INQUEST INTO THE DEATH OF REBECCA MURRAY

FILE NO. 615/2007

IN THE CORONIAL JURISDICTION OF NEW SOUTH WALES

CORAM: **His Honour, Magistrate Carl Milovanovich**
New South Wales Deputy State Coroner

VENUE: **Coroners Court of New South Wales sitting at Westmead**

DATE: **1st – 12th June 2009**

APPEARANCES

Gail Furness of Counsel, instructed by Dr Julia Quilter from the State Crown Solicitor's Office, as Counsel Assisting the Coroner.

Michael Cranitch SC and Lesley Whalan of Counsel, instructed by Courtenay Poulden of Beilby Poulden Costello, Solicitors for the Murray family and Mr and Mrs Furner.

Michael Bozic SC instructed by John Kamaras of Paul Tsaousidis, Solicitors for Doctors Lukic, Rikard-Bell and Schibeci.

Neale Dawson, Solicitor, instructed by Pat Robertson, New South Wales Nurses Association in the interest of its members Brigette Hodges, Roslyn Forrest, Jane Thompson and Christine Morris.

Kim Burke of Counsel instructed by Melissa Asimus of General Insurance Law Department for the Greater Western Area Health Service, South Western Area Health Service, Dr Mervitz and Registered Nurse Sullivan.

Michael Ainsworth of Counsel instructed by Scott Chapman of Tress Cox, Solicitors for Doctor Dubyk.

INTRODUCTION

1. The death of Rebecca Murray was reported to me in my capacity as a New South Wales Deputy State Coroner on the 26th June 2007. At that time I received from the NSW Police a report of the death to the Coroner (P.79A), an identification statement by Mr James Murray and a Form A being a report from Nepean Hospital to the Coroner of the death of a patient.

2. Rebecca's death was a reportable death to the Coroner by virtue of the fact that a medical practitioner had not issued a death certificate. Her death was also a reportable death on the basis that she had died within 24 hours of the administration of an anaesthetic and her death was sudden and unexpected.

3. On the 26th June 2007 I issued an order in writing to Dr Dianne Little, Forensic Specialist, Institute of Clinical Pathology and Medical Research, Westmead Hospital to conduct a post mortem examination on the body of Rebecca Murray. Dr Little has provided the Coroner with a written report in which she expresses her opinions as to cause of death. That report and the formal documents have been tendered and marked as Exhibit 1 in these proceedings.

4. A Coroner has a statutory obligation under the provisions of the *Coroners Act 1980* ("the Act") to examine the evidence surrounding a reported death and pursuant to s. 22 of the Act return a finding, where possible, as to the identity of the deceased, the date and place of death and the manner and cause of death. The Coroner's findings are subsequently recorded with the Registrar of Births, Deaths and Marriages and will appear on a certified copy of the death certificate.

5. Under the provisions of s. 22A of the Act a Coroner has the power to make recommendations. Recommendations are usually made on issues that touch upon public health and safety.

6. It is important for the general community and particularly for the family of Rebecca Murray to understand that a coronial inquest is not adversarial in nature, it is an inquiry which is focused on determining the manner and cause of death. Apart from the statutory functions and the power to make recommendations the inquiry is very much the vehicle through which family and loved ones may come to understand the circumstances surrounding the death of a loved one.

7. For the above reasons, it is also important to understand that the Coroners Court is not a court of blame and in cases where specific or systemic failings are determined as contributing to death, any commentary or findings by the Coroner are done so with a view to identifying those issues in the context of determining manner and cause of death.

ESTABLISHED FACTS

8. Rebecca Murray died on 25 June 2007 in the Intensive Care Unit at Nepean Hospital. She was 29 years of age.

9. The cause of her death was multisystem organ failure following postpartum haemorrhage. The cause of the post partum haemorrhage was a failure of the uterus to contract effectively, known as atonic uterus.

10. Rebecca Murray had two children and was pregnant with her third child. She lived in Bathurst. During her pregnancy with her first child it was known that she had low platelets during pregnancy. Platelets are disc shaped cell structures which are present in the blood. They have several functions all related to the arrest of bleeding. She had no history of post partum haemorrhage and each of her deliveries had been quite rapid.

