Midwife, Ms B

Obstetric Registrar, Dr C

A Birthing Clinic

Waikato District Health Board

A Report by the

Health and Disability Commissioner

(Case 12HDC00876)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

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Executive summary

Factual background

1. In 2009, at 37 weeks' gestation, Mrs A, aged 31 years, chose Ms B to be her Lead Maternity Carer (LMC), after her first chosen LMC commenced long-term sick leave. During Mrs A's antenatal appointments with Ms B, it was noted that the baby was in a posterior position, which can result in a longer and more difficult labour. In addition, Mr and Mrs A informed Ms B of the difficulties Mrs A experienced with the birth of their first son, their anxiety associated with that, their concern that the pregnancy was mirroring the first pregnancy, and their concern that Mrs A should therefore give birth at hospital. Ms B reassured the couple that it was safe for Mrs A to give birth at a local birthing clinic (the clinic).

2. Five days past her due date, Mrs A's waters broke spontaneously at home and contractions started. At 3.30am, Mr and Mrs A telephoned Ms B and informed her that Mrs A's contractions were strong, painful, occurring every two to four minutes and were lasting 60 seconds. Ms B instructed the couple to meet her at the clinic.

3. At 4am, Ms B assessed Mrs A at the clinic. Mrs A was in pain, and was using Entonox and a TENS machine[1] for pain relief. Ms B assessed Mrs A as being in early labour and recommended that the couple return home. The couple did not want to go home, and asked to be transferred to hospital. Ms B discouraged the couple from going to hospital. Ms B recommended pethidine for pain relief, which was administered to Mrs A at 5.15am. The couple were then sent home against their wishes. Ms B did not assess Mrs A's vital signs or the fetal heart rate prior to or after the administration of pethidine. Mrs A was in so much pain she could not walk, and had to be taken to her car in a wheelchair, where Ms B assisted her onto the back seat of the car. Because of the pain, the only position Mrs A could tolerate in the car was to be on all fours in the back seat.

4. At 9.30am, Mr A called Ms B to come to their home, as they were scared, anxious, and exhausted. Ms B arrived at their house at 10am and assessed Mrs A. Mrs A was found to be fully dilated, her contractions were strong with three to four contractions every 10 minutes and lasting 60 seconds, and Mrs A was pushing involuntarily with the contractions. Ms B instructed Mrs A not to push, and an ambulance was arranged to transport Mrs A to the clinic.

5. Mrs A arrived at the clinic at 11am, and commenced active pushing. At 12.30pm, because of her failure to progress, Mrs A was transferred to the hospital by ambulance. Ms B listened to the fetal heart on only four occasions between 11am and 12.30pm, and did not take any maternal observations other than Mrs A's temperature at 12.15pm.

6. Mrs A was assessed at the hospital by registrar Dr C at 1.20pm. At that stage, the fetal heart was noted to be 140bpm with a variability of 5–8bpm which, although not

[1] Transcutaneous Electrical Nerve Stimulation, commonly used for assisting with back pain or contraction pain during labour.

reassuring, Dr C interpreted as being still within normal limits. Dr C instructed Ms B to take Mrs A's observations, insert an intravenous (IV) luer and commence IV resuscitation[2] for Mrs A, and to monitor the fetal heart rate and call her if there were any concerns.

7. Ms B failed to identify that the fetal heart rate was abnormal until she called Dr C back to assess Mrs A at 2.25pm. Dr C attended with consultant Dr K. At 2.40pm, it was decided to proceed with an emergency Caesarean section for possible uterine abruption. Baby A was delivered at 3pm by emergency Caesarean section, but could not be resuscitated and, sadly, died shortly after birth. Mrs A suffered a spontaneous uterine rupture and required emergency surgery, including an abdominal hysterectomy.

Findings

8. Ms B failed to provide services to Mrs A with reasonable care and skill, and breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights 1996 (the Code).[3] In particular, Ms B:

- failed to assess and treat Mrs A adequately at the clinic from 4am to 6am;
- sent Mrs A home against her wishes and when it was not clinically appropriate to do so;
- failed to adhere to the clinic's pethidine policy and to monitor and assess Mrs A and the baby adequately before and after the administration of pethidine;
- failed to monitor Mrs A adequately at the clinic between 11am and 12.45pm;
- failed to monitor the fetal heart rate adequately at the clinic between 11am and 12.45pm;
- failed to consult a specialist and/or transfer Mrs A to secondary care in a timely manner;
- failed to clarify who was responsible for Mrs A's ongoing care at the hospital;
- failed to monitor Mrs A's condition adequately at the hospital; and
- failed to monitor the fetal heart rate adequately at the hospital.

9. Ms B also breached Right 4(2)[4] of the Code for failing to adequately document her assessments and care of Mrs A and the fetal heart rate.

10. Adverse comment was also made that Ms B failed to work in partnership with Mrs A by failing to provide her with sufficient information about Ms B's experience and involve Mrs A in important decisions regarding her care.

[2] Intravenous fluid replacement.
[3] Right 4(1) of the Code states: "Every consumer has the right to have services provided with reasonable care and skill."
[4] Right 4(2) of the Code states: "Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards."

11. Ms B's care of Mrs A was a major departure from the accepted standard of care. Ms B will be referred to the Director of Proceedings to determine whether any proceedings should be taken.

12. Dr C breached Right 4(1) of the Code because she did not assess Mrs A adequately at the hospital, and her treatment plan for Mrs A was inappropriate.

13. Mrs A received poor midwifery care from the hospital midwives while she was in labour at the hospital, and Waikato DHB breached Right 4(1) of the Code.

14. The Clinic did not breach the Code.

Complaint and investigation

15. The Commissioner received a complaint from Mrs A and Mr A about the primary care services provided to Mrs A during the labour and delivery of their son in 2009.

16. Following consultation with the Coroner's Office, it was agreed that the Coroner's Inquest would take precedence over an HDC investigation. The Coroner released his findings into the death of Baby A in 2012. The Commissioner commenced his investigation on 22 February 2013.

17. The following issues were identified for investigation:

- *The adequacy of the care provided to Mrs A by Ms B in 2009.*
- *The adequacy of the care provided to Mrs A by the clinic in 2009.*
- *The adequacy of the care provided to Mrs A by Dr C in 2009.*
- *The adequacy of the care provided to Mrs A by Waikato District Health Board in 2009.*

18. The parties directly involved in the investigation were:

Mrs A	Consumer/complainant
Mr A	Complainant
Ms B	Provider/midwife
The clinic	Birthing clinic/Provider
Dr C	Provider/registrar
Waikato District Health Board	Provider

Also mentioned in this report:

The hospital	Hospital/Provider
Ms D	Student midwife
Ms E	Midwife

Ms F	Midwife
Ms G	Mrs A's sister
Ms H	Hospital midwife
Dr I	Anaesthetist
Ms J	Staff midwife
Dr K	Obstetric consultant

19. Information was also reviewed from the Coroner and Ms D (a student midwife).

20. Independent expert advice was obtained from a midwife, Rachel Smith (attached as **Appendix A**), and an obstetrician, Dr Bernadette White (attached as **Appendix B**).

Information gathered during investigation

Antenatal care

21. At 37 weeks' gestation, Mrs A, aged 31 years, attended an antenatal appointment with midwife Ms E. At that appointment, Ms E advised Mrs A that her Lead Maternity Carer (LMC), Ms F, had commenced long-term sick leave, and that Mrs A would therefore need to choose a new midwife.

22. Ms E noted that Mrs A's care plan for labour and birth had not been completed, and the plan was discussed and completed at this appointment. The care plan records that Mrs A would birth at the clinic, would accept vaginal examinations if needed, the fetal heart would be monitored intermittently if normal, and that Mrs A would like water and gas for pain relief. Under "Interventions", it is noted "[the hospital]". The couple advised HDC that the care plan, as completed at that appointment, was not an accurate reflection of their care preferences. For example, the care plan should have recorded that the couple would give birth at either the clinic or hospital, and it incorrectly recorded their wishes regarding the administration of Vitamin K to the baby after birth. The care plan was not checked or signed by Mrs A, and the couple advised that they were not given a copy.

Ms B

23. Following the appointment, Mrs A chose midwife Ms B to be her LMC, on the recommendation of the midwifery practice.

24. Ms B graduated as a midwife in 2008, and had been practising as a self-employed midwife since that time. At that time, Ms B was engaged in the First Year of Midwifery programme, which is a voluntary national programme for New Zealand registered midwifery graduates. In the programme, new practitioners are assigned an experienced mentor midwife, and engage in further educational and professional development, and receive support.[5]

[5] The Midwifery Council of New Zealand has stated that although the programme is voluntary, around 98% of graduates enrol in it.

25. Ms B advised that Mrs A had had a well, normal pregnancy, with blood tests within the normal range,[6] no abnormalities detected on her scans, normal urinalysis, and lots of fetal movements.

The Clinic

26. The clinic is a primary birthing centre. The clinic provides labour and birth facilities to LMCs, and inpatient postnatal care to LMC clients. Independent LMCs utilise the clinic's facilities pursuant to an access agreement.

27. At the time of these events, Ms B held an access agreement with the clinic (signed in December 2008). Mrs A went on a scheduled tour of the clinic a month prior to her due date. She recalls that she was told that, on admission, the LMC would usually monitor the fetal heart rate by CTG[7] for 20 minutes, and that if transfer to hospital was required, it was a short trip by ambulance.

Antenatal appointments with Ms B

28. Mr and Mrs A attended an appointment with Ms B two weeks prior to the due date. Mr and Mrs A advised Ms B of their anxiety and the difficulties Mrs A experienced with the birth of their first son. In particular, Mr and Mrs A advised that they had planned a home birth for their first son, but the plan had been abandoned when Mrs A experienced difficulties during her labour, the baby became distressed, and they had an emergency transfer to hospital, where their son was born via a forceps delivery. Mrs A had also had high blood pressure during the labour and delivery of her first son. Mr and Mrs A said that Ms B did not ask them any questions about the difficult birth of their first son, and she did not at any time look at or go through their birth plan with them. Ms B advised HDC:

> "I briefly retouched on [Mrs A's] previous delivery and briefly re-established the birth plan, but I did not do this in depth with them and on reflection I should have sat with [Mr A] and [Mrs A] and discussed both [her] previous pregnancy and delivery and a birth plan for this labour."

29. Mrs A's baby was noted to be in a posterior position,[8] and Ms B noted that Mrs A would try optimal fetal positioning with time on her hands and knees, to encourage the baby to change position. Mr and Mrs A advised that they were concerned that the current pregnancy was mirroring that of their first son, and that therefore they should birth at hospital given the difficulty they experienced with the birth of their first son. The couple advised that they discussed those concerns with Ms B. The couple recall

[6] Mr and Mrs A advised that Mrs A had had a raised blood sugar on one of her blood tests. The test was repeated, and the repeated result was normal.

[7] Cardiotocography. (As well as monitoring the fetal heart rate and rhythm, a cardiotocograph measures the strength and frequency of uterine contractions.)

[8] A baby is said to be in the occiput posterior (OP) position (or posterior position for short) when it is head down but facing the abdomen. In this position, the back of the baby's skull (the occipital bone) is in the back (or posterior) of the woman's pelvis. Usually babies are born with their face towards the mother's back, which is called the anterior position. The anterior position is ideal, because it allows for the smallest diameter of the head to pass through the birth canal. If the baby is in the posterior position, a larger diameter will have to pass through the birth canal.

that Ms B reassured them that it would be safe for Mrs A to give birth at the clinic. Ms B advised that the decision to birth at the clinic appeared to her to be appropriate and, although the baby was in a posterior position, Mrs A was in the "low risk" category.

30. Ms B did not inform Mr and Mrs A that she was a newly graduated midwife, or that she was participating in the First Year of Midwifery programme. The couple advised HDC that they originally chose Ms F to be their LMC because of her experience and, if they had known that Ms B was a new graduate, they would not have chosen her to be their LMC when Ms F became unavailable.

31. At an appointment a few days later, Mr and Mrs A again questioned the need for a hospital birth. Ms B told Mrs A that posterior births can result in longer labours, but reassured her that second labours were usually a lot quicker, and therefore she did not recommend planning a hospital labour or birth. Mrs A recalls being told that transfer to hospital was a short trip by ambulance from the clinic, if necessary. Ms B said that Mrs A agreed to continue with attempts at optimal fetal positioning, and that she was also going to try Pulsitilla[9] to help turn the baby.

32. When Mrs A was three days beyond her due date, she attended the clinic for CTG monitoring. The CTG was normal. No other tests or observations were taken. Mrs A was anxious that she was going to have another difficult labour, because she was going past her due date and the baby was posterior, as with her first son, and because Ms B had advised her that the baby was large. Mrs A said that, for those reasons, she asked Ms B again about labour and birth plans and the potential need for hospital intervention. Mrs A also requested that a referral be made to the Women's Assessment Unit at the hospital. Ms B recorded on the referral: "Baby sitting POP since 37/40. Discussed optimal fetal positioning. Only 3 days past due date but [Mrs A] is very anxious [and] wanting this referral. Discussed with her that she probably wouldn't be seen until later next week. I will also do a CTG on [Tuesday]."

33. Mrs A went into labour before an appointment at the hospital was scheduled.

Early labour and assessment at the clinic

34. At 12.30am, Mrs A's waters broke spontaneously at home, and contractions started. Mr and Mrs A advised HDC that they followed the written instructions provided to them by Ms B, and telephoned Ms B at 3.30am when Mrs A's contractions were strong, painful, and occurring every two to four minutes and lasting 60 seconds. Ms B instructed the couple to meet her at the clinic.

35. Mr and Mrs A arrived at the clinic at 4am, accompanied by Mrs A's sister, Ms G. Mr and Mrs A advised that, due to the severe pain Mrs A was experiencing, she was taken by wheelchair to the birthing room and was assisted onto the bed. She was offered and accepted Entonox[10] for pain relief.

[9] A homeopathic remedy.
[10] A mixture of oxygen and nitrous oxide that is used as an inhalational analgesic.

36. There are factual discrepancies between Mr and Mrs A's, Ms G's, and Ms B's recollections of Mrs A's condition, and of Ms B's examination of Mrs A at that time.

The couple's recollection of events

37. The couple recall that Ms B examined Mrs A and said that Mrs A's cervix was "paper thin" and that Mrs A was only 2cm dilated. They recall that Ms B listened to the fetal heart rate once using a hand-held Doppler, and then told them that they needed to go home.

38. Mrs A said that she could not believe she was being told to go home, as she was using Entonox and a TENS machine for pain relief, and could not move. The couple recall that Mrs A was not able to talk freely, as submitted by Ms B (see below); rather, Mrs A was "moaning, groaning and grimacing through the contractions".

39. Mrs A told Ms B that she did not want to go home because she was in so much pain. Mrs A asked to use the birth pool to ease her pain, which was part of her birth plan, and she also asked to stay at the clinic so that she could continue to use Entonox to manage her pain. In between contractions, Mrs A managed to communicate that she needed midwifery support, she felt she would not make it out to the car or manage at home, and that she was anxious and scared. Ms B said that she would consult with the clinic staff and left the room. When Ms B returned to the room, the couple understood from what she told them that they could not remain at the clinic, as Mrs A was not in established labour and the labour would last all day. The couple recall that, at that time, Ms B advised them that Mrs A's cervix was "paper thin" and that the baby was "floating".[11] Mr and Mrs A believed that this meant that the baby's head was not engaged. They could not believe that the baby was "floating" and was not engaged, given the pain that Mrs A was experiencing at that time, and submitted that it is their belief that Ms B used the term "floating" to persuade them to go home.

40. The couple advised that they were shocked when they were told they could not stay at the clinic, and that they were scared to be sent home unsupported during labour when Mrs A was in so much pain, could not walk, and required Entonox for pain relief. Mrs A then asked to be transferred to hospital, as she felt she needed support. Ms B told Mrs A that she could not go to the hospital, as the hospital would just send her home as well, that Mrs A needed to go home and get comfortable, and that the couple should listen to her because she was their midwife.[12] The couple said they were made to feel as if they were being "told off" for asking to go to hospital.

41. The couple recall that Ms B recommended pethidine for pain relief, so that Mrs A could go home, and Maxolon for nausea. Mrs A advised that she did not want the drugs, and pethidine had not been part of her birth plan, but she felt she had no choice as she anticipated she was not going to be able to cope at home with the level of pain she was experiencing. Therefore, Mrs A accepted the pethidine.

[11] Ms B submitted that she did not use the term "floating".
[12] Ms B said that she did not say that the couple should listen to her as their midwife.

Ms B's recollection of events

42. Ms B submitted that she assessed Mrs A on her arrival at the clinic by palpation, observation, and vaginal examination, and that although Mrs A's contractions were strong, there were only two contractions in every ten minutes lasting 45–60 seconds.[13] Ms B submitted that Mrs A was able to talk freely at that time, her cervix was two centimetres dilated with the head at station –1,[14] and the cervix was very thin and central. No membranes were felt and there was no moulding or caput.

43. Ms B also submitted that she monitored the fetal heart with a hand-held Doppler. She stated that her standard practice is to listen both between contractions for 45 seconds and then following the contraction for at least 30 seconds, and to monitor the fetal heart rate half hourly in the first stage. She stated that she is certain she would have done this, although it is not documented. The fetal heart rate was recorded once at 4am as 110–118bpm and variable, with no decelerations (see below).[15]

44. Ms B assessed Mrs A as being in early labour and formed a plan to give her pain relief and for her to return home to await further progress in labour. Ms B advised, "Both [the clinic] and the hospital prefer for women in early labour to be at home … providing the labour is still low risk, it is clinically acceptable and standard practice through much of the country". Ms B recalls that the couple preferred to stay at the clinic. She said, "I again discussed with [Mrs A] and [Mr A] about the posterior position, and that labour might take some time, and that early labour can be faster and certainly more comfortable at home."

45. Ms B recommended that Mrs A have pain relief and go home. Ms B said that she told the couple to ring her if they were worried about anything, or when contractions started to come every two to four minutes lasting 60 seconds.[16] Ms B advised that she strongly encouraged the couple to continue to labour at home and said that, in her opinion, the hospital would have provided the same advice. Ms B said that she discouraged the couple from going to hospital.

[13] The couple recall that Mrs A's contractions did not slow down to two in ten minutes while she was at the clinic.

