QUEENSLAND COURTS

OFFICE OF THE STATE CORONER

FINDINGS OF INQUEST

CITATION:	**Inquest into the death of Judith McNaught**
TITLE OF COURT:	Coroner's Court
JURISDICTION:	Rockhampton
FILE NO(s):	2010/1894
DELIVERED ON:	6 December 2012
DELIVERED AT:	Rockhampton
HEARING DATE(s):	6 December 2011, 6-10 February, 4-7 June 2012
FINDINGS OF:	AM Hennessy, Coroner
CATCHWORDS:	CORONERS: Inquest: health-related death, death from septic shock following bile leak from laparoscopic cholecystectomy, whether medical care was adequate, whether nursing care adequate after patient transferred to low dependency unit one day post-surgery, referral of surgeons to AHPRA.

REPRESENTATION:

Counsel Assisting:	Ms J Rosengren
For Next of Kin:	Mr A McKean i/b Maurice Blackburn Lawyers
For Rockhampton Hospital and & Hospital Medical Practitioners:	Mr C Fitzpatrick i/b Corrs Chambers Westgarth
For Nurses:	Mr G Rebetzke i/b Roberts & Kane Solicitors

Introduction

These findings seek to explain, as far as possible, how the death of Judith McNaught occurred on 6 June 2010. Consequent on the court hearing the evidence in this matter, where learnings indicate that changes can be made to improve outcomes, recommendations may be made with a view to reducing the likelihood of a similar incident occurring in future.

I express my sincere condolences to the family of Mrs McNaught for their tragic loss.

THE CORONER'S JURISDICTION

1. The coronial jurisdiction was enlivened in this case due to the death falling within the categories of section 8 of the *Coroners Act 2003* (the Act) as Mrs McNaught's death was an '*unexpected outcome of health care'* and section 9 of the Act. A Coroner has jurisdiction to investigate the deaths under section 11(2), to inquire into the cause and the circumstances of a reportable death and an inquest can be held pursuant to section 28.

2. A Coroner is required under section 45(2) of the Act when investigating a death, to find, if possible:-
   - the identity of the deceased,
   - how, when and where the death occurred, and
   - what caused the death.

3. An inquest is an inquiry into the death of a person and findings in relation to each of the matters referred to in section 45 are delivered by the Coroner which includes a finding about the circumstances in which the person died, as distinct from the means or mechanism by which the death occurred. The focus of an inquest is on discovering what happened, informing the family and the public as to how the death occurred, but not on attributing blame or liability to any particular person or entity.

4. The Coroner also has a responsibility to examine the evidence with a view to reducing the likelihood of similar deaths. Section 46(1) of the Act, authorises a Coroner to '*comment on anything connected with a death investigated at an Inquest that relates to – (c) ways to prevent deaths from happening in similar circumstances in the future'.* Further, the Act prohibits findings or comments including any statement that a person is guilty of an offence or civilly liable for something.

5. Due to the proceedings in a Coroner's court being by way of inquiry rather than trial, and being focused on fact finding rather than attributing guilt, section 37 of the Act provides that the Court may inform itself in any appropriate way and is not bound by the rules of evidence. The rules of natural justice and procedural fairness apply in an inquest. The civil standard of proof, the balance of probabilities, is applied.

6. All interested parties can be given leave to appear, examine witnesses and be heard in relation to the issues in order to ensure compliance with

the rules of natural justice. In this matter, the family of Mrs McNaught, Queensland Health (the Rockhampton Hospital and Doctors) and the Qld Nurses Union were represented at the Inquest.

7. I will summarise the evidence in this matter. All of the evidence presented during the course of the inquest, exhibits tendered and submissions made have been thoroughly considered even though all evidence or submissions may not be specifically commented upon.

8. The oral evidence in relation to the inquest into the death of Mrs McNaught was heard over nine days between 6 and 10 February and between 4 and 7 June 2012. Eighty-eight exhibits were tendered. Thirty-four witnesses were called to give evidence. Mrs McNaught's son and other family members were in attendance at the hearing.

THE EVIDENCE

9. Mrs McNaught was married and had three adult children Sean, Anne and David. She was a very fit lady. Mrs McNaught was aged 69 years.

10. On 1 June 2010, Mrs McNaught underwent a laparoscopic cholecystectomy performed at the Rockhampton Base Hospital (the hospital). Unfortunately she developed a post-operative complication, namely a bile leak causing generalised peritonitis. She was returned to the operating theatre on 3 and 5 June 2010 but sadly passed away on 6 June 2010.

11. A post mortem examination was undertaken by Dr Nigel Buxton, Forensic Pathologist, on 8 June 2010. The proximate cause of death was considered to be septic shock as a consequence of billiary peritonitis following the laparoscopic cholecystectomy on 1 June 2010.

12. Expert evidence was provided by Professor Russell Strong and Dr Drew Wenck who were both extremely well-credentialed and experienced in their respective fields of surgery and intensive care. They provided insightful opinions and critiqued the management of Mrs McNaught's care.

Relevant Medical Background

13. In late 2009, Mrs McNaught attended upon her general practitioner, Dr Claire Palmer on 20 October 2009 and reported feeling unwell with epigastric pain, fever and tenderness. The pain settled for a short time and then re-emerged episodically lasting a few hours at a time. Test results showed a mild gall bladder wall thickening.

14. Mrs McNaught re-attended upon Dr Palmer on 6 November 2009. She was jaundiced, tender around the right upper quadrant and experiencing intermittent epigastric pain. Dr Palmer referred Mrs McNaught to the Emergency Department at the Hospital where she was seen later that day. She was referred for a surgical review. A repeat ultrasound was undertaken confirming the previous findings. Mrs McNaught was referred

for a CT scan with a plan to review her in Outpatients at the Hospital on 9 November 2009.

15. When reviewed in Outpatients at the hospital on 9 November 2009, Mrs McNaught reported feeling much better, however her jaundice persisted. Dr Rao arranged for her to have repeat blood tests in two weeks and for her to re-present at Outpatients for a review.

16. Mrs McNaught re-presented to Outpatients for review on 23 November 2009, and was again seen by Dr Rao. She reported two attacks of exercise-related pain since he had last seen her. The blood results showed an improvement in her liver function. The results of the CT scan showed no evidence of gallstones. Following this examination, Dr Rao considered Mrs McNaught's pain may have been of a cardiac origin and advised her to attend upon her general practitioner for a referral to a cardiologist if she experienced any further episodes. He arranged for her to be reviewed in Outpatients in six weeks time.

17. Due to continuing symptoms, Mrs McNaught underwent an investigative procedure known as a Magnetic Resonance Cholangiopancreatography (MRCP) on 14 January 2010. This medical imaging technique is used to visualise the billiary and pancreatic ducts in a non-invasive manner and can be used to determine if gallstones are lodged in any of the ducts surrounding the gallbladder. The report from this procedure records there was a 7mm diameter filling defect towards the lower end of the common bile duct consistent with a stone.

18. Four days later Mrs McNaught re-presented to Outpatients with the results of the MRCP and was seen by Dr Ben Robertson, Surgical Registrar. Further blood tests were ordered, the results of which showed that while her liver function had improved, she was still jaundiced. Dr Robertson discussed Mrs McNaught's future management with Dr Rao and it was decided that she required an Endoscopic Retrograde Cholangiopancreatography (ERCP). This is a procedure that combines upper gastrointestinal endoscopy and x-rays to visualise the bile and pancreatic ducts and was recommended to remove what appeared to be the stone in the common bile duct which had been seen on the MRCP. The ERCP could not be performed at the hospital and for this reason Mrs McNaught was referred to the Royal Brisbane and Women's Hospital (the RBWH) for the procedure.

19. Prior to the ERCP being performed and because of recurrent abdominal pain, Mrs McNaught re-presented to the Hospital's Emergency Department on 25 January 2010. She had called the ambulance and had been administered morphine. When she was examined in the Emergency Department her pain had resolved. She was discharged home about two hours later.

20. The ERCP was performed at the RBWH on 19 February 2010. No stones were found and it was considered that the stone which it was thought to

be present at the time of the ERCP had probably passed. It was recommended that consideration be given to performing a laparoscopic cholecystectomy, which is considered to be a low risk procedure.

21. Mrs McNaught returned to Outpatients at the Hospital on 15 March 2010. She reported she had been much happier since the ERCP and had not felt as good in the previous four months. Despite this, it was decided that Mrs McNaught undergo a cholecystectomy to ensure there were no further problems with stones lodging in the bile duct.

22. A laparoscopic cholecystectomy was performed on Mrs McNaught by Dr Goundar, Surgical Registrar under the direct supervision of Dr Atherstone, Consultant Surgeon at the Hospital on 1 June 2010. The findings at operation were chronic inflammatory changes and adhesions with a thick walled gall bladder. She had some minor problem with hypertension in recovery which was successfully treated.

23. Mrs McNaught was returned to the surgical ward (the SU) at approximately 1.30pm. This was a 40 bed facility. Post-operative observations of her vital signs were taken initially every 30 minutes until 4pm, then hourly until 10pm. No observations were recorded between 10 pm on 1 June 2010 and 5.45am on 2 June 2010. There were no documented concerns regarding her post-operative recovery over this time.

24. At the daily ward round on the morning of 2 June 2010, Mrs McNaught was reviewed by Drs Atherstone and Goundar and Interns working in their team. Dr Atherstone recalled that Mrs McNaught was out of bed when he initially went to her bed side. However, it was his impression that '*she did not look happy'*. She was complaining of left shoulder tip pain and feeling nauseous. Dr Atherstone considered she needed to remain in hospital under observation until the following day. This was not fully documented in the progress notes. Her nursing care plan provided for her observations to be taken four times a day.

25. At approximately midday, a decision was made at the SU to transfer Mrs McNaught to the rehabilitation unit (the RU) at the Hospital as an outlier. This decision was made by nursing staff for operational reasons to open up a bed to enable a more acute surgical patient to be admitted to the SU. The RU had 16 beds and was in a separate building at the hospital. It would have generally taken some 15 minutes in transfer time between the SU and the RU.

26. The focus of patient care in the SU and RU were different. In the RU, the focus was on maximising a patient's recovery and restoration of independence after illness or injury. Observations were only taken daily on stable rehabilitation patients. It was the expectation of nursing staff in both the SU and the RU that observations would be undertaken on a surgical outlier patient in the RU in accordance with the patient's nursing care plan.

27. At 4pm Mrs McNaught's observations were taken in the SU. These were essentially normal apart from her pulse rate which had risen to 100. This is at the upper limit for a normal post-surgical patient. Her MEWS score was a 2. It had been 1 when her previous observations had been taken at 10am.

28. At approximately 4.40pm Mrs McNaught was wheeled with RN Forrest and a wardsman to the RU. She transferred from the wheel chair to the ward bed with the assistance of a rollator. RN Forrest verbally handed over her care initially to EN Dunlop and shortly thereafter to RN Dulnuan. Mrs McNaught's chart was left at the nurses' station in the RU.

29. RN McNamara was allocated to care for Mrs McNaught overnight. There was some confusion amongst nursing staff in the RU as to whether the nursing care plan provided for Mrs McNaught's observations to be taken daily or four times a day. The more senior nursing staff considered the latter to be correct. There were no observations taken between 4pm on 2 June 2010 and 6am the following morning.

30. The observations at 6am on 3 June 2010 were concerning. RN McNamara noted in the chart that Mrs McNaught was feeling unwell and in pain. The ward call doctor, Dr Iredia was asked to attend.

31. Dr Iredia's assessment revealed that Mrs McNaught was sick, distressed and diaphoretic. She was tachycardic and nauseous. Examination showed a distended abdomen with generalised tenderness and significant rebound tenderness. Dr Iredia thought she was critically unwell and required urgent surgical review. He took blood samples for testing. He ordered 2.5 mg of intravenous morphine which was commenced at 7.40am. He also ordered 1000 ml of intravenous normal saline to be administered at the rate of 125 mls per hour, which was commenced at 8am. He telephoned Dr Bowes, Surgical Registrar, to arrange a surgical review.

