CITATION: *Inquest into the death of Georgia Rae Tilmouth* [2008] NTMC 008

TITLE OF COURT:	Coroner's Court
JURISDICTION:	Darwin
FILE NO(s):	D0057/2007
DELIVERED ON:	9 April 2009
DELIVERED AT:	Darwin
HEARING DATE(s):	12- 14 November, 2008
FINDING OF:	Mr Greg Cavanagh SM
CATCHWORDS:	Unexpected death in hospital, obstetric care, non-reporting of death to the Coroner.

REPRESENTATION:

Counsel:

Assisting:	Dr Celia Kemp
Department of Health and Families	Kelvin Currie

Judgment category classification:	B
Judgement ID number:	[2008] NTMC 008
Number of paragraphs:	136
Number of pages:	37

IN THE CORONERS COURT
AT DARWIN IN THE NORTHERN
TERRITORY OF AUSTRALIA

No. D0057/07

GEORGIA RAE TILMOUTH
ON 23 AUGUST 2006
AT THE ROYAL DARWIN HOSPITAL

FINDINGS

(9 April 2009)

Mr Greg Cavanagh

1. Georgia Rae Tilmouth was born on the 22 August 2006 at the Royal Darwin Hospital. She was the first child of Juliana De Castro Matos and Robert Tilmouth. She was extremely unwell when she was born, and she died 13 hours later in the Neonatal Intensive Care Unit at 7:10 am on 23 August 2006. She died because of organ failure caused by not receiving enough oxygen during labour.

2. Her death was not reported to me until the Deputy Coroner was rung by an officer from the Health and Community Services Complaints Commission on 14 March 2007, and my office began inquiries into the death. I then received a letter from Dr Len Notaras, the Medical Superintendent at the Royal Darwin Hospital, dated 15 March 2007, which apologised for the delay and formally reported the death.

3. Georgia's death was reportable to me on two grounds pursuant to section 12 of the Coroner's Act, which will be discussed in greater detail below. Firstly it was as a result of an injury sustained during labour and secondly it was unexpected. This failure to report the death for many months is greatly concerning to me and was one of the key concerns at the inquest.

4. I find that there were changes over a period of time evident on the equipment being used to monitor Georgia Rae that showed that she was in

trouble but that these changes were not picked up. I find that these changes should have been picked up, and an earlier vaginal examination been done, and had these occurred it may have led to an expedited delivery and Georgia may have been born in a healthier state. I therefore consider that in this case deficiencies in the care provided contributed to the death of this little girl.

5. The holding of a public inquest is not mandatory but was held as a matter of my discretion pursuant to section 15 of the Act.

6. Pursuant to section 34 of the Coroners Act, I am required to make the following findings:

> "(1) A coroner investigating –
>
> (a) a death shall, if possible, find –
>
> (i) the identity of the deceased person;
>
> (ii) the time and place of death;
>
> (iii) the cause of death;
>
> (iv) the particulars needed to register the death under the Births, *Deaths and Marriages Registration Act*;
>
> (v) any relevant circumstances concerning the death."

7. Section 34(2) of the *Act* operates to extend my function as follows:

> "A Coroner may comment on a matter, including public health or safety or the administration of justice, connected with the death or disaster being investigated."

8. Additionally, I may make recommendations pursuant to section 35(1), (2) & (3):

> "(1) A coroner may report to the Attorney-General on a death or disaster investigated by the coroner.

(2) A coroner may make recommendations to the Attorney-General on a matter, including public health or safety or the administration of justice connected with a death or disaster investigated by the coroner.

(3) A coroner shall report to the Commissioner of Police and Director of Public Prosecutions appointed under the Director of Public Prosecutions Act if the coroner believes that a crime may have been committed in connection with a death or disaster investigated by the coroner."

9. This inquest was held from 12- 14 November 2008 in the Darwin Magistrates Court. Dr Celia Kemp appeared as Counsel Assisting me. Mr Kelvin Currie was granted leave to appear on behalf of the Department of Health and Families (hereafter 'the Department'). I heard evidence from Brevet Sergeant Anne Lade, the office in charge of the investigation, Cherillee Harry (by video link from Victoria), Dr Tichifara Muvirimi (by video link from Katherine), Sue Wainwright (by phone link from England), Stephanie Worn (by phone link from England), Cindy Sluggett (by video link from Adelaide), Sharon Haste, Erna Cripps, Dr Charles Kilburn, Dr Jane Woolcock (by video link from Sydney) and Dr Martha Finn (by video link from Ireland). I have before me the medical records of Georgia Rae and of her mother and a complete brief of evidence as well as an expert report commissioned by my office, written by Professor Caroline Homer, and an expert report commissioned by the Department, written by Professor David Ellwood.

10. I would like to thank Brevet Sergeant Lade for the high quality and thoroughness of her investigation and her assistance in co-ordinating the inquest. I would like also to thank the Coroner's Clerk, Alana Carter, for her efforts in arranging the video links for such a large number of widely-dispersed witnesses.

11. Juliana De Castro Matos, Robert Tilmouth, Juliana's mother, Sandra, and her grandmother, Isabel, and Robert's mother, Jeanette, her partner, Steve, and Jeanette's aunt also attended the inquest. I would like to thank them all

for the respect they have shown to the Coronial process. I would like to particularly commend Juliana for her sustained and dignified efforts in relation to obtaining answers about this death. She told me that she wants *some answers, justice and a better system that will look after me and other women going through childbirth in the future* (p 4 transcript). This death would not have been reported to me, and this inquest would not have taken place, had she not advocated so strongly for her baby.

CIRCUMSTANCES OF DEATH

12. Juliana and Robert Tilmouth began a relationship in 2005 and Juliana fell pregnant. She saw midwives at the Alice Springs Hospital for most of her pregnancy. She and Robert moved to Anula in July 2006 in order to be close to family in Darwin when the baby was born and she had one visit to the ante-natal clinic at the Royal Darwin Hospital.

13. Her waters broke at 3:40 am on Monday 21 August 2006 and she and Robert went to the delivery suite. She was 35 weeks and 6 days gestation, that is her baby was considered 'premature'. She was not in active labour. It was decided to admit her to see if the labour progressed.

14. Juliana states that early on in her stay *a junior male midwife asked if he could be involved and wanted to feel my stomach, which I allowed but when he did I realised he had no idea so I told the staff that I did not want any junior staff involved in my care.* She was told this may not be possible but that she would be told about the level of experience of those caring for her.