[14] The station of the fetal head, or how far the baby is "down" in the pelvis, is measured by the relationship of the fetal head to the ischial spines. The ischial spines can be palpated at about a finger-length into the vagina, at four and eight o'clock. They are felt as bony prominences. The degree of descent is measured in centimetres — above the ischial spines as negative numbers or below the ischial spines as positive numbers. If the head (or breech) lies above the ischial spines, the station is recorded from –1 (just above) to –5 (floating free in the uterus). The head is considered to be engaged on vaginal examination when it reaches "0" station. Stations +2 to +3 indicate descent (and that a forceps delivery might be possible) with +5 being the crowning of the head.

[15] Ms B advised that it was not the clinic's policy or expected professional practice to carry out a CTG on admission to the clinic in the circumstances, although that is what Mrs A recalls being told during her tour of the clinic.

[16] In response to the provisional report, the couple advised HDC that Ms B did not tell them this. They stated that, at that time, Mrs A's contractions were already two to four minutes and lasting 60 seconds, and that had Ms B told them this they would not have gone home, but would have gone to hospital.

Ms G's recollection of events

46. Ms G advised the Coroner that Mrs A was having regular contractions, and that she "couldn't believe" it when Ms B suggested they go home, as Mrs A was dilated and the stage of labour could quicken at any time.

47. Ms G said that she and the couple tried to insist that they stay at the clinic, but Ms B would not allow them to. When they asked if they could go to the hospital, Ms B also said they could not go to the hospital.

The clinical records

48. The contemporaneous notes, made by Ms B at 4am, record:

> "Admitted to [the clinic] with history of SRM[17] at 0030, clear liquor, contractions directly following 2–4 mins apart lasting 60 secs. Very strong contractions on palpation. FHH[18] 110–118bpm. Has got a personal tens machine in use. Also using Entonox with contractions as she needs it. VE[19] with consent to assess. Cx[20] central, very thin, 2cm dilated, station –1. To have pain relief and go home to await labour."

Information from the clinic

49. The Clinic advised the Coroner that there is no "policy" on when a woman can stay and when she should go home in the early stages of labour, and that it was not its policy to insist that clients go home against their wishes. Furthermore, it is the LMC's responsibility to assess the woman and diagnose whether the woman is in established labour or not.

50. The Clinic staff midwife on duty that morning recalls that Ms B advised her that Mrs A was in early labour, not established labour, and that she communicated to Ms B that, in her opinion, the best labour place for early, unestablished labour is at home. The staff midwife did not see or assess Mrs A, and did not say that Mrs A was not allowed to stay at the clinic and had to go home.

Administration of pethidine

51. The Clinic's pethidine protocol requires that the drug be checked out from the controlled drug cupboard by a doctor, registered midwife or nurse together with another doctor, registered midwife or nurse or an enrolled nurse with a current generic IV certification. The protocol further states, "The controlled drug must be taken to the patient, together with the prescription sheet, and must be rechecked by two health professionals … to revalidate the medicine dose and patient identity." The protocol requires baseline maternal monitoring including blood pressure, pulse, respiratory rate, level of consciousness, pain assessment, and oxygen saturations. With regard to fetal monitoring, the protocol states:

[17] Spontaneous rupture of membranes (waters breaking).
[18] Fetal heart heard.
[19] Vaginal examination.
[20] Cervix.

> "Prior to administration of a narcotic to a pregnant woman, a baseline CTG monitoring must be reassuring.
>
> Post administration, a CTG monitoring should be done for a minimum of 30 minutes. If reassuring then discontinue until another dose is required. If non-reassuring notify Registrar immediately and continue CTG.
>
> Be aware that the fetal heart beat to beat variability and/or reactivity may be reduced when maternal pethidine is at its peak. If non-reassuring notify O&G Registrar immediately."

52. At 5.15am Ms B gave Mrs A 100mg of pethidine and 10mg of Maxolon. Ms B did not monitor Mrs A or the baby prior to or after the administration of pethidine. In addition, Ms B did not ensure that the clinical drug notes were signed by a second midwife, which was also required by the clinic pethidine protocol.

Discharge home

53. At 6am Mrs A was discharged home to await established labour. Ms B did not examine Mrs A prior to discharge — she advised the Coroner that a further vaginal examination before Mrs A left the clinic was not clinically indicated.

54. The couple advised that at the time of discharge, Mrs A could not walk, and needed to be taken to the car in a wheelchair. The couple recall that Ms B assisted Mrs A, who at that time was still using Entonox for pain relief, into the wheelchair, and wheeled Mrs A to the car. The couple also recall that Ms B assisted Mrs A on to the back seat of the car, and the only position Mrs A could tolerate at that time because of her pain was to be on all fours. The couple recall that Mrs A was in a lot of pain and was extremely distressed, and that they were being sent home against their wishes. Mr A advised HDC that, although he was driving carefully, any bump in the road during the drive home would cause Mrs A to scream out in pain.

55. Mr A asked Ms B when they should contact her again. Ms B replied that she would call around to their home later, or they could call her if they needed anything else or if Mrs A's breathing changed. Mr A advised HDC that he could not believe he did not receive any specific instructions as to when he should contact Ms B again, and he questioned whether a lay person is appropriately qualified to monitor breathing changes.

56. Ms B advised HDC that, in retrospect, she should not have sent the couple home, especially after pethidine administration. She stated:

> "It was my responsibility as their LMC to support them throughout their labour experience and had I known that [Mrs A's] labour would progress as it did of course I would have them stay at the birthing unit with my continual support and have water and entonox for pain relief. I have let [Mr A] and [Mrs A] down in this aspect and I am truly sorry."

57. Mr and Mrs A strongly believe that Mrs A was fully dilated and in established labour at 6am when they left the clinic. Ms B advised HDC:

> "In hindsight it is possible that [Mrs A] be fully dilated [sic] before leaving the clinic or shortly after arriving home. My judgement at the time was that [Mrs A's] behaviour hadn't changed during the time at the clinic and that she was still experiencing early labour … On reflection I should have at least offered [Mrs A] a vaginal examination to check/assess progress before leaving the clinic …"[21]

58. At the Coroner's Inquest, Ms B accepted that there was a possibility that Mrs A could have delivered her baby in the car on the way home.

Mrs A's condition at home

59. The couple advised that they arrived home at 6.30am, and Mrs A was assisted to her bed. The couple reported that, at that time, Mrs A was in the same condition as when they had left their home for the clinic earlier that morning, in that she was experiencing the same strong regular contractions, and was still in pain despite the pethidine.

60. Ms G also advised the Coroner that when they arrived back at the couple's house, she and Mr A both assisted Mrs A to her bed and, at that time, Mrs A was still having strong regular contractions.

61. At 9.30am Mr A called Ms B and asked her to come to their house, as they were scared, anxious, and exhausted. Ms G advised the Coroner that Mrs A was in agony at that time, and was distressed.

62. Mrs A recalls that just before Ms B arrived she felt the urge to push.

63. Ms B arrived at the couple's house at 10am and assessed Mrs A. Ms B recalls that Mrs A's contractions were strong and three to four every ten minutes, lasting 60 seconds. On vaginal examination, the cervix was fully dilated, at station 0, and clear liquor was draining. Ms B advised that she considered that Mrs A was in the transition phase,[22] approaching the second stage of labour, because although Mrs A was fully dilated she was not pushing.[23]

64. There is dispute as to whether Mrs A was pushing at that time, as to what information was given, and as to what decisions were made in regard to transporting Mrs A to the clinic or hospital.

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[21] In response to the provisional report, Mr and Mrs A advised that Mrs A's labour had progressed between 4am and 6am while they were at the clinic, and that Ms B would have been unable to judge that owing to her lack of monitoring of Mrs A.

[22] The term "transitional" phase (or transition) is often used by midwives to describe the period at the end of the first stage of the labour just preceding the pushing phase (second stage).

[23] At the Coroner's Inquest into the death of Baby A, there was disputed evidence as to when the second stage of labour starts. The evidence given by the obstetricians at the Inquest was that the second stage of labour commences once the woman is fully dilated. Ms B's evidence was that she was taught that the second stage of labour commences once the woman is fully dilated and active pushing has commenced. The Coroner made recommendations in this regard, and those are set out below.

Mr and Mrs A's recollection

65. Mr and Mrs A recall that, at the time of Ms B's assessment at 10am, Mrs A was pushing involuntarily with her contractions, and that Ms B instructed her to stop pushing or she would have the baby at home. The couple recall that Ms B looked "really alarmed and shocked" when she examined Mrs A, and said with urgency that they needed to go straight away as the baby was coming.

66. The couple recall that Ms B told Mr A to get the car ready, but Mrs A insisted on an ambulance, as she was exhausted, in pain, was pushing involuntarily, and could not move out of the bedroom where she was. The couple state that there was no discussion with them as to the options of where they could go (the clinic or hospital).

67. Mrs A recalls that she was panting to avoid pushing following Ms B's examination and when she was in the ambulance. Mrs A was taught the technique of panting at an antenatal class.

Ms B's recollection

68. Ms B stated that Mrs A was not pushing when she assessed her at 10am, and that it was she who considered that ambulance transport would be safer at that point. Ms B stated that she did not consult the couple as to where they wanted to go, as she assumed they were still comfortable with birthing at the clinic. Ms B advised HDC that, in hindsight, at the point of labour that Mrs A was at, she should have transferred from home to hospital.

69. In contrast, under cross-examination at the Coroner's Inquest, Ms B stated that, when she assessed Mrs A at 10am, Mrs A was involuntarily pushing at the height of her contractions. She said that she told Mrs A not to push and to try to breathe through the contractions.

The clinical records

70. The contemporaneous notes record at 10am: "Seen at home to assess progress. [Mrs A] very uncomfortable with constant contractions. VE — fully dilated, fetal head at spines. Discussed going to [the clinic] by ambulance. Tx [Transfer] to [the clinic] by ambulance."

Ambulance transfer to the clinic

71. Ms B called a priority one ambulance at 10.22am,[24] and the ambulance arrived at the [couple's] house at 10.41am. Mrs A was transported to the clinic. The ambulance officer took Mrs A's pulse, which was 149bpm, recorded Mrs A's oxygen saturations as 97%, and asked Ms B if she wanted Mrs A's blood pressure taken. Ms B declined this as she was happy with Mrs A's condition.

72. The ambulance notes record: "O/A pt lying in bed, constant contractions. In pain, transferred to stretcher. Hx: 40 wks — 2nd pregnancy, contractions started 12.30 this

[24] In response to the provisional report, the couple submitted that the delay between Ms B's assessment of Mrs A at 10am and the calling of the ambulance at 10.22am reflects the time during which Ms B was attempting to get Mrs A up and into the car.

morning and patient now having continuous contractions … Midwife [Ms B] travelled with patient. Happy with patient so BP not taken."

73. The ambulance officer advised the Coroner that Mrs A's contractions were regular and strong, and Mrs A was offered and accepted Entonox.

Labour at the clinic

74. Mrs A arrived at the clinic at 11am and commenced active pushing. The contemporaneous clinical notes record that the fetal heart was heard at that time, but the heart rate was not documented.

75. Mrs A consented to student midwife Ms D being present to observe the labour and birth.

76. Ms B advised that, at 11.15am, Mrs A agreed to move into the left lateral position as the semi-reclined position would not aid in getting the baby out given his posterior position. Ms B submitted that Mrs A required a lot of coaching and encouraging as "she was pushing like a primip".[25] The couple advised that they found this comment inappropriate and offensive, as Mrs A was in considerable pain and (as they subsequently found out) had an obstructed labour. Ms B advised HDC that, by describing Mrs A as "pushing like a primip", she did not mean to be insulting or patronising, and she apologised for that comment.

77. The contemporaneous notes record: "11.15am Change position onto left lateral. FHH.[26] Fetal head still at spines."

78. At 11.45am Ms B suggested that Mrs A change position to her hands and knees. Ms B advised that Mrs A was making some progress — "pushing and bearing down well". Ms B did another vaginal examination and felt the anterior fontanelle[27] at 2 o'clock, and could feel caput.[28] The fetal heart rate was recorded as 136bpm.

79. The contemporaneous notes record: "11.45am Change position hands + knees. Ant. Fontanelle felt at 2'oclock on hands + knees. FHH 136 bpm."

[25] A "primip" is a mother in first time labour.
[26] In this case, Ms B recorded in the notes "FHH", which she said indicated that she had listened to the fetal heart between contractions and the whole way through a contraction and after for three seconds, and that she had heard the fetal heart rate between the normal range of 110–160bpm with acceptable variability and no decelerations.
[27] The position of suture lines and fontanelles are felt during a vaginal examination to establish the position of the baby's head during labour. Feeling a presenting anterior fontanelle would indicate that the head was deflexed.
[28] Caput is a shortening of the term "Caput succedaneum" — this is a temporary swelling of the soft parts of a baby's head, which occurs during birth, due to compression by the muscles of the cervix. A caput succedaneum is more likely to form during a prolonged or difficult delivery. This may be especially true after the membranes have ruptured, because the amniotic sac is no longer providing a protective cushion for the baby's head. Caput succedaneum does not usually cause complications and resolves spontaneously within a few days.

80. At 12pm Ms B suggested that Mrs A try the birth stool for more gravity and force, as there had been no further descent.[29] Mrs A's contractions were still three to four every ten minutes, lasting 60 seconds. Ms B advised Mrs A that if the baby had not been delivered by 12.30pm, they would transfer her to hospital as she might need further intervention.

81. The contemporaneous notes record: "1200 Onto birth stool, no change on descent. Mrs A feeling very exhausted, contractions still 3–4:10. Feeling faint, drinking plenty. FHH."

82. The couple recall that Mrs A complained to Ms B that she was feeling dizzy and light headed on the birth stool and, accordingly, at 12.15pm Mrs A was assisted back to the bed. Ms D recalls that, at that time, Mrs A was experiencing hot and cold flushes.

83. Mr A recalls that there was blood on the stool when Mrs A was assisted back to bed. Ms D stated that when Mrs A moved back on to the bed from the birthing stool she noticed that some "brownish liquid remained in the birthing stool". Ms B stated that there was never any vaginal blood loss, only clear liquor.

Monitoring of fetal heart at the clinic

84. There is a discrepancy as to how often the fetal heart was monitored while Mrs A was at the clinic.

85. Ms B advised that it was her standard practice to monitor the fetal heart rate regularly every five to ten minutes in the second stage of labour, and she asserts that she did so in this case. She said she used the CTG machine to listen to the fetal heart by holding it in place, as the hand-held Doppler was in use in another room. She further said that the fetal heart could be heard by all in the room, and she would point it out to the family. She stated to the Coroner that, at that time, she had no one to document for her and could not always write in the notes with wet gloves, so instead she wrote in the notes at intervals when she could take her gloves off (the recordings of the fetal heart rate in the notes are as set out above).[30]

86. The couple dispute that Ms B listened to the fetal heart as often as she has claimed. The couple stated that they received no real support from Ms B, who often left the room, no maternal observations were taken, and there was very little monitoring of the baby. The couple further advised that there was no "bladder management".[31]

87. Ms D said that Ms B used the CTG machine, or at least attempted to use it, to monitor the fetal heart rate on approximately three occasions. Ms D said that with the CTG machine you can hear the heartbeat, but when Ms B held the monitor over Mrs A's stomach there was no sound and no numbers on display. She stated that no other machine was used to check for the baby's heartbeat.

[29] In response to the provisional report, Mr A stated that it was he who suggested and requested a birth stool.
[30] In response to the provisional report, the couple submitted that Ms B had taken notes during her assessment at their home at 10am, while wearing wet gloves.
[31] Bladder care during labour involves encouraging frequent voiding/emptying of the bladder.

88. Ms G advised the Coroner, "Although some monitoring was carried out I did not feel that enough checks were being done. The heart beat was checked occasionally."

Transfer to hospital

89. Ms B advised HDC that she could see that transfer to hospital would be needed and she therefore attempted to insert an IV luer. This was unsuccessful and she asked a Clinic staff midwife to try. This was also unsuccessful. Ms B asked Mrs A to try not to push as she organised for transfer to hospital. At 12.15pm, Ms B was unable to hear the fetal heartbeat.

90. The contemporaneous notes record: "12.15 Back onto bed now. IV luer attempt. [The Clinic's staff midwife] attempt IV luer on other side. T — 36 [Celsius]."

91. At 12.30pm Ms B notified the hospital delivery suite that Mrs A was being transferred for "failure to progress" and an ambulance was called. The contemporaneous notes record: "12.30 [delivery suite] notified we are coming in for [failure to progress]. Ambulance rung and on its way priority one."

92. The hospital telephone information records list a call from Ms B at 12.30pm, and records, "2400 [spontaneous rupture of membranes], Fully [dilated] @ 1015 [fetal heart heard] advice [to come in]".

93. Ms H was working as the coordinating midwife at the hospital that day.[32] Ms H recalls receiving a referral made to the Coordinators' phone from Ms B at 12.30pm. Ms H recalls being told that Mrs A was at term with her second baby, and that she had had a previous forceps delivery. Ms H also recalls being told that Mrs A's membranes had ruptured at midnight, and she had been fully dilated since 10.15am but had failed to progress.

Care and treatment at the hospital

94. The ambulance arrived at the clinic at 12.46pm and transported Mrs A to the hospital. According to Ambulance records, the ambulance arrived at the hospital at 1.02pm.

Handover of care to secondary services

95. There is nothing documented (either contemporaneously or retrospectively) to indicate that there had been a formal transfer or handover of Mrs A's care to secondary services when Mrs A arrived at hospital.

96. The Ministry of Health Guidelines for Consultation with Obstetric and Related Medical Services (the Referral Guidelines) that applied at the time provide that, for

[32] Ms H said that the role of coordinating midwife involves coordinating the hospital delivery suite, which includes receiving transfers in and out from LMCs, and organising and supporting staff and LMCs with their clinical work. She said that, what this means, is that the coordinating midwife is working as a resource with staff and LMCs while they work with the women that they are caring for. She said that there is an expectation that the position is supernumerary, but in practice that is not a reality and the coordinating midwife is often required to take a client load as well.

such a referral,[33] the decision regarding ongoing clinical roles and responsibilities "must involve a three way discussion between the specialist, the Lead Maternity Carer and the woman concerned. This should include discussion on any need for and timing of specialist review. The specialist will not automatically assume responsibility for ongoing care. This will depend on the clinical situation and the wishes of the individual woman."