11. Her antenatal care was shared by Bathurst Base Hospital and her GP, Dr Catherine Stewart.

12. In May 2007, it was confirmed that the baby presented by breech. Mrs Murray was referred to Dr Holloway, an obstetrician and gynaecologist who decided that a caesarean would be performed on 4 July 2007. He also noted her low platelets.

13. In the early hours of Sunday 24 June, her waters broke and she went to Bathurst Base Hospital, arriving sometime between 0430 and 0500. After assessment by a midwife, Dr Rikard Bell, a General Practitioner, Visiting Medical Officer in Obstetrics examined her and in conjunction with Dr Lukic, the locum obstetrician, decided to perform a caesarean. The various staff needed to carry out the procedure were called and arrived between 0530 and 0600. RN Thompson was the anaesthetic nurse, RN Hodges, the scrub/instrument nurse, EN Forrest the scout nurse, Dr Mervitz the anaesthetist, with Dr Lukic performing the procedure assisted by Dr Rikard Bell. The anaesthetic nurse's role extended to accompanying the patient to recovery and performing the recovery room tasks. All the nurses involved had

significant experience in operating theatres. Dr Mervitz was a first year Anaesthetic Registrar.

14. Spinal anaesthetic was given about 0635. There was a discussion with Dr Lukic concerning Mrs Murray's preference for a vaginal delivery. At that stage the foetal heart rate was checked and foetal distress was identified. An emergency caesarean was then performed by Dr Lukic, commencing at 0701 hours. Eight minutes later a healthy baby girl was delivered.

15. Following the delivery, a small extension of the uterine incision on the left hand side was seen, the uterus was externalised, the tear was repaired and the abdominal wall was then closed after inspecting the wound for a period of time and finding that there was no further bleeding.

16. The uterus was slow to contract initially, however, when it was returned to the abdomen it was well contracted. Dr Lukic ordered Syntocinon, a synthetic oxytocic used to induce uterine contractility, of which 10 units were initially given followed by an infusion which commenced at 0720.

17. Dr Lukic generously estimated that there was one litre of blood loss during the caesarean, of which some 600 mls of blood and fluids was collected in the suction bottle. That amount of blood loss, according to the NSW Health Framework for Prevention, Early Recognition and Management of postpartum haemorrhage, a circular published in 2002, meets the definition of severe post partum haemorrhage. The usual amount of blood which is lost during a caesarean section is about 600 mls.

18. Dr Lukic charted post-operative instructions on the operation report and they included that the Syntocinon was to continue as charted. The operation report noted that a left uterine tear had been repaired with haemostasis achieved and that there had been blood loss of about 1 litre. Following the procedure, Dr Lukic informed Dr Schibeci, who was rostered on after Dr Rikard-Bell, as GP Obstetrician, of Mrs Murray's history of low platelets and asked him to perform a full blood count.

19. On handover, the recovery room nurse, RN Thompson was not told of the tear during the caesarean or the blood loss. She obtained a copy of the operation report at about 0815.

20. At 0807, Mrs Murray was transferred to the recovery room. She was the only patient. Between 0807 and 0836, Mrs Murray's observations were fairly stable, although her

BP was low (a fact which was communicated to Dr Mervitz and Dr Rikard Bell). During that period of time, six sets of observations were recorded which included determining verbal response, performing a head lift, and taking pulse and blood pressure readings. No fundal height was taken, nor was any fundal massage performed. The purpose of taking these measures is to determine whether the uterus has contracted and to assist in that process.

21. At 0815 a moderate ooze per vagina was recorded by the recovery nurse. This observation was not conveyed to any of the medical team.

22. Between about 0815 and 0830, Mrs Murray was alert and talking to her husband and others.

23. At 0836 Mrs Murray's blood pressure dropped from the low 90s to 89/51. She was given 2 mg morphine having received 1 mg 10 minutes earlier. Mrs Murray's observations were taken again at 0841 with little change in her blood pressure and pulse rising to 79 from 74.

24. At 0846, there was recorded a dramatic change, her pulse had risen to 94 and her blood pressure dropped to 54/22. A large blood loss was observed by RN Thompson which had soaked through two pads, blue sheets and bed linen.