32. The surgical team led by Dr Atherstone and including Doctor Goundar reviewed Mrs McNaught on the ward round in the RU at approximately 8.30 am on 3 June 2010 as part of their scheduled ward round. There is evidence from some witnesses that Mrs McNaught was standing by her bed when they arrived. Dr Atherstone considered she did not look well and recalled she immediately complained of pain. She had a high pulse, high respiratory rate, relatively low oxygen saturations and there was generalised tenderness of her abdomen.

33. Dr Atherstone considered the provisional diagnoses, in order of most likely were:
    a. Bile leak causing generalised peritonitis;
    b. Perforated bowel; or
    c. Gangerous bowel.

34. In relation to the bile leak, Dr Atherstone gave evidence that whilst the generalised tenderness of the abdomen was most likely explicable by a generalised peritonitis. He considered the possibility that the bile leak may have been confined, for example, to the right upper quadrant or gall bladder bed. These provisional diagnoses are not recorded in the progress notes or otherwise documented.

35. The chart records that the plan of the surgical team following the ward round was to check the results of the blood tests ordered by Dr Iredia earlier that morning and for Mrs McNaught to undergo an abdominal x-ray and a contrast CT scan.

36. Dr Atherstone gave evidence that having reviewed Mrs McNaught at the ward round, his plan was to take her back to the operating theatre in the early afternoon. This was not communicated to any of the other doctors present and was not recorded in the progress notes.

37. There were at least three Interns present at the ward round. No one Intern was allocated to follow up on the plan which had been put in place for Mrs McNaught's future management. The various tasks in relation to all of the patients on the ward round were randomly split between the Interns by the Interns.

38. Following the ward round Mrs McNaught's observations were taken at 10-15 minute intervals until 10am.

39. At 10.06am the results of the blood tests ordered by Dr Iredia were available. By 10.32am, Dr Goundar had accessed all of the results apart from the CRP. He did not consider there to be any particular concern with any of the results. For this reason he did not alter the management plan that had been implemented at the ward round. He did not review Mrs McNaught or arrange for any other doctor to review her.

40. Mrs McNaught's observations were not taken between 10am and 11.30am. it is not clear why this is the case. The observations taken at 11.30am were concerning. Her blood pressure and oxygen saturations had fallen and her respiratory rate had risen. Her pulse was not recorded. Even in the absence of her pulse rate, the MEWS score was 3. In accordance with the hospital's policy a doctor should have been called. This did not occur.

41. Shortly thereafter, EEN Christine Keiler and a wardsman transferred Mrs McNaught to the CT room. EEN Keiler was not aware of the observations taken at 11.30am. On arrival in the CT room, EEN Keiler *"noticed a change"* in Mrs McNaught and took her observations. She was concerned and Dr Khan was called.

42. Dr Khan had been present at the ward round. She was an Intern having only commenced her rotation in the SU some two days earlier. On learning that Mrs McNaught was quite unwell she felt nervous and

requested that another Intern, Dr Suranji, go to the call with her. Dr Suranji had also only commenced her rotation in the SU that week.

43. By the time the interns arrived in the CT room, Mrs McNaught had been wheeled out into the corridor between the CT room and the Emergency Department. Mrs McNaught was pale and complained of abdominal pain. The doctors took a further set of observations, which they were concerned about. Dr Khan thought Mrs McNaught had deteriorated noticeably since the ward round. Both doctors considered she was very unwell and that her future management was beyond them and they required the input of a more senior doctor. For this reason Dr Suranji telephoned Dr Goundar. He recommended pain relief, a 500ml bolus of fluid, an ECG and for oxygen to be continued. Despite the concerns expressed to him regarding Mrs McNaught's condition, he did not personally review Mrs McNaught or arrange for a doctor more senior than the Interns to review her.

44. Dr Goundar telephoned Dr Atherstone between midday and 12.30pm. The operating theatre records confirm that Dr Atherstone was not in theatre at the time of this call. Dr Atherstone gave evidence that he normally worked in the skin lesion clinic each Thursday but was unable to say where he was at the time of the call on this day. He recalled Dr Goundar telling him that Mrs McNaught had been in the CT room when her blood pressure dropped and that he had ordered bolus fluids. He had a clear recollection of Dr Goundar conveying to him the results of the blood tests. Having heard these results, Dr Atherstone was satisfied Mrs McNaught was severely septic. It is unclear as to whether this was communicated to Dr Goundar.

45. The progress notes indicate that the CT scan was completed at approximately 12.50pm. Dr Atherstone recalled Dr Goundar telephoning him again at about 1pm. He recalled Dr Goundar discussing with him the results of the CT scan and the fact that Mrs McNaught would need to be taken back to the operating theatre.

46. Dr Atherstone gave evidence that he told Dr Goundar that Mrs McNaught required antibiotics. He could not recall whether he did this during the course of the telephone conversation at about 1pm or the earlier call about one hour earlier. He thought it was likely to have been the earlier one. Dr Goundar had no recollection of this. Dr Atherstone thought he spoke with Dr Goundar over the telephone on at least one further occasion prior to taking Mrs McNaught to the operating theatre later that day. Dr Goundar telephoned Dr Casey, Intensive Care Unit (ICU) Principal House Officer (PHO) and requested a post-operative bed following the surgery.

47. EEN Keiler and a wardsman transferred Mrs McNaught from the CT room to the SU and handed her care over to EN Quigley. She took a set of observations. At approximately 2pm, Dr Casey arrived in the SU to review Mrs McNaught preparatory to her coming to his ward following surgery. He considered she was unwell with peritonitis, tachycardia and renal failure. He ordered two litres of normal saline intravenous stat fluids and

the insertion of a nasal gastric tube and an in-dwelling urinary catheter. He also ordered triple therapy intravenous antibiotics, being Metronidazole, Ampicillin and Gentamicin. He took an arterial blood gas sample to obtain some electrolyte blood result values as a blood sample taken a few hours earlier could not be analysed due to haemolysis.

48. Dr Andrew Gottke, Anaesthetic PHO went to the SU to undertake Mrs McNaught's pre-anaesthetic assessment. Dr Casey was already reviewing her. Dr Gottke documented that Mrs McNaught's current medications were Ampicillin and Metronidazole.

49. RN Leather inserted the catheter. She commenced the Metronidazole at 2.20pm. This antibiotic came in a 100ml bag which was delivered over 20 to 30 minutes. She could not administer the three antibiotics simultaneously because Mrs McNaught only had one intravenous (IV) line in situ. There were limited people in the SU at the time who were able to insert another IV line. She commenced one litre of the stat IV fluids at 2.30pm. RN Leather then inserted the indwelling catheter after which she was requested to take Mrs McNaught to theatre.

50. It was RN Leather's recollection that she handed Mrs McNaught over to RN Gill in the operating theatre. She had a definite recollection of verbally informing RN Gill that she had only had time to administer the Metronidazole. Mrs McNaught's chart was also handed over.

51. Meanwhile Dr Gottke discussed his pre-anaesthetic assessment with Dr Nicholson, Consultant Anaethetist. The discussion included the fact that Mrs McNaught had not been administered a litre of the IV fluids which had been ordered by Dr Nicholson. Dr Casey also provided her with the results of the arterial blood gas analysis. Dr Casey advised Dr Nicholson that he had prescribed the triple therapy antibiotics. It was her impression from this discussion that the three antibiotics had been administered to Mrs McNaught prior to her arriving in theatre.

52. Dr Nicholson went to see Mrs McNaught in the corridor of the operating theatres. She thought Mrs McNaught looked reasonably well. Mrs McNaught was able to converse and indicated that she'd had *'a rough night'*. Dr Nicholson was satisfied that Mrs McNaught was lucid and comprehended the information provided to her regarding the anaesthetic and the likelihood she would be cared for in a high dependency unit in the immediate post-operative period.

53. The intra-operative records shows that Mrs McNaught was taken into the operating theatre at 2.52pm but the surgery did not commence until 4.15pm. The reason for this is that as soon as Dr Nicholson commenced intubating Mrs McNaught, she became profoundly hypotensive. As part of resuscitating Mrs McNaught, Dr Gottke attempted to place an arterial line which he was unable to do on account of Mrs McNaught's critically low blood pressure. Dr Tohill, Anaethetist, attended the operating theatre to provide assistance. An arterial line was placed in Mrs McNaught's left

femoral artery and a central line was inserted. It took about one hour and ten minutes for Mrs McNaught to be sufficiently stabilised to undergo the surgery.

54. The surgery was commenced at 4.15pm and was concluded at 6.40pm. A laparoscopy was attempted but an adequate view could not be achieved and it was converted to a midline laparotomy. There were extensive bile stained collections in the abdomen which was thoroughly lavaged with saline fluid. Bile was found to be leaking from the cystic duct.

55. On arrival in the ICU the staff were confronted with a very sick lady. It was discovered that the Ampicillin and Gentamicin which had been ordered by Dr Casey prior to the surgery had not been given. They were commenced shortly before 8pm. Inotropes, mechanical ventilation and continuous dialysis were administered. Unfortunately Mrs McNaught continued to progressively deteriorate. A further laparotomy was performed on 5 June 2010 to exclude any treatable cause. Wide spread hepatic and bowel ischaemia was found. She went into multi-organ failure and passed away on the afternoon of 6 June 2010.

Issues

56. The hearing has identified the following relevant broad issues;

a. The indications for the laparoscopic cholecystectomy;
b. Whether the surgery on 1 June 2010 was performed appropriately;
c. The circumstances and effect of the transfer of Mrs McNaught to the RU;
d. Whether the post operative care was otherwise appropriate including:

i. Whether the nursing care in the RU on 2 June 2010 was appropriate;
ii. Whether the nursing care in the RU on 3 June 2010 was appropriate;
iii. Whether the provisional diagnoses made and treatment implemented at the ward round on 3 June 2010 were appropriate;
iv. Whether Dr Goundar's interpretation of the blood results which he had accessed by 10.32am on 3 June 2010 was reasonable;
v. Whether Dr Atherstone's treatment and management of Mrs McNaught following his diagnosis of sepsis was appropriate;
vi. The adequacy of the pre-anaesthetic assessment on 3 June 2010;
vii. The circumstances surrounding the significant delay in the administration of two out of three of the antibiotics prescribed by Dr Casey on 3 June 2010;
viii. The possible explanations for the rapidity of Mrs McNaught's deterioration;

ix. Whether it is possible to determine the time when Mrs McNaught's condition became irretrievable.

A. Indications for Laparoscopic Cholecystectomy

57. Professor Strong considered it was unlikely that Mrs McNaught's presentation in the weeks and months prior to the surgery were explicable by the presence of gallstones. However he thought she probably had inflammation of her gallbladder and for this reason the surgery was indicated.

B. Laparoscopic Cholecystectomy Surgery

58. The only contentious issue in relation to the performance of the laparoscopic cholecystectomy on 1 June 2010 is whether it would have been prudent for Dr Goundar to have placed a 3mm suction drain in the gallbladder bed at the conclusion of the surgery.

59. Dr Atherstone gave evidence that whilst there would be occasions when he would place such a drain when performing a laparoscopic cholecystectomy, he did not consider it was indicated in Mrs McNaught's case. Professor Strong gave compelling reasons as to why he considered it appropriate to routinely place a drain when performing laparoscopic cholecystectomies. However, he acknowledged that there were many surgeons who did not share his view in this regard. It is noted that the Royal Australasian College of Surgeons (the College) does not recommend the placement of a drain in the performance of a Laparoscopic Cholecystectomy as routinely needed.

60. The family of Mrs McNaught have submitted that the failure to use a drain in this instance was an incorrect clinical judgment. In light of the expert evidence and the position of the College, a finding in those terms cannot be made.

C. The circumstances and effect of the transfer of Mrs McNaught to the RU

2 June 2010

Transfer to the RU

61. As at June 2010, the hospital did not have a policy with respect to the transfer of outlier patients. A practice had developed where reliance was placed on the clinical judgments of the nursing staff to determine whether it was appropriate for a patient to be transferred from one ward to another. The treating doctors were not routinely consulted in the course of the decision making process and the transfer was facilitated through the hospital's bed manager. There was no requirement for there to be consultation on the issue with any medical personnel.

