotic treatment, noting that in his experience there was significant variance between patients in the time required for it to become effective.

73. Notwithstanding A/Professor Lee's undisputed experience, in light of the above evidence to the contrary I do not think it can be concluded that selection of a more appropriate antibiotic would have prevented Lesley's death.

Communication of Lesley's Tazocin exposure

74. A related issue which fairly arose for consideration at the inquest was the adequacy of communication about Lesley's previous exposure to Tazocin.

75. Lesley's background of cholangitis and prolonged exposure to Tazocin was included in the Discharge Summary from RPAH and in the Mater medication charts. And clearly it was known to her surgeon, Dr Sandroussi. Yet it emerged at the inquest that when Lesley returned to ICU on 5 July, Dr Hislop and his team had no knowledge of this important information. Dr Hislop stated that Lesley's prolonged pre-exposure to Tazocin was material information which would have caused him to select Meropenem instead, due to her risk of resistance.

76. Dr Hislop did not read Lesley's Discharge Referral from RPAH or her Mater medication notes, either on 26 June after her Whipple's procedure, or on 5 July when she was returned to ICU. Nor could the ICU Registrar Dr Lyn Lusambili recall being aware of Lesley's previous exposure. At the inquest Dr Hislop expressed sincere regret that he had not taken more steps to inform himself of these matters. Dr Lusambili also told the court that in hindsight, she ought to have noted this important information.

77. For his part Dr Sandroussi agreed that on 5 July he had not discussed with Dr Hislop his choice of Tazocin and his reasons for that choice. He assumed, he said, that Dr Hislop had been aware of Lesley's previous cholangitis and Tazocin exposure because he had cared for her during her postoperative period in ICU from 27 June to 3 July. For this reason he did not draw the attention of the ICU doctors to these matters. He conceded that he ought perhaps to have communicated more with the ICU team about this.

78. Plainly there was a failure of communication between Dr Sandroussi and Dr Hislop as to very material information about Lesley's treatment. At the inquest the surgeon experts Dr Merrett, Dr Fawcett and Dr Haghighi were in unanimous agreement that Lesley's return to ICU on 5 July ought to have been accompanied by a proper handover. This would include information to guide the appropriate choice of antibiotic.

79. In closing submissions Counsel Assisting was critical of Dr Sandroussi for not ensuring this handover took place. But in the opinion of Dr Merrett, Dr

Fawcett and Dr Haghighi, the ICU treating team should have sought the handover from Dr Sandroussi. It remains unclear to me who had the responsibility to ensure that Lesley's antibiotic history was known to the ICU team, and by what process this ought to have taken place. In these circumstances it does not seem quite appropriate to single out Dr Sandroussi for criticism on this point.

80. Yet it must be very distressing to Lesley's family to know that important information about her treatment somehow fell between the cracks of the two teams responsible for her treatment. It is of little comfort to them to know that communication failures such as this occur in hospitals of all sizes.

81. This instance of poor communication has not been made the subject of a specific recommendation. However for reasons which are later explained, it underlies one of the two recommendations which I make in this inquest.

Was the management of Lesley's nutritional state adequate?

82. This issue has some importance because patients who are malnourished have higher risks of postoperative complications, longer stays in hospital and an increased risk of death.

83. In the opinion of A/Professor Lee, Lesley's biochemistry results over the period 10 to 26 June 2015 signified she was malnourished. In his view these results, together with the high risk that she was nutritionally deficient due to her prior BDP surgery, ought to have prompted Dr Sandroussi to refer her for a nutritional assessment prior to her surgery. Lesley could then have been provided with nutritional supplements which in his opinion would have maximised her condition in anticipation of the impacts of her surgery. This did not happen and according to A/Professor Lee, partly explained why she developed a bile leak and then sepsis.

84. I have referred above to Lesley's previous bariatric surgery and its significance to her nutritional condition. In 2015, adding to her pre-existing risk for nutritional deficiency was the depletion of energy consequential upon her illness from cancer, as well as similar effects to be expected postoperatively from her Whipple's procedure. The question therefore arises whether Lesley ought to have been referred to a dietitian for nutritional assessment prior to her surgery. The assessment would have included not only consideration of her biochemistry results, but also her muscle mass, weight over time, and assessment of protein uptake among other tests.