97. Ms H stated:

> "When a woman is admitted to the hospital after referral the partnership remains between the LMC and the woman but consultation with the Obstetric team broadens the dialogue and plan of care … Until tertiary care is required, or the LMC requests handover of care to DHB staff, the LMC remains in her role of caring for the woman."

98. Ms H advised that Ms B did not hand over care or request handover of Mrs A's care to the hospital midwives. Ms H said that she assisted as required.

99. Ms B advised HDC that once Mrs A transferred to hospital she saw her role as a support for Mrs A. Ms B advised that she assumed she had handed over care to the obstetric team on arrival at the hospital and she did not realise she remained responsible for Mrs A's care from this point. She said that she was in and out of the room taking bloods to the laboratory, phoning the anaesthetist, getting the blood pressure cuff, etc. Ms B stated, "On reflection I should have ensured the care had transferred and that someone was responsible, that was my duty and I neglected to make sure that care had transferred to a secondary level."

Initial assessment at the hospital

100. Ms H advised that, at 1.15pm, Ms B came to the main office and informed her of Mrs A's arrival. Ms H said that she offered to make contact with the obstetric registrar, which Ms B accepted. Ms B then asked Ms H to listen for the fetal heart rate as she had been unable to hear it for the previous hour. Ms H told the Coroner that Ms B did not tell her that Mrs A was an emergency admission requiring urgent attention, and she sensed no urgency from Ms B when she asked her to help find the fetal heart rate. Mr and Mrs A also advised that they sensed no urgency from Ms B, and that she was "very relaxed" at that time. The couple advised HDC that Ms B did not, at that time, tell them that she could not hear the baby's heartbeat.

101. Ms B said that on arrival at the hospital she requested from Ms H an urgent obstetric registrar review and asked Ms H to listen for the fetal heart rate as she had been unable to hear it prior to transfer. Ms B advised HDC that she feels that she did portray urgency when she requested an urgent obstetric review and when she mentioned that she had been unable to hear the fetal heart rate prior to transfer.

[33] A referral for a prolonged second stage of labour, as in this case, is classified in the Referral Guidelines as a Level 2 referral.

102. A retrospective note made by Ms B the day following the birth, recording events at 1.15pm during labour, states: "On admission asked staff mw [Ms H] to auscultate fetal heart as I was unable to hear it at 12.45 before transfer …" Ms B subsequently advised that this retrospective note was incorrect, and the time at which she was unable to hear the fetal heart rate before transfer should read 12.15pm. Ms B did not record in the contemporaneous notes made at 12.15pm that she had been unable to hear the fetal heart (see above).

103. Ms H said that when she entered Mrs A's room she noted that Mrs A was distressed, pushing involuntarily, and using Entonox. Ms H said she noted Mrs A's pallor, and asked Ms B if that was her usual colour. Ms H also recalled that Mrs A felt cold to touch, although she assumed that was because of transferring her from outdoors. Ms H also said that Mrs A's abdomen looked unusual (ie, prominent at the fundus (top of the uterus) and flatter over her umbilicus and lower segment). Ms H recalls seeing movement in Mrs A's abdomen, which she took to be fetal movements.

104. At 1.20pm Ms H heard the fetal heart using a CTG machine. Ms H said that the fetal heart rate appeared to be 150–160bpm, which was within the normal range, and showed variability. Ms H advised the Coroner that obstetric registrar Dr C[34] arrived to assess Mrs A as Ms H was listening to the fetal heart rate. Accordingly, she stopped what she was doing so that Dr C could proceed with her assessment.

Review by obstetric registrar Dr C

105. Dr C assessed Mrs A at 1.20pm and found that she was fully dilated and contracting every three to four minutes, the baby was in a posterior position, with his head just below the spines, and clear liquor was draining. Dr C advised HDC that her assessment included abdominal palpation, although this is not documented A fetal scalp electrode was attached. There was a lot of "artefact",[35] which made the trace difficult to interpret. The trace showed a baseline pulse of 140bpm with a variability of 5–8bpm. Dr C advised that the first few minutes of the trace did not give a reassuring picture but that it was still within normal limits.[36]

106. Dr C advised that no notes were available for her to review when she assessed Mrs A, and she received a verbal history from Ms H that Mrs A was a multiparous woman, had been actively pushing for one hour at the birthing unit, and had failed to progress. Dr C also recalls receiving a brief antenatal history from Mrs A, who advised that her labour progression had been exhausting, and she wanted analgesia.

107. Dr C noted that Ms B had not accompanied Mrs A to the birthing room initially and, when she did arrive, she advised Dr C that Mrs A had been fully dilated since 10am, and that she had been pushing from 11am. Dr C advised that when she assessed Mrs

[34] At the time of these events, Dr C was in the first year of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists specialist training programme.
[35] Disruptions in the heart rate recording caused by mechanical problems.
[36] The hospital's consultant obstetrician, Dr K, advised that her retrospective review of this CTG revealed a non-reassuring CTG with a baseline of approximately 140bpm with no variability, which was unfortunately not recognised at the time. Dr K's involvement in Mrs A's care and treatment is set out below.

A, she did not have information about the fetal heart rate prior to admission, or maternal observations, she did not have the clinical notes, and she was not informed that Mrs A may have been fully dilated since anytime between 4am and 10am.

108. Ms B said that when Dr C came into the room to assess Mrs A at 1.20pm, Ms B provided Dr C with a handover history "with what had happened". However, in response to the provisional report, Ms B advised that she does not recall providing information about maternal observations or the fetal heart rate. Ms B also stated, "Some clinical notes were available at transfer to hospital. The maternity notes which I was using as Lead Maternity Carer [were] made available and were sitting on the desk as were hospital stickers and clinical note paper."

109. Dr C's plan was to wait for the baby to turn as it seemed he was starting to do so. She recommended that Mrs A turn on to her left side. Dr C instructed that basic observations be taken, that an IV luer be inserted, and that IV resuscitation be commenced. Dr C advised HDC that she gave these instructions to Ms B and the hospital midwife, who were both present in the room, because at that stage she was unaware of what, if any, discussion had occurred in relation to the transfer of midwifery care. Dr C also requested that the midwives continually monitor the fetal heart rate, and advised that she should be contacted if anything did not go to plan.

110. Dr C advised the Coroner that Ms B wrote down the verbal plan she gave. Ms H advised the Coroner that Ms B remained the LMC and consulted with Dr C about the proposed care plan. Ms H advised that she was in the room to assist as required.

111. Dr C advised HDC that her plan was to return to the birthing unit once Mrs A had been assessed, with a view to reviewing her for delivery. If, at that point, she considered there to be any complications with Mrs A's presentation, she would have discussed Mrs A with the on-call consultant. Dr C said that she left instructions for the assessment to be done immediately and, in the meantime, she responded to a page that she received to review a patient in another ward. Her expectation when she left the ward was that the baby could likely be delivered without any further intervention, as most multiparous women spontaneously labour and deliver after being resuscitated well with fluid, and with adequate analgesia.

112. Mr A recalls that Ms B sat on a high swivel stool to the left of Mrs A and next to the CTG machine. Mr A is concerned that despite sitting next to the CTG machine, Ms B did not notice (as he would subsequently learn) that the CTG showed a poor trace indicating that the baby was in distress.

Epidural

113. At 1.25pm anaesthetist Dr I assisted with the insertion of a luer and took blood samples. At 1.45pm Mrs A requested an epidural. Ms B paged Dr C to "okay" the epidural. Dr C approved the epidural and advised HDC that at that time she was falsely reassured of Mrs A's condition. Dr C stated:

> "Having left the instructions I did with the LMC and the [hospital] midwife, my expectation was that if there was any concern about [Mrs A] I would be informed

of it immediately. As nothing was said in this conversation about her condition, I presumed that all was well. Unfortunately (perhaps because I was rather rushed off my feet), I did not think to ask."

114. Hospital policy required that care must transfer to hospital midwifery staff for the administration of epidurals if the LMC is not certified in that procedure. Ms B was not certified to assist with the epidural and so another staff midwife, Ms J, was called to assist. The epidural was administered by Dr I at 2.15pm.

Emergency call

115. At 2.20pm Ms B took Mrs A's blood pressure and it was recorded as being 112/64.[37] Ms B said that she looked at the fetal trace and noted that it did not appear to show any variability, and she mentioned this to Ms J. In contrast, Ms J said that she noted that the CTG was non-reassuring and asked Ms B to get the registrar urgently.

116. At 2.25pm Ms B left the room to call Dr C. Dr C advised Ms B that she would be down shortly. In the meantime, staff midwife Ms J took Mrs A's blood pressure again and found it to be very low (53/34). Dr I was still in the room and gave Mrs A ephedrine.[38] Ms J repeated the blood pressure, and it was recorded as 84/40.[39] Mrs A complained of not being able to breathe. Mr A recalls that Dr I instructed him to squeeze Mrs A's IV fluids into the drip, and that he did this as hard as he could as he was concerned to save the life of his wife and son. The emergency bell was activated, the emergency trolley was brought into the room, and Dr C was paged again. Dr C asked obstetric consultant Dr K to attend with her.

117. At 2.30pm Dr C and Dr K entered the room. Dr K advised that Mrs A was clearly unwell. Mrs A was pale, tachypnoeic,[40] complaining of difficulty breathing, and had a distended abdomen and abnormal mottling of the skin. Dr K stated that an acute event resulting in maternal collapse was clinically obvious.

118. Dr C inserted a urinary catheter and noted blood in Mrs A's urine. A vaginal examination revealed that the baby was still posterior. Dr K stated that the CTG was non-reassuring, with a baseline rate of 140bpm and absent variability. At 2.40pm it was decided to proceed with an emergency Caesarean section for possible uterine abruption.

119. Baby A was delivered at 3pm by emergency Caesarean section but could not be resuscitated and, sadly, died shortly after birth.

[37] Normal (or ideal) blood pressure is below 120/80mmHg. In response to the provisional report, the couple advised that Ms B tested the blood pressure machine on herself, as she thought it might be faulty.
[38] A drug used for the temporary relief of shortness of breath, chest tightness, and wheezing. It also increases blood pressure.
[39] In response to the provisional report, the couple advised that Ms J took that blood pressure reading with a different machine.
[40] Rapid breathing.

120. Mrs A suffered a spontaneous uterine rupture, which led to a major intra-abdominal haemorrhage, which caused her to collapse. She required an emergency total abdominal hysterectomy under general anaesthetic, with simultaneous resuscitation and blood transfusions during the procedure. Mrs A had a complicated postoperative recovery, with an initial inpatient stay of 37 days. Her injuries included bladder damage, cardiac arrest, hypoxic brain injury, skin grafting to her left arm, and sepsis. Mrs A has required surgery several times since these events. The couple also advised HDC that Mrs A suffered post-traumatic stress, depression, and anxiety, and has not been able to return to her previous level of employment.

121. Dr K advised that spontaneous uterine rupture in labour (not in the presence of a Caesarean section scar) is very uncommon in women in the developed world, and documented risk factors include prolonged second stage, obstructed labour, and malposition.

Further information from Ms B

122. In response to the Coroner's findings (see paragraph 136), Ms B publicly stated that she does not accept that her training and degree of experience contributed to the tragic outcome in this case.

123. In her response to HDC, Ms B stated:

> "Reading through this complaint now I feel extremely saddened that [Mr A] and [Mrs A] were put in this position. They had put their trust in me to provide midwifery care which they did not receive in the first stage of labour when they needed it. It is upsetting for me to think that I wasn't working in partnership and also not putting my trust in [Mrs A] to listen to what she was experiencing. Instead I used my own judgement and experience which now just doesn't seem good enough at only 10 months of self employment."

Further information from the clinic

124. The Clinic advised HDC that all midwives entering employment with the clinic and all LMCs utilising the clinic pursuant to an access agreement are oriented to the clinic by a senior midwife, and that orientation can take up to several days. Ms B signed her orientation checklist with all tasks marked as completed on 17 December 2008. During the Coroner's Inquest, Ms B admitted that she did not read the policies that she agreed to follow when she signed the access agreement with the clinic.

125. The Clinic's Documentation policy, as it applied at the time of these events, noted that it is the LMC's responsibility for documentation in maternity notes, and that the clinical/maternity notes are the main source of communication among all health professionals. The policy states that notes should be written legibly and objectively, and should record findings and evaluations, and clients' care and response to it. It also states that all changes in condition should be documented.

126. The Clinic also advised HDC that it has introduced a Duty of Care policy since this event, and it has updated its Incident and Event policy, complaints process, orientation checklists, and quality improvement/incident form/adverse event form.

Further information from Waikato District Health Board

Changes made since these events

127. Waikato District Health Board (WDHB) undertook a serious event review of the care and treatment provided to Mrs A and Baby A. The review resulted in the following recommendations and actions:

- The review identified that processes in the secondary service were not robust enough to provide an opportunity to gauge the urgency of Mrs A's transfer. In particular, the telephone record form did not guide the secondary service to ask the right questions of the referrer, and the handover of care processes did not clearly guide the practitioners in the primary/secondary interface around communication, including the clinical assessments (eg, maternal observations at the time of handover). In response, WDHB amended the telephone record form that is completed when a transfer to secondary care is made to include pertinent information using SBARR[41] as a guide. In addition, WDHB instituted a new Transfer of Care policy to include that all women transferred from primary to secondary care shall have a prompt assessment including a complete set of baseline observations taken on admission.

- The review identified that the CTG was not reviewed as per expected protocol. WDHB reviewed how it provides CTG training to ensure it meets medical and midwifery needs (new process set out below).

- The review identified that the Epidural Administration and Monitoring protocol was not followed, and staff were reminded that the monitoring protocol, including background observations, should be followed and recorded on the Obstetric Regional Anaesthesia Record.

- Partograms are to be reintroduced to all WDHB facilities as the standard documentation for intra-partum care, which will encourage the taking and documentation of the fetal heart rate, maternal observations, contractions, liquor, medications, IV fluids, epidural and Syntocinon administration, fluid balance and labour history.

128. The Coroner recommended that WDHB require its obstetric registrars to consult with their respective supervising specialist in respect of every woman who has transferred from primary care. WDHB advised that registrars are now required to inform the consultant on call in a number of circumstances, including (but not limited to): transfers into the unit; all women requiring theatre; twin pregnancy in labour; breech presentation in labour; bleeding placenta previa; severe pre-eclampsia requiring magnesium sulfate;[42] and augmentation of multiparous women. Consultants will either attend or give advice over the phone, depending on the situation. Direct

[41] SBARR is an acronym that stands for Situation, Background, Assessment, Recommendation, and Response.

[42] Magnesium sulfate is indicated to prevent seizures associated with pre-eclampsia, and for control of seizures with eclampsia.

consultant cover has increased within the hospital, and the hospital has also increased the number of registrars on call at the weekend.

Updated policies and procedures

129. WDHB provided HDC with a copy of its 1 March 2010 Admission, Discharge and Transfer policy. The policy states, "Responsibility for the patient's clinical care remains that of the referring provider until responsibility for the patient's care is accepted by the receiving healthcare provider."

130. WDHB also provided HDC with a copy of its 30 July 2010 Maternity Transfer of Care Procedure, the purpose of which is to ensure the safe management of the "primary/secondary interface in the clinical setting". The procedure requires that, at any time, only one midwife is responsible for the midwifery care of a woman, and this person has full responsibility for all clinical decision-making. The procedure states, "By ensuring one midwife is fully responsible for the midwifery care and decision-making, confusion and assumptions should be eliminated and appropriate actions taken." The procedure sets out the responsibilities of all parties when care is transferred, including the responsibility of the LMC to provide relevant and required clinical and administrative information to inform the secondary service and to ensure the urgency of the woman's condition is communicated. As noted above, the procedure also requires that the WDHB telephone service receiving advice of a referral is required to complete the SBARR telephone record to capture the information given by the referrer in order to enable prioritisation and a timely review/assessment upon the woman's arrival at hospital. The procedure also requires that the ongoing care and responsibility of the woman is negotiated by means of a three-way conversation between the LMC, medical staff, and the woman.

Staff training

131. WDHB advised that it now has a CTG credentialing process in place for all medical and midwifery staff (the Fetal Heart Monitoring Passport), which is a three-year "rolling cycle" of training consisting of the following: K2 CTG training package;[43] the Royal Australian and New Zealand College of Obstetricians and Gynaecologists FSEP full day training;[44] and a half-day refresher and one hour of teaching on intermittent auscultation. The Fetal Heart Monitoring Passport was introduced at WDHB in September 2012, and provides for supervision and training for staff who get a score of less than 70% in the Fetal Heart Monitoring Passport.

132. In addition, PROMPT (Practical Obstetric Multi-Professional Training) courses are run four times a year, and there are multidisciplinary training days for obstetric emergencies, which involve obstetricians, anaesthetists, and midwives. In addition, all registrars are assessed for competence in a variety of procedures, including CTG interpretation, instrumental deliveries, and Caesarean sections, as well as on when

[43] The DHB Fetal Heart Monitoring Passport provides that all new medical staff to be employed in Women's Health must complete the K2 programme prior to starting work there, and their marks are discussed with their supervisor and/or line manager.

[44] The DHB Fetal Heart Monitoring Passport provides that new graduate midwives may elect to do this full day of training in their first year of the practice programme, and can apply for funding to do so.

consultants are required. Furthermore, WDHB holds monthly reviews of interesting/learning CTGs.

Further information from Dr C

133. At the time of these events, Dr C was the only registrar on duty from 8am to 10pm and, with the assistance of one house officer, was covering acute patients in the delivery suite, the Women's Assessment Unit, and gynaecological admissions to the emergency department. She was also providing inpatient care to patients in the gynaecology, antenatal, and postnatal wards.

134. At the Coroner's Inquest, Dr C accepted that she erred in failing to ask Dr K to review Mrs A when she first arrived. Dr C advised HDC that, since these events, she has made the following changes to her practice:

- Upon her arrival in the Delivery Suite, one of her first priorities is to establish clear lines of responsibility for both the midwifery and medical care of the patient.
- She records her instructions to others in the notes.
- She ensures that the time for review is documented in the notes, and that she communicates either to the LMC or midwife caring for the patient clear time limits for the first and second stages of labour.
- She ensures that the consultant on call is aware of all prospective complex cases. She does this at handover and when new and complicated cases come in.
- If she cannot be present herself for a review, she arranges for either a consultant or fellow registrar to attend in her place.