25. RN Thompson called EN Forrest, who was in the operating theatre, for assistance. EN Forrest attended the recovery room and assisted RN Thompson in changing the linen and pads. That process took about 5 minutes. RN Morris came into the recovery room as this process was being completed and observed the blood pressure reading of 54/22. She obtained a further blood pressure reading and checked Mrs Murray's fundal height then massaged the fundus. RN Morris then initiated 1000mls of Hartmann solution infusion. She momentarily ceased the Syntocinon infusion and attached it to the Hartmann's solution in order for both fluids to be infused through the one cannula.

26. RN Thompson telephoned Dr Mervitz and informed her of the blood pressure reading of 66/33 and that Mrs Murray had passed a blood clot vaginally. Dr Mervitz instructed that 500ml bolus of gelofusin be administered intravenously.

27. EN Forrest telephoned B ward in an effort to locate Dr Lukic. Dr Schibeci overheard the call and, as Dr Lukic had left the hospital, he went to the recovery room to assist. Dr Schibeci observed or was told that the Syntocinon infusion had ceased. He

inserted a second cannula and drew blood for a full blood count and to cross match 6 units of blood, which was then taken by him to pathology at about 0930. There had been no blood taken for cross matching or group and hold prior to the caesarean, which was consistent with the then policy of the hospital.

28. According to telephone records, Dr Lukic was contacted by telephone at 0917. She arrived at the hospital several minutes later. Dr Mervitz arrived at about the same time or shortly afterwards.

29. Dr Lukic observed that the Syntocinon infusion had ceased. She instructed that it be restarted immediately. She diagnosed that Mrs Murray had an atonic uterus. Mrs Murray's uterus was massaged and large amounts of blood clots were expelled. It is likely that Mrs Murray was bleeding into her uterus soon after arriving in recovery.

30. Dr Lukic called for ergometrine, a drug designed to assist in uterine contractility which was administered sometime after 0925. Prostaglandin was also administered directly to the uterine wall to aid uterine contractility. Each of these drugs was accessed from the maternity ward, not being available in the operating theatre.

31. Attempts were made to locate an experienced obstetrician to assist with further surgery. An experienced general surgeon was located and, ultimately, he arrived and assisted with the surgery.

32. At about 0955, the first unit of packed cells were commenced in Recovery; over one hour after the large blood loss was observed.

33. At 1000, Mrs Murray was transferred to the operating theatre where she underwent further surgery during which a large blood clot was evacuated and her uterus was found to be large and atonic. No obvious bleeding point was noted. Dr Lukic then performed an abdominal hysterectomy. About 14 units of packed cells were administered during and after the procedure together with 10 units of fresh frozen plasma (FFP). One pool of platelets was transfused at about 1230 after arriving from Orange Base Hospital

34. Mrs Murray had a cardiac arrest on the operating table, was resuscitated and then transferred to Nepean Hospital where she died on 25 June 2007.

CORONER'S SUMMARY AND FINDINGS

35. The Inquest into the death of Rebecca Murray commenced at this Court on 1 June 2009 and over the past two weeks this Court has heard evidence from a total of 16 witnesses and has examined a volume of written material. The brief of evidence in these proceedings was commissioned by the Coroner with Det Sgt David Broome of the Coronial Investigation Unit, being the Officer in Charge of the investigation and with the assistance of the State Crown Solicitor's Office. The three volume brief was tendered on 1 June and has been marked as Exhibit 2.

36. At the conclusion of oral evidence the Court heard submissions from Counsel Assisting the Coroner and from Counsel appearing for the various interested parties to whom leave to appear had been granted.

37. This Inquest has identified a number of issues that are paramount and relevant to the circumstances leading to the death of Rebecca and has also identified a number of peripheral matters that appropriately should be subject to comment. I believe the main issues are:
    - The standard of obstetric services at Bathurst Base Hospital.
    - Protocols in regard to ordering a full blood count, group and hold and/or cross match.
    - Handover procedures from the Operating Theater to Recovery.
    - The level of training and experience of nurses in Recovery in regard to obstetric patients.
    - Policies in regard to identifying and treating patients with a post partum haemorrhage.