85. Dr Sandroussi did not refer Lesley to a dietitian for a nutritional assessment. He was not specifically asked his reasons for this, although it may be inferred from his responses to related questions that he did not consider there was sufficient clinical indication of a need for nutritional boosting.

86. However as noted on 10 June Lesley received a visit from dietitian Ms Jill Mason, who had decided to review Lesley after noting from the ward list that she was to undergo a Whipple's Procedure. Ms Mason recorded that Lesley

was eating well and tolerating all food. She attended her again on 26 June, this time recording that she was still eating well and that her appetite had been good until the day or two prior.

87. Ms Mason was unaware that Lesley had had a previous BPD. This information was not contained in the ward list and Ms Mason could not recall if she had read Lesley's Discharge Summary. At the inquest she told the court that if she had been aware of the BPD surgery this would have prompted her to investigate whether Lesley was at risk of nutritional compromise. Nor did Ms Mason check Lesley's biochemistry results, having no reason to suspect nutritional deficiency. Had she done so she would have noted the abnormalities referred to at paragraph 17 above.

88. As to whether it can be concluded from the existence of the abnormalities that Lesley was malnourished, this is difficult to assess. I do not accept the submission made on behalf of the Mater, that the evidence showed conclusively that Ms Arndell was *not* malnourished. In the opinion of expert dietitian Ms Deirdre Mathai, the biochemistry tests that were conducted were not sufficient to enable a proper nutritional diagnosis. A further complicating factor, explained by Ms Mathai, is that Lesley's biochemistry testing took place against a background of cancer and cortisone therapy, both of which would have distorted some of the results. For these reasons Ms Mathai was not willing to conclude that Lesley was in fact malnourished. Dr Vickers and Dr Merrett concurred that it was difficult to determine if and to what extent Lesley was malnourished.

89. But although with the exception of A/Professor Lee there was uncertainty as to whether in fact Lesley was malnourished, there was a strong consensus she was at least at risk of nutritional deficiency. This arose from her background of bariatric surgery and the depletions to be anticipated following her planned Whipple's procedure. Dr Vickers, Dr Merrett and Professor Fawcett all agreed with A/Professor Lee and Ms Mathai that this was the case. The weight of expert opinion was therefore that dietary investigations were warranted so to ensure, as put by Dr Vickers, she '*went into surgery in the best nutritional state possible'*.

90. The above five witnesses were also agreed that it would at the least have been useful for Ms Arndell to have received pancreatic enzymes prior to her surgery. The purpose would have been to enhance her digestion and absorption of nutrients, on the basis that these were likely compromised as a result of her BPD surgery. In submissions on behalf of Dr Sandroussi it was asserted there was no clinical indication that this was needed, a position with which Dr Haghighi agreed, but this is contrary to the opinions of the other experts including Ms Mathai.

91. I should note that nothwithstanding this consensus, Dr Merrett and Professor Fawcett expressed uncertainty as to whether two weeks would have been enough time for Lesley to have benefited from treatment with pancreatic enzymes.

92. A further question was whether, had Lesley received a nutritional assessment and been found to have been malnourished, there was sufficient time prior to her surgery to correct identified deficiencies. There was divergence of opinion on this question. According to A/Professor Lee a period of five to seven days was enough to improve Lesley's immune function, which would have had an impact on wound healing. Dr Vickers and Ms Mathai however were unwilling to conclude that nutritional boosting would positively have made a difference to Lesley's outcome, in particular in reducing the risk of anastomotic breakdown. Dr Fawcett agreed that some but not all acute deficiencies were correctable within that time frame.

93. I conclude there is not sufficient evidence to find that in Lesley's case a full nutritional assessment and nutritional boosting prior to surgery would have altered her tragic outcome. In my opinion however the evidence is well capable of supporting the conclusion that Lesley was at risk of nutritional deficiency, and for this reason ought to have been referred for a full nutritional assessment. I also accept the majority expert opinion, that in view of the risks posed by her previous BPD she ought to have been given pancreatic enzymes prior to her surgery. It is a reasonable approach to try to ensure in the case of patients at risk of nutritional compromise, that they receive every opportunity to be as well-nourished as possible.

94. In Dr Vickers' opinion a nutritional assessment ought also to have occurred while Lesley was under the care of Dr Kaffes at RPAH. However others disagreed. I note that Lesley was under Dr Kaffes' care for a brief period only, and therefore make no criticism of him on this account.