Further information from the Midwifery Council of New Zealand

135. In early 2010, the Midwifery Council of New Zealand (the Midwifery Council) resolved to undertake a review of Ms B's competence. Following that review, the Midwifery Council ordered that Ms B complete a competence programme.

Coroner's findings

136. The Coroner released his findings into the death of Baby A in 2012, following an Inquest held in 2011. The Coroner concluded that Baby A died as a result of intra-partum asphyxia, and that the hypoxic environment had arisen during a prolonged second stage of labour due to fetal malposition and uterine rupture. He found that four factors contributed to Baby A's death:

- the LMC failed to recognise that the progress of labour was not normal;
- the LMC failed to convey urgency on transfer (either verbally or in documentation) to hospital staff;
- the LMC and hospital staff failed to recognise the urgency of Mrs A's situation and expedite delivery; and

- the LMC and hospital staff failed to review and properly interpret the CTG trace.

137. The Coroner made a number of recommendations, including the following:

- The Ministry of Health should:

  i. reconvene the consultative group that reviewed the Referral Guidelines[45] and consider amendments to the 2012 version of the Referral Guidelines that clarify the definition of the commencement of the second stage of labour to remove any ambiguity;

  ii. provide a process for the transfer of clinical responsibility for midwifery care from the LMC to secondary midwifery care that involves a conversation between the LMC, the secondary midwife, the woman concerned, and any specialist involved, to determine that the transfer of midwifery care is appropriate and acceptable, and determine the respective roles and responsibilities; and

  iii. reword the opening paragraphs of the Referral Guidelines to emphasise that they are evidence based, considered good and safe practice, and should be followed in most cases.

- The WDHB should require obstetric registrars to consult with their respective supervising specialist in respect of every woman who has transferred from primary care.

- The Midwifery Council of New Zealand should:

  i. review midwifery training to ensure that it is consistent with the Referral Guidelines and encourage midwives within their first years of practice to practice within the Referral Guidelines;

  ii. consult with a view to reviewing the Midwifery First Year of Practice programme with particular emphasis on the mentoring aspect of the programme and work with the Ministry of Health to make the programme compulsory; and

  iii. review the roles and descriptions of midwives who provide collegial support, supervision, and oversight to colleagues.

[45] The Referral Guidelines are an appendix to the Primary Maternity Services Notice 2007 promulgated pursuant to section 88 of the New Zealand Public Health and Disability Act 2000. The Referral Guidelines provide Lead Maternity Carers with information about the categories of referral, referral pathways, and criteria on which LMCs should advise women that a referral is warranted. The Referral Guidelines define three levels of referral and consequent action.

Responses to provisional opinion

138. Where relevant, the responses to the Commissioner's provisional opinion have been incorporated into the "Information Gathered" section above. In addition, the following responses were received:

Mr and Mrs A

139. With reference to Ms B's decision to send Mr and Mrs A home at 6am, Mr and Mrs A submitted:

> "Midwife [Ms B] let down [Mr A], [Mrs A] and more importantly [Baby A]. … Midwife [Ms B] would have let down our family even if [Mrs A's] progress of labour was different and the outcome was good in respect to her care. Midwife [Ms B] knew we wanted to stay [at the Clinic] … To learn that Midwife [Ms B] knew and understood that there was a real possibility that we would deliver a baby … in [the] car but still removed us from the [Clinic], or the fact that Midwife [Ms C] knew that [Mrs A] could go from 2cm to fully dilated very fast … to remove us from [the Clinic], from her [care] and send us home is profound and heart breaking."

Ms B

140. Ms B accepted the findings in the provisional report, and made the following statements in her response to HDC:

> "I agree that my degree of experience had not been offered to consumers, including [this family]. If clients were to ask, I would happily tell them, but in hindsight that may not be a question consumers would know to ask, so it becomes my responsibility to offer that information in order for them to choose an LMC they would be comfortable working with …
>
> I accept responsibility for my assessment of [Mrs A] at 4am to be incomplete [sic]. I did not take a thorough assessment. I did do an abdominal palpation, and watch and assess behaviour, however did not take vital signs or ask after bladder care [or] if [Mrs A] was able to urinate. I accept that when diagnosing stages of labour a full assessment of the woman should be completed.
>
> After further experience, reflections and in hindsight, [Mrs A] should not have been sent home at 6am. I should have at least offered pain relief, completed a full assessment and waited while offering midwifery support to see if labour was establishing before reassessing and making a clinical decision as to whether [Mrs A] was making progress in her labour.
>
> It was my opinion at the time that [Mrs A] was not in established labour and that administering pethidine and being sent home to await labour was common practice and what I was used to seeing in midwifery practice. However, I am of the opinion now that midwifery support and offering pain relief is best practice and can make for better outcomes as women are more comfortable and trust their surroundings.

I accept that I did not carry out a complete assessment of [Mrs A] before or after administering pethidine. This was the practice I was used to seeing from a colleague and mentor. However, each midwife is accountable for her own actions and I am now aware of what is best practice when using a narcotic and the assessments that need to be taken before and after to ensure correct dosing, side effects and the well being of Mum and baby.

I accept that my poor documentation has very much let me down in this case … Before this day my normal practice was to do an admission CTG, but I had recently attended a study day where that practice was not evidence based and has no place for normal labour.

Although my recollections and account were that I had monitored fetal wellbeing at 5–10 minute intervals, I accept that every 5 minutes for at least a minute is the reasonable standard of practice.

…

There was much debate about the start of the second stage of labour. At the time, I thought it reasonable to be at the clinic, however should have arranged transfer at 12 rather than 12.30 …

I accept that it was my responsibility to ensure that care had handed over on arrival to [the hospital]. However, it was my understanding that I was there as a support. I was not certified to monitor epidurals, and I was of the realisation that as a newly graduated midwife I was out of my depth caring for someone who was [failing] to progress in second stage of labour and needed secondary care and an epidural …

I do accept however that it was my responsibility to clarify that care had handed over.

…

I accept that I did not recognise the abnormal CTG trace, but believe it to be unfair that this was solely my responsibility as other health professionals, more senior than myself were also in the room …

I accept responsibility for poor documentation. This is solely my responsibility for having clear, concise and contemporaneous health records which I failed to do.

…

There are many means in which a midwife needs to ensure competence and standard[s] of practice, and as I am now employed by a DHB, they too have their own ways to ensure their staff remains competent and safe to practice, which is more than self employed midwives have access to.

Every year I complete my fulfilments for recertification for Midwifery Council by keeping up to date with neonatal resuscitation, adult CPR, breastfeeding updates,

technical skills workshops, attending twice yearly midwifery standards review, and breastfeeding workshops 3 yearly.

I have attended many study days, including but not limited to, documentation/record keeping, PROMPT, immunisation course for midwives, recognising and managing antenatal risk and compromised neonatal workshop.

After [this case] in 2009, I was to undertake a competence review programme as set out by [the] Midwifery Council …

Each of the components were completed and reported back to [the] Midwifery Council, and they reported that my competence programme was completed and conditions removed from my practising certificate [in mid] 2012.

I regularly attend perinatal mortality meetings within my DHB for further learning, and attend study days beyond what is required for recertification.

Within [the DHB] I undertake yearly performance development reviews and have completed and achieved in the confident domain for the quality and leadership programme which is voluntary.

…

As a result of further experiences, further study and talking and learning from colleagues, I feel my practice is completely different now as to what it was four years ago. My practice, like with all midwives is evolutionary so changes over time anyway, but feel like I am practising more autonomously now (even though I'm employed) because I actually have more understanding of the midwifery profession, and am a stronger person to stand up for the rights of women and can question when I don't think the right decision has been made. When I was a new graduate, I felt like I was a clone of somebody else's practice, but claimed it to be my own, as I believed it to be right. I now understand that there is an individual approach to the way in which we practice, which is why all midwifes are different, but that evidence based practice, ensuring compliance with policies and protocols and discussions between colleagues all help in providing women with the care they have a right to.

…

[Mr and Mrs A] and their extended family have endured what most of us dread to ever happen in our lives, and I am forever regretful that they are in this situation. Not a day goes by that I don't think of this loving family and what life they would have had with [Baby A] growing up in it. Children are a blessing and their blessing got taken away from them too soon. For my failures in this case, I am immensely sorry, and although I know that no words are adequate enough to show them how I feel, I hope that it can bring them just a little bit of peace. I wish to send them my deepest condolences, not only for the heartbreaking loss of their son, but for the lifelong mourning this family will go through."

Dr C

141. Dr C accepted the findings in the provisional report, but submitted that, if her understanding of Mrs A's labour was inadequate, it was because of the inadequacy of the information conveyed to her by Mrs A's LMC (Ms B), not because of her failure to take a history.

Waikato District Health Board

142. The Waikato DHB accepted the findings in the provisional report. It submitted that it continues to critically review its practice, and has made a number of changes in response to the issues identified as a result of this matter. Waikato DHB also stated:

> "We have also reflected on the impact of these events on [Mr and Mrs A] and their family. We wish to express our sympathies to them for their loss, and extend our apologies for inadequacies in the care provided at the time."

The Clinic

143. The Clinic did not respond to the provisional report.

Opinion: Ms B

Antenatal care — Adverse comment

144. Ms B became Mrs A's LMC on 30 September 2009, after Mrs A's original LMC went on a period of sick leave. Mrs A had, to that time, had a normal pregnancy.

145. Mrs A had several appointments with Ms B before she went into labour. During these appointments the following matters were noted and/or discussed:

- It was noted that the baby was in a posterior position, and that Mrs A would try optimal fetal positioning and Pulsitilla to encourage the baby to change position.

- Mr and Mrs A informed Ms B of the difficulties Mrs A experienced with the birth of their first son, their anxiety associated with that, and their concerns that Mrs A should labour and give birth at hospital.

- Ms B advised Mr and Mrs A that posterior births can result in longer labours, but reassured Mr and Mrs A that second labours were usually a lot quicker and that it would be safe for her to give birth at the clinic. Although the baby was in a posterior position, Ms B considered that Mrs A was in the "low risk" category. Ms B told Mr and Mrs A that transfer to hospital was a short trip by ambulance, if necessary.

- Ms B advised HDC that she "briefly retouched" on Mrs A's previous history and birth plan, although she accepted that, on reflection, she should have discussed these matters further with Mr and Mrs A.

146. My expert midwife advisor, Ms Rachel Smith, advised that the advice Ms B gave in regard to the progression of labour and second births was adequate, evidence based, and would not differ to the advice many midwives would give in this situation. She also advised that Ms B's advice to Mrs A in relation to planning for the birth was reasonable.

147. Ms B met with Mrs A at recommended intervals during the antenatal period, and documented the care provided and advice given. When Mrs A continued to express her anxiety and concern about the birth, given her history, Ms B recognised that and appropriately referred Mrs A to the hospital.

148. In these circumstances, Ms B provided antenatal care of a reasonable standard, and did not breach the Code in this regard.

149. However, I am concerned that Ms B did not tell Mr and Mrs A that she was a newly graduated midwife. A consumer receiving midwifery care always has the right to receive the information that a reasonable consumer, in her circumstances, would expect to receive. In many circumstances, this will include information as to the experience of the midwife.

150. In this case, Mrs A was presenting with a history of a previous complicated labour and delivery, with a large baby in a posterior position. She was anxious about her labour for those reasons. In my view, given Ms B's lack of experience and the significant features of Mrs A's presentation, a reasonable consumer, in Mrs A's circumstances, could have expected to be informed about the experience of the midwife. As I have noted in a previous opinion, I do not accept that if a consumer does not ask for such information it implies that this is not information that a reasonable consumer in that consumer's circumstances would expect to receive.[46]

Assessment and treatment at the clinic from 4am to 6am — Breach

151. When Mr and Mrs A called Ms B at 3.30am and reported that Mrs A was experiencing strong, painful contractions of 60-second duration every two to four minutes, Ms B appropriately advised the couple to meet her at the clinic.

152. However, I am concerned about the adequacy of Ms B's assessment of Mrs A after Mrs A arrived at the clinic at 4am, and the appropriateness of her advice to, and treatment of, Mrs A. My concerns are as follows.

Assessment of Mrs A

153. The clinical records indicate that, at 4am, Ms B assessed Mrs A. Mrs A was noted to be experiencing contractions that were two to four minutes apart lasting 60 seconds, with very strong contractions on palpation. Her cervix was noted as being central, very thin, and 2cm dilated, at station –1. The fetal heart was recorded as being 110–118bpm. It was also recorded that Mrs A was using Entonox for pain relief, and she also had a personal TENS machine attached.

[46] See Opinion 09HDC01565 available at www.hdc.org.nz.

154. Ms B stated that she monitored the fetal heart more regularly than is documented in the contemporaneous records, and that Mrs A's contractions were actually only two every ten minutes lasting 45–60 seconds. I do not accept Ms B's evidence in this regard. If those were her assessments, then they should have been recorded in the notes along with her other assessments. As this Office has frequently emphasised, it is through the records that health care providers have the power to produce definitive proof of a particular matter, and health professionals whose evidence is based solely on their subsequent recollections (in the absence of written records offering definitive proof), may find their evidence discounted.[47] In this case, Ms B's recollection differs from what is recorded in the clinical records, and differs from the recollections of the other parties in the room. In the absence of any clear evidence that the clinical notes are not an accurate reflection of the events recorded at the time, I prefer the evidence of the contemporaneous clinical record. As such, I accept that the assessment and findings, as recorded in the clinical records at 4am, are an accurate representation of Mrs A's condition at that time, and the assessments Ms B undertook.

155. I consider that Ms B's assessment of Mrs A at 4am was inadequate and, in response to the provisional report, Ms B accepted that her assessment of Mrs A at that time was incomplete. Ms B did not take Mrs A's vital signs, which Ms Smith advises would usually be attended to and used to inform midwifery clinical decision-making at that time. I accept Ms Smith's advice that initial assessment would usually include taking the woman's blood pressure, pulse, temperature, urinalysis, vaginal loss, abdominal palpation and behaviour responses. While a vaginal examination and abdominal palpation were undertaken, the other assessments were not. As noted by Ms Smith, a vaginal examination alone should not be used to diagnose labour. For these failures, I find that Ms B breached Right 4(1) of the Code.

Decision to send Mrs A home

156. Following her assessment at 4am, Ms B concluded that Mrs A was in early labour and that she should therefore return home until her labour established.

157. I accept Ms Smith's advice that although Mrs A's contraction pattern of contractions every two to four minutes lasting 60 seconds would usually indicate established labour, in this situation it was not unreasonable for Ms B to conclude that Mrs A was in early labour. This is because she was, at that time, only 2cm dilated, and the level of cervical dilation generally associated with established labour, approximately 3–4cm, was not evident at that time.

158. However, I consider that Ms B's decision to send Mrs A home on the basis of her assessment that Mrs A was in early labour was nevertheless unwise. As noted by Ms Smith, this was Mrs A's second baby. At 4am Mrs A was presenting with very strong contractions every two to four minutes, she was using pain relieving measures, and her cervix was central, very thin, and 2cm dilated with a presenting part at station –1. As noted by Ms Smith, these factors give a clinical picture of possible establishing labour, and women having second or subsequent babies can dilate very rapidly once the cervix thins. Ms B's assessment of Mrs A took place at 4am — two hours before

[47] See Opinion 08HDC10236, available at www.hdc.org.nz.

she sent Mrs A home. In addition, Mrs A was in so much pain that she was using Entonox and was administered pethidine (see below), had to be taken to her car in a wheelchair, and the only position in the car that she could tolerate because of her pain was to be on all fours in the back of the car. Ms B was aware of all of these matters, and should have turned her mind to the appropriateness of sending Mrs A home in these circumstances, and the safety of sending her home as she was, on the back seat of her car.

159. In my view, considering these matters together, Ms B's decision to send Mrs A home was clinically inappropriate, and a major departure from the accepted standard of care.

160. Consideration also should be given to Mrs A's emotional state at that time. Ms B was aware that Mrs A was anxious about the labour and delivery, as this was clearly ascertained during their antenatal appointments. Mrs A made it very clear that she did not want to return home, and that she would like ongoing midwifery support at the clinic or in hospital, and would like to use the birth pool in accordance with her birth plan. Ms B was aware that the couple's preference was to stay at the clinic, and yet she gave the couple the impression that they were not allowed to stay at the clinic, and that they would be unable to obtain care at the hospital. Indeed, she accepts that she strongly encouraged Mrs A to continue to labour at home. When Ms B assisted Mrs A into her car, she must have been aware that Mrs A was in a lot of pain, and was extremely distressed.

161. A midwife is required to work "in partnership with the woman/wahine throughout the maternity experience",[48] and to "respond to the social, psychological, physical, emotional, spiritual and cultural needs of women seeking midwifery care, whatever their circumstances, and facilitate opportunities for their expression".[49] In addition, the midwife is required to share decision-making with the woman,[50] accept the right of each woman to control her birthing experience,[51] and accept that the woman is responsible for decisions that affect her and her baby.[52]

162. The New Zealand College of Midwives' *Midwives Handbook for Practice* (2008) (*Midwives Handbook*)[53] provides that "[t]he third decision point in labour" is "when the woman wants continuous support from a midwife". The *Handbook* explains:

[48] See Competency One in the *Midwives Handbook for Practice* (2008), New Zealand College of Midwives. The requirement on midwives to work in partnership with the woman is also Standard One of the Standards of Midwifery Practice (2008). Standard One requires the midwife to facilitate open interactive communication, and to negotiate choices and decisions. In addition, the responsibility to act in partnership with the woman is set out in the Code of Ethics for midwives (2008) under "Responsibilities to the woman" at point (a).
[49] Code of Ethics for midwives (2008), "Responsibilities to the woman", point (e).
[50] Competency 2.15 in the *Midwives Handbook for Practice* (2008), New Zealand College of Midwives.
[51] Code of Ethics for midwives (2008), "Responsibilities to the woman", point (b).
[52] Code of Ethics for midwives (2008), "Responsibilities to the woman", point (c).
[53] This has since been updated, but is referred to here as the standard that applied at the time of these events.

> "This point is the full realisation of the working partnership between the woman and the midwife.
>
> Follow birth plan in consultation with the woman and her partner/supporters as appropriate.
>
> Facilitate partner/supporters' involvement as per birth plan.
>
> Encourage the woman to move into whatever position she feels comfortable.
>
> Continue regular assessment of the woman and baby and progress of labour.
>
> If the woman or the midwife feels that progress is not being made, mother and baby should be reassessed regularly for factors that may indicate whether additional care should be considered."