38. Other issues I have identified are as follows:
    - The availability of certain drugs.
    - Documentation, record and note keeping.

The Standard of Obstetric Services at Bathurst Base Hospital

39. The Bathurst Base Hospital provides obstetric services in much the same manner as other major regional centres. It is understood that Bathurst Base Hospital delivers between 500 to 600 babies each year and 25% of all deliveries are by way of caesarean section.

40. There was no evidence at this Inquest that might suggest that the standard of obstetric care was generally inferior to that of other regional centres, however, there is little doubt that the same degree of expertise and access to highly skilled clinicians and ancillary medical staff (nurses, midwives etc) is more available and accessible in the larger hospitals located in the Sydney metropolitan area.

41. This is invariably an issue of logistics and funding. In the perfect world a Base Hospital should be able to provide the same level of service in medical care in the specialist fields it chooses to provide, whether it be obstetrics or any other surgical or medical discipline. Mrs Murray's pre-natal care was satisfactory and unremarkable. The decision to undergo an elective caesarean section on the 4th July 2007 due to the child being in breech was appropriate, was discussed with her treating doctor, Dr Halloway and consents given. On the 24th June Mrs Murray went into early labour and when she presented at Bathurst Base Hospital and following an examination by Dr Rikard-Bell she was found to be 4-5 centimeters dilated. Dr Rikard-Bell is a General Practitioner at Bathurst with Visiting Medical Officer rights in obstetrics. Dr Rikard-Bell contacted the on-call locum obstetrician, Dr Lukic, and arrangements were made for Mrs Murray to go into theatre for an emergency caesarean section. The Anesthetic Registrar, Dr Mervitz was contacted who in turn contacted Dr Dubyk, the Visiting Medical Officer in anaesthesia, who authorised Dr Mervitz to insert the spinal anaesthetic.

42. Dr Lukic completed the caesarean section and a healthy female child was delivered. During the caesarean section a uterine tear occurred which it is understood is not uncommon in cases where the child may be in the breech position. Dr Lukic repaired the tear and she checked that bleeding had stopped. Mrs Murray was then taken to Recovery.

43. One of the fundamental differences between Bathurst Base Hospital and some of the larger Sydney hospitals is that Bathurst had a policy at the time of not undertaking a full blood count, group and hold and/or cross match prior to the operative procedure. Dr Lukic has stated that it is her normal practice to order a full blood count, group and hold and cross match and she only became aware that it had not been done during the caesarean procedure. According to her evidence she was told that it was not Hospital policy to order it.

44. On this issue there appears to be major differences in practice in regard to full blood count, group and hold and/or cross matching. This Court has heard the views expressed by Dr Bland and Dr Korda in regard to their practice at Royal North Shore

Hospital, Port Macquarie Hospital and Royal Prince Alfred Hospital. Similarly, the expert anaesthetists, Drs Levitt, Elliott and Maloney, while having slightly differing views, all concurred that group and hold and/or cross match should be taken for an emergency caesarean. The difference in opinion was more to the issue of whether cross matching should be ordered at the same time, or if specific risk factors are known or arise in relation to the particular patient.

45. An inquest has the benefit of hindsight. With that benefit, had a full blood count and group and hold been taken, even without cross matching, Mrs Murray may have been able to have had blood transfusions at an earlier time and it may have resulted in a different outcome.

46. It is apparent from the evidence that Dr Lukic had an expectation that a full blood count, group and hold and cross match would have been done, however, she did not request it as she may have believed it was the policy to automatically do it or believed that the Anaesthetic Registrar would have ordered it. It is evident that as a visiting locum, Dr Lukic was not aware of the Hospital's policy. Similarly, it would seem that Dr Lukic also believed that Bathurst Base Hospital would have had sufficiently experienced and trained staff in Recovery to attend to all the necessary observations required of a patient who had suffered a post partum haemorrhage.

Protocols in regard to ordering a full blood count, group and hold and cross match

47. Following the tragic death of Mrs Murray a Root Cause Analysis was conducted. This Court has been informed by a letter dated 30 April 2009 to the Coroner from the Greater Western Area Health Service of the findings and recommendations made following the Root Cause Analysis.