Was there sufficient medical oversight and review of Lesley after her discharge from the ICU on 3 July 2015?
Ought Lesley's deterioration from sepsis have been detected earlier on 4 or 5 July 2015?

95. I will consider these two issues together as they involve a considerable overlap of evidence.

96. I have described at paragraphs 22 and 23 above the symptoms which Lesley displayed during the night of 3 July, and the clinical responses these received. In the opinions of Dr Merrett, Dr Haghighi and Dr Fawcett, Lesley's decreasing blood pressure, light headedness, numbness and pain can be features of sepsis but also of other conditions. In their opinion (with which Dr Vickers agreed) these symptoms warranted a medical review to assess the underlying cause.

97. As noted, the overnight CMO Dr Elnawsra did personally attend Lesley on one of the occasions he was contacted that night. He did not however record any notes of his involvement, including his decisions regarding Lesley's symptoms. I accept the submission of Counsel Assisting, that his failure to do so did not assist in keeping Dr Sandroussi or other CMOs properly informed of Lesley's condition.

98. Regarding any possible shortcomings in care on the night of 3 July and during the day on 4 July, I note the expert consensus at the inquest that it was unlikely Lesley's symptoms at that stage represented developing sepsis. In the opinion of the surgeon conclave of Dr Merrett, Dr Haghighi and Dr Fawcett, the described symptoms were not significantly deviant from those of a normal recovery from surgery. Dr Fawcett further commented that when Dr Sandroussi reviewed Lesley on the evening of 4 July she did not seem to be unwell, making it unlikely she had been developing sepsis over the day. Dr Vickers and A/Professor Lee concurred.

99. There is accordingly insufficient evidence to conclude that Lesley was developing sepsis over the course of 4 July which ought to have been detected.

100. As regards Lesley's medical care on the night of 4 June and morning of 5 June, I have noted that after Dr Sandroussi's attendance at 6pm on 4 July she did not receive a medical assessment until approximately 10.15am the following day. This was when Dr Sandroussi arrived at the Mater in response to serious concerns about her condition, and made his provisional diagnosis of sepsis. This was almost seven hours after Lesley's nurses had first contacted a doctor with concerns about her. The lack of any medical review over this period is also significant because in the opinion of the surgeon conclave, clear indications of sepsis were emerging on the morning of 5 July.

101. During the night of 4 July there were two opportunities for Lesley to have received a medical review. The first was when Lesley's nurse RN Lazarus contacted Dr Kazemzadeh at 3.10am with concerns about her condition. RN Lazarus was uncertain in retrospect if she had asked him for a clinical review. Dr Kazemzadeh for his part was unsure if she told him of symptoms other than spasmic pain, for which he gave a phone order of diazepam. The absence of certainty on this point makes it difficult to conclude that Dr Kazemzadah's decision not to personally review Lesley at that stage was unreasonable.

102. There was a further missed opportunity at 7.00am when Dr Kazemzadah was conducting ward rounds. By this time, as noted by Dr Vickers, the nursing notes recorded at least two matters which according to protocol, mandated a clinical review within 30 minutes. These were Lesley's increasing pain levels and her hallucinations. Yet Dr Kazemzadeh did not perform one.

103. Dr Kazemzadeh gave three reasons for this decision. These were that Lesley was by then asleep after what he understood had been a disturbed night; RN Lazarus had told him her spasmic pain had settled; and he understood Lesley to be a complex patient with whose condition he was not familiar and about whom he lacked, as he put it, '*the big picture'*. Therefore he advised Lesley's nurses to discuss her condition with her consultant Dr Sandroussi.

104. As has been described, shortly after 8.00am Lesley's nurses rang Dr Sandroussi with serious concerns about her deterioration. As RN Lazarus described the situation in her statement: '*Mrs Arndell's pain had increased*

further, she was highly agitated and requiring one on one care. Her blood pressure had dropped and her respiratory rate had risen'. These calls to Dr Sandroussi were followed by another at 9.00am from Dr Smythe who was '*extremely concerned'* about Lesley's pain levels.

105. Against this background of rapid deterioration it is difficult to understand why Lesley did not receive a more prompt medical review. In hindsight it can be seen that by this time at least, clear signs of sepsis were emerging. Discounting for hindsight, there is no doubt that by 8.00am she met the criteria for a clinical review which must occur within 30 minutes, mandated by the Mater's *Deteriorating Patients - Identification and Response* policy.