163. I am very concerned at the lack of support Ms B provided to Mrs A at that time. I do not consider that Ms B's actions are an example of partnership between the midwife and woman. Mrs A was clearly in pain and anxious. As Ms Smith noted, the fact that the couple felt so strongly about the need for continued midwifery support that they were prepared to present to hospital to have their needs met is telling of what they were experiencing. In my view, Ms B's omission to either provide requested care or negotiate a mutually agreed alternative was a major departure from the accepted standard of care. It was unacceptable that Mrs A was left to feel that she could not access, or was not entitled to, midwifery support at that stage of her labour.

164. Ms B also seemed to have a complete disregard for Mrs A's birth plan, which was to use the birth pool at the clinic for pain management. The couple also felt that they were not given sufficient direction as to when they should call Ms B from home. Mr A felt that he was insufficiently experienced to assess whether Mrs A's breathing had changed sufficiently.

165. In response to the provisional report, Ms B stated that, after further experience, reflections, and in hindsight, Mrs A should not have been sent home at 6am, and that she should have at least offered pain relief, completed a full assessment, and waited while offering midwifery support to see if labour was establishing before making a decision about the progress of Mrs A's labour.

166. I find that Ms B breached Right 4(1) of the Code for sending Mrs A home against her wishes and when it was not clinically appropriate to do so.

Administration of pethidine

167. At 5.15am, Ms B gave Mrs A 100mg of pethidine. Mrs A did not want to take pethidine and it was not part of her birth plan, but she felt she had no choice since she was being sent home.

168. Ms B did not ensure that the clinical drug notes were signed by a second midwife, as required by the clinic pethidine protocol. In addition, the clinic pethidine protocol required baseline maternal monitoring, including blood pressure, pulse, respiratory rate, level of consciousness, pain assessment, and oxygen saturations. The protocol also required fetal monitoring, including a reassuring baseline CTG prior to the

administration of pethidine, and CTG monitoring for a minimum of 30 minutes post administration. Ms B did not take any maternal observations during Mrs A's admission at the clinic between 4am and 6am, including before or after the administration of pethidine. Neither did Ms B undertake the required fetal monitoring before and after the pethidine was administered.

169. In response to the provisional report, Ms B accepted that she did not carry out a complete assessment of Mrs A before or after administering pethidine, and that she was accountable for her actions in that regard.

170. The requirement to monitor mother and baby in accordance with the protocol is for the safety of the baby and woman. Ms B's failure to do such monitoring was a major departure from the accepted standard of care, and a breach of Right 4(1) of the Code.

Assessment at home at 10am — Adverse comment

171. At 9.30am, Mr A phoned Ms B as Mrs A was still experiencing the same strong and regular contractions, was still in pain, and they were scared and anxious, and Mrs A was exhausted. Ms B arrived at the couple's house at 10am.

172. Ms B assessed Mrs A. Ms B recalls that Mrs A was fully dilated, at station 0, clear liquor was draining, and Mrs A's contractions were strong with three to four contractions every 10 minutes, lasting 60 seconds. Ms B said she assessed Mrs A as being in the transition phase, approaching the second stage of labour, because Mrs A was fully dilated but not pushing. The contemporaneous clinical notes record that Mrs A was "very uncomfortable with constant contractions", that she was fully dilated, and that the fetal head was at the spines. Ms B's contemporaneous notes do not record that clear liquor was draining, the frequency of the contractions, or her assessment of Mrs A being in the transition phase approaching the second stage of labour.

173. I do not accept Ms B's evidence that Mrs A was not pushing. I accept Mrs A's recollection, as supported by Mr A, that she felt an urge to push before Ms B arrived at 10am, and that she was pushing involuntarily with her contractions when Ms B arrived at their home at 10am. I accept that Ms B advised Mrs A not to push, and arrangements were made to transfer Mrs A to the clinic. This finding is supported by Ms B's statement to the Coroner that, when she assessed Mrs A at 10am, Mrs A was pushing involuntarily at the height of her contractions.

174. I accept Ms Smith's advice that Ms B's assessment of Mrs A at 10am and the transfer from home to the clinic was not unreasonable. After assessing the situation, she found Mrs A to be fully dilated, advised her to stop pushing, and arranged for her transfer. This was reasonable, as the plan was to birth at the birthing centre or hospital, and not at home.

175. I do not consider it necessary to make a finding as to who suggested calling an ambulance to transport Mrs A.

176. However, I am concerned that, although the notes record "discussed going to [the clinic]", neither party can recall such a discussion. The couple state that there was no

discussion with them as to the options of where they could transport to (ie, either the clinic or hospital). Ms B stated that she did not consult the couple as to where they wanted to go, as she assumed they were still comfortable with birthing at the clinic.

177. In my view, in this situation, Ms B should have discussed whether Mr and Mrs A preferred to be transported to the clinic or to the hospital to give birth. Mrs A had previously indicated that she would be happy to give birth at either the clinic or in hospital, and noted in her care plan that if any intervention was required she wanted that to be at the hospital. I consider it was unwise for Ms B to assume that Mrs A wanted to be transported to the clinic, when her labour had taken an unexpected course leading to her being fully dilated at home. I consider that Ms B should reflect on her actions in this regard, and her obligation to work in partnership with the woman for whom she is caring when making decisions about ongoing care and treatment.

Labour at the clinic from 11am to transfer to hospital — Breach

178. Mrs A arrived at the clinic at 11am and commenced active pushing. By that time, she had been fully dilated for at least one hour. Mrs A stayed at the clinic actively pushing until she was transferred to the hospital at around 12.45pm.

179. I have several concerns about Ms B's management of Mrs A at that time, as set out below.

Monitoring of the fetal heart rate

180. The clinical notes record that Ms B listened to and documented the fetal heart rate on four occasions between 11am and 12.45pm. In particular, the notes record "FHH" at 11am, "FHH" at 11.15am, "FHH 136 bpm" at 11.45pm, and "FHH" at 12pm. Although Ms B made notes at 12.15pm and 12.30pm, there is no reference in those notes to the fetal heart being listened to or heard at those times.

181. Ms B advised that where she wrote "FHH" in the notes, she was indicating that she had listened to the fetal heart rate between contractions and the whole way through a contraction, and after the contraction for three seconds, and that she had heard the fetal heart rate between the normal range of 110–160bpm with acceptable variability and no decelerations.

182. Ms B advised that although she documented listening to the fetal heart rate only on those four occasions, it is her standard practice to monitor the fetal heart rate regularly every five to ten minutes in the second stage of labour, and she asserts that she did so in this case but did not document it. As noted above, it is through the records that healthcare providers have the power to produce definitive proof of a particular matter, and health professionals whose evidence is based solely on their subsequent recollections (in the absence of written records offering definitive proof) may find their evidence discounted. I do not accept Ms B's evidence that she listened to the fetal heart rate on occasions other than those documented and noted above. None of

the other parties present in the room (Mr A, Mrs A, Ms G or Ms D) recall the fetal heart being listened to every five to ten minutes as asserted by Ms B.[54]

183. Ms B departed from the accepted standard of care in her monitoring of the fetal heart rate during Mrs A's second stage of labour. As noted by Ms Smith, the evidence available at the time recommends listening to the fetal heart rate for at least one minute every five minutes during the second stage of labour. I note that, in this respect, even if I had accepted Ms B's account that she listened to the fetal heart rate every five to ten minutes, but did not document that, I would still consider, on the basis of Ms Smith's advice, that Ms B failed to meet accepted standards with respect to fetal monitoring.

184. I find that Ms B breached Right 4(1) of the Code for failing to monitor the fetal heart rate adequately at the clinic between 11am and 12.45pm.

Maternal observations

185. Ms B did not document any maternal observations during her care of Mrs A, except for Mrs A's temperature at 12.15pm. This is despite Mrs A reporting that she felt faint at 12pm, and that she was noted to be very exhausted.

186. Given that no maternal observations are documented, other than Mrs A's temperature at 12.15pm, I conclude that such observations were not undertaken. This is supported by Mr and Mrs A's evidence that no maternal observations were taken and, in response to the provisional report, Ms B accepted that she did not do a full assessment of Mrs A including maternal observations. I accept Ms Smith's advice that Ms B's failure to take maternal observations was a major departure from the accepted standard of care.

187. I also note that Ms B did not document any bladder care in labour, including no mention of the passing of urine or urinalysis. As such, I conclude that no bladder care was undertaken by Ms B. This is supported by Mr and Mrs A's evidence that there was no "bladder management" by Ms B and, in response to the provisional report, Ms B accepted that she did not do a full assessment of Mrs A including bladder care. I accept Ms Smith's advice that by not assessing Mrs A's bladder during Mrs A's labour, which was deviating from normal (see below), Ms B's care of Mrs A was a departure from the accepted standard of care.

188. I also note that where the woman or the midwife feels that progress is not being made in the second stage of labour, as was evident in this case, the *Midwives Handbook* states that "mother and baby should be reassessed regularly for factors that may indicate whether additional care should be considered".[55] That did not happen in this case.

[54] Mr and Mrs A stated that there was very little monitoring of the baby. Ms D said that Ms B used the CTG machine, or attempted to use it, to monitor the fetal heart rate on approximately three occasions. Ms G advised that the heart rate was checked occasionally.

[55] See: "The fourth decision point in labour — the second stage" in the *Midwives Handbook for Practice* (2008), New Zealand College of Midwives.

189. I find that Ms B breached Right 4(1) of the Code for failing to monitor Mrs A adequately at the clinic between 11am and 12.45pm.

Timing of referral to secondary care

190. As noted above, Mrs A arrived at the clinic at 11am and commenced active pushing. By that time, she had been fully dilated and resisting pushing with panting for at least one hour. Mrs A stayed at the clinic actively pushing until she was transferred to the hospital at around 12.45pm.

191. In response to the provisional report, Ms B submitted that there was much debate about the second stage of labour, and at the time she considered it reasonable for Mrs A to be at the clinic. However, a midwife is required to identify factors in the woman or her baby during labour and birth "which indicate the necessity for consultation with, or referral to, another midwife or a specialist medical practitioner".[56] In addition, the Ministry of Health Guidelines for Consultation with Obstetric and Related Medical Services (the Referral Guidelines) that applied at the time provided that in the case of a prolonged second stage of labour, being greater than one hour in a multipara with no progress, the LMC:

> "**must recommend** to the woman … **that a consultation with a specialist is warranted** given that her pregnancy, labour, birth or puerperium (or the baby) is or may be affected by the condition. *Where a consultation occurs, the decision regarding ongoing clinical roles/responsibilities must involve a three way discussion between the specialist, the Lead Maternity Carer* and *the woman concerned. This should include discussion on any need for and timing of specialist review*. The specialist will not automatically assume responsibility for ongoing care. This will depend on the clinical situation and the wishes of the individual woman." (Emphasis in original.)

192. The Referral Guidelines also stated:

> "The Guidelines acknowledge that General Practitioners, General Practitioner Obstetricians and Midwives have a different range of skills. The guidelines are not intended to restrict good clinical practice. There may be some flexibility in the use of these guidelines:
>
> (a) The practitioner needs to make clinical judgements depending on each situation and some situations may require a course of action which differs from these guidelines. The practitioner will need to be able to justify his/her actions should s/he be required to do so by their professional body.
>
> …
>
> It is agreed that, in accordance with good professional practice, a practitioner must record in the notes the reasons for the variation from the guidelines."

[56] Competency 2.6 in the *Midwives Handbook for Practice* (2008), New Zealand College of Midwives.

193. The Referral Guidelines did not define when the second stage of labour begins (ie, at full dilation or at active pushing), and it is evident from the Coroner's Inquest into the death of Baby A that there were differing opinions on this. I note that the Referral Guidelines, as amended in 2012, now provide that an LMC must recommend to the woman that a consultation with a specialist is warranted when there has been a "prolonged *active* second stage of labour" (my emphasis), which is described as "[greater than] 1 hour of active pushing with no progress for multipara".

194. I consider that Ms B should have consulted with a specialist and referred Mrs A to the hospital sooner. This view is based on a number of considerations which include, but is not limited to, the direction set out in the Referral Guidelines. In particular:

- Mrs A was fully dilated from at least 10am, possibly earlier. She had the urge to push and was pushing involuntarily until Ms B advised her not to. At that time, the presenting part of the baby was documented to be at the spines (station 0). This represents a period of at least two hours and 45 minutes since it was identified that Mrs A was fully dilated with an urge to push and when she was transferred to the hospital.
- Mrs A commenced active pushing at 11am.
- Mrs A had experienced a previous difficult labour requiring a forceps delivery.
- The baby was in a posterior position.
- A vaginal examination at 11.15am identified that the fetal head was still at the spines.
- A further vaginal examination at 11.45am identified that the anterior fontanelle was felt "at 2 o'clock". Ms Smith advised me that if the anterior fontanelle is felt on vaginal examination at that stage, it would generally indicate a deflexed occipito-posterior position, and would fit the clinical picture of no or slow descent in the second stage of labour.
- At 12pm, an hour after Mrs A had commenced active pushing, Ms B identified that there had been no further descent of the baby. Mrs A's contractions were still three to four every ten minutes and lasting 60 seconds. Mrs A was exhausted, and feeling faint. At that time, Ms B advised Mrs A that if the baby had not been delivered by 12.30pm then they would transfer her to hospital. Although the Referral Guidelines required Ms B to recommend to Mrs A that a consultation with a specialist was warranted in the case of a second stage of labour longer than one hour with no progress, Ms B did not make such a recommendation to Mrs A, even though Mrs A had been fully dilated with an urge to push for two hours, and actively pushing for one hour.
- Ms B was unable to hear the fetal heartbeat at 12.15pm, or at any time prior to Mrs A's transfer to the hospital at 12.45pm. As noted by Ms Smith, "If a practitioner can not hear a fetal heart rate in the second stage of labour and birth is not imminent then urgent action is required." Unless birth is imminent, then any failure to hear the fetal heart rate should be acted on.

- Ms B called the ambulance and the hospital at 12.30pm, one and a half hours after Mrs A had commenced active pushing.

195. In my view, having regard to the full clinical picture (as set out above), Ms B failed to exercise reasonable care and skill by not recognising that consultation with, and/or referral to, a specialist was warranted sooner than 12.30pm. While the Referral Guidelines allow for practitioners to make clinical judgements depending on each situation, Ms B did not document a reason for not complying with those guidelines. I accept Ms Smith's advice that, at 11.45am when it was discovered that the baby was in a deflexed OP position, a referral was warranted. At the latest, I consider that Ms B's decision not to consult with a specialist at least at midday, an hour after active pushing, was inappropriate in light of that full clinical picture. It appears that Ms B failed to recognise that Mrs A's labour was deviating from normal,[57] and that specialist input was required.

196. I find that Ms B breached Right 4(1) of the Code for failing to consult a specialist and/or transfer Mrs A to secondary care in a timely manner.

Care provided by Ms B at the hospital — Breach

Failure to clarify responsibilities for care

197. Professional standards provide that a midwife is required to ensure that, in situations where another dimension of care is needed, negotiation takes place with other care providers to clarify who has the responsibility for the care.[58]

198. There is nothing documented (either contemporaneously or retrospectively) to indicate that there had been a transfer or handover of Mrs A's care to secondary services when Mrs A arrived at the hospital.

199. In my view, it was unwise for Ms B to assume that care would be automatically handed to the obstetric team on her arrival at the hospital. According to the Referral Guidelines, a transfer of midwifery care to hospital midwives is not automatic. The Coroner noted that care can only transfer once there has been a clear understanding established between the Lead Maternity Carer, the secondary midwife and the woman concerned. I agree with the Coroner. Ms B should have discussed this directly with Mrs A, Ms H, and the obstetric team, as required by the Referral Guidelines, and she failed to do so.

200. There is no documentation that care was transferred to the hospital midwives when Ms B arrived at the hospital with Mrs A, and therefore midwifery responsibility for Mrs A's care remained with Ms B at that time.

201. In response to the provisional report, Ms B accepted that it was her responsibility to ensure that care had been handed over.

[57] Standard Six of the Standards of Midwifery Practice (2008) provides that the midwife "identifies deviations from the normal, and after discussion with the woman, consults and refers as appropriate".
[58] Standard Seven of the Standards of Midwifery Practice (2008).

202. I find that Ms B breached Right 4(1) of the Code for failing to clarify who was responsible for Mrs A's ongoing care at the hospital.

Information provided to hospital staff

203. Ms B phoned the hospital at 12.30pm to advise that she was transferring Mrs A for failure to progress. She advised that Mrs A's membranes had ruptured spontaneously at midnight, that she was fully dilated at 10.15am, and that the fetal heart was heard.

204. The coordinating midwife, Ms H, recalls being advised that Mrs A was at term with her second baby, had had a previous forceps delivery, that Mrs A's membranes had ruptured at midnight, and that Mrs A had been fully dilated since 10.15am but had failed to progress.

205. Ms B said that she provided Dr C with a handover history "with what had happened"; however, in response to the provisional report, Ms B advised that she does not recall providing information about maternal observations or the fetal heart rate. I accept Dr C's evidence that that information was limited to the fact that Mrs A had been fully dilated since 10am and had been actively pushing from 11am.

206. In response to the provisional report, Ms B submitted that some clinical notes were available at transfer to hospital, as her midwifery notes were sitting on the desk. There remains no evidence that those notes were provided to Dr C for the purposes of her assessment of Mrs A, or brought to Dr C's attention. In addition, as noted below, I have concerns about the adequacy of Ms B's documentation of her assessments and care of Mrs A and the fetal heart rate.

207. I am concerned that Ms B did not provide Dr C with sufficient information about Mrs A's history and the progress of her labour to assist Dr C with her assessment of Mrs A. In particular, Dr C was not provided with information about the fetal heart rate prior to admission, was given no information about maternal observations, was not informed that Mrs A may have been fully dilated earlier than 10am, was not advised about Mrs A's previous difficult labour and delivery, and was not provided with any clinical notes. In my view, that was crucial information that Ms B should have provided to Dr C, to inform Dr C's assessment of Mrs A and to ensure adequate continuity of care was provided to her.

208. I find that Ms B breached Right 4(1) of the Code for failing to provide adequate handover information about Mrs A's history and labour to the hospital staff.

Monitoring of Mrs A and the fetal heart rate at hospital

209. Following her review of Mrs A at 1.15pm, Dr C instructed Ms B and Ms H to take basic observations, insert an IV luer, and commence IV resuscitation. Dr C also requested that the midwives continually monitor the baby's heart rate and that they contact her if anything did not go to plan.