15. She went into labour early the next morning, that is on 22 August 2006. At 3 am a vaginal exam showed she was 4 cm dilated, that is she was in active labour. An IV cannula was inserted and she was started on IV antibiotics. A partogram, which is a document used on which to record observations of a woman once in active labour, was started at 4 am.

16. A cardiotocograph or CTG was also started. This is a machine used to record the fetal heart rate and to record maternal contractions. There are two transducers, which are placed on the mother's abdomen. One measures the fetal heart rate and the second records the maternal contractions. They are converted into two traces which are continually printed onto a piece of paper. The traces can be interpreted to assess the health of the foetus and the rate of maternal contractions, and these traces help to guide decision making in labour.

17. The following variables can be followed by looking at the CTG:

- Uterine contractions – the time between contractions, which reduces as childbirth progresses.
- Baseline heart rate
- Baseline rate variability
- Fetal heart rate accelerations
- Fetal heart rate decelerations

There are three stages of labour; the dilatation of the cervix which is completed when it is 10 cm dilated, the delivery of the baby and the delivery of the placenta.

18. A vaginal exam at 7:20 am showed that Juliana's cervix was still only 4 cm dilated. Juliana requested an epidural anaesthetic (that is an anaesthetic inserted through a catheter in the back into the epidural space in the spine) at 8:20 am but the anaesthetist was busy. She eventually received this at 9:35 am.

19. The midwifery roster provided for a team leader and two other midwives to be rostered on the birth suite at any one time. The team leader had a supervisory role over the other midwives. RM Cherillee Harry was the

midwife allocated to Juliana from 8 am on and the midwifery team leader that morning was RM Cindy Sluggett.

20. The obstetric roster provided for (in increasing order of seniority) an obstetric resident, an obstetric registrar and a Consultant on duty. At 8:50 am Juliana was reviewed by the medical team; Dr Tichafar Muvirimi, the resident, Dr Jane Woolcock, the registrar, and Dr Martha Finn, a consultant obstetrician and gynaecologist and the Head of the Department of Obstetrics and Gynaecology at the Royal Darwin Hospital. Dr Muvirimi was doing his GP Diploma which required him to do 25 deliveries, at that stage he had 10 deliveries towards that total. He was under the supervision of the midwife. He was present with Juliana for most of the day.

21. At 10:50 am syntocinon, which is given to augment labour, was commenced. This is a drug that is given through a drip and it increases uterine contraction. It also increases the risk to the baby as very strong, frequent contractions can cause distress to the baby.

22. At this stage the labour was unequivocally in the higher risk category because the baby was premature, because Juliana had an epidural and because she was on a syntocinon drip.

23. Juliana's rate of contractions increased to a high rate and a vaginal exam at 11:20 am showed that she was 7 cm dilated, which is quite rapid progress. However in spite of this the syntocinon dose was increased. There is no notation as to the frequency or regularity of contractions and no indication that the midwife had any concerns about the contractions.

24. Dr Woolcock came in to see Juliana at 11:30 am and signed the CTG to show she had reviewed it. She did not see her again before the baby was born.

25. There are limited clinical notes made from this time until the next midwife took over at 4:10 am although the CTG continues and the partogram is completed graphically.

26. The evidence is that there were significant concerns with the CTG from this time on with particular concerns at 12:40 pm and then again from about 3:20 pm. There is no evidence that these concerns were recognised by those caring for Juliana and no action in relation to them was taken by staff. There are instances of decelerations where the midwife has written 'maternal' which suggests that she considered that the heart rate recorded was Juliana's rather than the baby's. The expert evidence was that the trace was in fact Georgia Rae's. If a fetal scalp clip had been applied to Georgia Rae's head, then this would have removed this uncertainty. This was not done.

27. A vaginal exam was conducted by Dr Muvirimi at 3:20 pm and showed that Juliana was fully dilated. This meant she had entered the second stage of labour.

28. RM Harry was relieved for her lunch break from 1:30 pm to 2:05 pm by a student midwife. Juliana was not told that a student was looking after her.

29. It is not entirely clear who RM Harry originally handed over to when she finished her shift at 3:50 pm, it may have been the student midwife for a period, but in any case at 4:10 pm Stephanie Worn, took over Juliana's care. At that stage the team leader was RM Sue Wainwright, who had taken over at 1 pm, and the two other midwives consisted of Stephanie Worn and a student. RM Worn had also cared for Juliana the previous day. Dr Muvirimi was still present.

30. It seems likely that Dr Finn came to the ward that afternoon at some stage but that she did not see Juliana. She gave evidence that she did not enter the room and see Juliana or review the CTG, but she came to the ward and

conferred with the Midwifery Team Leader about her and was reassured that everything was progressing normally.

31. Juliana commenced active pushing at 4:30 pm. Professor Homer said the CTG showed problems just prior to this. Once active pushing commenced it was difficult to read the trace. If a fetal scalp clip had been attached, or a fetal blood sample taken to assess fetal ph, this would have given an indication of whether the baby was distressed. However it does not seem to have been recognised that the CTG indicated concerns and these tests were not done. During pushing the CTG shows that the contractions are too frequent and the fetal heart rate is too high for too long. This was not picked up.

32. Professor Ellwood (an expert whose evidence was before me) says that there was *quite a long delay from the point at which the vertex was first visible (1700) until the baby was delivered, at a time when the CTG was at best uninterpretable, but in reality I believe was showing evidence of significant fetal compromise.*

33. RM Worn was concerned after Juliana had been in the second stage for 40 minutes and she consulted her team leader about the unit guidelines in this circumstance and was told that until a woman has an urge to push, the second stage can be up to 2 hours but that once she has an urge to push, she can and if no progress has been made after 30 minutes then a review is required.

34. Georgia Rae was born at 5:42 pm which was 72 minutes after active pushing started. The cord was wrapped around her neck and shoulders and was clamped and cut. She did not spontaneously breathe and was pale and floppy. Her very poor condition came as a complete surprise to treating staff.

35. The paediatric resident had been present since 5:30 pm because it was a preterm birth. The paediatric registrar arrived 3 minutes after birth and commenced resuscitation. The paediatric consultant Dr Charles Kilburn, who also attended and continued resuscitation, including intubation at about 5 minutes of age. Georgia Rae didn't develop a spontaneous heart rate until 20 minutes.

36. She was transferred to the Neonatal Intensive Care Unit and ongoing efforts were made over the next 13 hours to stabilise her condition. Early the next morning Georgia Rae was removed from the ventilator and died at 7:10 am. Both her parents and both her grandmother's and her great grandmother on her mother's side were present.

37. Juliana was told that an autopsy would only reveal brain damage and so was not necessary. She therefore agreed not to have an autopsy.