62. The decision to transfer Mrs McNaught from the SU to the RU was made at about midday on 2 June 2010. The bed manager was RN Johnson and the shift co-ordinator was RN Christensen. Neither nurse had an

independent recollection of their involvement in the decision making process. No notes were made of the relevant discussions. RN Christensen explained that she would have spoken with the registered nurse allocated to care for Mrs McNaught for the morning shift and had any concerns been raised the transfer would not have occurred.

63. The transfer process was complicated by the fact that it was common for a decision to be made to transfer a patient during one shift and for the transfer to take place during the following shift. The ultimate responsibility rested with the nurse caring for the patient at the time of the transfer to be satisfied that the patient remained suitable for transfer.

64. At the ward round on the morning of 2 June 2010, Dr Atherstone considered Mrs McNaught to be not unwell although she was complaining of nausea (non-specific) and left shoulder-tip pain, a common symptom following laparoscopic surgery. For these reasons, Dr Atherstone had decided not to discharge Mrs McNaught but to the have her mobilized and commenced on break-through morphine and a normal diet. His evidence was that he expected Mrs McNaught to have been the subject of the usual post-surgical observations in the SU until the ward round the following day.

65. RN Forrest was allocated to care for Mrs McNaught on the afternoon shift of 2 June 2010. She gave evidence that when she commenced her shift Mrs McNaught was mobilising with a rollator. She explained that in accordance with the usual procedure she was likely to have been informed of the transfer during either the verbal handover at about 2.30pm or the taped handover some 40 minutes later.

66. Mrs McNaught's observations were taken in the surgical unit at about 4pm. The most recent set of observations prior to this had been at 10am. The only change over this six hour period had been an increase in her pulse from 90 bpm to 100 bpm. This was significant in so far as it resulted in an increase in Mrs McNaught's MEWS score from 1 to 2 (a MEWS score of 3 required a doctor to be notified and an increase in the frequency of observations to 15 minute intervals).

67. RN Forrest had no recollection of taking Mrs McNaught's observations at 4pm. She explained that there was an endorsed nurse working with her who probably would have taken them. She did not remember being aware of the 4pm vital signs prior to Mrs McNaught being transferred. Consequently, the change in Mrs McNaught's MEWS score did not prompt a reconsideration or re-assessment of the transfer decision.

68. The progress notes do not sufficiently detail the reasons as to why Dr Atherstone had considered at the morning ward round that it was clinically indicated for Mrs McNaught to remain in the hospital under observations for a further day. The notes would have been recorded during the ward round by an Intern. The difficulty occasioned by the notes not completely documenting any concerns or opinions that Dr Atherstone had in relation

to Mrs McNaught's recovery from surgery, is that the nursing staff who were making the transfer decision were relying on the notes in conjunction with Mrs McNaught's condition at the time to effect the decision to transfer when they were not fully apprised of the treating Consultant's opinion on the patient.

69. RN Forrest gave evidence that had she been aware of the nature of Dr Atherstone's concerns, together with the 4pm observations, she would not have considered that Mrs McNaught was an appropriate patient to be transferred to the RU.

70. Dr Atherstone explained that he did not consider Mrs McNaught was an appropriate patient to transfer to the RU. The reasons for this were because she:
    a. Was still an acute post-operative patient where there had been concerns regarding her recovery sufficient for her to remain in hospital under observation for at least another day;
    b. She required more frequent observations than those routinely undertaken in the RU.

71. Dr Atherstone said that if he had been consulted about the transfer to the RU, he would have opposed it. He went on to say that had he been consulted, he would have made enquiries to ascertain whether there was a less acute patient in the SU who would have been more appropriate for transfer. If not, he would have had her medically reviewed to have determined whether she had improved sufficiently since the morning ward round to have been transferred to the RU.

72. Professor Strong and Dr Wenck were particularly critical of the decision to transfer Mrs McNaught to the RU on the afternoon of 2 June 2010, especially in circumstances where Dr Atherstone had not been consulted. Professor Strong said:

> *"The other thing about this here is the worst thing with this patient being put in the rehabilitation unit. If she was not well enough to go home that day following, then she needed to be properly observed. And in fairness to the people in the rehabilitation, that's not their job. … That's not the thing they do day in and day out."*

73. Dr Wenck said:

> "*If the patient's in a surgical ward the nursing staff … will have seen this exact sort of surgery before probably many, many times, that ingrains a certain pattern and certain expected recovery and expected behavior of the patient in terms of their rate of recovery and their velocity of recovery that they would get used to and that body of knowledge is lost when it goes to a ward which is not a post op surgical ward."*

74. Counsel for the Nurses submits that the reality of the Hospital resource environment must be taken into account when examining this decision. It is submitted that internal transfers must be seen in the context of high demand and insufficient resources. On the day of the transfer, the Hospital was full, internal transfer of patients to free up surgical ward beds was a regular occurrence and the doctors caring for Mrs McNaught would have been aware of this. Further, it was submitted that there can be no criticism of the nurses tasked with the unenviable duty of managing the limited number of beds available in the surgical unit, especially in light of the lack of notation on the chart of Dr Atherstone's concerns about Mrs McNaught or any particular care arrangements.

75. Bed shortages are not confined to Rockhampton Base Hospital and seem to be a common problem in most hospitals throughout Queensland. Be this as it may, communities are entitled to expect safe health care. Even in the face of bed shortages, an acute post-operative surgical patient should not be transferred to a lower dependency unit unless the patient has recovered sufficiently to be appropriately cared for in the lower dependency unit.

D(i) Whether nursing care in the RU was appropriate on 2 June 2010

76. When Mrs McNaught arrived in the RU at about 4.40pm, her care was initially handed over to EN Dunlop, a pool nurse. She recalled Mrs McNaught looking quite exhausted. However she was not particularly alarmed by this given that Mrs McNaught had only recently undergone surgery and had been transferred from another ward, the transport itself is usually disturbing to patients to some degree.

77. RN Forrest could not recall the handover she provided to EN Dunlop. She explained that it was her usual practice to explain the procedure the patient had undergone, a history of the care provided and the frequency with which observations were required. She would normally show the receiving nurse the observations chart.

78. It was EN Dunlop's recollection that RN Forrest told her in the course of the verbal handover that Mrs McNaught was mobile with the assistance of one, had been administered her medications and that her observations had only recently been taken and were stable. She was not aware that Mrs McNaught's MEWS score had been 2 at 4pm. EN Dunlop explained to RN Forrest that it would also be necessary to provide a verbal handover to RN Dulnuan, as she would only be caring for Mrs McNaught for a short period of time.

79. EN Dunlop estimated that she only cared for Mrs McNaught for approximately 15 minutes, after which time she left her to return to the opposite side of the ward where she was caring for other patients.

80. The shift co-ordinator in the RU from 12.30 until 9pm on 2 June 2010 was RN Dulnuan. He had worked in the RU for the previous 16 years. His dedication, professionalism and compassion were readily apparent when

he gave his evidence. He indicated that Mrs McNaught's transfer occurred at a busy time in the RU. He explained that at about 5pm there were only two nurses looking after the 16 patients. One nurse was responsible for giving the patients their medications while the other was required to walk the patients to the meal room and assist them with their meals. He could not recall the handover provided to him by RN Forrest or his involvement with Mrs McNaught's care during his shift.

81. RN Dulnuan was not aware that Mrs McNaught's MEWS score had been 2 at 4pm. He gave evidence that had he been aware of this, he would have questioned *"the wisdom of the … staff who had sent … the patient down",* taken another set of observations and continued to frequently monitor her until he was satisfied that her pulse rate had dropped. He would also have sought the input of the After-hours Nurse Manager, the patient's treating surgeon or another doctor in the surgical team. RN Dulnuan thought that such further action would have been required because there are many potential explanations for a rise in the pulse rate, ranging from mobilization (during the transfer) to the presence of a serious complication such as an infection.

82. RN Dulnuan also gave evidence that had he been aware of Dr Atherstone's concerns at the morning ward round regarding Mrs McNaught's post operative recovery, he would not have accepted her as a surgical outlier in the RU.

83. At approximately 9pm the nursing shift changed and RN McNamara came on duty. She was primarily responsible for the nursing care provided to Mrs McNaught until the conclusion of her shift the following morning. She was an experienced nurse who had worked in the RU since 2007. There was only one other nurse rostered on with her overnight being an enrolled nurse who would have commenced her shift at 11pm.

84. RN McNamara had no recollection of the care she provided to Mrs McNaught. The content of the handover provided to RN McNamara is not known.

85. It was RN McNamara's evidence that she had interpreted the nursing care plan as requiring Mrs McNaught's observations to be taken daily. This is because there was no tick placed next to the reference to "QID T, P, R, & BP" in the observations section in the plan. EN Keiler agreed with RN McNamara's interpretation of the nursing care plan. However, other nursing staff considered the absence of the tick did not detract from nursing care plan requiring QID observations. Of importance, RN McNamara said that had she been aware of the MEWS score of 2 which had been recorded at 4pm on 2 June 2010 that she would have taken a set of observations at about 9pm that evening.

86. RN McNamara gave evidence that hourly visual observations with a torch would have been performed on Mrs McNaught. There is no entry in the progress notes to this effect. Dr Wenck rejected the suggestion from

Counsel for the Nurses to the effect that such cursory (by their very nature) observations of Mrs McNaught would have enabled the nurses to have detected a deterioration in her condition. He said:

"The fact … that a nurse is going round with a torch in the middle of the night and listening for breathing et cetera, I don't think that - … sort of stands up to any sort of medical standard. I think that torch light is notoriously variable".

87. In short, no reliable observations of Mrs McNaught were taken for the remainder of the day after she arrived in the RU at approximately 4.40pm.

D(ii) Whether nursing care in the RU was appropriate on 3 June 2010

Nursing care prior to ward round

88. No observations were taken between midnight and 6am. Any monitoring of Mrs McNaught's condition continued to be limited to hourly visual observations with a torch. This was clearly inadequate for the reasons explained by Dr Wenck. However, the interpretation of the nursing care plan that there was no requirement for observations overnight should be taken into account. Also, proactive steps were taken by nurses in the RU to have Mrs McNaught reviewed by the ward call doctor, Dr Iredia, once the deterioration in her condition was identified at approximately 6am.

Ward round

89. Dr Iredia's entry in the progress notes indicates that he conducted a relatively thorough examination and assessment of Mrs McNaught about an hour prior to the ward round. He thought she was critically unwell and required urgent surgical review. Of note, Dr Iredia recorded in the progress notes *rebound tenderness ++.* Despite Dr Iredia's communicated opinion that Mrs McNaught needed urgent surgical review, she was not seen until the scheduled ward round at 8.30am. As she was situated in the RU in a different building to the SU, the SU ward round proceeded and Mrs McNaught was seen after that. Dr Atherstone was not aware untilt he ward round at SU that Mrs McNaught had been moved, but at no stage after Dr Bowes call to the surgical team was any urgency applied to the examination of Mrs McNaught.

90. EEN Keiler gave evidence that at approximately 7.30am when she went to Mrs McNaught's bedside to take Mrs McNaught's observations Mrs McNaught was not sufficiently well to mobilise to the toilet by herself or to otherwise be mobilised from her bed.

91. There is some suggestion that Mrs McNaught had improved somewhat by the time of the ward round about an hour later. The reason for this is that Drs Atherstone and Goundar recalled Mrs McNaught standing by her bed at the time they arrived to examine her , however, the ward round entry recorded in the progress notes makes no reference to this. Further it is not referred to in either of Dr Atherstone's or Dr Goundar's statements. Their evidence in February this year, some 20 months after the subject

event, was the first occasion when either of them made mention of this matter. Professor Strong expressed surprise that Mrs McNaught would have been well enough to have been standing at the time Dr Atherstone arrived to examine her.