48. Recommendation 1 states that "all elective and emergency caesarean section (LCSC) patients are to have a current group and hold and full blood count attended prior to surgical intervention (within 3 days)".

49. This Court has been informed that Recommendation 1 has been implemented at Bathurst Base Hospital, however, it would seem that it has not been implemented in any other hospital that provides obstetric services in the Greater Western Area Health Service. It is appreciated that the Greater Western Area Health Service is only responsible for its area of management, and it should be commended for implementing Recommendation 1. That said, however, this Court has been informed, that at least when Dr Bland was working at Port Macquarie Hospital it was not the practice to undertake a group and hold and/or cross match for caesareans. One

may only speculate how many different policies may exist across the State of New South Wales on just this one issue. If the unexpected and avoidable death of a young mother at Bathurst justifies a change in policy at Bathurst Base Hospital, why should that policy not extend State wide. Do we have to wait for another mother to die in similar circumstances and have another Root Cause Analysis before there is some change?

50. The collective view of the experts who gave evidence is that, at a minimum, a group and hold should be routinely ordered for every emergency caesarean. That Bathurst Base Hospital now has a policy of ordering a full blood count and group and hold in regard to both elective and emergency caesareans is the benchmark that all area health services should strive for. This issue is a policy matter than can only properly be implemented if a Policy direction comes from the appropriate Minister and/or the Director General of Health for New South Wales. I propose to make a recommendation to the Minster of Health that Recommendation 1 of the Root Cause Analysis following the death of Rebecca Murray should be implemented in every hospital in New South Wales that provides delivery by caesarean section.

Handover procedures from Theatre to Recovery and generally

51. From the outset, it must be said that the handover procedure from Theatre to Recovery was deficient. We know that Dr Lukic generously estimated that Mrs Murray had lost about 1000mls of blood during the caesarean and surgery to repair the uterine tear. While opinions differed as to whether the blood loss estimated was lower due to it being mixed with liquor, there is little doubt, that even the more conservative estimate placed Mrs Murray within the Hospital's own guidelines of having suffered a post partum haemorrhage.

52. On 24 June, RN Thompson was the allocated Anaesthetic Nurse and it would appear that it was not unusual, particularly in a country hospital and on a weekend, for the Anaesthetic Nurse to take over the duties of Recovery Nurse. RN Thompson was in the Operating Theatre during the caesarean procedure, however, according to her evidence she was not aware at the time of the amount of blood Mrs Murray had lost, she had no specific recollection of the procedure to repair the uterine tear and had never previously experienced a post partum haemorrhage. RN Thompson has stated that she read the operation report in part, however, did not read it in its entirety and therefore was not aware that she had lost an estimated 1 litre of blood and had a uterine tear repaired. RN Thompson stated that she understood her responsibility to be to monitor Mrs Murray's vital signs, set up the Syntocinon infusion and provide pain relief.

53. The handover of Mrs Murray from Theatre to Recovery was poorly administered. It relied on assumptions and a narrow application of the respective area of responsibility between the anaesthetist, Dr Mervitz, and the obstetrician, Dr Lukic.

54. The assumption that was made, was that RN Thompson, being a nurse looking after a post operative obstetric patient in Recovery was experienced and trained in all facets of post operative care following a post partum haemorrhage. We now know that RN Thompson had never previously cared for a post operative patient who had suffered a post partum haemorrhage, nor had she been trained in checking such matters as fundal height or performing a fundal message that would cause the uterus to contract. It is also apparent that Dr Lukic believed that as Bathurst Base Hospital undertook caesarean sections, that appropriately skilled staff, being either nurses or midwives, would know what needed to be done and checked on a patient with a post partum haemorrhage.