38. Dr Finn told Juliana that the hospital would be investigating the death internally. Juliana had a series of meetings with Dr Finn and other representatives of the hospital at which she asked questions about what had happened with Georgia Rae. She also asked, repeatedly, why the death was not being reported to the Coroner and was told that it was not a 'reportable death' under the *Coroner's Act.* This advice was incorrect.

39. It was recognised immediately that this was an 'adverse event'. A critical incident review was conducted by the hospital on 30 August 2006 and the conclusions of that review form part of the brief of evidence and I have found them to be of great assistance.

40. My office commissioned an expert report from Professor Caroline Homer (which was referred to as 'the Homer report' throughout the inquest). She is the Professor of Midwifery at the University of Technology, Sydney, and the Director of the Centre for Midwifery, Child and Family Health. She is also the President of the NSW Midwives Association and a practicing midwife.

She reviewed the medical records and the coronial brief and produced an outstanding report which contained nine recommendations. This report was provided to the Royal Darwin Hospital.

41. In the lead up to the inquest I was provided with a report by Dr Martha Finn written in response to the Homer Report, a lengthy document written by Erna Cripps, in her position as the Nursing and Midwifery Director of the Division of Maternal and Child Health (which she held until June 2008) and a statement from Dr Charles Kilburn, in his role as the Medical Co-Director of the Division of Maternal and Child Health. The Department also commissioned a second expert report from Professor David Ellwood, the Professor of Obstetrics and Gynecology at Canberra Hospital and the Deputy Dean of the ANU Medical School, which was provided to me and was of great assistance.

CAUSE OF DEATH

42. This death was reported far too late for an autopsy to be undertaken. A death certificate was signed by a paediatric registrar on 5 September 2006 which gave the cause of death as 'peri-natal asphyxia', that is Georgia Rae had suffered a sustained period with insufficient oxygen which had caused fatal damage to her organs, and in particular to her brain.

43. Dr Charles Kilburn, a senior Consultant in Paediatrics who is in charge of the Special Care Nursery and the Neonatal Intensive Unit, and who cared for Georgia Rae, considered that the cause of death was perinatal asphyxia, which was likely caused by her being deprived of oxygen during the birth process.

44. Professor Homer states that

> *the cause of Georgia's death is likely to have been perinatal hypoxia, either before the labour or during the labour. Given the events that occurred during labour, it seems likely that the hypoxia*

occurred during labour but I cannot be certain of this timing. The lack of autopsy results makes a definite diagnosis difficult.

45. Professor Ellwood is of the opinion that

> *there is very little doubt that the cause of the poor condition of the deceased at birth and the subsequent neonatal course (and ultimate death) was intrapartum hypoxia and acidosis. What is in some doubt is the exact timing of this and the actual cause of the fetal compromise. I think there are two likely explanations, one of which is a period of uterine hyper-stimulation during the first stage of labour caused by the Syntocinon augmentation, and the other is a prolonged period of umbilical cord compression, most probably during the second stage of labour. It is also possible that both factors were operating together, with a degree of compromise in first stage which was compounded by more acute and severe changes in second stage.*

46. I rely on all the opinions of these three to find that Georgia Rae died because of organ failure caused by not receiving enough oxygen during labour.

FAILURE TO REPORT THE DEATH

47. The failure to report this death, particularly given that Juliana repeatedly asked why it wasn't reported, is extremely concerning to me. It was only reported because of the sustained effort put in by Juliana. She told me through counsel assisting that *it took a lot of effort to get to where this is at now.* This should not be required. This death was clearly reportable and should have been reported by hospital staff when it occurred. The failure to report this death raises the issue as to whether other similar deaths have occurred that have not in fact been reported.

48. Any death that is 'unexpected' is reportable to me. Georgia Rae was expected to be a healthy baby girl, when she was born unwell everyone was extremely surprised. Her critical condition and death were clearly unexpected. In addition it was recognised early on by the hospital that this was an adverse event and there had been significant failures in the care provided by the hospital. Such a failure of care must be 'unexpected'.

49. In addition any death that occurs 'directly or indirectly as a result of accident or injury' is reportable to me and this death was the result of injuries suffered during labour.

50. The brief indicates a high level of uncertainty about relevant considerations in reporting a death to the Coroner. The following are extracts of the opinions of senior staff in relation to the relevant considerations as to what is a reportable death (all taken from documents in the brief):

> *Deaths are reported to the coroner if they are suspicious, within 24 hours of an anaesthetic, caused by non-accidental injury or if the cause of death cannot be determined.*
>
> *A coroner's inquest involves a post-mortem examination of the baby, which may be stressful for the parents, so care needs to be taken in consideration of the definition of a reportable death.*
>
> *While not always necessary or appropriate to report preterm fetal or neonatal deaths, and sometimes little information may be obtained from an autopsy, it may be of value to the parents to report the death to the Coroner and have a formal hearing of the case.*
>
> *A post mortem, a Coroner's enquiry, it's usually done with a purpose to finding an answer…it wasn't clear that any answers would be provided by this.*

This death was totally unexpected but we could see the reason why it happened.

While not always necessary or appropriate to report preterm fetal or neonatal deaths, and sometimes little information may be obtained from an autopsy, it may be of value to the parents to report the death to the coroner and have a formal hearing of the case.

As the cause of baby Georgia's death was believed to be understood and the parents did not wish to pursue a post-mortem examination, it was not immediately apparent that this case should be referred to the coroner.

51. This is indicative of serious and widespread misunderstandings of the legal requirements under the *Coroner's Act*.

52. For clarity I set out Section 12 (1) of the *Coroner's Act*

"reportable death" means –

(a) a death where –

(i) the body of a deceased person is in the Territory;

(ii) the death occurred in the Territory; or

(iii) the cause of the death occurred in the Territory,

being a death –

(iv) that appears to have been unexpected, unnatural or violent or to have resulted, directly or indirectly, from an accident or injury;

(v) that occurred during an anaesthetic;

(vi) that occurred as a result of an anaesthetic and is not due to natural causes;

(vii) of a person who, immediately before death, was a person held in care or custody;

(viii) that was caused or contributed to by injuries sustained while the person was held in custody; or

(ix) of a person whose identity is unknown;

53. I note also that if a doctor cannot sign a death certificate because they cannot determine the cause of death, the death also, by default, becomes reportable.

54. There is a commonly held misconception that if the cause of death is known then it is not reportable. This is incorrect. If the death satisfies any of (iv) – (ix) above it is reportable, no matter how clear the cause of death.