92. Whilst Dr Iredia noted *rebound tenderness* ++, Dr Atherstone gave evidence that he conducted the relevant test for this and his findings were equivocal. Once again the ward round entry makes no reference to this.

93. Professor Strong thought that if Mrs McNaught was seen to be standing at the commencement of the ward round and if Dr Atherstone's finding in relation to rebound tenderness was equivocal, this prima facie improvement in Mrs McNaught condition over the previous hour could potentially be explained by the administration of 2.5mg of intravenous morphine which had been ordered by Dr Iredia.

D(iii) Whether the provisional diagnoses made and treatment implemented at the ward round on 3 June 2010 were appropriate

94. Dr Atherstone's provisional differential diagnoses in order of the most likely were a bile leak causing generalised peritonitis, a perforated bowel or a gangrenous bowel. Professor Strong and Dr Wenck agreed with this view. Dr Wenck went on to explain that:

> *"... then we have to decide what is wrong with the patient and all these observations add up to a patient who is likely to have an intra-abdominal problem ... then sepsis is the very likely problem."*

95. In addition to the abovementioned diagnoses, Dr Atherstone considered there was also a possibility that the generalised tenderness of Mrs McNaught's abdomen could be explained by a confined bile leak. Professor Strong rejected Dr Atherstone's contention in this regard. He said:

> *"Well, if she had a confined collection of fluid, you would expect that any … symptoms and signs would actually be located in the area, for example, the right upper quadrant. But she had a generalised [indistinct] and was in distress. In addition she had a pulse of 125 when the intern was called to see her at 6am in the morning. … And she had low blood pressure. So if you had a confined collection, you wouldn't expect the signs and symptoms to be generalised. Also, there were consequences in her overall wellbeing. In other words, a fast pulse rate, a low blood pressure. There are some respiratory things, although I'm not quite clear on all that. She had a low oxygen. All this is pointing to something that is not just localised – it's a generalised problem."*
> *… I think we're clutching at straws. That to me just doesn't make sense… There's got to be some reason for the generalised pain and distress and tenderness and rebound et cetera. If it's confined to*

something just in the right upper quadrant, that's not something you'd expect to see.
… Anything's possible, but it's remote.

92. Counsel for the Family submitted that when Dr Atherstone was considering the differential diagnoses at the ward round on 3 June 2010, he had relatively fresh in his mind the knowledge of the condition of the cystic duct stump. In light of this knowledge, it should have weighed even more heavily on Dr Atherstone's mind that a diagnosis of biliary leak was more likely than the other two considered conditions. The three-pronged diagnoses was said to have been raised by Dr Atherstone to explain his delaying the second operation.

96. Having arrived at the provisional differential diagnoses detailed above, a component of Dr Atherstone's plan as to Mrs McNaught's future management was a CT scan of the abdomen with oral and IV contrast. Dr Atherstone considered a CT scan was indicated to obtain a more definitive diagnosis which would assist in determining whether there was a confined collection which could be drained radiologically, and if not the site of the incision for the surgery.

97. Professor Strong disagreed with Dr Atherstone that it was necessary to obtain a more definitive diagnosis to guide Mrs McNaught's future management. Whilst he agreed with Dr Atherstone to the extent that perforated or gangrenous bowels were possible diagnoses, he considered the most likely diagnosis was a bile leak. This was in circumstances where Mrs McNaught's gallbladder had only been removed two days earlier and it is a well recognised post-operative complication of that surgery. Professor Strong explained that generalised peritonitis caused by any of these three complications requires surgery. Professor Strong considered the prospects of a confined leak were remote and did not justify the ordering of a CT scan.

98. With respect to issue of the site of the incision, Professor Strong rejected outright Dr Atherstone's evidence in this regard. He explained that surgery for each of the three potential complications would have required a mid-line abdominal incision starting in the upper abdomen followed by a lavaging of the abdomen.

99. Although this was not a consideration stated by Dr Atherstone, Dr Wenck explained that one of the advantages of a CT scan providing a definitive diagnosis is that it would have enabled more information to have been provided to Mrs McNaught and her family as to her future management. Dr Wenck provided the example that if the results of the CT scan had found a bowel perforation, Mrs McNaught was likely to require a colostomy bag in the immediate post-operative period and it would have been preferable to have explained this to her prior to her undergoing the surgery.

100. Dr Atherstone gave evidence that his plan had been to return Mrs McNaught to the operating theatre in the early afternoon. Professor Strong considered Mrs McNaught was critically unwell at the time of the ward round meaning that she required immediate surgery. He conceded that an immediate surgical work-up would have taken a couple of hours. He considered that it was not appropriate to delay the surgery to enable the administration of the contrast and the performance of the scan. He explained:

"This lady had generalised peritonitis. She was sick. She had a fast pulse rate, low blood pressure, abdominal signs that showed she had peritonitis, and she needed that done [surgery] quickly and urgently."

101. A complicating feature in this case is that Mrs McNaught's pattern and rate of deterioration did not follow the usual course with a bile leak into the abdominal cavity. It was explained during the course of the Inquest by a number of medical specialists that the presence of a bile leak does not normally cause a patient to become critically unwell. The reason for this is that bile is normally sterile and when it initially leaks into the abdomen, it usually causes a chemical and not an infective peritonitis. It is only if a chemical peritonitis is left untreated that it will become infective. The net effect of this is that a patient does not usually deteriorate as rapidly as Mrs McNaught did.

102. Professor Strong considered that Mrs McNaught's rapid decline had commenced well before the ward round, with the consequence that it ought to have been readily apparent to Dr Atherstone at the ward round that she was not following the ordinary course and urgent surgical intervention was required. The blood results confirm Professor Strong's opinion that Mrs McNaught was critically unwell with sepsis at the time of the infection and that antibiotics and surgery were urgently required.

103. Dr Wenck agreed with Professor Strong that Mrs McNaught was clearly unwell and had developed a post-operative complication by the time of ward round on 3 June 2010. However, he did not agree with Professor Strong as to the urgency with which the further surgery was required. One of the reasons for their difference of opinion in this regard was their respective interpretations of Mrs McNaught's blood pressure at the time of the ward round.

104. Professor Strong opined that Mrs McNaught had been hypotensive since approximately 6am at which time it had been recorded as approximately 103/65. Dr Wenck disagreed on the basis that Mrs McNaught's blood pressure could not be looked at in isolation to determine if she was hypotensive at the time of the ward round. He considered this information must be assessed in combination with how she looked at the relevant time. He gave evidence that patients can have blood pressures in the range of Mrs McNaught's and not be hypotensive provided they are well perfused. He indicated that her blood pressure reading was potentially explicable by her having exerted herself shortly before it was taken. He

did not consider her observations were life threatening at the time of the ward round. Dr Wenck did not consider the rapidity of her decline was readily apparent at the time of the ward round.

105. The Hospital submitted that no adverse conclusions could be drawn against Dr Atherstone in relation to his assessment of Mrs McNaught at the time of the ward round given the difference of opinion between the experts. Whilst there was a difference of opinion as to the urgency with which Mrs McNaught required surgery on 3 June 2010, the expert witnesses were in agreement that antibiotics were indicated at the time of the ward round. In effect both experts considered that Dr Atherstone's management of Mrs McNaught was sub-optimal in this regard. Professor Strong said:

> *"This lady had generalised peritonitis and therefore one would expect in this case that antibiotics would be part of the management plan and I would've thought that it would be started at that time. Whether one is operating or not, that to me, would be the most appropriate thing to do."*

106. Dr Wenck gave the following evidence:

> *"The principle remains that from the time where there is sepsis in place and the administration of the correct antibiotics, there is a direct correlation there between survivability."*

107. Dr Atherstone defended his decision not to order antibiotics on the basis that:
    a. Antibiotics are not the first line of treatment for a gangrenous bowel; and
    b. One of the risks of having ordered antibiotics if it was subsequently shown that Mrs McNaught had not required them, is that she could have developed a resistance to them.

108. Both Professor Strong and Dr Wenck were asked to comment on each of these reasons and rejected them. They explained that antibiotics are an important treatment component for a gangrenous bowel. Dr Wenck said:

> *"Even if you have got a gangrenous bowel, it leaks bugs into the circulation because the bowel is dead … Therefore antibiotics are of paramount importance."*

109. They considered Dr Atherstone's concern regarding the potential for Mrs McNaught to have developed a resistance to the antibiotics to have been without merit. Dr Wenck's evidence on this point was as follows:

> *"I disagree with that completely as well. Firstly the patient itself doesn't become resistant to antibiotics, it's the bugs which become resistant to the antibiotics".*

110. Dr Wenck opined that if the triple therapy antibiotics had been commenced shortly after the ward round, the risk of mortality to Mrs McNaught would have been reduced.

111. Professor Strong considered that part of Dr Atherstone's management plan at the ward round ought to have included the placement of a catheter to monitor Mrs McNaught's urine output. As events transpired a catheter was not inserted until about six hours later.

112. Part of Dr Atherstone's management plan did not include any proactive attempts to have Mrs McNaught transferred out of the RU. It is curious that on the one hand, Dr Atherstone did not consider Mrs McNaught was sufficiently well to have been transferred to the RU on 2 June 2010, yet on the other hand he made no attempts to transfer her out of the RU following the ward round on the 3 June 2010, at which time he had satisfied himself that she had deteriorated and was suffering from a post-operative complication which was likely to require surgery by early afternoon. It is difficult to reconcile this inconsistency in approach.

113. The effect of the failure by Dr Atherstone to have Mrs McNaught transferred to a more appropriate ward pending the CT scan, was that she was left to be cared for by nurses who did not routinely look after patients with post-operative complications. The ability of the nurses in the RU to care for Mrs McNaught was further compromised by the inadequacy of the documented management plan. It did not include parameters or intervention points. Nor did it detail Dr Atherstone's provisional diagnoses and his plan for her to be returned to the operating theatre in the early afternoon. This additional information may have alerted and/or reinforced to the nursing staff the deteriorating nature of Mrs McNaught's condition.

114. It was submitted on behalf of Dr Atherstone that it was clear from the progress notes made at 9am on 3 June 2010 that Mrs McNaught was to be transferred back to the SU. Dr Atherstone explained in evidence that he thought it was reasonable for that to be done via the CT scanner rather than through an immediate transfer from RU to SU, then from SU to the CT and return to SU. It was further submitted that Mrs McNaught was in the SU by 1pm by which time a request was being made for an operating theatre. It is submitted that the order to transfer Mrs McNaught back to the SU did originate from Dr Atherstone or a member of the team on the basis that the CT scanner was a stopping point during the transfer. There is no evidence as to this contention and it is likely that the event in the CT room and subsequent consideration of blood test results was what prompted the change of ward at that time.

Nursing care in RU for the day shift

115. RN McNamara finished her shift at about 7.15am. RN Tydd was the shift co-ordinator who commenced at 7am. There were three nurses allocated to care for the patients in the RU, namely EEN Keiler and two graduate registered nurses.

116. There is some doubt as to who was the nurse who cared for Mrs McNaught in the RU for the day shift. In resolving this issue, the reliability of the various versions (in the sense of constituting evidence that is capable of being safely acted upon) were in issue.

117. A signed statement dated 4 May 2011 was provided by RN Tydd. On the face of it, the statement reads as though RN Tydd provided the nursing care to Mrs McNaught while she remained in the RU on 3 June 2010. It only transpired during the course of his evidence in February 2012 that RN Tydd contended that he in fact did not fulfill this role and did not know who had. He explained that he only had a vague recollection of the shift and that the nurse who was allocated to care for Mrs McNaught would have also been allocated to care for four and perhaps five other patients. However, he speculated that because Mrs McNaught was medically unstable, the nurse would probably have spent the majority of her time with Mrs McNaught. He indicated that he did not know who had taken her observations.

118. When giving evidence in February, RN Tydd was taken to the nursing care plan for 3 June 2010 to comment on the frequency with which the care plan provided for Mrs McNaught's observations to be taken. It became apparent in subsequent evidence that RN Tydd had signed off on the care plan for the shift. His signature was not legible and RN Tydd did not offer this information when he was taken to this document in the course of his evidence.