106. Dr Sandroussi acknowledged he was aware of the nurses' concern that morning. It remains unclear why, having become aware of this by 8.15am, he was not in personal attendance of Lesley for a further two hours. At the inquest he was asked why in those circumstances he did not direct that a CMO examine her. He replied that he had decided to attend her himself, and had made treatment orders in the meantime.

107. It cannot be concluded that Lesley received a timely medical assessment that morning. I accept it cannot be known what might have been found had this taken place during the night or at an earlier stage on the morning of 5 July, and if this would have altered the outcome. Nevertheless as the court heard, the patient care model provided at the Mater relies upon the ready availability of the consultant to address issues at an early stage; and in the event that he or she is not accessible, that the patient will receive immediate care by a CMO. This did not happen in Lesley's case.

Specific criticisms made of Lesley's care

108. Counsel Assisting submitted that features of Dr Sandroussi's care of Lesley were deficient, and that these were relevant to the cause and manner of her death.

109. I will deal firstly with the two hour delay in Dr Sandroussi reaching the hospital on 5 July to review Lesley. The submissions of Counsel Assisting were critical of the fact that during this period Dr Sandroussi did not arrange for Lesley to be seen immediately by another medical officer.

110. Responding to this, submissions on behalf of Dr Sandroussi were that the Mater protocols for a clinical review were not followed by nursing staff that morning. This is correct. In fairness however it must be said the nursing staff made strenuous efforts to obtain a medical review by directly contacting Lesley's consultant Dr Sandroussi.

111. I note further that according to Mater policy, a consultant is able to request a CMO to review a patient (refer par 29 of Ms Corbett's statement 14 June 2017). In view of the seriousness of Lesley's condition as communicated to Dr Sandroussi by 8.15am, and the fact of the two hour delay in his arrival, this would have been appropriate. Dr Sandroussi's response was not satisfactory

and meant there was further delay in Lesley receiving the medical review she so clearly required.

112. Regarding the other items identified by Counsel Assisting, the evidence in relation to some of these does not go so far as to establish deficient care on Dr Sandroussi's part. I refer here to his management of her nutritional condition, in that he did not refer Lesley for a nutritional assessment, nor direct that she receive pancreatic enzymes. With the exception of A/Professor Lee, no witness was critical of Dr Sandroussi for failing to take these steps. On the strength of the opinions of Ms Mathai, Dr Vickers, Dr Merrett and Dr Fawcett I have found that it would have been a reasonable approach for Dr Sandroussi to have done so. I have also found that the evidence cannot establish these measures would have made a difference to the tragic outcome of Lesley's death.

113. Similar considerations apply to the criticism that Dr Sandroussi did not document his assessments of Lesley's condition on 3 and 4 July. I doubt very much this failure would be considered acceptable practice, but it cannot be concluded that it contributed to her death.

114. Regarding Dr Sandroussi's choice of antibiotic treatment, I have found that his selection of Tazocin was not an appropriate one. There is insufficient evidence however to establish that a more appropriate choice would have prevented Lesley's death. Nor, given the lack of clarity in the evidence, am I able to find that he was substantially responsible for the ICU team's lack of awareness of Lesley's medication history.

115. Some of the above aspects of Dr Sandroussi's care of Lesley could have been better performed. This is also the case with Dr Hislop, who expressed sincere regret for his role in not being aware of Lesley's antibiotic history. It is also the case with the nursing staff who did not comply with hospital policy early on the morning of 5 July, although as noted they tried to obtain a medical review of Lesley by other means.

Question of recommendations

116. I turn now to consider the changes which Counsel Assisting has recommended for the consideration of the Mater.

<u>Referral for nutritional assessment</u>

117. The first proposal is that every patient with a history of bariatric surgery who is admitted to the Mater for a serious medical reason or to have major surgery, be referred to a dietitian for nutritional assessment, correction of nutritional deficiencies if present, diet education and monitoring as needed.

118. This proposal was made by Dr Vickers and was supported by dietitians Ms Mattai and Ms Mason, and by A/Professor Lee. It was also supported by Lesley's family. The surgeon conclave of Dr Fawcett, Dr Merrett and Dr

Haghighi responded that a nutritional assessment ought to be *considered* for all such patients.

119. Submissions on behalf of the Mater were that it would not be appropriate to make such a recommendation; while those on behalf of the Sydney Local Health District were that the recommendation ought not to be couched in mandatory terms.