55. There seems to be a widespread belief at the Royal Darwin Hospital that the decision whether to report a 'reportable death' is discretionary and hospital staff are taking into account considerations such as whether or not an autopsy would reveal anything, whether or not an autopsy is acceptable to the family, whether or not the family want a Coronial investigation or whether the individual staff member believes a coronial investigation would serve any purpose.

56. Reporting deaths to the coroner is a mandatory legal requirement and these considerations (and any other considerations that are not stated in the *Coroner's* Act) are irrelevant in determining whether a death is reportable. A death is reportable if it falls under the definition of a 'reportable death' in the *Coroner's Act,* a definition that has been constant for many years. If there is any doubt the death should be reported. Indeed, it ought be noted that it is a criminal offence not to report a 'reportable death'.

57. This is set out in Sections 12 (2),(3) and (4) of the *Coroner's Act:*

(2) A person who has reasonable ground to believe that a reportable death has not been reported shall report the death as soon as possible to a coroner or to a member of the Police Force.

Penalty: $5,000

(3) A medical practitioner who is present at or after the death of a person shall report the death as soon as possible to a coroner if:

(a) the death is a reportable death;

(b) the medical practitioner does not view the body of the deceased person; or

(c) the medical practitioner is unable to determine the cause of death.

Penalty: $5000

(4) If more than one medical practitioner is present at or after a death and one of them reports it to a coroner, the other medical practitioners need not report the death but shall gie to the coroner investigating the death any information that may help the investigation.

Penalty: $5000

58. What makes this matter of particular concern is that it is very clear that it was recognised from early on within the Hospital that substandard treatment played a part in this death. There are notes from a meeting on 28 February 2007 where Juliana is told that her baby received suboptimal care.

59. Sharon Haste was the Maternity Services Manager at the Royal Darwin Hospital from October 2006 and became involved with the follow up to Georgia Rae's death. She says she was told by a number of senior staff that the *Coroner does not deal with deaths involving negligence*, she found this hard to believe and made a note about it at the time, because part of her job was to explain to Juliana why the death was not reported to the Coroner. This note was before me.

60. It is not part of my jurisdiction to make a determination on whether there was, indeed, negligence in the civil sense, and I am using the word only as an indicator of what was believed about the death by some of those in a position to report it. I note that all unexpected deaths are reportable. I would presume that negligence is always 'unexpected' at the Royal Darwin Hospital and thus if it is considered by senior staff that a death may be due to negligence then such a death is unambiguously reportable.

61. It is difficult to believe that there was a genuinely held view that a death caused by negligence is not reportable, and this perhaps indicates a disinclination to have such deaths reviewed by the Coroner.

62. Dr Notaras, in his letter to me, apologised for not reporting the death and said it should have been reported. It seems from the evidence before me that one of the problems initially was that the issue of reporting the death fell through the gaps caused by the transfer of Georgia Rae's care from the Obstetric team (throughout labour) to the Paediatric team (at birth). The Obstetric team were seized with the knowledge of the problems during labour that made it reportable, but, by the time Georgia Rae died she was under the care of the Paediatric team, who did not look back to what occurred before they became involved when signing the death certificate. The death of Georgia Rae was not unexpected given the condition she was in from the time they took over and thus they didn't report it. There was clearly a communication issue between the two Departments. Dr Finn states that *both obstetric and paediatric teams genuinely did not believe that referral to the coroner was necessary. Hence there was no formal discussion between obstetric and paediatric teams on this particular issue, even at the later perinatal mortality meeting* (p11 of 11).

63. There has been a serious commitment in recent times by the Paediatric team to report deaths appropriately. This has resulted in the Coroner's office being contacted more frequently by Paediatric doctors and the reporting of a number of baby deaths. Dr Kilburn provided a statement to me which included the following (at p 2):

> *The issue of reporting to the Coroner has been a focus of discussion within the Division and with the assistant coroner. There is now more clarity about which deaths are required to be reported to the Coroner both on the part of Paediatrics as well as Obstetrics and Gynecology. Any causes which cause any doubt are now discussed directly with the Coroner's office.*

64. Dr Finn states that at the meetings subsequent to a neonatal death, overt consideration is now given to whether the death is reportable to the Coroner.

I accept that a serious effort is being made on this front and again this is evident to me because calls are being made to my office in relation to such deaths.

65. I therefore accept that a considerable effort is being made to improve the situation. However my concerns about the failure to report this death even in the face of repeated requests from Juliana and a clear belief that there had been a failure of care, in combination with the clear and widespread confusion in relation to the criteria for a reportable death demonstrated on the brief, mean I consider a recommendation in relation to this issue is necessary.

DEFICIENCIES IN CARE

66. I rely on the Critical Incident Review and the reports from Professors Homer and Ellwood to find that there was a failure over an extended period of time to recognise the fetal and maternal CTG changes that indicated that Georgia Rae may have been in difficulties. Dr Homer describes this as follows *It is evident that there deficiencies in the interpretation and subsequent documentation of the CTG throughout labour, particularly in the second stage of labour...action on these concerns may have resulted in a different outcome.*

67. In addition I rely on the report from Professor Ellwood to find that the wait of four hours between the vaginal examination at 11:20 and the one at 3:30 was too long. Professor Ellwood states that

> *most women in preterm labour would progress very quickly from 7 cm to fully dilated, especially with a contraction frequency of 4-5 in 10 minutes. I suspect that she may well have been fully dilated when the [CTG] trace changed at about 1240 and thus there was a lost opportunity to have got her to start active pushing much earlier than 1620. I think a vaginal examination should have been done at about*

1 [pm] as part of the investigation of why the CTG trace had changed.

68. I find that the CTG changes should have been picked up, and an earlier vaginal examination been done, and had these occurred it may have led to an expedited delivery and Georgia may have been born in a healthier state. I therefore consider that in this case deficiencies in the care provided contributed to the death of this little girl.

69. I have carefully considered what factors contributed to these deficiencies in care. There is evidence before me that there are a number of contributing factors and I will deal with them in turn.