210. Ms B remained Mrs A's LMC, was aware of Dr C's instructions and, in my view, had ultimate responsibility to continue caring for, and monitoring, Mrs A in accordance with her responsibilities as LMC and Dr C's instructions. I consider that she failed to

meet her responsibilities in that regard. In particular, as noted by Ms Smith, the CTG recording was abnormal and Ms B failed to act on that, in particular, by advising Dr C and requesting a further urgent review. Ms B failed to advise Dr C about the CTG trace even though she spoke to Dr C at 1.45pm when she requested Dr C's approval for an epidural for Mrs A. In addition, Ms B did not take Mrs A's blood pressure until 2.20pm, at which point it was recorded as low at 112/64.

211. Ms B failed to recognise Mrs A's deteriorating condition and the poor fetal heart rate. She failed to coordinate care with the obstetric team and ensure that Dr C was appropriately informed about Mrs A's condition and the fetal heart rate.

212. In response to the provisional report, Ms B accepted that she did not recognise the abnormal CTG trace.

213. I find that Ms B breached Right 4(1) of the Code for failing to monitor Mrs A and the fetal heart rate adequately at the hospital.

Documentation — Breach

214. A midwife is required to provide "accurate and timely written progress notes and relevant documented evidence of all decisions made and midwifery care offered and provided".[59]

215. Clinical records underpin safe, effective, and timely clinical practice, and are essential to enable other providers to provide consistent and appropriate care. For these reasons, the importance of accurate and full clinical records cannot be overstated.

216. I accept Ms Smith's advice that Ms B's documentation of her care of Mrs A was poor, and a major departure from accepted standards of practice. For example:

- There was a lack of documentation in relation to Ms B's assessment of Mrs A at 4am, including no documentation of Mrs A's emotional state and no documentation of the discussion around the administration of pethidine or the decision to send Mrs A home.
- All recordings of the fetal heart rate between 11am and 12.15pm at the clinic are expressed as "FHH" with only one episode of a rate recorded at 11.45am as 136bpm. Recording the heart rate in this way meant that the variability of the fetal heart rate was not evident from the documentation.
- Ms B's documented assessments of Mrs A between 11am and 12.30pm provided limited information about the nature of her assessments and her assessment findings. For example, at 11.15am the notes state that the fetal head was still at the spines. This could have been determined only through a vaginal examination, but a vaginal examination is not documented. The same applies at 11.45am, when

[59] Competency 2.16 of the *Midwives Handbook for Practice* (2008), New Zealand College of Midwives. Standard Seven of the Standards of Midwifery Practice (2008) also required the midwife to "clearly [document] her decisions and professional actions".

the notes state that the anterior fontanelle was felt, which would mean another vaginal examination was performed at that time, although that is not documented.

- There is no documentation of the reasons for Ms B's variation from the referral guidelines, as required by those guidelines.
- There is no contemporaneous documentation of Ms B's assessment of, and care of, Mrs A at the hospital, including the information that Ms B gave to staff at the hospital about the history of Mrs A's labour.

217. Ms B's failure to maintain a comprehensive clinical record meant that Dr C and the staff at the hospital were not privy to significant clinical information, and this in turn impacted on the continuity of care Mrs A received at the hospital.

218. In response to the provisional report, Ms B accepted responsibility for her poor documentation in this case.

219. I find that Ms B breached Right 4(2) of the Code for failing to adequately document her assessments and care of Mrs A and the fetal heart rate.

Conclusion

220. In my view, Ms B failed to provide services with reasonable care and skill to Mrs A. In my view, Ms B breached Right 4(1) of the Code for:

- failing to assess and treat Mrs A adequately at the clinic from 4am to 6am;
- sending Mrs A home against her wishes and when it was not clinically appropriate to do so;
- failing to adhere to the clinic's pethidine policy and to monitor and assess Mrs A and the baby adequately before and after the pethidine was administered;
- failing to monitor Mrs A adequately at the clinic between 11am and 12.45pm;
- failing to monitor the fetal heart rate adequately at the clinic between 11am and 12.45pm;
- failing to consult a specialist and/or transfer Mrs A to secondary care in a timely manner;
- failing to clarify who was responsible for Mrs A's ongoing care at the hospital;
- failing to provide adequate handover information about Mrs A's history and labour to the hospital staff;
- failing to monitor Mrs A's condition adequately at the hospital; and
- failing to monitor the fetal heart rate adequately at the hospital.

221. Ms B breached Right 4(2) of the Code for failing to adequately document her assessments and care of Mrs A and the fetal heart rate.

222. Ms B's departures from the accepted standard were severe and repetitive. In my view, Ms B let Mrs A down significantly.

223. In my view, Ms B also failed to work in partnership with Mrs A and failed to discuss with her important aspects regarding her care and treatment. In particular, Ms B did not tell Mrs A that she was a newly graduated midwife or inform her of her lack of experience. In my view, that is information that a reasonable consumer, in Mrs A's circumstances, would have wanted to know. Ms B also failed to have a discussion with Mrs A as to whether she wanted to be transported to the clinic or the hospital after her assessment at home at 10am. I recommend that Ms B carefully reflect on how she let Mrs A down in regard to these, and the other, aspects of her care.

224. I also note with concern that Ms B signed the clinic orientation checklist with all tasks marked as completed on 17 December 2008, including that she had read the clinic protocols. During the Coroner's Inquest, Ms B admitted that she did not read the policies that she had agreed to follow when she signed the access agreement with the clinic. It was Ms B's professional responsibility to truthfully sign her orientation checklist, and her failure to do so reflects poorly on her professionalism as a registered midwife.

Opinion: The Clinic — No breach

225. Ms B was a community-based midwife with an access agreement with the clinic. In this case the clinic was an employing authority for the purposes of the Health and Disability Commissioner Act 1994 (the HDC Act).

226. Under Section 72(3) of the HDC Act, employing authorities are vicariously liable for any breach of the Code by an agent. Under Section 72(5) of the Act it is a defence for an employing authority to prove that it took such steps as were reasonably practical to prevent the act or omission of employees who breached the Code.

227. Ms B's access agreement with the clinic required her to comply with the clinic policies.

228. I accept Ms Smith's advice that the relevant policies and procedures were in place at the clinic at the time, but were not adhered to by Ms B.

229. It is not enough for an employing authority such as the clinic to have policies and procedures in place; it also needs to robustly orient staff and community-based midwives to those policies and procedures. In addition, the clinic needs to ensure a culture of compliance with its policies and procedures by all midwives who use its facilities. Without compliance, policies become meaningless. Accordingly, the clinic must take responsibility for ensuring that appropriate care is provided by its staff and midwives with access agreements. For example, the clinic should have a mechanism in place (such as regular audit) to ensure ongoing compliance with those policies and

procedures, so that it can be satisfied that consumers receiving services in its facility are provided with care that accords with the requirements the clinic places on those using its facility.

230. Ms B signed the clinic orientation checklist with all tasks marked as completed on 17 December 2008, including that she had read the clinic protocols; however, during the Coroner's Inquest, Ms B admitted that she did not read the policies that she had agreed to follow when she signed the access agreement with the clinic.

231. In these circumstances, I consider that Ms B's breaches of the Code were due to her individual clinical failings, for which the clinic is not liable. However, I recommend that the clinic reflect on my comments about robust orientation to, and monitoring of compliance with, its policies and procedures.

Opinion: Dr C

Assessment — Breach

232. Dr C reviewed Mrs A at 1.20pm. Dr C was in the first year of the RANZCOG[60] specialist training programme. She had sufficient experience and knowledge to recognise what was required of her in terms of her assessment of Mrs A and responding to a prolonged second stage of labour and an abnormal CTG trace.

233. My expert advisor, Dr Bernadette White, stated that when Dr C assessed Mrs A, she should have assessed her clinically and established a plan of management. Dr White stated:

> "As a minimum the assessment required her to take a brief history of her pregnancy and her labour up to that time, either on direct questioning of [Mrs A] or obtaining the information from her LMC, [Ms B]. Her clinical assessment needed to include knowing maternal observations, such as temperature, pulse and blood pressure, and abdominal palpation to assess the size of the baby and whether the fetal head was palpable. Assessment also required a vaginal examination to assess whether the cervix was fully dilated and the station and position of the baby's head. Assessment also needed to include an assessment of fetal wellbeing and this would be done by the cardiotocograph.
>
> … Having completed her assessment, I would expect that [Dr C] would then have made a management plan for [Mrs A]."

234. Dr C assessed Mrs A as fully dilated, contracting every three to four minutes, with the baby in a posterior position with his head just below the spines, and Dr C noted that clear liquor was draining. She attached a fetal scalp electrode, the trace of which showed a baseline pulse of 140bpm with a variability of 5–8bpm. Dr C's assessment

[60] Royal Australian and New Zealand College of Obstetricians and Gynaecologists.

of the trace was that it did not give a reassuring picture, but that it was still within normal limits.

235. I accept Dr White's advice that Dr C's assessment of Mrs A at that time was not sufficiently thorough. As noted by Dr White, Dr C failed to recognise that the CTG was very abnormal. In addition, it is not clear that Dr C adequately understood the course of Mrs A's labour, including Mrs A's observations. I accept that Dr C did not receive adequate information from Ms B about the course of Mrs A's labour and her history, in that although she was informed that Mrs A was a multiparous woman who had been fully dilated since 10am and actively pushing since 11am, she was not informed that Mrs A had possibly been fully dilated before 10am, and she was not provided with information about the fetal heart rate prior to admission, maternal observations, or Mrs A's history with the difficult birth of her first son. However, it was Dr C's responsibility to ensure that she had adequate information on which to base her assessment and treatment plan for Mrs A. Dr C should have waited for the maternal observations to be taken before she completed her assessment, and should have questioned Ms B and Mr and Mrs A directly about the history of Mrs A's labour, including the fetal heart rate and previous maternal observations.

236. I find that Dr C breached Right 4(1) of the Code for failing to assess Mrs A adequately.

Treatment and plan — Breach

237. Dr C's plan was to wait for the baby to turn. She instructed the midwives to take basic observations, insert an IV luer and commence IV resuscitation, continually monitor the baby's heart rate, and to contact her if anything did not go to plan. Dr C was called to assess a patient on another ward. She planned to return to the birthing unit once Mrs A had been assessed, to review her for delivery.

238. I accept Dr White's advice that Dr C's plan of management to provide Mrs A with IV resuscitation was appropriate; however, it was not appropriate to allow Mrs A's labour to continue at that point, and Dr C should have made immediate plans for delivery. The reasons why it was not appropriate to allow Mrs A's labour to continue include:

- The CTG from 1.20pm showed the fetal heart rate at around 150bpm with "virtually no variability and no clear accelerations or decelerations". This was an abnormal pattern, which Dr White described as "subsequently becom[ing] worse in the sense that there is no variability and an increasing fetal tachycardia". As noted by Dr White, this suggests that the baby's well-being was compromised. Dr C failed to recognise that the CTG was very abnormal.

- At that time, Mrs A had been fully dilated for at least three hours and actively pushing for over two hours, but the baby remained undelivered. Dr White commented, "This is [a] very prolonged second stage of labour for a multiparous woman and the possibility of obstructed labour should have been considered."

239. As noted by Dr White, Dr C should have discussed Mrs A's presentation with a consultant following her assessment, and I note that a consultant, Dr K, was available in the hospital for such a discussion.

240. Dr C's treatment plan for Mrs A was inappropriate, and for that I find that she breached Right 4(1) of the Code.

Contact with Ms B about epidural — Adverse comment

241. Ms B contacted Dr C at 1.45pm, to seek her approval for the epidural. Ms B did not discuss the CTG trace with Dr C at that time, and Dr C did not ask Ms B about the CTG trace because, in the absence of Ms B mentioning it, she "presumed that all was well". I consider that it was unwise for Dr C to make such a presumption, given what she knew about Mrs A's labour and the CTG trace when she reviewed it during her assessment at 1.20pm. In my view, Dr C should have specifically questioned Ms B about the CTG, Mrs A's condition, and the outcome of the assessments she had directed the midwives to undertake before approving any further medical intervention, such as an epidural. Dr C's actions contributed to the poor standard of care provided to Mrs A.

Dr C's subsequent care and treatment — No breach

242. As noted by Dr White, it appears that Dr C appropriately sought assistance from the consultant, Dr K, after being advised that the CTG was abnormal and that Mrs A was hypotensive. Dr C and Dr K both attended promptly at 2.25pm. I accept that appropriate actions were taken at that time in transferring Mrs A to theatre for a Caesarean section, and that Dr C provided appropriate and reasonable care from that time.

Conclusion

243. In my view, Dr C did not assess Mrs A adequately, in that she did not ascertain Mrs A's observations, or obtain adequate information about Mrs A's labour and history during the course of her assessment. Dr C also failed to recognise that the CTG was abnormal, or to adequately consider the length of the second stage of Mrs A's labour. Accordingly, her treatment plan was inappropriate, in that she should not have allowed Mrs A's labour to continue under those circumstances. At the least, Dr C should have discussed Mrs A's situation with the consultant, Dr K. I accept Dr White's advice that these were moderate departures from the accepted standard of care. In these circumstances, Dr C failed to provide services to Mrs A with reasonable care and skill, and breached Right 4(1) of the Code.

Opinion: Waikato District Health Board

244. Waikato DHB had an obligation to provide Mrs A with appropriate care that complied with the Code. It may be held directly liable for any failure to meet this duty. The Waikato DHB may also be held vicariously liable for not taking all reasonably

practicable steps to prevent actions or omissions by its employees found to have breached the Code. At the time of these events, Dr C was an employee of the Waikato DHB.

Obstetric care — No breach

245. In this case, Dr C has been found to have breached Right 4(1) of the Code. At the time of these events, Dr C was a first-year trainee with RANZCOG. She was the only registrar on duty from 8am to 10pm and, with the assistance of one house officer, was covering acute patients in the delivery suite, the Women's Assessment Unit, and gynaecological admissions to the emergency department. She was also providing inpatient care to patients in the gynaecology, antenatal, and postnatal wards. However, there is no evidence that Dr C's workload was excessive, or that she did not have adequate support from Waikato DHB to perform her job on that day.

246. I consider that, although Dr C was in the first year of the RANZCOG specialist training programme, she had sufficient experience and knowledge to recognise what was required of her in terms of her assessment of Mrs A and responding to a prolonged second labour and an abnormal CTG trace. In particular, Dr C should have recognised the seriousness of Mrs A's presentation, and the need to discuss her presentation with the consultant. The consultant was readily available for such a discussion.

247. In these circumstances, I find that Waikato DHB is not vicariously liable for Dr C's breaches of the Code.

Midwifery care — Breach

248. In my view, the hospital midwifery staff did not provide adequate care to Mrs A. However, those errors occurred in the context of deficiencies in the systems operating at Waikato DHB and, accordingly, I consider that Waikato DHB bears ultimate responsibility for failing to provide an appropriate standard of midwifery care to Mrs A.

249. The areas of hospital midwifery care provision that I am particularly concerned about are as follows.

250. Ms B transferred Mrs A to hospital for consultation with a specialist due to Mrs A's failure to progress in the second stage of labour, which is a referral pursuant to the Referral Guidelines. Ms H advised that her understanding is that until tertiary care is required, or the LMC requests handover of care to DHB staff, the LMC remains in her role of caring for the woman. This was not Ms B's understanding, which was that, once Mrs A transferred to hospital, responsibility for Mrs A's care also transferred to the hospital obstetric team. The Referral Guidelines that applied at the time state:

> "Where a consultation occurs, the decision regarding ongoing clinical roles/responsibilities must involve a three way discussion between the specialist, the Lead Maternity Carer and the woman concerned … The specialist will not automatically assume responsibility for ongoing care. This will depend on the clinical situation and the wishes of the individual woman."

251. The focus of the Referral Guidelines is on a three-way conversation, and I agree with the Coroner that "[c]are can only transfer once there has been a clear understanding established between the Lead Maternity Carer, the secondary midwife and the woman concerned". I consider that, where the LMC or the hospital midwives have any doubt as to whether care is to be transferred to the hospital midwifery team, those care providers must be proactive in asking the question. In this case, given the circumstances surrounding Mrs A's transfer to the hospital, including the reason for her referral, her condition, the involvement of the hospital obstetrics team in Mrs A's care, and Ms B's failure to initiate the three-way discussion required by the Referral Guidelines, the hospital midwives should have specifically clarified with Ms B whether she was intending to hand over responsibility for Mrs A's care. The failure of any the hospital staff to ask the question and clarify whether it was Ms B's intention to transfer care was a missed opportunity, and meant that Mrs A's transfer to secondary services was poorly coordinated.

252. I note that the hospital policy requires that care must transfer to the hospital midwifery staff for the administration of an epidural if the LMC is not certified in that procedure. Ms B obtained Dr C's approval for the epidural at 1.45pm, the anaesthetist was called to administer the epidural at 2pm, and the epidural was administered at 2.15pm. Hospital midwife Ms J was called to assist with the epidural, as Ms B was not certified in the procedure. The hospital midwives should have taken responsibility for the care of Mrs A from that time, although no transfer of care is documented.

253. The interactions between Ms B as LMC and the hospital midwifery staff were suboptimal. Waikato DHB should have ensured that it had clear processes in place to ensure the smooth transition of women from primary to secondary care, including in accordance with its own policy.

254. In addition, the lack of clarity between the LMC and the hospital midwives as to which midwife had overall midwifery responsibility for Mrs A's care, meant that the urgency of Mrs A's condition and the non-reassuring fetal heart rate was not identified in a timely manner by the hospital midwives. Although I accept that Ms B remained the LMC and midwife ultimately responsible for Mrs A's care until the epidural was administered at 2.15pm, the hospital midwives were in the room and actively involved in Mrs A's care and treatment. In those circumstances, the hospital midwives also had a duty to provide Mrs A with services of an appropriate standard, and to identify and respond to the deterioration in her condition and the non-reassuring fetal heart rate. The hospital midwives failed to do so and, in my view, there was a missed opportunity by the hospital midwives to identify that Mrs A was in need of an urgent obstetric review prior to when the call was made by Ms B to Dr C at 2.25pm.

255. Mrs A received poor midwifery care from the hospital midwives while she was in labour at the hospital, for the reasons set out above. In these circumstances, Waikato DHB did not provide Mrs A with services with reasonable care and skill, and breached Right 4(1) of the Code.