55. I find that Dr Mervitz did give a verbal handover to RN Thompson, however, it was limited to ensuring that Syntocinon was administered and that blood pressure be checked. These handover instructions from an Anaesthetic Registrar were appropriate, however, they could have included clear instructions as to why blood pressure and pulse needed to be checked and monitored carefully in the light of the known blood loss and the uterine tear. Dr Lukic did not give a verbal handover to RN Thompson. She did complete the operation report, visited the maternity ward, spoke to Dr Schibeci and then left the hospital. Dr Rikard-Bell, who was present during the caesarean and delivery, spoke to Dr Schibeci who was taking over from him as the on-call obstetrician. He informed Dr Schibeci that Mrs Murray had had a caesarean delivery, that she had lost about 1 litre of blood and that she had a uterine tear repaired after delivery.

56. The critical time for Mrs Murray was the period from when she left the Operating Theatre until her blood pressure was noted to have dropped to 54/22 at 8.46am. The expert evidence would suggest that while Dr Lukic successfully repaired the uterine tear, conducted an fundal massage and checked that the bleeding had stopped, Mrs Murray most likely commenced to bleed again internally within a very short time after being received in Recovery.

57. Had Dr Lukic known that RN Thompson had no experience in nursing a post partum haemorrhage patient, as the surgeon responsible for Mrs Murray, Dr Lukic's evidence was that she would have attended to Mrs Murray. We know that Bathurst Base

Hospital had a protocol for treating post partum haemorrhage (Tab 27), which was last revised in July 2004. It was apparent that RN Thompson had never seen that protocol nor understood or was trained in the identification of symptoms of post partum haemorrhage and the need to check fundal height and massage the fundus.

58. Had a full and proper handover been given to RN Thompson and had she been informed of the need to check fundal height, it may have transpired and been ascertained at an early stage that RN Thompson was not trained or experienced in performing that task. There was staff working at Bathurst Base Hospital on that morning, including RN Sullivan (midwife), RN Morris and Dr Schibeci who could have been summoned to Recovery.

The Level of Training and Experience of Nurses in Recovery

59. I have touched upon this issue in my comments above, however, it perhaps requires emphasis that hospital administrators have the responsibility to ensure that rostered staff have the skills and training to identify and deal with a particular crisis. If a staff member does not have the skills to deal with a particular crisis, they at least should be able to identify it and seek assistance.

60. A considerable amount of criticism has been levelled at RN Thompson in regard to her skills and training in dealing with a patient with a post partum haemorrhage. In fairness to her, at least on the issue of post partum haemorrhage, it would be unreasonable to expect her to properly identify and adequately deal with a medical situation for which she has never been trained or experienced before. RN Thompson completed her Bachelor of Nursing at the Australian Catholic University (NSW) in 1993. A review of her work experience over approximately 13 years indicates that she worked for periods in Nursing Homes and Public and Private Hospitals in both a full time and part time basis. In her 13 years career in nursing prior to June 2007, she also took maternity leave on two occasions. Her employment history, as set out at Tab 16A of the Brief indicates only limited exposure to nursing duties in Recovery and post natal.

61. Had RN Thompson been informed by any of the medical staff of the loss of blood in Theatre and had she been aware of the Hospital's own post partum haemorrhage guidelines she may possibly have been more acutely aware of the need to closely monitor vital signs. The moderate ooze that RN Thompson observed at 8.15am and so recorded, may have resulted in her contacting either Dr Mervitz or Dr Lukic straight away if she was aware and had been told of the blood loss in Theatre.

62. In regard to the observations made and recorded by RN Thompson, in particular blood pressure and pulse between 8.41am and 8.46am, those observations should have resulted in an immediate call for assistance. It would appear that RN Thompson did not appreciate the gravity of the situation and felt that the priority was to seek assistance to clean up the blood and Mrs Murray. I accept RN Morris' evidence that, to use her own words, she "popped in" while passing Mrs Murray's curtained bed and almost immediately identified a crisis situation in regard to blood pressure and fundal height. We also know that RN Morris was a very experienced registered nurse with over 30 years service including periods when she worked in maternity wards and had past experience in dealing with patients with post partum haemorrhage and had the knowledge and skills in regard to vital signs such as fundal height.

63. We must accept that the skills of all medical personnel, including nurses, will vary according to experience and training. Again, I feel it needs to be emphasized, that the responsibility of ensuring appropriately skilled staff are available to deal with patient care must be a responsibility that rests squarely on the shoulders of hospital administrators.