1. Lack of medical supervision of the labour

70. Professor Ellwood says his strongest criticism is to do with the apparent lack of senior medical supervision of this 'high-risk' labour. He states

> *Whilst it can be argued that there were some deficiencies in the interpretation of the CTG by the two midwives looking after her, the most senior medical input throughout the labour appears to have come from Dr Muvirimi who was, in effect, a junior doctor in training and in no way should be considered to have had any supervisory role. I would have expected that someone more senior on the medical side (either registrar or consultant) would have returned to the labour ward to see the patient and view the trace first hand and assess the progress of labour rather than rely on the midwife to call if she was concerned. Had this occurred, I would have expected an earlier examination to assess progress (no more than two hours after the VE at 1120) rather than the more passive approach which was adopted by the midwife. Had this taken place I think this baby would have been delivered in a much better condition as she would have started active pushing much earlier.*

71. He later says he would expect, at a minimum, that the registrar should perform labour ward rounds at least every 4 hours and, in some cases, visiting individual patients with high risk characteristics more frequently, perhaps every two hours. He says *[h]ad this been done I suspect there would have been earlier intervention and an assisted delivery of a much healthier baby in better condition.*

72. Similarly Professor Homer says that as Juliana was having a preterm baby with syntocinon augmentation of her labour and epidural anaesthesia it would have been reasonable to expect review by an obstetric registrar at some stage through the afternoon.

73. Dr Charles Kilburn, in his role as Medical Co-Director of the Division of Maternal and Child Health, writes that

> *My view is that the management of this labour, almost by default, reverted to the midwife when it was clear that management of this labour should have been a medical responsibility and rested with more experienced medical members of the team.*

74. Dr Woolcock was an experienced obstetric registrar at the time; she already had three and a half years experience as an obstetric registrar when she commenced working at the Royal Darwin Hospital. She gave evidence that the obstetric registrar job at the Royal Darwin Hospital was *probably the most exhausting job I've ever done as a registrar in obstetrics and gynecology*. When a registrar was on call, they worked a 24 hour shift, and at the end of that shift there was a ward round so it was a bit longer. They then had that day off and came back to work the next day for the usual day shift. There were five registrars so they were on call one day in five. When they were on call they were responsible for the women labouring in the labour ward, their own ward patients and any patients that came through Emergency Department.

75. On August 22 2006 Dr Woolcock was on call. In addition to her usual responsibilities on this particular day there was another registrar off sick, whose job it had been to cover the antenatal clinics that morning and afternoon, so Dr Woolcock was also covering the clinics. At the time Georgia Rae was born, Dr Woolcock was in the Emergency Department. I am satisfied that Dr Woolcock was extremely busy on the day which is why she did not return to the ward after 11:30 am.

76. There is some ambiguity in relation to Dr Finn and why she didn't monitor the labour more closely. Dr Finn wrote a retrospective note in Juliana's records after 7 pm on August 22, after Georgia Rae had been born, which included the following:

> *Seen by me 08:30, 13:30 and 15:40, Satisfactory Progress and Clear liquor, CTG – Baseline 140/m. Variability – 5 – 15, Clear liquor throughout, Fully dilated at 15:30, I agreed with plan to allow head to descend before pushing.*

77. However when Dr Finn was interviewed by B/Sergeant Lade on 22 May 2007 she said that she had no contact with Juliana between the ward round at 8:30 am on August 22 and when she saw Juliana after the baby was born. She said *I was aware that she was progressing normally because I was in touch with my registrar and in touch with the midwives on the ward and she was progressing normally.* Dr Finn wrote a report a few months before the inquest in response to the Homer report which described what happened as follows *it was documented that Dr Finn was also aware of Juliana's progress when she visited the Delivery Suite at 1330 and 1530.*

78. Dr Finn was asked about her retrospective entry in the medical notes and her evidence was that she visited the labour ward, something she would be particularly likely to do if the registrar were unavailable, and was reassured that everything was progressing normally. She said that there is a whiteboard with the progress of each patient charted and she would have

looked at the whiteboard and gone through it with the senior midwife and if they had any concerns or any patients they wanted her to check then she would do it. She said *there is a concern that we don't over-medicalise normal labour so we don't routinely check every patient in there every few hours (p87).* She said that if she had seen Juliana she would have written notes.

79. Dr Muvrimi says he did a ward round with Dr Finn that morning and he next saw her after the incident happened, he says she may have come to the ward when he wasn't on the ward (p 25 transcript).

80. Dr Finn's notes are misleading. The potential to mislead is clearly demonstrated by the evidence given by Dr Woolcock that Dr Finn had seen Juliana twice that afternoon. Dr Woolcock said she based that on the notes written by Dr Finn. Dr Finn was asked about the inaccuracy at the inquest and said that *the inaccuracy may have been related to the shock that we were confronted [with] at the time*(p 92 transcript).

81. Dr Finn's original statement states *I think it's sad that the registrar on call for the day was not alerted to this* (p 8) and *it's a pity that we weren't given the opportunity unfortunately to evaluate it* [the CTG] *...and see whether we could have changed the course...* She is then asked 'And is that because the midwife didn't alert anyone to it' and answers *Sadly...that's true.* She was asked whether the baby required closer attention during labour and Dr Finn's answer was to do with the midwifery supervision, she added *but we do need to be part of the team and know what's happening.* She was asked if the Registrar should have been involved and said that *the Registrar should have been involved more by invitation.*

82. However at inquest Dr Finn said she agreed with Professor Ellwood's report and said *I would have preferred to have had more medical supervision of the labour and I regret that there wasn't both on my behalf and on behalf of the registrar (*p 89). She said the reason there wasn't more supervision was that

she and the registrar were limited by their duties outside the Labour ward. However in this case her evidence was that she was able to come to the ward so this explanation is not entirely satisfactory.

83. Overall it seems that Dr Finn had not categorised Juliana as a higher risk labour that required active medical management, and was content to allow the labour to be supervised by the primary midwife. This is reflected in the notes written at the morning ward round, where there is no suggestion that the birth will be medically managed and no plan written down for any medical monitoring to take place, and in her original interview with Brevet Sergeant Lade. I find that Dr Finn didn't see Juliana because of a failure to recognise that the birth was in the higher risk category, rather than because or her workload, as her evidence was that she was, in fact, on the ward that afternoon.

84. I am concerned about the inaccuracy of her retrospective note, which states that she saw Juliana when she didn't. This is an error which is made more concerning because it is exculpatory, and it goes towards one of the key criticisms of the management of the labour. After careful consideration I am referring this entry in the notes to the Medical Practitioners Board for their attention.

85. Juliana was concerned about whether staff had enough qualifications and training to be left unsupervised. The experts shared her concern and I find that the lack of senior medical supervision was a major contributing factor to this death.

2. Issues with midwifery supervision and training in the Birth Suite

86. I heard evidence, which I accept, that the interpretation of a CTG is difficult and it requires interpreting against the background of the particular case. I have found that it was not reasonable that this responsibility was left to the midwives in this case. Nonetheless even had there been closer medical

supervision as there should have been, with four hourly or two hourly review, it is likely that for most of the time there would only be midwifery review of the CTG and thus it would be expected that the midwifery team would have the capability to pick up the presence of abnormalities in the CTG and alert the medical team. This did not occur in this instance.