256. I note that, since these events, Waikato DHB has taken a number of steps to improve its services in this regard, including amending the telephone record form that is completed when a transfer to secondary care is made, instituting a new Transfer of Care policy, and implementing the Maternity Transfer of Care Procedure.

Other comment

257. I remain thoughtful about the level of support and supervision provided to newly graduated midwives. I intend to engage with the Midwifery Council of New Zealand, the New Zealand College of Midwives, Health Workforce New Zealand, and the Health Quality and Safety Commission on these issues.

Recommendations

258. I recommend that Ms B:

- Provide a written apology to Mr and Mrs A. The apology is to be sent to HDC by one month from the date of this report, for forwarding to Mr and Mrs A.
- Reflect on her failings in this case, including her documentation and, within one month from the date of this report, provide a written report to HDC, the Midwifery Council of New Zealand, and the New Zealand College of Midwives, on her reflections and the changes made to her practice as a result of this case.
- Establish a three-year mentoring and continuing education plan with the Midwifery Council of New Zealand and the New Zealand College of Midwives, and report to HDC the substance of the plan and the arrangements made to ensure compliance with that plan, within two months from the date of this report.
- Undertake to complete the above mentoring and continuing education plan before she returns to work as a self-employed community-based midwife, if at all.

259. I recommend that the clinic:

- Carry out an audit of compliance with their policies and procedures by midwives using the clinic facilities, and provide HDC with the outcome of that audit by one month from the date of this report.

260. I recommend that Dr C:

- Provide a written apology to Mr and Mrs A for her breaches of the Code. The apology is to be sent to HDC by one month from the date of this report, for forwarding to Mr and Mrs A.

- Provide a written report to HDC and the Medical Council of New Zealand of the training she has done in interpreting CTGs since the time of these events.

261. I recommend that Waikato DHB:

- Provide a written apology to Mr and Mrs A for its breach of the Code. The apology is to be sent to HDC by one month from the date of this report, for forwarding to Mr and Mrs A.

- Carry out an audit of compliance with its new Transfer of Care policy, Admission Discharge and Transfer policy, Maternity Transfer of Care procedure, CTG credentialling process, and Fetal Heart Monitoring Passport, and provide HDC with the outcome of those audits by three months from the date of this report.

Follow-up actions

262. - Ms B will be referred to the Director of Proceedings in accordance with section 45(2)(f) of the Health and Disability Commissioner Act 1994 for the purpose of deciding whether any proceedings should be taken.

- A copy of this report will be sent to the Coroner.

- A copy of this report with details identifying the parties removed, except the experts who advised on this case and the Waikato District Health Board, will be sent to the Midwifery Council of New Zealand and the New Zealand College of Midwives, and they will be advised of Ms B's name.

- A copy of this report with details identifying the parties removed, except the experts who advised on this case and the Waikato District Health Board, will be sent to the Medical Council of New Zealand and the Royal Australian and New Zealand College of Obstetricians and Gynaecologists, and they will be advised of Dr C's name.

- A copy of this report with details identifying the parties removed, except the experts who advised on this case and the Waikato District Health Board, will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A — Independent midwifery advice to the Commissioner

The following expert advice was obtained from midwife Ms Rachel Smith:

"I have been asked to provide an opinion to the Commissioner on Case Number C12HDC00876, and have read and agree to follow the Commissioners Guidelines for Independent Advisors.

Prior to the commencement of this report, I would like to acknowledge the tragic loss of [Baby A] and hope that the investigations and findings from this and other previous reports will be used to improve systems of care to prevent such situations occurring.

DETAILS OF THE EXPERT'S QUALIFICATION

My name is Rachel Mary Smith. I graduated as a Registered Nurse (Comp) New Zealand from the Taranaki Polytechnic in 1989 and as a Registered Midwife from the University of Western Sydney in 1996. I am registered as a midwife with the Nursing and Midwifery Board of Australia. I have practised as a midwife for more than 18 years in a variety of settings including as a core birthing unit midwife, a caseload midwife working from a birthing centre and as a midwifery academic. I continue to practice as a midwife across the full scope of practice. A short version of my CV is available at the end of this report.

I hold formal academic qualifications at Masters Level (Master of Midwifery (Hons) from UTS, 2010 and various postgraduate qualifications in teaching and learning).

My current role is as a Lecturer in Midwifery at the University of Technology, Sydney and as a Project Coordinator for the World Health Organisation Collaborating Centre. In addition to these roles, I continue as a clinical midwife (casual pool) at the Mater Hospital in Sydney. Up until last year (2012) I also provided caseload care for a number of women each year through the birth centre at St George Hospital, Sydney. I am an active member of the Australian College of Midwives and sit on a number of College committees including the Australian Midwifery Practice Review Committee. I am published (peer-reviewed) in the area of continuing professional development/competence and midwifery education and am the co-author of two Australian and New Zealand Midwifery textbooks.

MATERIALS REVIEWED AND FACTUAL FINDINGS

I base the factual findings on the information contained in the Letter of Instruction. I have cross referenced these facts with the following documentation provided for the purpose of this opinion:

1. NZ Primary Maternity Services Notice 2007 issued pursuant to section 88 of the Public Health and Disability Act 2000.

2. New Zealand Ministry of Health Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines).
3. New Zealand College of Midwives *The Midwives Handbook for Practice (2008 version).*
4. Letter of complaint from [Mr and Mrs A] and attachments, undated.
5. Letter from [Mr and Mrs A's lawyer], dated 13 May 2013.
6. Summary of interview between HDC and [Mr and Mrs A] on 7 March 2013
7. Statement from [Mrs A's] sister, [Ms G], undated.
8. Maternity Information Booklet for [Mrs A].
9. Response from [Ms B] and attached clinical records, dated 30 November 2012.
10. Response and attachments from [Ms B], dated 14 March 2013.
11. Report for the Coroner from [Ms B], undated.
12. Letter from HDC to then student midwife [Ms D], dated 9 April 2013, and her response received by email on 8 May 2013.
13. Response from the clinic and enclosures, dated 27 March 2013.
14. Information [the ambulance service] provided to the Coroner, dated 21 October 2010.
15. Statements to the Coroner from:
    a. Midwife [Ms F];
    b. [The Clinic's Clinical Manager];
    c. [The Clinic's Clinical Director];
    d. [The Clinic's staff midwife];
    e. [Hospital] midwife [Ms H];
    f. [Hospital] midwife [Ms J];
    g. Obstetric Registrar [Dr C];
    h. Obstetrician [Dr K]; and Anaesthetic Registrar
    i. [Dr I].
16. Transcripts of evidence from the Coroner's Inquest relating to evidence given by:
    a. [Mrs A];
    b. [Mr A];
    c. [Ms B];
    d. [Ambulance officer];
    e. Student midwife [Ms D];
    f. Hospital midwife [Ms H];
    g. Hospital midwife [Ms J];
    h. [The Clinic's staff midwife];
    i. [The Clinic's Clinical Director];
    j. Registrar [Dr C]; and,
    k. Consultant [Dr K].
17. Agreement between Waikato DHB and [the clinic].
18. Response and attachments from obstetric consultant [Dr K], dated 20 March 2013.
19. Response from [Dr C], dated 12 March 2013.
20. [Mrs A's] clinical records from [the hospital].

Factual Summary of Events

[Redacted for brevity.]

Expert Advice Required

The HDC have posed a number of questions in regard to the care provided and received in this case and these will be answered as requested through the questions numbered and alphabetised below:

1. Please comment generally on the standard of care provided by [Ms B].
2. Please comment generally on the standard of care provided by [the clinic].
3. What standards apply in this case?
4. Were those standards complied with?

These questions are answered through the remainder of the document. I note there are no questions regarding the initial care provided at [the hospital] which upon review of the documents in this case seems warranted.

Antenatal care

5. The adequacy and appropriateness of the care [Ms B] provided to [Mrs A] during the antenatal period. Please include comment on:

(a) The adequacy of the advice [Ms B] gave [Mrs A] about posterior births and second labours.

The advice [Ms B] gave in regard to the progression of labour and second births was adequate and evidence based and would not differ to the advice many midwives would give in this situation.

(b) The adequacy of the care planning for [Mrs A's] labour, given her obstetric history.

Given that a number of women experience longer labours and difficult births in first births the adequacy of care planning and advice in regard to planning for this second birth was reasonable. It appears that the Antenatal Care Plan document was updated on the ([the day] [Ms B] assumed LMC care of [Mrs A]) where labour and birth care was discussed and documented that the plan for labour and birth place was [the clinic] and transfer if required would be to [the hospital]. This care plan is not signed by either [Ms B] or [Mrs A]. It is difficult to determine the extent of the discussion from the documentation but this action meets the criteria set out in the Midwives handbook (2008) page 31 under the heading The fourth decision point in pregnancy — 36 weeks. In saying this, I note [Ms B] has reflected on her actions in this regard and has recognised that a more in-depth discussion and history taking would have been beneficial as she took over the LMC role at a late stage in pregnancy.

The late and unexpected change in care providers (LMCs) will have impacted on the woman–midwife partnership and puts both [Ms B] and [Mrs A] in a difficult

situation where a relationship of partnership and trust needed to be established in a short and emotionally challenging period of time.

[Ms B] recognised [Mrs A's] increased levels of anxiety around the labour and birth and completed a referral to the Women's Assessment Unit. It appears from the referral form that the purpose of the assessment at this unit was anxiety in regard to fetal positioning (occipito-posterior) and the effect this may have on labour and birth. There is also mention of being postdates (overdue) so it is not clear if the purpose of the assessment was mental health assessment or management of postdates assessment (or both). In either case, the assessment was clinically relevant.

(c) The adequacy of [Ms B's] monitoring of [Mrs A] between [the time she became [Mrs A's] LMC and the time she gave birth].

The provision of antenatal care by [Ms B] meets the required Standards of Midwifery Practice (Midwives Handbook 2008). It appears [Ms B] attended to midwifery care at recommended intervals, documented the care and made appropriate decisions in partnership with [Mrs A].

Management of Labour prior to transfer to Hospital

6. The adequacy and appropriateness of the care [Ms B] provided to [Mrs A] between 4am and 6am at [the clinic]. Please include comment on:

(a) [Ms B's] examination of [Mrs A] at 4am.

A factual discrepancy exists here and each account of events will be commented on separately.

<u>[Ms B]</u>
Due to a lack of documentation it is difficult to determine if a full assessment of [Mrs A] took place. [Ms B] states [Mrs A] was experiencing very strong contractions 2–4 minutes apart lasting 60 seconds (documented). This type of contraction pattern would usually indicate established labour. In addition, [Ms B] has stated [Mrs A] is using Entonox (gas and air) 'as she needs it'. It is not clear if this means 'as she needs it for pain' or 'as she needs it' meaning not using it all the time. It is also documented that [Mrs A] is employing another pain relieving method the Trans cutaneous Nerve Stimulator (TENS) commonly used for assisting with back pain or contraction pain during labour.

There is no documentation of maternal vital signs or abdominal palpation which would usually be attended and be used to inform midwifery clinical decision making at this time. Initial assessment should have included blood pressure; pulse; temperature; urinalysis; vaginal loss; abdominal palpation; emotional and behavioural responses (Midwives Handbook 2008; NICE 2007).

A vaginal examination was attended and this is reasonable to assess the progress or establishment of labour. Vaginal examination alone should not be used to

diagnose labour but adds to the clinical picture. Whilst diagnosis of labour is contentious and progress of labour is unpredictable a diagnosis of early labour in this situation was not unreasonable as the level of cervical dilatation generally associated with established labour (approx. 3–4cm) was not yet evident (Pairman et.al, 2006).

However, in this situation, a woman having a second baby presenting with 2–4 minutely very strong contractions, using pain relieving measures and with a cervix that is central, very thin, 2cm dilated and a presenting part (head) that is at station –1 would give a clinical picture of possible establishing labour. Although classic definitions state regular painful contractions and 4 cm or more dilation as established labour, women having second or subsequent babies can dilate very rapidly once the cervix thins (effaces). Also, it appears that [Mrs A] and her support people made it clear that they were seeking continuous support at this time. A woman seeking continuous support is discussed in the Midwives Handbook as being the third decision point in labour and should be the start of the full realisation of the working partnership between the woman and the midwife (Midwives Handbook for Practice, 2008).

There is no documentation as to the emotional state of [Mrs A] during this time except that [Ms B] recalls that [Mrs A] could talk freely.

[Mrs A]
The first area of contention appears to be the possible use of the term 'floating' in regard to the position of the head on vaginal examination.[61] If the head was as [Ms B] documented (at station –1), it would not have been referred to as 'floating' as this suggests the fetal head was not fixed in the pelvis. It is therefore unlikely that the term 'floating' in relation to the fetal head would have been used. In addition, [Ms B] submitted that there were no membranes (bag of waters) or caput and moulding (changes to the fetal head shape or consistency) felt on examination. This would again suggest the fetal head was felt and it is difficult to feel this if the head was floating.

Another contentious area is the frequency of contractions. [Ms B] has documented that the contractions were 2–4 minutely and very strong on palpation.

[Mrs A] makes it very clear that at this time they were seeking continuous support and states that if they could not receive it at [the clinic] then they would seek this at [the hospital]. The couple give a strong indication they were 'not allowed to stay' despite requesting this and requiring additional pain relieving measures. It is my opinion that not providing [Mrs A] with requested care or negotiating a mutually agreed alternative constitutes a breach of the Standards of Midwifery

[61] As noted by the couple in their response to the provisional opinion, Ms B did not use the term "floating" at the time of the vaginal examination at 4am; rather, she used the term "floating" to describe the position of the baby when she was advising the couple that Mrs A was not in established labour, that labour would last all day, and that the couple could not stay at the clinic.

practice and in particular Standard 2, page 16, and in my opinion this was a major failure of the expected standard.

(b) The recording of the fetal heart rate as 110–118 bpm with no decelerations taken with a hand held Doppler, including whether that is a normal fetal heart rate for early labour and whether a CTG should have been taken at that time.

A CTG is not recommended or supported in the evidence if there are no risk factors present (NICE, 2007). There were no risk factors present at the time of the initial assessment. Recording the fetal heart rate with a hand held Doppler at this stage is evidence based practice. A normal fetal heart rate is between 110 and 160 bpm. The fetal heart rate is documented at 0400hrs as 110–118bpm and is not documented again during this presentation.

(c) The decision to administer Pethidine and the circumstances surrounding the administration of Pethidine at 5:15am, including the lack of maternal or fetal observations taken prior to or following the administration of Pethidine.

There was a major failure to follow accepted practice and health service policy in relation to this issue. [The Clinic's] policy provided (The Waikato District Health Board guideline Sept 2007) clearly sets out the required actions for when Pethidine is to be prescribed and administered. Baseline observations are required (Blood pressure, pulse, respiratory rate, level of consciousness, oxygen saturations and pain assessment). These were not documented nor was a recording of blood pressure, pulse, respiratory rate or oxygen saturations, according to any evidence, attended to. It is unclear from the policy whether a baseline CTG is recommended or if the policy is referring to an existing CTG but the policy clearly states post administration a CTG should be attended for 30 minutes and removed if reassuring.

(d) Compliance with [the clinic's] policy regarding the administration of Pethidine.

[The Clinic's] policy was not attended to — see above.

(e) The decision to send [Mrs A] home at 6am on the basis of her condition at that time, the recent administration of Pethidine, and [Mrs A's] request to stay at [the clinic]. Please comment on this matter in the alternative (i.e. the adequacy and appropriateness of that decision based on [Mr and Mrs A's] recollections of [Mrs A's] condition at that time; the adequacy and appropriateness of that decision based on [Ms B's] recollection of [Mrs A's] condition at that time; and the adequacy and appropriateness of that decision based on what is recorded about [Mrs A's] condition at that time in the clinical records).

<u>The [couple's] Recollection</u>

The Midwives Handbook for Practice in both the documentation regarding the Standards for Practice and the Decision points for Midwifery Care clearly sets out the expectation that the midwife will work in partnership with the woman regarding decisions surrounding care and reach mutually satisfying solutions.

From the [couple's] recollections at this time this standard of care was not met. It appears from the [couple's] statements and from [Ms G] (sister and support person at the time of the admission to [the clinic]) that they requested continuous support and the opportunity to stay and these were declined. The [couple] and [Ms G] describe [Mrs A's] condition as one of experiencing a large amount of pain and difficulty with mobilising and transfer into the care (wheelchair and assistance required).

[Ms B's] Recollection

The admission documentation by [Ms B] is limited and does not record any of the discussions around the administration of Pethidine or the decision to go home. [Ms B's] recollection is that [Mrs A's] condition had not changed since arrival and that she could still talk normally and sit still. It is my opinion, that being able to talk and sit still, although useful indicators of potential progress of labour, need to be combined with the usual assessments of labour — observations of vital signs, palpation of uterine activity, level of pain and mechanisms for coping. There is a lack of documentation in regard to these.

It is my opinion that the decision to send [Mrs A] home at this time was a breach of the Standards for Midwifery Practice and did not follow the recommendations set out in the Decision points for Midwifery Care (Midwives Handbook for Practice, 2008). In my opinion this was a major failure of the expected standard.

(f) Whether maternal and/or fetal observations should have been taken, and an examination of [Mrs A] performed, prior to [Ms B] sending [Mrs A] home at 6am, particularly given that the previous examination had taken place at 4am, prior to the administration of Pethidine.

In line with the policies in place at [the clinic] both maternal and fetal examinations should have been attended and documented following pethidine administration. In my opinion, not to have attended to these required and standard observations was a major failure of the expected standard.

Had the Pethidine not been given and the diagnosis of early labour made, then it would be reasonable not to attend to a further vaginal examination prior to sending [Mrs A] home if she were thought to be in early labour.

If [Mrs A's]condition was as described by the [couple] and in part by [Ms B], the failure to meet the expected standard of care was in the giving of Pethidine, the lack of required observations, the lack of documentation and discharging home without mutual agreement on the decision.

(g) The frequency of fetal heart monitoring between 4am and 6am. Please comment on this matter in the alternative (i.e. the adequacy and appropriateness of the monitoring of the fetal heart rate based on [Mr and Mrs A's] recollection that it was listened to once using a hand held Doppler; the adequacy and appropriateness of the monitoring of the fetal heart rate based on [Ms B's] account that she would have listened to it both between contractions

for 45 seconds and then following contractions for at least 30 seconds and half hourly in the first stage; and the adequacy and appropriateness of the monitoring of the fetal heart rate based on what is recorded in the clinical notes).