Policies in regard to identifying and treating patients with post partum haemorrhage

64. I am of the view that the existing guidelines issued by the Department of Health and the guidelines issued by Bathurst Base Hospital in regard to identifying and treating post partum haemorrhage are appropriate.

65. Guidelines alone, however, are of little significance if they are not accompanied by appropriate training and a system is in place to ensure that the guidelines are known and understood by staff working in a particular area of expertise.

66. It is perhaps of greater significance in a country location that nurses who may only be rostered in a particular area infrequently, or work part time, are provided with the necessary information. Such information needs to be regularly disseminated. It was apparent in this Inquest that some of the staff did not even know of the existence of Hospital guidelines in regard to post partum haemorrhage.

67. This issue does not require formal recommendations. It is common sense that the effective and efficient management of the available skills and resources is a management responsibility.

The availability of certain drugs

68. This Inquest identified that certain drugs that may have assisted in the recovery of Mrs Murray were not available at Bathurst Base Hospital. Misoprostol a drug that is not recommended for use during pregnancy is a drug that can reduce bleeding. The drug is highly effective in that it acts as a contracting agent and could have been used, if available, on Mrs Murray post partum. It is understood that it was not the policy at Bathurst Base Hospital to stock this drug, although it is available at other hospitals.

69. Similarly, Novoseven, a drug that has coagulation properties, was also not available at Bathurst, although was stocked at Orange. The drug, the Court has been told is very expensive.

70. Counsel representing the Murray family has submitted that this Court should make a recommendation that Misoprostol be available in all hospitals in New South Wales that provide obstetrics services and that the drug Novoseven also be available in all hospitals in New South Wales.

71. I am of the view that while it would be highly desirable to have immediate access to the full range of appropriate drugs in all hospitals, it is not a matter that this Court has been sufficiently informed about in order to make formal recommendations. I would suggest, however, that the Director General of Health should review and formulate a policy as to the minimum requirement for hospitals to stock a particular or range of drugs. This issue is best determined by the Director General of Health and should take into account availability, demand and shelf life.

Documentation, record keeping and note taking

72. An inquest that involves the examination of the circumstances of a death following admission and treatment in hospital will invariably result in the close examination and scrutiny of medical records. Regrettably in too many cases the documentation and attention to detail is deficient. It is appreciated that medical and nursing staff are often working under pressure, and in an emergency situation priority should correctly be given to providing the appropriate care. That said, however, when a critical incident occurs, as in the case of Mrs Murray, the need to record accurately and while memories are fresh, are imperative.

73. This Inquest has suffered in not being able to determine with a degree of precision what actually took place during critical time frames. By way of example, the time

frame from about 8.46am when RN Morris detected an emerging medical crisis and the established phone call to Dr Lukic at 9.17am is a period of over 30 minutes. There is inconsistency in the evidence as to specific time frames, for example, when Dr Schibeci attended the Recovery Room. The progress notes, by way of example, that appear at page 530 of the Brief of Evidence record the observations made by Dr Schibeci following his examination of Mrs Murray in the Recovery Room. While the pro forma document prompts in bold lettering to record dates and times, Dr Schibeci only recorded the date. Similarly, it was difficult from the available evidence to determine exactly when certain medical staff arrived or left the Recovery Room or Theatre.

74. By way of further example, we know that the Syntocinon drip was in place when Mrs Murray arrived in the Recovery Room. We have, however, conflicting evidence as to when it was turned off and re-commenced. Syntocinon is an effective drug in assisting uterine contraction and this Court has not been able to determine for what period Mrs Murray was without the drug as no notations were made in the nursing notes or medication charts as to when it was turned off or back on.

75. I do not propose to make formal recommendations on this issue, however, I would remind Hospital administrators that this issue has been subject to comment by Coroners in the past and there is a need to re-enforce to all medical staff the need to make accurate and timely notations. In the case of a critical incident, such as the death of Mrs Murray, there should be an appreciation that a Root Cause Analysis may take place, if not a coronial inquest, and staff should be instructed, even if done retrospectively, to make detailed notes. The approach taken by RN Morris in recording vital observations (written on her uniform) and then completing a detailed note later while her memory was fresh is to be commended.