87. Both the Critical Incident Review and Professor Homer discussed the need for better CTG training. Professor Homer stated there was a need for mandatory education for all staff involved in the application and interpretation of electronic fetal monitoring (that is reading a CTG). She emphasised that this needed to include all midwives and doctors, not just senior staff, and orientation programs needed to include this topic. The CIR recommended that education and training be undertaken on a more regular basis and the introduction of a credentialing system. They also recommended hourly interpretations of the CTG be written in the partogram, and the provision of monthly multidisciplinary education in relation to CTGs.

88. Stephanie Worn had been registered as a midwife in the UK since 1999. She worked at the RDH from 31 May 2006 to 21 September 2006 as a full time midwife. She says she attended one day of a two day hospital induction program. She completed a self guided information sheet within the maternity department that pertained to the ward. She was not given an induction on the birth suite. She had been working on the ante-natal and post-natal wards, and Juliana's delivery was the second delivery she had supervised on the birth suite.

89. Cherillee Harry had qualified as a midwife in October 2005, she had moved to Darwin at the end of May 2006 and she had been working for a week in the birth suite when she was caring for Juliana. She had completed a self-guided orientation package to the ante-natal and post-natal wards, and a

second package for the birthing suite which she was given to go through in her own time.

90. The effect of this was that the two staff responsible for Juliana during her labour, and on whom the responsibility fell on the day to monitor the CTG, were extremely new to the birthing suite at the Royal Darwin Hospital and had had very limited orientation to the birth suite.

91. Erna Cripps states, in the detailed report she provided to the Inquest, that *It was revealed at the Critical Incident Review that the midwife team leader was unable to fully supervise due to combined clinical and governance roles.* It is difficult for me to find exactly what happened in regards to supervision on the day as the statements from both team leaders were taken a considerable time after these events and, not surprisingly, they couldn't remember.

92. The team leaders, RM Sluggett and RM Wainwright, were senior and experienced midwives who had had many months of experience as team leaders at the Royal Darwin Hospital. RM Harry remembers RM Sluggett coming in at different times for short periods, and her reporting the progress of what was happening, and in particular says she reviewed the CTG at about 10 am that morning. RM Sluggett says that she popped in to say hello in the morning but had management responsibilities to attend to from 1 onwards and the afternoon team leader took over from that point. RM Wainwright says she looked at the CTG early in her shift (which started at 1 pm) and there were no sinister features but did not write in the notes as *it is not usual to write in the notes of every patient especially when a competent midwife was managing the case.* However there is no documented involvement of the team leader in reviewing the CTG at any stage after that, RM Harry doesn't remember the team leader looking at it and RM Worn says a team leader didn't look at it. RM Wainwright's statement was taken a considerable time after the event, and I consider that she was telling me the

truth as she remembered it. However I find, on all the evidence, that it is likely that a team leader did not in fact review the CTG in any detailed manner after 10 am and therefore it is likely that the only people that reviewed the CTG for the following seven hours were the two junior midwives and the resident. This is not acceptable for a high risk labour.

93. The Critical Incident review found that the primary midwife may not have been adequately supported in providing care due to how the delivery suite was staffed, and the Review recommended that the staffing be sufficient to allow the team leader to provide a supervisory role, that is that they did not have their own patient load.

94. On 22 August 2006 there was a team leader and three midwives on. One of the midwives was a student midwife. There were three babies born on 22 August 2006; Georgia Rae at 1742, a second birth at 2038 and a third birth at 2238. RM Sluggett says that she remembers RM Wainwright telling her the next day that she had been in with another woman in labour overseeing the care that was being delivered by a student. This gains some support by the fact that the records show that student was responsible for a delivery at 2038.

95. RM Wainwright says *The team leaders had voiced our objections in the past about student midwives being included in our numbers. We didn't feel the staffing would be safe as the team leader often took a caseload and could not easily mentor the student* and *I don't recall exactly which patients I looked after that day but I remember Juliana wasn't the only patient. It was often very difficult to supervise everyone due to the work load.*

96. There is evidence before me that having a student midwife included in the numbers, which happened on the day of Georgia Rae's death, but was also common occurrence at the time, was problematic.

97. Sharon Haste resigned as Maternity Services Manager and wrote a letter to the General Manager of the Royal Darwin Hospital where she expressed her concerns about understaffing and an inadequate skill mix and the effects this had on the standard of care provided. She pointed out that *students are counted in our midwifery numbers from the first day of recruitment, even though they are not trained midwives.*

98. Cindy Sluggett was the acting Clinical Midwifery Manager for 16 months and declined to apply for the position in 31 January 2007 and wrote a letter explaining her reasons which referred to her concerns about the lack of staff and the lack of experienced staff, the difficulty of supervising less experienced midwifes and her concern about the effects this had on care. Her statement said that there was a time when *the midwives were being moved around frequently and inexperienced midwives were being left to run the birthing suite. This has now been resolved and a team leader training package has been implemented. The team leaders should never have a client load so she can always be available to oversee other staff...Even when there were experienced staff there were not enough to enable the team leader to be free to constantly checking [sic] the less experienced midwives. The team leader often had a woman or women in labour so was unable to adequately supervise the less experienced staff.*

99. It seems there were a number of factors on the day, that were reflective of the general situation at the time, that reduced the effectiveness of the supervision. In this case the fact that the team leader had their own patient load, and the fact that student midwives were counted in the midwifery numbers, despite their need for increased supervision, may have reduced the effectiveness of the team leader supervision of the midwives providing primary care in this high risk labour.

3. Lack of clarity about the roles of staff in the Birth Suite

100. Dr Kilburn gave evidence that the responsibility for care was devolved to the midwife in this case and he thinks that was partly because *there wasn't clarification about where the role of the midwife began and ended and where the role of the medical staff began and ended.* Professor Homer states that *there seems to be a lack of clarity about who was 'managing' Juliana's labour and birth. Both the midwife and the resident medical officer were in attendance. Both were under the impression that the other was unconcerned about the CTG, Juliana's contractions or the length of the second stage.*

101. Juliana was told by senior midwives that *in this case the midwife was reassured by the presence of the doctor in the room.* This was one of the findings of the Critical Incident Review. It is evident that RM Harry assumed that Dr Muvirimi had more responsibility than he actually did. RM Harry gave evidence that she thought that he was there to *help me look after the* patient and that neither she nor Dr Muvirimi was responsible for supervising the other. Her statement says that they were *jointly sharing care.* In actual fact the resident is under the supervision of the midwife in charge and has very limited obstetric experience and knowledge.