119. At the conclusion of the first week of the Inquest, a request was made that a statement be provided by the nurse who looked after Mrs McNaught on the day shift on 3 June 2010. A statement was duly provided by EEN Keiler. It was EEN Keiler's recollection that she commenced her shift at approximately 6am. She could not recall the handover but remembered having been rostered to work with RN Tydd and the two graduate nurses.

120. EEN Keiler gave evidence that she was initially allocated to care for Mrs McNaught. Support for this can be found in the RU diary which was produced after EEN Keiler gave her evidence. She was also allocated to care for at least four other patients and was concerned as to how she would manage her work load given that Mrs McNaught was the sickest patient in the RU. At approximately 7.30am, she left the handover room and proceeded to Mrs McNaught's bedside to take her observations. She gave evidence that she was part way through this when RN Tydd patted her on the shoulder and told her that he would do this. EEN Keiler did not record the observations she had taken in the medical chart.

121. After leaving Mrs McNaught's room, EEN Keiler proceeded to do the medication round. Having completed this round she was in the corridor between the two four bay wards when RN Tydd approached her again and indicated that he would care for Mrs McNaught. She had a clear recollection of having no further involvement with Mrs McNaught until she was requested to transfer her to the CT room.

122. RN Tydd was recalled to give evidence in June 2012 when the Inquest resumed. He had considerable difficulty responding to the suggestion that he had been responsible for Mrs McNaught's nursing care for the shift. However the preponderance of other evidence relevant to this issue suggests that he was and I am so satisfied. Firstly, RN Tydd recalled that one of the graduate nurses and not EEN Keiler had been allocated to care for Mrs McNaught. The RU diary confirms this is not correct. Secondly, EEN Keiler had a clear and independent recollection of having been initially allocated Mrs McNaught's care for the shift and RN Tydd telling her that he would take over her care. He did not dispute this. It was her understanding that RN Tydd assumed responsibility for Mrs McNaught's nursing care between approximately 8.15am and when she was transferred to the CT room a couple of hours later.

123. Thirdly, the medical chart records RN Tydd having commenced the IV fluids at 8am, having telephoned Mrs McNaught's daughter at 9.30am and having documented that the administration of oral contrast to Mrs McNaught had been completed at 11.30am. Fourthly, RN Tydd recalled CNC Davis requesting him to initial the care plan. It was CNC Davis' usual practice to have the nurse who cared for a patient to do this. It seems inconceivable that RN Tydd would have signed off on the nursing care plan if he had in fact not cared for Mrs McNaught. Finally, whilst RN Tydd had no recollection of having provided the nursing care to Mrs McNaught, he did not dispute that he did.

124. Following the ward round Mrs McNaught's observations were relatively stable. Professor Strong explained that the most likely explanation for this is the pain relief and fluid she had been administered following the ward call earlier that morning.

125. There is no reliable evidence that Mrs McNaught's vital signs were monitored between 10 and 11.30am. They should have been. It is not known why this did not occur in circumstances where they had been monitored at 15-20 minute intervals between 8 and 10am. Having said this, it is also not known who had determined the frequency with which the observations had been taken over this earlier period and why this close monitoring had been considered necessary. With the benefit of hindsight it can be concluded that Mrs McNaught's vital signs were probably deteriorating over that hour and a half period. It is not possible to be definitive about the period of time over which the deterioration occurred or whether more regular observations later in the morning would have picked up deterioration, but they certainly would have assisted with the picture of Mrs McNaught's condition if they had been taken.

126. There is some uncertainty as to whether the 11.30 observations were taken in the RU. The weight of the evidence suggests they were. First, RN Tydd recalled being aware that the observations had been taken prior to Mrs McNaught leaving the RU for her CT scan. Second EEN Keiler transferred Mrs McNaught to the CT room and did not take or record

them. She had not checked the observation chart prior to transferring Mrs McNaught to the CT room.

127. The observations at 11.30am were concerning to say the least. Mrs McNaught's blood pressure was about 90/55 and her respiration was about 28 taken. In combination these observations resulted in a MEWS score of 3, which according to the hospital's policy, required a doctor to be called. This did not occur. Further, it is concerning that Mrs McNaught's pulse was not even recorded given the readily apparent deterioration in her condition from the previous set of observations taken at 10am.

128. It is submitted for the Nurses that the MEWS scores were consistently at 3 during the morning and that the score of 3 at 11.30am without a call to the doctor does indicate a nursing deficiency as the "plan" following the ward round was being implemented by the nurses and Mrs McNaught's score was consistent from the ward call early that morning. Further it was submitted that the nurses couldn't be expected to call a doctor after every set of observations. In the long run, the eventuality which should have occurred in the ward where it would have been easier to examine the patient, occurred in a corridor outside the CT room with no facilities to assist the Interns following Mrs McNaught's difficulties in the CT room. This was obviously the less desirable scenario.

129. I am satisfied on the evidence that the 11.30am observations were taken before Mrs McNaught left the RU. There is no evidence that they were taken later. It may be that the time was a quick estimation as it seems that they may have been taken a little earlier given the scan examination being documented to have taken place at 11.48am (there is no evidence at which stage of the happenings in the CT room this time is recorded).

D(iv) Whether Dr Goundar's interpretation of the blood results which he had accessed by 10.32am on 3 June 2010 was reasonable

Medical care between the ward round and transfer to the SU

130. It appears that, at the ward round, Dr Atherstone did not discuss with the Interns his provisional diagnoses or his plan for Mrs McNaught to be returned to the operating theatre in the early afternoon. Importantly, neither Drs Atherstone nor Goundar requested or directed the interns to review or otherwise attend upon Mrs McNaught. From the Interns' perspectives, her immediate future management was as documented in the progress records, namely checking the bloods and abdominal x-ray and CT scan results.

131. The practice in place at the time was that the Interns would meet following the ward round and divide the various tasks between them. This had the consequence that no particular Intern was allocated to carry out those aspects of Mrs McNaught's management plan which had been implemented at the ward round. Her medical follow up was further complicated by the fact that she was being cared for in an entirely different building from the other surgical patients. It is not known who the Intern

was who was responsible for checking Mrs McNaught's blood results. However, Mr Pascoe's statement confirms that the results were not accessed by an Intern at any relevant time.

132. Despite Dr Goundar's assertion that it was the responsibility of the Interns to check the blood results, the evidence establishes that he repeatedly checked for them in the hours following the ward round. At 10.06am the results were available. By 10.32am, Dr Goundar had accessed all of the results apart from the CRP. The experts considered that the results were such that a registrar of Dr Goundar's experience ought to have been alerted to the diagnosis of sepsis. Regrettably he was not, with the consequence that he did not appreciate the seriousness of Mrs McNaught's condition.

133. As to the significance of the blood results, Dr Wenck opined:

> *"The interpretation that the doctor [Dr Goundar] put on it is wrong, and ... you have to marry the results with the patient. You know, the patient and the results aren't two separate things. ... They have to be looked at together, so I think the results truly show a patient that's septic and – and with quite serious deterioration biomechanically, and haematologically."*

134. Dr Goundar's misinterpretation of the blood results was a grave error of judgment. The experts opined that having accessed the blood results, appropriate medical management by Dr Goundar included:
    a. Immediate steps being taken to have Mrs McNaught reviewed by himself or another doctor of at least registrar level and probably consultant level;
    b. Ensuring that a set of observations were taken (no observations were recorded between 10am and 11.30am);
    c. The ordering and administration of additional fluids;
    d. The placement of a catheter to monitor urine output;
    e. The commencement of antibiotics;
    f. Taking steps to have Mrs McNaught:
        i. Transferred out of the RU;
        ii. Returned to the operating theatre as soon as possible.

135. The evidence established that Mrs McNaught was not reviewed by a doctor in the RU subsequent to the morning ward round. It was not until after EEN Keiler took her observations shortly after arriving in the CT room that medical assistance was called for. The two interns who responded to the call for assistance had been working in the SU for less than a week. Only one of them had experience in managing a patient with a post-surgical complication and this was limited. Neither had experience in the treatment of a septic patient. Having examined Mrs McNaught, the Interns sensibly sought guidance from Dr Goundar over the telephone. They clearly required his advice and counsel.

136. The contemporaneous note made by Dr Suranji of her conversation with Dr Goundar records Dr Goundar having advised her that Mrs McNaught needed to be given a 5mg fentanyl patch and a 500ml bolus of normal saline. He also recommended that an ECG be undertaken and that oxygen by continued. The Interns followed these instructions.

137. Dr Wenck was critical of the prescription of a fentanyl patch, on the basis that it is more commonly used in non-acute settings. Dr Suranji rejected the suggestion that while Dr Goundar may have prescribed Fentanyl he did not prescribe it in the patch form. Dr Goundar had no independent recollection of having advised Dr Suranji to give Mrs McNaught the Fentanyl patch. He explained that it was not something he would routinely do. It is not possible to resolve this conflict in evidence and little turns on it.

138. Dr Khan entered two separate fluid orders which were crossed out. The orders were not signed for as having been administered. Dr Khan was questioned extensively regarding these entries. Her recollection was vague only and the net effect of her evidence was that she had "*reason to believe"* that Mrs McNaught had been given these fluids. However, EEN Keiler gave evidence that she had a clear recollection that neither of these crossed out fluid orders were administered to Mrs McNaught. EEN Keiler's evidence in this regard should be preferred.

139. At the time, Dr Suranji telephoned Dr Goundar, she thought that Mrs McNaught's condition was so grave the she needed to be examined by a more senior doctor within the next half hour. The critical nature of Mrs McNaught's condition was readily apparent from her low blood pressure, high pulse rate and her difficulty maintaining her oxygen saturations.

140. EEN Keiler estimated that the junior doctors remained with Mrs McNaught for no more than 10 minutes. They did not remain with her while the CT scan was performed and did not accompany her to the SU. Of concern, the doctors left when there is no evidence that Mrs McNaught's condition had improved. Indeed EEN Keiler gave evidence that she could not recall Mrs McNaught's condition improving following the administration of the fluid ordered by Dr Khan.

141. It was submitted by the Hospital that there should be no criticism of the medical care for Mrs McNaught between the ward round and the transfer to the SU as Mrs McNaught was stable until her deterioration at 11.30am. At that time she received a medical review (from Interns) and input from the Surgical Registrar (by phone) which enabled the completion of the CT scan and soon after Mrs McNaught was in he SU having further medical reviews.

142. Dr Wenck considered Mrs McNaught needed to be reviewed by a more senior doctor at the time of the deterioration in the CT room. He said:

"This sort of patient is way beyond interns. This is a patient that requires senior input…I think all interns can do is … recognise there is a problem and call for senior help … These patients are completely beyond them.… He's [Dr Goundar] seen the blood tests at 10 o'clock, he's got a deteriorating patient. I just think that either he should've come to see the patient or he should've called for more senior help himself or the intensive care unit to come and help him with the patient or call the MET call."

D(v) Whether Dr Atherstone's treatment and management of Mrs McNaught following his diagnosis of sepsis was appropriate

143. Dr Goundar telephoned Dr Atherstone between midday and 12.30pm. Dr Goundar told him that Mrs McNaught was in the scanner and her blood pressure had dropped. They discussed the blood results which Dr Goundar had accessed at 10.32am. As a consequence of this discussion with Dr Goundar, Dr Atherstone satisfied himself that Mrs McNaught was severely septic. He was questioned extensively at the Inquest regarding the need for antibiotics in a severely septic patient. He explained that having made this diagnosis and with the knowledge that Mrs McNaught was hypotensive, the antibiotics needed to be given without delay as he was aware there is a direct correlation between the timing of antibiotics and the prospects of survival in a patient such as Mrs McNaught.

144. Both experts considered that while the antibiotics ought to have been prescribed by Dr Atherstone as early as the ward round, that in the absence of this having occurred, they were clearly indicated when Dr Atherstone was satisfied Mrs McNaught was septic around noon.