FINDINGS

76. Dr Korda expressed the view in his written report that the death of Rebecca Murray was preventable. Counsel Assisting, Counsel for the Area Health Service and Counsel for the family agree and I so find.

77. The evidence has established that the two primary factors that contributed to death were:

- The failure to take a full blood count, group and hold and/or and cross match prior to an emergency caesarean section. That failure was due to both policy at Bathurst Base Hospital and a belief by the obstetrician that it would be routinely done. Had a full blood count, group and hold and/or cross matching

been done, Mrs Murray would have received blood transfusions at an earlier time and her death would have been prevented.

- The care and treatment of Mrs Murray in the Recovery Room failed to provide the appropriate nursing care for a woman who had suffered a post partum haemorrhage in that the allocated staff had no experience in identifying a continuing post partum bleed, understanding the significance of fundal height or having been trained or skilled in massaging the fundus in order to achieve contraction of the uterus.

78. The evidence has also established that there were individual failures by the medical and nursing staff, however, these failures are more of a systemic nature. Mrs Murray's death on 25 June 2007 was before the Special Commission of Inquiry. Of significance are Recommendations 8, 56 and 91 of that Inquiry, which according to the evidence of Chief Nurse, Debra Thoms, have been accepted by the Government and will be implemented.

79. The one feature that in my view stands out in the tragic death of Rebecca Murray is a failure of the health professionals who treated Mrs Murray on the 24th June to apply a holistic approach to her overall care and treatment. There appeared too greater a willingness between various disciplines to compartmentalise their perceived area of responsibility. As Mr Cranitch outlined in his submissions, Mrs Murray appears to have fallen into a gap between the various medical and nursing roles with those involved failing to identify their individual or collective responsibility to the primary task of providing appropriate care and treatment from admission to discharge.

80. I have given careful consideration to the submissions made by Counsel for the family and I have purposely refrained from making direct criticisms of the individual medical or nursing staff. I have done that for two reasons, first, I see the problems as being systemic rather than individual, and secondly, as previously stated, it is not the role of the Coroner to apportion blame and even more so in the context of a pending inquiry by the Health Care Complaints Commission.

81. I have similarly refrained from making findings of fact on what I perceive are peripheral issues and which may imply that this Court is making findings of credit.

82. On the presented evidence and the submissions there are no issues in regard to identity, date, place, manner or cause of death. The commentary outlined on page 6 of Dr Little's final post mortem report explains in more detail the factors that caused

the death of Rebecca Murray. That report also indicates that the direct cause of death was due to Multisystem Organ Failure, due to or following Postpartum Haemorrhage. I propose to return a finding in accordance with Dr Little's report.

RECOMMENDATIONS

83. The initiative already taken by the Greater Western Area Health Service in relation to Bathurst Base Hospital (in regard to full blood count and group and hold) and the consequences of the Garling Report and its acceptance by the Government, are factors that should be taken into account when considering formal recommendations. I also have had regard to the recommendations and their implementation following the Root Cause Analysis.

84. I will request that the Registrar to the office of the State Coroner, forward a copy of the written and oral submissions, together with the Coroner's findings to the Director General, NSW Department of Health but I do not make a formal recommendation to this effect. I request that the Director General give specific consideration to the issues identified in the death of Rebecca Murray and in particular to issues associated with obstetric training, post partum haemorrhage guidelines and the availability of certain drugs in NSW Hospitals.

85. I make the following formal recommendation:

    1. The Minister for Health. That consideration be given to implementing a uniform policy in all New South Wales Hospitals that provides that a full blood count and group and hold be undertaken for all elective and emergency caesarean sections.

86. I return the following formal finding:

I FIND THAT REBECCA MURRAY DIED ON THE 25TH JUNE 2007 AT NEPEAN HOSPITAL PENRITH IN THE STATE OF NEW SOUTH WALES FROM MULTI-SYSTEM ORGAN FAILURE FOLLOWING A POST PARTUM HAEMORRHAGE.

Magistrate Carl Milovanovich
NSW Deputy State Coroner
Westmead Court, 12 June 2009