102. RM Worn said she believed she was supervising Dr Muvirimi and he was conducting the delivery. However her statement talked about taking over 'joint care' with Dr Muvrimi and she says that they didn't establish who would oversee the elements of labour care, other than Dr Muvrimi would perform the delivery of the baby. When she was asked about the CTG interpretation she stated *Dr Muvirimi was also checking the CTG trace and he did not raise concerns regarding the fetal heart rate* and again *I did not have any concerns that the contractions were too frequent and Dr Muvrimi did not raise any concerns.*

103. Dr Muvrimi graduated from medical school in Zimbabwe in 2000. He had worked in various, non obstetric departments both overseas and then, from 2005, in the Northern Territory. He had completed a three month placement as an Obstetric Resident and this was his second three month placement and he was doing it to obtain a Diploma in Obstetrics and Gynecology. He had recorded 12 deliveries in his log book but had also done some before he started recording them.

104. It is easy to see how any assumption that Dr Muvrimi had greater experience or knowledge than he in fact possessed could give a false sense of reassurance to the primary midwife and thus delay any action in relation to indicia of difficulty, and also how the midwife and junior doctor could be reassured by the apparent lack of concern from the other and I find that this occurred in this case. The midwives were very new to the suite, they had had very brief orientations and it would not be surprising if they were not clear about the respective roles of midwife and resident, or the level of experience of the resident.

105. It is extremely important that all staff are aware of the experience and roles of those they are working them. Professor Homer states that *Orientation of new staff in the Birth Suite seems to have been lacking in clarification of the roles and responsibilities of staff and the practice guidelines in the Birth Unit.* I agree and so find.

4 Documentation

106. The investigation into this death revealed problems with note taking, as is not infrequently the case in matters that proceed to inquest before me.

107. The Critical Incident Review (CIR) pointed out numerous deficiencies in the documentation on the partogram (the record that is kept once labour commences). For the 1120 vaginal examination there is no records of the position of the presenting part and there is no corresponding abdominal

palpation recorded. The examination record is not signed. When the CTG was recorded as being reassuring at 1135 there was no corresponding breakdown of how this was assessed. There was no subsequent documentation of CTG interpretation; the CIR said the CTG should be reviewed at regular intervals using a standard template for interpretation. There is a gap in the documentation after 2:15 pm. There was no evidence in the documentation to suggest that review by a senior medical officer was sought or planned for, that is there was no evidence that planning and review had taken place. The CIR stated that best practice documentation would reflect risk factors, an action plan with time frames for referral and review/checks and by whom. There was inadequate evidence of a 'care plan'. They concluded that *best practice was not followed in regard to documentation.*

108. Professor Homer says there were minimal recordings at Juliana's last pre-natal visit and limited information in her records as to discussions about what may happen during labour/birth/the post natal period. During the medical ward round on the morning of Georgia Rae's birth no plan of care was documented. In addition there was poor documentation on the partogram during the day shift with no entries made in the plan/comment section after 2:15 pm until RM Worn took over at 4:10 pm. RM Harry was asked about this and gave an answer in her statement. She said *I was busy attending to various medical and midwifery duties at the same time, and in a workplace that was quite new to me*. I have already discussed the problem with the inaccuracy of Dr Finn's retrospective notes.

109. Good documentation is vital for the quality of patient care, and is also vital for quality and safety and coronial purposes. I emphasise again its importance.

5. Communication with the family

110. There were some communication difficulties with between Dr Finn and Juliana after Georgia Rae was born, leading to Juliana requesting that Dr Finn did not come in see her. This was documented in the notes but Dr Finn did come in to talk to Juliana, Dr Finn says she only became aware of the request after Juliana had left the hospital.

111. Juliana and her family were under the impression that Dr Muvirimi was experienced in conducting deliveries. This was because of a conversation they had with Dr Muvirimi. She remembers him saying that he had been delivering babies for a number of years. He says that he explained that he had been a doctor for six years and he thinks they misinterpreted that to mean that he was an obstetrician for six years. He says he explained that he was the most junior in the team but it is difficult for patients to understand how the team works. She found out after the delivery that he did not have qualifications in obstetrics.

112. It is particularly unfortunate because Juliana had requested no students be involved and had been told that although this may not be achievable, she would be told the level of experience of those involved in her care. There are no notes about this conversation so it is not surprising that subsequent staff involved in her care were not aware of this request, nor what Juliana had been told. I note that Dr Muvrimi wasn't a medical student but was essentially there in a learning capacity and not expected to make decisions about management of labour. Juliana did not receive accurate information about his experience, as she had been told she would.

113. There were some organisational difficulties after Georgia Rae's death. Juliana attended for an appointment to discuss it and was not seen for a number of hours, and the appointment was then changed. She attended for follow-up care and her records were not available. I note that effort was

made to have repeated meetings with Juliana to discuss her concerns and explain what the hospital was doing in response to the death.

114. Professor Homer states *Communication with Juliana and Robert seems to have been lacking at times. I recognise the considerable efforts that some staff made to try and support and communicate with the family.* She makes a recommendation in relation to this, which was adopted by the hospital.

HOSPITAL RESPONSE TO THIS DEATH

Internal Hospital response

115. It was recognised immediately that this was an 'adverse event'. It is evident that the staff involved in Juliana's care were distressed and upset by what had happened.

116. Dr Finn stated that she has *openly acknowledged that Juliana had sub optimal care and apologised for that on behalf of the Department [of Obstetrics and Gynecology] and that she was personally and professionally very disappointed that this happened* (p 28 Statement). I have records of a meeting with Juliana where Dr Finn noted that she *acknowledged that this was suboptimal care for her baby.*

117. Dr Kilburn gave evidence that it was recognised *very soon after this that there were...failings in the system, they'd failed the care of this baby, and there was an extensive internal review performed at the hospital...that happened at a number of meetings; both at our morbidity meeting and our combined paediatric and obstetric morbidity and mortality meeting. It was also the subject of some discussion between staff and, in a more formal process, a critical incident review was performed about this* (p 74 transcript).

CHANGES IMPLEMENTED BY THE HOSPITAL

118. Professor Homer states *it is commendable that the staff were able to identify the main issues and have made considerable efforts to improve the quality and safety of the service.* It was apparent to me that there was considerable effort made by the Royal Darwin Hospital to review and upgrade their systems in response to this death and I commend them for this. In addition when the Homer Report was received by the Hospital, a commitment was made to implement all of her recommendations and a large amount of work has been done towards achieving this.