145. Dr Atherstone gave evidence that he recalled discussing the issue of antibiotics with Dr Goundar.

146. I do not accept Dr Atherstone's evidence in this regard for the following reasons. He could not recall the content of the discussion, nor whether the discussion took place in the course of the telephone discussion between midday and 12.30pm or about an hour later, or indeed both. Dr Goundar had no recollection of discussing antibiotics with Dr Atherstone and explained that he would normally make a note of such a request from a Consultant Surgeon. Dr Atherstone's evidence at the hearing was the first occasion he made mention of discussing antibiotics with Dr Goundar. Drs Scholes and Sandford had no recollection of Dr Atherstone having mentioned to them in the post event meetings/discussions that there had been such a discussion with Dr Goundar. It was not included in either of Dr Atherstone's statements or mentioned to anyone prior to him giving evidence. When questioned as to why his evidence at the inquest was the first occasion he had mentioned this, he indicated that he had only considered it relevant after reading Dr Wenck's report and the Root Cause Analysis ("the RCA") approximately one week earlier. He further went on to say that he had not previously mentioned it to his lawyers as it was never raised with him. His evidence in this regard was unconvincing,

particularly when regard is had to the paramount importance of antibiotics in the treatment of sepsis.

147. As the Consultant Surgeon, the decisions as to Mrs McNaught's future management ultimately rested with Dr Atherstone. The experts agreed that once he was aware of the blood results it was his responsibility to ensure that Mrs McNaught was immediately reviewed by a doctor more senior than an Intern. This did not occur. Dr Wenck explained that if Dr Atherstone could not personally review Mrs McNaught at this time, another senior doctor such as an Intensive Care Consultant should have. The operating theatre records show that Dr Atherstone was not operating after midday. There is no evidence that Dr Atherstone was otherwise attending patients who required more urgent attention at that time.

148. Dr Wenck explained that Dr Atherstone ought to have made immediate enquiries regarding the possibility of taking Ms McNaught to theatre. If an operating theatre had not been available, she should have been transferred to the ICU where her resuscitation could be appropriately monitored pending surgery.

149. Dr Atherstone's management of Mrs McNaught following his diagnosis of sepsis at approximately 12.30pm was suboptimal and inexcusable. It was incumbent on him to have:
    a. Immediately reviewed Mrs McNaught or to have arranged for her to be reviewed by an experienced doctor, preferably at Consultant level;
    b. Requested that triple therapy antibiotics be administered without delay;
    c. Requested that a catheter be inserted so her fluid balance could be monitored; and
    d. Attempted to arrange for her to be immediately transferred to the intensive care unit so that her fluid resuscitation could be adequately administered and monitored.

150. In short Dr Atherstone had before him hard proof of a very serious, life threatening problem that he ignored or at least did not treat with sufficient urgency. He failed to adequately engage with the challenges Mrs McNaught's case presented and to provide his junior colleagues with the level of supervision and input that they were entitled to expect from him.

D(vi) The adequacy of Pre-anaesthetic assessment on 3 June 2010

151. Dr Gottke commenced his pre-anaesthetic assessment at approximately 2pm. It was his impression that Mrs McNaught was not critically unwell. She was alert, orientated and appeared to understand the information he gave to her relevant to the proposed surgery. Whilst she was tachycardic she was not hypotensive.

152. One of the reasons for the pre- anaesthetic assessment was for an assessment to be made as to whether Mrs McNaught was sufficiently resuscitated to undergo the surgery. In making this assessment Dr Gottke

did not consider the adequacy or otherwise of the fluids which had been administered prior to the fluid order prescribed by Dr Goundar. It was concerning that Dr Gottke said he not feel as though he was sufficiently experienced to be making such an assessment, only having two months experience working in Anaesthetics. Following the assessment, Dr Gottke discussed the issue of fluids with his consultant, Dr Nicholson, prior to the commencement of the surgery.

153. Dr Gottke was not aware that Dr Atherstone had diagnosed Mrs McNaught as having been severely septic. He gave evidence that had he been aware of this he would have undertaken a more careful assessment of her fluid balance, would have checked her blood results to ascertain her renal function and would have satisfied himself that prior to her surgery Mrs McNaught had been given all three antibiotics prescribed by Dr Casey. However, the AUSLAB records suggest that Dr Gottke accessed the blood results at 1.56pm which should have indicated her condition to him. Dr Gottke had no recollection of having done this.

154. It was with the benefit of hindsight that Dr Gottke conceded he had underestimated the severity of Mrs McNaught's illness. He recalled raising his concern in this regard with Dr Scholes in the week following Mrs McNaught's death.

D(vii) The circumstances surrounding the significant delay in the administration of two of the three antibiotics prescribed by Dr Casey on 3 June 2010

Handover in the operating theatre

155. RN Leather handed over Mrs McNaught's care to RN Gill in the operating theatre. It was RN Leather's recollection that she verbally informed RN Gill at the time of the handover that she had not had time to administer to Mrs McNaught all of the antibiotics which she had been prescribed by Dr Casey in the SU. RN Gill had no recollection of the handover but did not dispute such information had been provided to her. It appears this vital information was not communicated to the anaesthetic team in the operating theatre.

Surgery

156. The medication chart clearly indicates that two of the three antibiotics (Ampicillin and Gentamicin) prescribed by Dr Casey had not been commenced prior to Mrs McNaught being taken to theatre. The chart was handed over to RN Gill at the time Mrs McNaught was taken to theatre. The reasons for the way in which the antibiotics were administered by RN Leather were that Mrs McNaught had only one IV line, it was considered under standard practice unwise to mix the drugs and there were varying time periods over which each drug needed to be delivered (along with the fluids that were still running), there was no specific instruction as to the order in which the drugs were to be delivered and those tasks in the SU

were being undertaken while the rush was on to get Mrs McNaught to theatre.

157. Dr Gottke explained that it would have been his usual practice to have reviewed the medication chart in the operating theatre towards the end of the surgery but thought he may not have done so on this particular occasion. He gave two possible explanations for this. First, the anaesthetic team was distracted with the task of resuscitating Mrs McNaught. Second, he had handed over Mrs McNaught's care to the evening anaesthetic PHO prior to the conclusion of the surgery. Dr Nicholson did not review the medication chart. It was her usual practice to review the medication chart at the conclusion of the operation. However, prior to the conclusion of Mrs McNaught's operation, Dr Nicholson handed over her anaesthetic management to Dr Tohill and left the operating theatre.

158. The delay in the administration of Gentamicin in part resulted from a breakdown of the usual pre-operative checks (leaving aside Dr Nicholson's usual practice) and possibly from a failure to view the triple antibiotics prescribed on the ward to be different from the usual prophylactic antibiotics referred to on the check sheet used in the theatre. Since Mrs McNaught's death, Dr Nicholson has changed her practice to reviewing the medication chart prior to a surgical procedure commencing.

159. In Dr Nicholson's words, as soon as she commenced intubating Mrs McNaught she *"crashed"*. There was a *"profound and prolonged period of hypotension (30 minutes) despite rapid administration of intravenous fluid therapy and vasoconstrictors".* Dr Nicholson gave the following evidence:

> *"… I actually tended to be in a hurry in order to get her into theatre, and get the operation underway. Whereas if I had taken a little more time with her, I might have considered putting in all the lines that were required prior to taking her to theatre. That would have delayed the operation by an hour. I elected not to do that. That could be considered a mistake."*

D(viii) The possible explanations for the rapidity of Mrs McNaught's deterioration

160. A possible explanation for the rapid rate at which Mrs McNaught deteriorated relates to the ERCP and sphincterotomy which Mrs McNaught underwent on 19 February 2010. In simple terms, during the course of a sphincterotomy the sphincter was cut which allowed the retrograde passage of duodenal contents up the bile duct colonising the bile. This could have resulted in the bile becoming infected. Provided the infected bile remained within the confines of the bile duct it would not have adversely affected Mrs McNaught. However, infected bile contents leaking into Mrs McNaught's abdominal cavity following the laparoscopic cholecystectomy on 1 June 2010 would have resulted in a more rapid

deterioration in her condition than if the leaking bile contents had been sterile.

D(ix) Whether it is possible to determine the time when Mrs McNaught's condition became irretrievable

161. It is difficult to know when Mrs McNaught's condition became irretrievable. Professor Strong opined that had the surgery been undertaken at approximately 10.30am on 3 June 2010, there is the potential for Mrs McNaught to have survived. Dr Wenck was satisfied her condition was definitely irretrievable by 5 June 2010.

162. During the course of his evidence Dr Atherstone emphasised on a number of occasions, the rapidity with which Mrs McNaught deteriorated. Whilst this is undoubtedly correct, Professor Strong considered it ought to have been readily apparent to Dr Atherstone by the time of the ward round on 3 June 2010 that Mrs McNaught was very unwell. He considered the concerning deterioration in her condition is likely to have commenced overnight on 2 June 2010. Dr Wenck was less certain of this timing. However, he considered that the rapidity of the deterioration was readily apparent from the blood results which Dr Atherstone had been informed of shortly after midday on 3 June 2010.

Clinical incident reporting

163. On 4 June 2010 at 6.11pm, Dr Nicholson submitted a clinical incident report relating to Mrs McNaught's crash in the operating theatre. Dr Nicholson gave evidence that she would have expected the family to be told of the fact and content of the report. Dr Atherstone gave evidence that he was not informed of the report until very late in the Inquest, just before the second time he gave evidence.

164. Dr Scholes gave evidence that on 3 or 4 June 2010, he thought that he had asked Dr Atherstone to file a clinical incident report of his own relating to the second operation. If Dr Atherstone did take this step it has not been disclosed to the Inquest.

165. Dr Scholes would have expected Dr Nicholson's report to have come to his notice in his position of Director of Surgery as it would have been relevant for exploration of those issues by the surgeons with a view to improving patient care. Further he would have expected it to be part of the open disclosure discussion.

166. The Hospital submitted that Dr Sandford could not be criticized for not mentioning the PRIME report from Dr Nicholson in the open disclosure meeting as the records surrounding it may not have been in existence at the time of the meeting.

Notification of family members

Telephone Contact with the Family and Attendance at Hospital

167. The expectation of Mrs McNaught and her family on her admission to hospital on 1 June 2010 was that she would be discharged on the afternoon of 2 June 2010. Her daughter Anne and Son David were listed as next of kin on the admission forms.

168. The first notification to the family was at 9am on 3 June 2010 (entry in the progress notes confirms). Anne had been told by Hospital staff that she should not come and collect her mother as she was unwell, her blood pressure was high and her pulse was racing. Anne eventually had telephone contact with her mother later in the day and Mrs McNaught said that she was in immense pain and felt very hot. Dr Goundar contacted Anne at 2.50pm (documented in progress notes) and told her of the need for emergency surgery, that Mrs McNaught was very unwell and may need supportive care for some days until she recovers. This phone call occurred about 5 minutes before Mrs McNaught entered the Operating Theatre. Further contact with the family was made at 6.50pm on 3 June 2010 (progress notes).

169. Mrs McNaught never recovered consciousness after that surgery on 3 June 2010. David arrived at the Hospital on 4 June to be told that his mother had undergone surgery the day before and had been on a ventilator ever since. Mr McNaught gave evidence that there was no warning to the family of their mother's dire situation. It is submitted for the Hospital that the staff were grappling with the rapidity of Mrs McNaught's deterioration throughout 3 June in addition to communicating with the family.

170. Mrs McNaught passed away on 6 June 2010 and her family members who stayed at the Hospital day and night, were unable to say goodbye to her and were very distressed by seeing her condition in ICU.

Open Disclosure Meeting

171. The Queensland Health Incident management Policy ("the policy") has been in force since 30 May 2006. The objective of the policy is to "*minimize harm to patients, staff, visitors and property*". One of the principles of the policy is "*full and open disclosure should occur as part of incident management*". One of the elements of the policy is that there should be open and factual disclosure to "*affected patients, families and carers, consistent with the National Open Disclosure Standard*".