120. An obstacle identified by each was that without more specificity there would be difficulties identifying which patients were '*admitted for a serious medical reason or to have major surgery'*. In my view however the point was well made in evidence by Dr Vickers that hospitals are well accustomed to grading admissions on the basis of their seriousness. The proposed recommendation would permit the Mater to develop its own guidelines as to which patients fell within the category, and would allow the dietitian to determine what extent of assessment was required for each referral.

121. A further argument made against the recommendation being put in mandatory terms, was that the specialist surgeon was in the best position to decide whether a patient required referral to a dietitian. This proposition however was not borne out in Lesley's case. The strong consensus of expert opinion was that a nutritional assessment was indicated in her case, but at the time Dr Sandroussi did not consider it was warranted.

122. I reject a further submission made on behalf of the Mater, that the facts in this inquest established that Lesley was *not* malnourished. I have found on the strength of the evidence that it is not possible to conclude whether she was malnourished, based in part on the fact that she did not receive a sufficient assessment.

123. For the above reasons I am satisfied that the proposed recommendation is a desirable one.

<u>A medical admission be completed when a patient is transferred</u>

124. The second recommendation is that all patients transferred to the Mater from another hospital have a medical admission completed on admission.

125. A medical admission was not conducted when Lesley arrived at the Mater after transfer from RPAH. Counsel Assisting submitted that had one been performed this may have alerted the ICU team to her previous admissions at the Mayo Hospital and RPAH, and exposure to Tazocin. The court heard from Dr Margaret Mathers, who is the Deputy Director of Medical Services, that in late 2017 the Mater introduced a policy that all patients transferred there *after hours* from another hospital receive a medical admission review by a doctor onsite at the Mater.

126. The proposal that a medical admission be performed for transferring patients was supported by Lesley's family. A submission opposing the proposal was made on behalf of the Mater. It was argued that a CMO, Dr Merrin

Thanopoulos, did perform a clinical review when Lesley arrived at the Mater. However when the resulting record is examined there is little to alert the reader to Lesley's medication history.

127. For the reasons put forward by Counsel Assisting, I am satisfied that the proposed recommendation is a desirable one.

A review by the Mater of its processes for ensuring compliance with its own clinical review protocols

128. The third recommendation arises from the evidence at inquest that the Mater's protocol for clinical review was not complied with on the morning of 5 July. Counsel Assisting proposed that in view of this evidence, the Mater undertake a review of the processes by which it ensures that the protocol for clinical review is complied with.

129. This proposal was opposed in submissions on behalf of the Mater, partly on the basis that it was unlikely to serve a therapeutic purpose in light of evidence from Dr Mathers about the hospital's existing auditing processes.

130. Following careful consideration, I am not satisfied that it is appropriate to make this recommendation on the strength of instances of non-compliance which occurred more than four years ago. In my view the evidence does not meet the threshold of indicating a systemic problem which would properly ground the making of this recommendation.

Conclusion

Like the medical and nursing staff who cared for Lesley, I offer sincere sympathy to her family for the loss of their much loved mother.

I acknowledge the excellent assistance I have received in this inquest from those assisting me, and all who represented the interested parties. I also thank the Officer in Charge Senior Constable Joel Loiacono for his very comprehensive coronial investigation.

Findings required by s81(1)

As a result of considering all of the documentary evidence and the oral evidence heard at the inquest, I make the following findings.

Identity
The person who died is Lesley Arndell

Date of death:
Lesley Arndell died on 6 July 2015.

Place of death:
Lesley Arndell died at The Mater Misericordiae Hospital, North Sydney, NSW.

Cause of death:
The cause of Lesley Arndell's death is multi organ failure due to abdominal sepsis.

Manner of death:
Lesley Arndell died in hospital following surgery for intra-abdominal cancer.

Recommendations pursuant to section 82 of the Act

That St Vincent's Private Hospital Ltd trading as the Mater Misericordiae Hospital consider:

1. Implementing a system whereby every patient with a history of bariatric surgery who is admitted to the Mater Hospital for a serious medical reason or to have major surgery, be referred to a dietitian for nutritional assessment, correction of nutritional deficiencies if present, diet education and monitoring as needed.

2. Implementing a system whereby all patients transferred to the Mater Hospital from another hospital have a medical admission completed on admission.

I close this inquest.

Magistrate E Ryan
Deputy State Coroner
Lidcombe

Date 19 December 2019