119. Dr Kilburn told me that clear guidelines have been developed about which labours should be managed primarily by a midwife and which labours should be primarily medically managed (based on the Australian College of Midwives Consultation and Referral Guidelines). Midwives will continue to provide care for all women in labour but decisions about the management of labour will be the responsibility of the registrar/consultant for medically managed labours. He said *we've also made it clear the expectation that medically managed labours will be medically managed, that the registrar and consultant as necessary will be involved in those patients, we'll make a plan for those patients...depending on the clinical condition about how often those patients will be reviewed and managed.* (p 75 trancript).

120. Dr Kilburn stated that there *is now a clear expectation...that the registrar will be available for advice and oversee in a more general sense those labours which are progressing normally.*

121. I heard evidence from Drs Kilburn and Finn that changes have been made to reduce the workload of the registrar looking after the Labour ward. An elective caesarean list is performed on Wednesday, Thursday and Friday mornings and other elective caesarean sections are scheduled in gynaecology theatre lists and it is hoped to extend the early morning lists to every day of

the week. This has the reducing the number of times that the on duty registrar from being taken away to perform these operations at unscheduled times of the day on the emergency theatre list. Finally an extra registrar position to cover the labour ward after hours had been approved a few months before this inquest, which would reduce the current 24 hour on call situation to 12 hours, and the evidence was that was going to being recruited to over the next few months (p 75 transcript).

122. The Department of Obstetrics and Gynecology has clarified the roles of the health professionals and these are outlined in the Medical Officers Handbook 2008. Dr Finn stated that *these roles are emphasised at orientation of new medical staff every three months and also taken on board by the Midwifery Educator, who performs the orientation and training of midwifery and medical students.*

123. The 'Obstetric Practice Guidelines for Medical Officers' issued by the Department of Obstetrics & Gynecology at the RDH and revised in October/November 2008 were tendered before me. They detail clearly the role of the resident, the requirement for regular CTG monitoring and the required involvement of senior medical input for high risk pregnancies.

124. The Royal Darwin Hospital has also taken steps to improve the interpretation of CTGs. A rubber stamp had been developed which is to be placed on the CTG hourly in stage 1 of labour and every 30 minutes on stage 2 of labour, and filled in, to help comply with best practice monitoring. Dr Finn states that if any single element is non-reassuring then the CTG must identified overall as non-reassuring and signed by the midwife, registrar or consultant, and it must be followed up by referral.

125. CTG training is now mandatory for medical and midwifery staff and training is recorded and audited. A range of learning material is available for this purpose. As of November 2008 all delivery suite midwives, registrars and

consultants have undergone this training. In addition it is now a mandatory part of the orientation program.

126. Obstetric and midwifery staff were engaged in a recent workshop run by the Perinatal Society of Australia and New Zealand (PSANZ) about Clinical Practice Guidelines for a Perinatal Mortality Audit , this included education on the psychological and social aspects of perinatal bereavement. The Division has endorsed the PSANZ guidelines which include guidelines in relation to the offering of autopsies and perinatal bereavement.

127. I note that a new Divisional structure has been implemented and Dr Kilburn says that this will allow access to information and then develop structures which can deliver quality care

128. There was conflicting information before me in relation to whether the midwifery team leader is still required to have a caseload. Dr Finn's report to me states that following the death of baby Georgia Rae this risk has been addressed by increased midwifery staffing and the Team Leader is no longer required to have a caseload. However Erna Cripps stated (p 72 transcript) to date we still have difficulty in staffing the unit and so currently the team leader may still have a patient load and her written reports states it has been difficult to do this due to the inability to recruit the required additional midwives. I heard evidence that student midwives are still counted in the numbers on occasion, although not regularly. I do not consider that this situation has been resolved at this stage and so intend to address this with a recommendation.

129. I intend to formally recommend the Homer recommendations that I consider most important, as well as the ones that are not yet fully implemented, as well as the ninth recommendation put forward by Professor Ellwood (in relation to the importance of regular senior medical input into the management of labour), emphasising that these have already been accepted

by the Royal Darwin Hospital and steps have been taken to address them. I have added a recommendation about the review processes.

FORMAL FINDINGS

130. On the basis of the tendered material and oral evidence at the Inquest I am able to make the following formal findings as required by the *Act*.

(i) The identity of the deceased was Georgia Rae Tilmouth. She was born on 22 August 2006 in Darwin.

(ii) The place of death was the Neonatal Intensive Care Unit at the Royal Darwin Hospital. She died at 7:10 am on 23 August 2006.

(iii) The cause of death was organ failure caused by not receiving enough oxygen during labour (intrapartum hypoxia).

(iv) Particulars required to register the death:

1. The deceased was female.
2. The deceased's name was Georgia Rae Tilmouth.
3. The deceased was born in Darwin, Australia.
4. The death was reported to the Coroner seven months after it occurred.
5. The cause of death was not confirmed by post-mortem examination and was perinatal asphyxia sustained during labour.
6. The deceased's mother was Juliana Aila De Castro Matos. The deceased's father was Robert Kevin Tilmouth.
7. The deceased spent her short life at the Royal Darwin Hospital. She was an infant when she died.

RECOMMENDATIONS

131. The policy regarding the reporting of neonatal deaths to the Coroner needs to be clarified. All staff (obstetric, midwifery and neonatal) need to be aware of the policy regarding reports to the Coroner.

132. Regular senior medical input should occur in the management of high risk labours in the obstetric ward. As a minimum the registrar should be performing labour ward rounds every 4 hours, and in some cases visiting individual patients with high-risk characteristics more frequently.

133. Mandatory education for all staff involved in application and interpretation of electronic fetal monitoring. This must be more than a 'unit expectation' and include all midwives and doctors, not only senior staff. Orientation programs for midwives and doctors must include interpretation of electronic fetal monitoring.

134. Staffing on the Birth Suite must ensure that the team leader/senior midwife is available to support other staff, midwives and doctors. The nurse fulfilling this role cannot also be expected to take a primary clinical load and be responsible for the care of individual women as well.

135. Improved lines of communication between junior medical staff, senior medical staff and midwives in relation to consultation, referral and supervision need to be developed. The lines of accountability and responsibility need to be formalised and an escalation policy developed and implemented.

136. Hospital staff should be reminded, once again, about the importance of note taking both in relation to medical treatment, and in the documentation of requests made by patients in relation to their care.

Mr Greg Cavanagh SM:

Dated this 9th day of April 2009.

_____

GREG CAVANAGH
TERRITORY CORONER