172. The National Open Disclosure Standard ("the standard") aims to provide guidance on minimizing the risk of recurrence of an adverse event through the use of information to generate systems improvement and promotion of a culture that focuses on health care and safety. The standard provides that as soon as possible after an event that a preliminary team discussion take place, including the multi-disciplinary team and all other staff involved in the care of the patient including the most senior health care

professional. The aims of the preliminary team discussion include establishing basic clinical and other facts.

173. It is submitted by Counsel for the Family that the policy and standard were not adhered to be the Hospital in this case. In particular, that there was a failure to provide information to Mrs McNaught and her family about her condition. It is submitted that when Dr Atherstone concluded there were a number of possible diagnoses all of which were serious conditions, he should have taken steps to notify Mrs McNaught of this fact immediately, especially later in the day when he concluded that Mrs McNaught had sepsis. Instead, the evidence shows that as late as 12.30pm Mrs McNaught was not aware why she had been taken back to SU and she was "a bit scared" about why she was going back into surgery.

174. Dr Nicholson's expectation was that there would have been post-operative contact with the family by the surgeon or the ICU consultant who would explain what was done and what was happening next.

175. Dr Sandford gave evidence that the usual practice was for Hospital staff to advise the patient and relevant family members as much as possible when there is relevant information available. This simply did not occur in this case.

176. An open disclosure meeting was arranged for the morning of 11 June 2010, 5 days after Mrs McNaught's death and the day of Mrs McNaught's funeral. It is submitted for the Hospital that it did deal genuinely, openly and empathetically with the family and it could not e expected that only 5 days after the death that they could have imparted the detail and breadth of information which came to light in the Inquest.

177. During the meeting, Dr Atherstone said Mrs McNaught's blood pressure "*dropped a little bit*" prior to the 3 June operation. He agreed in evidence that this was an underestimation of Mrs. McNaught's condition at the time. There was no disclosure in the meeting of Dr Nicholson's report or its contents.

Dr Sandford attended the meeting in his capacity as Open Disclosure Consultant. Part of that role was to ensure that the clinically known facts were communicated to the family and agreed that this extended to correcting anything which might be said which was misleading to the family. He agreed that the standard provided for the multi-disciplinary team meeting to prepare for the meeting with the family. He stated that he spoke with Dr Turley (head of the Anaesthetics Department) in preparation to the meeting but does not recall any mention of Dr Nicholson's report in the fact finding process.

178. It is further submitted by Counsel for the Family that the open disclosure process was also deficient in some important respects. A meeting of the multi-disciplinary team should have taken place as soon as possible after Dr Nicholson lodged her report. This would have revealed the clinical incident report to Dr Atherstone and other members of the team and would have assisted in the gathering of relevant facts leading to discussion in the

team as to how to prevent a similar incident in the future. Such matters were relevant to Dr Atherstone, who, as the Consultant Surgeon, was ultimately charged with the responsibility for Mrs McNaught's care.

179. The transcript of the open disclosure meeting does not reveal information which should have been able to be provided to the family as it would have been readily available to a diligent fact-finder preparing for the meeting.

180. It is concerning that the report of Dr Nicholson did not come to the attention of the open disclosure team and that Dr Sandford did not interrogate the clinical incidents system (on which the report would have been recorded) prior to convening the meeting.

Use of a drain in Laparoscopic Cholycystectomy

181. The lack of use of a drain in the initial surgery is of concern to the Family. Counsel for the Family has submitted that the insertion of a drain of the type recommended by Professor Strong may well have prevented the tragic consequences of the leakage of bile in this case. It is said to be so particularly having reference to the fact of the duct being thin and friable and where it may have been damaged in the attempt to cannulate it, and also where it is known that clips are known to erode through a duct.

182. The Family accept that not all surgeons use drains in this context but point to Dr Atherstone's stated practice of sometimes doing so. It is further submitted that in the circumstances of this case, Dr Atherstone should have used a drain and made an incorrect clinical judgment in not using one.

183. The totality of the evidence demonstrates the placement of a suction drain at the conclusion of a laparoscopic cholecystectomy is a vexed issue. It is beyond the scope of this Inquest to go into a debate over the relative merits of the most appropriate surgical approach to be followed. Suffice to say that the circumstances of Mrs McNaught's death have raised this issue and it will be referred it to the College for ongoing review and debate to ensure that patient care is the determinant of how the surgery is best performed.

Changes and improvements made since Mrs McNaught's death

184. The McNaughts and the general public are entitled to be assured that any failings that contributed to Mrs McNaught's death have been addressed. The evidence establishes that some positive measures have been taken by the Hospital in this regard.

185. In August 2010, the Hospital addressed a shortcoming in its transfer of outlier patient procedure with the introduction of a policy detailing criteria for the safe and appropriate transfer of outlier patients within the Hospital. It provides for Consultants to be involved in the identification of suitable outlier patients. It specifically states that acute surgical patients are unsuitable to be outlied to the RU. It would appear that this policy, if properly implemented will address the previous deficiency.

186. Dr Wenck explained that Queensland Health is in the process of implementing a system whereby relatives who are concerned about a patient's condition can initiate a review of the patient by a senior doctor. Dr Sandford gave evidence that he was not aware of this initiative until he gave his evidence. As communication issues existed for the family around their mother's condition and treatment once she started to deteriorate, this initiative, had it been in place, would have assisted the family significantly and could have had a beneficial effect on the treatment and timing of it provided to Mrs McNaught.

187. Since Mrs McNaught's death, Queensland Health has replaced the observations chart incorporating the MEWS scores with the ADDS chart. This chart is a component of the deteriorating patient project. Dr Scholes confirmed that the ADDS chart is currently used in the SU at the hospital. Dr Sandford explained that the project has been implemented in the hospital and is an ongoing process of training, review and modification.

Coronial Comment

188. Section 46(1) of the Coroners Act 2033 empowers the Coroner to comment, whenever appropriate, on anything connected with the death that relates to public health and safety or ways to prevent deaths from happening in similar circumstances in the future. Recent Queensland authority supports a broader than direct connection between any matter on which comment is made and the death under investigation. There are a range of issues arising from the evidence relevant to section 46.

189. A primary issue arising from this Inquest concerns the poor documentation in the medical chart, which is demonstrated by the following:

i. The notes of the ward round on 2 June 2010 do not include the reasons why Dr Atherstone had considered that Mrs McNaught was not fit to be discharged home;

ii. The notes of the ward round on 3 June 2010 do not include:
(1) Dr Atherstone's provisional diagnoses;
(2) The plan for Mrs McNaught to be returned to the operating theatre in the early afternoon;

iii. The absence of any documentation of the telephone discussions between Dr Goundar and Dr Atherstone after midday on 3 June 2010;

iv. The poor completion of the nursing notes which went with Mrs McNaught to the RU, particularly in relation to the frequency of observations having regard to the difference in care plans between the SU and the RU;

v. The poor completion of nursing notes in the RU during the morning of 3 June 2010 such that there is no definitive evidence as to who

was caring for Mrs McNaught during that critical period. This contributed directly to the MEWS score of 3 being missed immediately prior to the transfer to the CT room and a doctor not being called as procedurally required.

190. Dr Sandford gave evidence that he was aware that the documentation of medical charts was a continuing issue for his Hospital and others. It was also an issue that was subject to constant monitoring and effort towards improvement. He also gave evidence about a newish system to keep some records electronically for ease of reference by medical personnel of the important features of the patient and treatment. While it is ultimately a matter for the Hospital how the charts and official treatment records are kept, it is quite clear from this matter that the record keeping at the time of this matter was inadequate.

191. The evidence demonstrated quite starkly a lack of adequate communication between the surgical team, particularly at the ward round on 3 June 2010 as to the provisional diagnoses, future management of Mrs McNaught (especially the intention to return her to surgery that afternoon) and parameters for intervention in a patient who had obviously deteriorated. This lack of communication had the effect that no-one in the team knew what Dr Atherstone was thinking and there was no continuity of approach or communal alertness to the possibility of complications such as sepsis and this impacted adversely on Mrs McNaught's treatment.

192. There was a lack of sufficient nursing staff in the SU during the morning shift as evidenced by one nurse being allocated the responsibilities of a discharge planner and further, prior to surgery on the 3rd June 2010, the lack of appropriate personnel for RN Leather to call on for an additional IV line to be inserted (if she had been alert to the need for the antibiotics to be administered asap).

193. There was clearly a lack of sufficient nursing staff in the RU on the morning and afternoon shifts given the tasks required of them with the overlaid feature of caring for a much higher dependency patient as a surgical outlier. Further, there was an inconsistency in understanding between nurses in the RU as to the interpretation of the frequency of observations as provided for in the nursing care plan and a missed opportunity to seek reassessment of the instructions taking into account the observations at 4pm in the SU.

194. The miscommunication as to the status of the triple antibiotics at the time Mrs McNaught was handed over to the operating theatre on 3 June 2010 was quite critical in light of the impact delay in administration of all three of the antibiotics was likely to have on survival chances, particularly taking into account that it transpired, after the event, that gentamicin was the antibiotic which would have best fought the particular infection Mrs McNaught had.

195. The evidence demonstrated a relatively ad hoc approach to the allocation of responsibilities and supervision of the more junior doctors, especially the Interns. There was much reference to everyone knowing what their role was and what was expected of them. However, it needed to be taken into account that the two Interns involved in the matter had only just started their rotation in surgery and the lack of supervision was telling as evidenced by the fact that they were very tentative and concerned/scared when attending on Mrs McNaught in the CT room. After calling Dr Goundar on the phone and receiving advice, nothing further was immediately done to support or assist the Interns. Further, the lack of consistency of approach in the allocation of tasks following the ward round and the subsequent checking of blood results proved diabolical. Dr Goundar gave evidence that despite it being the task of the Interns, or one of them, to check the blood results, he did so anyway. He was not able to say why this occurred.

196. There was clearly inadequate communication with Mrs McNaught and her family on 3 June 2010 as detailed above.

197. In relation to the practice of outlying patients from the SU (or a higher dependency unit) to the RU (or a lower dependency unit), especially where the nursing workload, skills and focus may vary significantly it its clear that further development of the procedures needs to happen at the Hospital beyond the requirement for medical consultation. There was evidence conflicting with Dr Sandford's view that SU patients were no longer outlaid at the RU which is, in itself, concerning in light of the events being investigated here. It is clearly desirable that the recording observations prior to a surgical outlier patient leaving the SU and again on arrival in the receiving unit. Nurses in the RU gave evidence that there would be significant merit in implementing a single document summarising an outlier patient's condition when the patient is being transferred to the RU.

Resource demands for hospital beds

198. The circumstances leading to Mrs McNaught being sent as an outlier to the RU still exist in that there are limited resources and high demand for them. Further to seeking efficiencies in the present system, an increase in resources is the only real solution to the underlying issues. In the current funding climate, this may not be an option but the need should be stated nonetheless.

199. One efficiency which was suggested by nurses during evidence is the use of discharge planners in acute wards. The SU has successfully used the services of one nurse for this purpose; however that position was removed from patient care to serve in that role. The discharge planner forward plans the expected discharge of the patient from an acute ward and assists in organizing and co-ordinating issues such as transport, receiving facilities such as nursing homes etc in order to ensure that patients are discharged at the earliest appropriate time, releasing the bed for another patient. This successful "trial" of the role would seem to hold advantages

for other wards. If ward need to release a patient care position to provide the discharge planner position, then the efficiency of the change may be diminished or lost.

Root cause analysis

200. A Root Cause Analysis (RCA) was commissioned in response to this matter. In relation to the RCA procedure, the evidence was that virtually none of the treating doctors or nurses who cared for Mrs McNaught were spoken to during that investigation. This fact remains despite the reluctance of the Executive Director of Medical Services, Dr Sandford to concede it. Dr Scholes gave evidence that he would have concerns about the fact that none of the doctors or nurses who had given evidence at the Inquest had been contacted in the course of the RCA.

201. This was clearly a significant failure in the clinical incident process directing at reducing preventable harm. It also results in a lost opportunity for those involved in the care to review their performance and procedures with a view to improving practice and understanding what went wrong. This is necessary through the RCA process despite there being other procedures which may afford this opportunity to some of those involved in the care, such as Mortality Reviews and other procedures for the medical personnel. An RCA gives the opportunity for a multi-disciplinary review at all levels of care which would not seem to be available in any other processes at the time.

202. Of further concern in relation to the efficacy of the RCA, where there is no interviewing of the practitioners involved in the care, the reliance on medical charts as evidence becomes more pronounced. As has been seen in this matter, where the notes are deficient or inaccurate, the impact of reliance on that information compounds the issue and does not lead to the determination that there might be documentation problems, as in this case. All in all, the RCA in this case represented a completely lost opportunity.

203. It was submitted for the Hospital that there is constant striving for the improvement of the RCA process which is complex and strictly regulated by legislation. It was further submitted that the RCA successfully captured all relevant systemic, communication, documentation and other issues relevant to Mrs McNaught's treatment and clinical care at the Hospital.

Findings required under section 45

204. I make the formal findings:

a. The identity of the deceased was Judith Anne McNaught;

b. The date of death was 6 June 2010;

c. The place of death was at Rockhampton Hospital, Rockhampton, Queensland;

d. The formal cause of death was Septic Shock due to Bilary Peritonitis as a consequence of Laparoscopic Cholecystectomy due to Chronic Cholecystitis. On 1 June 2010, Mrs McNaught underwent a laparoscopic cholecystectomy performed at the Rockhampton Base Hospital by Drs Atherstone and Goundar. Unfortunately Mrs McNaught developed a post-operative complication, namely a bile leak causing generalised peritonitis. She was returned to the operating theatre on 3 and 5 June 2010 but sadly passed away on 6 June 2010. Mrs McNaught was transferred from the Surgical Unit of the Rockhampton Hospital to the Rehabilitation Unit (a low dependency unit focused on rehabilitating stable patients) on the late afternoon of 2 June 2010. Mrs McNaught had not been discharged on the morning of the 2nd as was her expected course, as Dr Atherstone had some concerns about her recovery from surgery due to her general condition and complaint of nausea and shoulder-tip pain. There was no consultation with Dr Atherstone about the decision of the Bed Manager to transfer Mrs McNaught to the Rehabilitation Unit as a "surgical outlie patient" in order to free up her surgical bed for another patient. The handover to the Rehabilitation Unit nursing staff did not adequately take account of the circumstances of Dr Atherstone's concerns about Mrs McNaught's recovery as they were not documented in the progress notes. The nursing care plan provided to the Rehabilitation Unit was not completed in a clear fashion, leading to some differences in interpretation of the frequency of observations required. No observations were taken from Mrs McNaught from that evening until 6am the following day. Mrs McNaught had deteriorated overnight and a Ward Call was made to Dr Iredia. He ordered various tests and ordered morphine and fluids and requested an urgent surgical consultation. This was passed on through the on call channels but there was no medical consultation with Mrs McNaught until the scheduled ward round about 8.30am. Dr Atherstone made provisional diagnoses of Mrs McNaught's condition at the ward round and resolved to take her back to surgery later that day. Neither of these issues were communicated to other members of the ward round or documented in the progress notes. Dr Atherstone ordered a review of the tests sought by Dr Iredia and ordered a CT scan be conducted to assist him in his deliberations on diagnoses and preparation for surgery. It is unclear which nurse was responsible for the care of Mrs McNaught after the ward round but it was likely RN Tydd. Observations were taken until 10am but then, without explanation, none until 11.30am immediately before Mrs McNaught was to be taken from the RU for the CT scanner. At 11.30am Mrs McNaught had deteriorated and her MEWS score was 3. No call to medical personnel was made as is required by that score. Mrs McNaught was taken to the CT scanner and further deteriorated, requiring Interns to attend on her. The Interns called Dr Goundar to explain Mrs McNaught's condition and received advice from him which they followed (primarily the administration of bolus fluids). Earlier, at

10.32am, Dr Goundar had accessed the blood results ordered by Dr Iredia which should have indicated to him that Mrs McNaught was septic. Dr Goundar rang Dr Atherstone between 12 and 12.30pm to discuss the blood results. Dr Atherstone came to the conclusion that Mrs McNaught was septic and says he told Dr Goundar to administer antibiotics. This did not happen. Mrs McNaught was taken from the CT scanner to the SU to prepare her for surgery. An ICU assessment was conducted by Dr Casey preparatory to Mrs McNaught being transferred there after surgery. Dr Casey ordered triple antibiotics and further fluid be administered. This treatment was started with one antibiotic and preparations made for transfer to the theater. The handover at theatre did not result in anyone being aware that the triple antibiotics had not been fully administered and as a result, they were not completed until sometime after the surgery. Mrs McNaught crashed as she was being administered anesthetic and there was a delay to surgery proceeding until she was revived. The surgery revealed infected bile in Mrs McNaught's abdomen which was lavaged. Mrs McNaught did not regain consciousness after the surgery on 3 June and despite further surgery on 5 June, passed away on 6 June 2010. Expert consideration of the treatment provided to Mrs McNaught has revealed serious concerns with some important aspects of her care.

COMMENT / RECOMMENDATIONS

204. **I make the following recommendations:**

Recommendation 1: **That the Rockhampton Hospital seriously consider the allocation of resources for dedicated discharge planners in its major acute wards, with additional resources allocated for nursing care in those wards to replace the nurses performing discharge planning duties where possible.**

Recommendation 2: **That the Rockhampton Hospital seriously consider whether the patient outlie system is necessary and appropriate for acute and post-surgical patients at all, particularly having reference to the expert opinion on the issue in this Inquest.**

Recommendation 3: **That in the event that it is considered that patient outlie is necessary and appropriate for acute and post-surgical patients, the Rockhampton Hospital conduct a complete review of the patient outlie system using input from key frontline personnel to ensure that if the practice needs to continue that all precautions are taken to ensure patient safety, including patient reviews before transfer, appropriate and complete handover of patients to receiving wards, detailed nursing care plan for the patient and consultation with treating doctors before the transfer as well as the supervisor of the sending and receiving wards before the transfer is effected, and regular reviews of the patient and the appropriateness of their remaining in the receiving ward.**

***Recommendation 4*: That those conducting Root Cause Analyses at Rockhampton Hospital ensure that all relevant care providers be interviewed in the investigation. It is clearly desirable that the nurses and doctors who are involved in an adverse incident be given the opportunity to give information to an investigating RCA team which is protected by statutory privilege so that the health care team can speak freely. Such participation can only assist in the early identification of issues which may need to be addressed to prevent tragedies from occurring in the future. It is noted that previous coronial comment on this issue has been made.**

Referral pursuant to section 48

205. Section 48(4) of the Act authorises a Coroner who "reasonably believes" that information gathered while investigating a death might cause a professional disciplinary body to inquire into the conduct of a relevant professional should give the information to that body. This section allows consideration of whether the care given to Mrs McNaught was of an appropriate standard and if not, whether it was such that it should be referred to the appropriate professional body for consideration of disciplinary action.

206. Section 5 of the *National Practitioner Regulation National Law 2009* defines "professional misconduct" as unprofessional conduct that amounts to conduct that is substantially below the standard reasonably expected of a health practitioner of an equivalent level of training or experience. Counsel for the Hospital and Doctors submitted that the comments of the State Coroner in the Findings of Inquest in the matter of *Ryan Charles Saunders* (2007) @ p28 are pertinent to the present matter. The State Coroner said:

> *"Professional disciplinary action is not punitive …: It is intended to correct and prevent aberrant behaviour rather than punish. As a result of participating in the HQCC investigation, this Inquest, and the searching self-reflection any insightful practitioner would undertake after being involved in Ryan's care would act very differently if they were confronted with a similar case in the future. That expectation, coupled with the systemic changes introduced as a result of the HQCC investigation, leads me to conclude no good purpose would be served by referring the conduct … for further consideration by the Board."*

207. There are a number of substantial differences between the situation detailed by the State Coroner and that existing in this matter. There has been no investigation by the HQCC or Medical Board in the present case as there was in *Saunders* before the Inquest. Despite the lengthy and detailed Inquest conducted in this matter, there does not appear to be any objective signs of self-searching reflection on the part of Drs Atherstone and Goundar which might comfort the family and the public that their actions might be different in future similar cases. Whilst there have been some changes since Mrs McNaught's death as to some of the procedures which failed or policies which were wanting (particularly evident in Dr Nicholson's self-imposed changes in practice and the requirement for

medical consultation on the transfer issue), there was clear evidence, for instance, that at the time of the Inquest, two years after the death, that surgical patients were still being outlied in the Rehabilitation Ward and there still exist nursing concerns around the procedures. There is still much to be done in relation to the critical contributing factors here.

208. The evidence on the issue and the concerns held in relation to the decision making of Drs Atherstone and Goundar have been fully detailed in these findings. I consider that there is sufficient evidence to warrant Dr Atherstone's post operative management of Mrs McNaught being reviewed by his professional body. There is a weight of evidence which might cause a disciplinary body to conclude that he failed to provide Mrs McNaught with an adequate standard of care. Accordingly, the material gathered during this inquest will be provided to the Australian Health Practitioner Regulation Agency.

209. Dr Goundar's post-operative management of Mrs McNaught was also inadequate for the reasons discussed above. There is a sufficient body of evidence to warrant his conduct also being reviewed by the Australian Health Practitioner Regulation Agency.

COSTS

210. Counsel for the Family has made application for costs against the Hospital on the basis that the conduct of the Hospital in its dealings during the course of the Inquest has necessitated their needing to engage legal representatives and in particular the costs for the second sittings due to the need to recall Dr Atherstone following the late provision of Dr Nicholson's statement. Counsel for the Nurses has somewhat less enthusiastically joined in the application.

211. There is no provision in the *Coroners Act 2003* specifically dealing with costs (which is acknowledged by the applicants). Section 35(1) provides power to make orders the Court considers appropriate for the conduct of the Inquest (other than is provided for in the rules and practice directions).

212. Counsel for the Family relies on *Cremona –v- RTA* [2000] NSWSC 735 (25 July 2000) in which Justice Dowd determined that the RTA was liable for costs of the family in an Inquest (to the extent of engaging experts to provide reports) in a situation where an action for damages for personal injuries arose out of the facts subject to investigation at the Inquest and the evidence from the Inquest was used in the summary judgment in favour of the Plaintiff.

213. Further, the decision in *Hurley v. Clements and Ors (No.2)* [2009] QCA 207 (21 July 2009) is relied upon. In that matter, the Court of Appeal found that the absence of the provision in the Act was not relevant and the District Court had the power to make an order for costs under the *Uniform Civil Procedure Rules 1999*.

214. Counsel for the Nurses has assisted with a more fulsome summary of the case law, submitting that the weight of authority appears to be against the proposition that an order for costs can be made in a Coronial Inquest.

215. It is clear that the power to award costs must be conferred by statute specifically (*Byrnes v Barry* (2004) 150 A Crim R 471, approving the House of Lords in *Garnett v Bradley* (1878) 3 App Cas 944; *GJ v AS* [2011] ACTSC 119; *The Appellants v Council of the Law Society of ACT* (2011) 252 FLR 209).

216. In Queensland, the position has long been that the power to grant costs must at least clearly appear in legislation, either being conferred expressly or by necessary implication - *Queensland Fish Board v Bunney; exparte Queensland Fish Board* [1979] Qd R 301 per Connolly J. That case dealt with a general power to *"make any other order [the court] considers just"* which the Court of Appeal held did not confer the power to award costs. A similar conclusion was reached in *The Appellants v Council of the Law Society of ACT* (ibid).

217. It is not certain or even likely that any day of hearing would have been saved if Dr Atherstone was not recalled. In any event, as there is no specific provision in the *Coroners Act* 2003 granting power to order of costs, I do not consider that such an order is possible, and further, if it was, there are insufficient grounds to make such an order in this case. I dismiss the applications for costs.

A M Hennessy
Coroner
6 December 2012