As previously stated, had the diagnosis of early labour been made, without the complication of giving of Pethidine, then it would be reasonable practice to listen to the fetal heart rate on admission and determine [if] it was within the normal limits and then not listen again as most women in early labour would be at home and provided all was progressing well more regular listening to the fetal heart would commence once labour is established. However, it is standard practice that the fetal heart rate be listened to after any intervention, in this case following a vaginal examination and it appears this was not attended to. In addition, the policy on Pethidine administration sets out clearly that a CTG is required following the administration of Pethidine and this was not attended to.

In general, the documentation is sub-standard and the documentation of the fetal heart rate in this episode of care fails to meet the expected standard of care.

(h) The advice that [Mrs A] should not go to hospital at that time.

From the evidence supplied, the failure in this situation was to not meet the [couple's] expectation of continued support at this time, preferably at [the clinic]. Given that the [couple] felt so strongly about this that they were prepared to present to another facility to meet their needs is telling of what they were experiencing.

The lack of documentation regarding the discussion around the discharge home makes it difficult to assess but it is my opinion that if the [couple] were requesting continual support at this stage then that is what would be expected of a midwife–woman partnership (Midwives Handbook for Practice, 2008)

7. The adequacy and appropriateness of the care [Ms B] provided to [Mrs A] when she assessed [Mrs A] at home at 10am, including consideration given to the length of time [Mrs A] may have been fully dilated, the decision to transfer [Mrs A] to [the clinic] for the birth (as opposed to the other available options, including transfer to hospital), the advice not to push, and whether maternal observations should have been taken. Please provide your advice in the alternative, in particular:

   (a) The adequacy and appropriateness of the care based on [Mr and Mrs A's] recollections of events at this time, including that [Mrs A's] condition had not changed since she had left [the clinic] at 6am, that [Mrs A] was pushing with her contractions and [Ms B] instructed her to stop pushing, and that it was [Mrs A] who insisted on transfer by ambulance.

Once called back to the [couple] the adequacy of care was not unreasonable. [Ms B] assessed the situation, examined [Mrs A], found her to be fully dilated, advised

to stop actively pushing and arranged for her transfer. The contention around the means of transfer is difficult to determine but it would have been unusual to recommend a transfer in a private car at this stage in labour, particularly a second or subsequent labour as often the time from full dilation to birth of the baby is limited.

Given that progress had been made (full dilation) and the booking at [the clinic], it is reasonable for the transfer from home to be to [the clinic]. The lack of care in the active phase of labour is regrettable but the clinical decision at this point in time is a reasonable one. However, there should have been some acknowledgement that [Mrs A] may have been at full dilatation for an indeterminate period of time and this assessment (and all others made) should have been documented in the notes.

(b) The adequacy and appropriateness of the care based on [Ms B's] recollections of events at this time, including that [Mrs A] was not pushing, and that it was [Ms B] who considered that ambulance transport would be safer at that point.

As above and in addition, the evidence from [Ms B] would suggest that [Mrs A] was pushing — involuntary pushing has been noted in the statements from [Ms B].

8. The adequacy and appropriateness of the care [Ms B] provided to [Mrs A] at [the clinic] from her arrival at [the clinic] by ambulance at 11am until her transfer to hospital at 12:46pm. Please include comment on:

(a) The manner in which the fetal heart rate was monitored (i.e. with the CTG machine by holding it in place). Please advise whether the fetal heart rate would be audible to those present in the room when taken by using the CTG machine in this way, and the adequacy of ascertaining fetal heart rate variability when using the CTG machine in this way.

Although not the usual manner in which to listen intermittently to the fetal heart rate, it is possible to use the abdominal transducer on the CTG machine to listen to the fetal heart rate. The ability to hear the fetal heart rate in this manner would depend on the level of volume being used on the CTG machine. It would be usual practice to have this set at a level all in the room could hear as it is unreliable to use only the LED displayed numbers. Measuring variability would depend on the length of time the fetal heart rate was listened to. It is not usual practice to determine variability in this way. Variability is measured over a period of time and requires information regarding baseline and any accelerations and decelerations. If a midwife listens to the fetal heart rate and counts and records the rate as a range of baseline eg. 120–130bpm, then it could be argued that variability sits within this range. If the fetal heart rate is recorded as a single number, then variability is not evident in the documentation. All recordings of fetal heart rate during the admission at [the clinic] were expressed as FHH (Fetal Heart Heard) with only one episode of a rate recorded at 1145hrs @ 136bpm.

(b) The frequency of the monitoring of the fetal heart rate. Please provide your advice in the alternative (i.e. the adequacy and appropriateness of the monitoring of the fetal heart rate based on [Mr and Mrs A's] recollections; the adequacy and appropriateness of the monitoring of the fetal heart rate based on [Ms B's] recollections; and the adequacy and appropriateness of the fetal heart rate based on the recorded observations in the clinical records — please advise whether the documentation of the fetal heart rate was also appropriate).

[Mrs A's] Recollection — approximately twice
The adequacy of the auscultation of the fetal heart rate according to the [couple] does not meet the expected standard of care.

Student midwife's Recollections — approx. three times
The adequacy of the auscultation of the fetal heart rate according to the student midwife [Ms D] does not meet the expected standard of care.

[Ms B's] Recollections — every 5–10 minutes
The adequacy of the auscultation of the fetal heart rate according to [Ms B] does not meet the usual standard of care.

The evidence available at the time recommends listening to the fetal heart rate for at least one minute every five minutes during the second stage of labour (NICE, 2007; Pairman et.al, 2006).

(c) The adequacy and appropriateness of maternal observations taken over that period.

There are no documented maternal observations during this time. [Ms B] states she was not aware of the significantly raised pulse rate measured by the ambulance officer, but even so, [Ms B] documents at 1200 hours that [Mrs A] is feeling faint, and does not attend to maternal observations at this time. In my opinion this constitutes a major failure to meet expected standards.

(d) The length of the second stage of labour, the appropriateness and adequacy of [Ms B's] response to [Mrs A's] failure to progress, and whether [Ms B] should have consulted and/or referred [Mrs A] to secondary services sooner (please refer to [the clinic's] transfer policy and the Referral Guidelines when providing your advice). If you consider that [Ms B] should have consulted and/or considered referring [Mrs A] to secondary services sooner, please advise at what point you consider that would have been appropriate.

[Mrs A] was confirmed at full dilation at 1000hrs and the presenting part of the baby (head) was documented to be at the spines (Station 0). There is evidence from both [Mrs A] and [Ms B] that involuntary pushing was occurring at this time but this was actively discouraged. This is reasonable practice particularly as the plan was to birth in the birthing centre and not at home.

The next entry in the notes was at 1100hrs at [the clinic] which documents the commencement of active pushing. There appears to have been another vaginal examination at 1115 as the notes state fetal head still at spines and this could only be determined through vaginal examination but this is not documented. Again at 1145 the notes state anterior fontanelle felt at 2 o'clock. This would mean another vaginal examination was attended to at this time — there is no documentation of this and no mention of progress of the presenting part. If the anterior fontanelle is felt on vaginal examination at this stage it would generally indicate a deflexed occipito-posterior position. This would fit the clinical picture of no or slow descent in the second stage of labour. The midwifery actions of changing maternal position throughout this time are reasonable actions as this may encourage rotation and descent of the head.

It is my opinion, that at this point in time when it was discovered that the baby is in a deflexed OP position and diagnosed second stage was 1hr45mins, with a history of previous intervention for OP baby and a possibility that second stage could have occurred prior to the diagnosis of second stage referral would have been warranted. This referral occurred 45 minutes later which is not entirely unreasonable as midwifery actions were being undertaken to support progress (change of position).

The major failure to meet expected standards is the lack of maternal and fetal observations given the lack of progress and the potential that full dilation could have occurred much earlier than discovered. The lack of documentation continues to be a major failure in expected standards.

(e) The significance of the shape of [Mrs A's] abdomen, which was noted by a [clinic] staff midwife to be 'odd'.

'Odd' is difficult to interpret. Many women have non-ovoid or non-rounded shaped abdomens during pregnancy and in labour. In retrospect, this may be significant, as obstructed labour can present with a constricted ring in the middle of the abdomen. The shape may also have been caused by an OP presentation where the area from the umbilicus to the pubis is concave in appearance.

(f) The significance of any blood or brown liquid that remained on the birthing stool after [Mrs A] moved off it at 12:15pm.

It is very common in second stage of labour to have a bloody loss referred to as a bright bloody show. It can indicate full dilation and is not of significance at the time as is a normal labour event.

(g) The adequacy of [Ms B's] actions when she could not hear the fetal heart rate at 12:15pm.

The care provided here did not meet the expected standard of care. If a practitioner cannot hear a fetal heart rate in the second stage of labour and birth is not imminent then urgent action is required. It is true that as the baby descends deeply

into the birth canal then the fetal heart rate can be difficult to hear but unless birth is imminent (ie. Next contraction or two) then this should be acted upon.

9. The adequacy and appropriateness of the care [Ms B] provided to [Mrs A] at [the hospital]. Please include comment on:

    (a) What information would reasonably be expected of a midwife to provide to secondary services when handing over the care of a woman in these circumstances, and whether you consider that [Ms B] provided [the hospital] staff with sufficient information for the ongoing management of [Mrs A].

From the evidence it appears the process of transfer of care was not clear and it is difficult to determine as there is a significant lack of documentation during this time. If care was being handed over to the next level as would be reasonable in this situation then a full handover of the events leading to the transfer would be expected. [Ms B] informed the staff of [the hospital] via phone of the situation in brief. I am unsure if it is usual process of if the urgency of the situation was conveyed as there appears to have been an immediate review of [Mrs A] on admission to [the hospital]. This would indicate that [Ms B] provided enough information to ensure timely assessment occurred.

    (b) The adequacy of [Ms B's] care of [Mrs A] at [the hospital] if she had handed over care to secondary services.

The adequacy of care is reasonable if [Ms B] had handed over to [the hospital] staff. She remained in attendance, identified an opportunity to develop her skills with support from [the hospital] staff and continued to provide some care. In this situation, if a process of accreditation was being supervised then generally the person undertaking the accreditation would be focussed on that task and another staff would be attending to other cares, so if [Ms B] was being assessed around epidural assistance, then it is reasonable to say that another midwife should have been ensuring all other cares were being attended to. The lack of documentation is again a major issue here.

    (c) The adequacy of [Ms B's] care of [Mrs A] at [the hospital] if she had not handed over care to secondary services, including her communication with [the hospital] staff and her ongoing monitoring of the fetal heart rate and [Mrs A].

If care had not been handed over then the adequacy of care does not meet the expected standard. The CTG recording was abnormal and not acted upon (this is also [a] major failure on behalf of the [hospital] staff). Contemporaneous documentation was almost non-existent and the deterioration in [Mrs A's] condition was not recognised in a timely manner.

Documentation

10. The adequacy and appropriateness of [Ms B's] documentation of her care of [Mrs A] in the antenatal period, and during [Mrs A's] labour. Please comment

specifically on the adequacy of the recordings of the fetal heart rate and maternal observations.

The documentation in the antenatal period in most cases meets expected standards of care but for the remainder of the care episode it was poor and a major failure in meeting expected standards of practice. [Ms B] has identified this on a number of occasions.

[The Clinic]

11. The adequacy and appropriateness of the care provided to [Ms B] by [the clinic], including the adequacy of the relevant policies and procedures in place at [the clinic] at the time.

It appears that relevant policies and procedures were in place at [the clinic] but were not adhered to.

Other matters

12. Are there any aspects of the care provided by [Ms B] and/or [the clinic] that you consider warrant additional comment?

Aspects of care provision and adequacy have been detailed throughout the report."

Further advice

Ms Smith was asked to provide additional advice on when bladder management is recommended during labour, and whether [Ms B's] care of [Mrs A] was in accordance with accepted standards for bladder management. Ms Smith provided the following additional advice on 10 October 2013:

"Bladder care in labour (this involves encouraging frequent voiding/emptying) and mostly a baseline urinalysis is recommended as a part of the routine care/assessment in labour (Midwifery preparation for Practice — Pairman et al 2006; NICE 2007). Assessment of elimination would usually be attended to throughout labour and in particular if there was a suspected delay at any stage. There is no recommended time frames but the guidelines at the time suggest **regular** or **frequent** emptying of the bladder.

I note from the documentation that there was no mention of bladder care/passing of urine/elimination or no urinalysis attended at any time during the episode of care. Whilst not always specifically documented in a normally progressing labour, not assessing this in a labour that is deviating from normal falls outside of the expected standard of care.

Again, the significant lack of documentation of care in this case makes it difficult to determine if care was attended to and not documented, or not attended to at all."

Appendix B — Independent obstetric advice to the Commissioner

The following expert advice was obtained from obstetrician Dr Bernadette White:

"Thank you for asking me to provide an opinion in this matter. My qualifications are as listed above and I am on the RANZCOG Register of Expert Witnesses qualified to give an opinion in the area of general obstetrics and gynaecology.

I have received from you the following documents:

1. NZ Primary Maternity Services Notice 2007 issued pursuant to section 88 of the Public Health and Disability Act 2000.
2. New Zealand Ministry of Health Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines)
3. Letter of complaint from [Mr and Mrs A] and attachments, undated.
4. Letter from [Mr and Mrs A's lawyer], dated 13 May 2013.
5. Summary of interview between HDC and [Mr and Mrs A] on 7 March 2013 […]
6. Statement from [Mrs A's] sister, [Ms G], undated.
7. Response from [Ms B] and attached clinical records, dated 30 November 2012.
8. Response and attachments from [Ms B], dated 14 March 2013.
9. Report for the Coroner from [Ms B], undated.
10. Statements to the Coroner from: [hospital] midwife [Ms H]; [hospital] midwife [Ms J]; Obstetric Registrar [Dr C]; Obstetrician [Dr K]; and Anaesthetic Registrar [Dr I].
11. Transcripts of evidence from the Coroner's Inquest relating to evidence given by [Mrs A], [Mr A], [Ms B], hospital midwife [Ms H], hospital midwife [Ms J], registrar [Dr C], and consultant [Dr K]. Please note that the information has been redacted from the transcripts. The redacted information relates to matters pertaining to the expert reports/advice to the Coroner and/or matters that are not relevant to the issues you are being asked to provide advice on.
12. Response and attachments from Waikato DHB, dated 18 April 2013.
13. Response and attachments from obstetric consultant [Dr K], dated 20 March 2013.
14. Response and attachments from [Dr C], dated 12 March 2013.
15. [Mrs A's] clinical records from [the hospital].

I confirm that I have read the Guidelines for Independent Advisors and agree to be bound by the Guidelines in the preparation of this report.

You have requested advice in the following areas

1. Please comment generally on the standard of care provided by [Dr C]. Please provide your advice in the alternative, for example, the adequacy of the care provided by [Dr C] if [Mrs A's] care had been handed over to secondary services, and the adequacy of care provided by [Dr C] if [Mrs A's] care had *not* been handed over to secondary services.

2. Please comment generally on the standard of care provided by Waikato District Health Board. If relevant, please provide your advice in the alternative, for example if care had been handed over to secondary services, and if care had *not* been handed over to secondary services.
3. What standards apply in this case?
4. Were those standards complied with?

In the situation that there are two versions of the facts, please provide advice in each situation.

If not answered above, please comment on the following, giving reasons for your view:

1. The adequacy and appropriateness of [Dr C's] assessment of [Mrs A] at [the hospital].
2. The adequacy and appropriateness of [Dr C's] treatment plan for [Mrs A], following her assessment.
3. Whether [Dr C] should have discussed [Mrs A's] presentation with the consultant and, if so, what time.
4. The adequacy of the instructions [Dr C] gave to the midwives about monitoring [Mrs A].
5. The adequacy of [Dr C's] response when advised at 2:25pm that there had been no improvement in the trace.
6. Any aspects of the care provided by [Dr C] and/or Waikato District Health Board that you consider warrant additional comment.

CLINICAL SUMMARY:

The index pregnancy was the second ongoing pregnancy for [Mrs A] who was aged 31. Her past obstetric history included […] a forceps birth of a healthy male baby weighing 7lbs 11oz in [year]. [Mrs A] had no significant past medical history and there was a family history of hypertension and aortic dissection.

[Mrs A] had an uncomplicated antenatal course and all routine antenatal investigations were normal. […] [Mrs A] was booked to give birth at [the clinic] under midwifery care.

[When Mrs A] was three days past her due date, she had a cardiotocograph performed which was normal.

[Five days past her due date] at 00:30, [Mrs A's] membranes ruptured spontaneously and contractions started. She arrived at [the clinic] at 4:00am and was noted to be having very strong contractions, 2–4 minutes apart, and lasting 60 seconds. She was using a TENS machine and Entonox for pain relief. On initial assessment maternal observations are not recorded, but the fetal heart rate was 110–118 beats per minute. Findings of abdominal palpation are not recorded and on vaginal examination the cervix was 2cm dilated. [Mrs A] was given Pethidine and Maxolon and discharged to labour at home, leaving [the clinic] at 06:00.

She continued to labour at home, and at 10:00 was assessed at home by her midwife, [Ms B]. On vaginal examination the cervix was found to be fully dilated with the station at the spines. She was transferred back to [the clinic] by ambulance. She arrived at [the clinic] at 11:00 and active pushing commenced. Maternal and fetal observations were not recorded, and the findings on abdominal palpation were not recorded. Several different maternal positions were tried to assist progress with pushing. The fetal heart rate was recorded at 11:45 at 136 b.p.m. At 12:00 it was noted that there was no change in descent and that [Mrs A] was feeling very exhausted and faint. Contractions were still 3–4/10. The fetal heart was checked but the rate was not recorded.

At 12:30 a decision was made to transfer [Mrs A] to [the hospital] and an ambulance was arranged. The Telephone Information Record at 12:30 indicates that the reason for referral was, '*24:00 SRM. Fully at 10:15. HH.*'

[Mrs A] arrived at [the hospital] at around 13:15. It does not appear that there are any contemporary notes of maternal or fetal observations or clinical findings. [Ms B's] retrospective notes indicate that [Mrs A] was to be assessed by [Dr C] with a plan being, '*fluids, pain relief and no active pushing*'; that at 14:15 she had an epidural; and that at 14:25 [Dr C] was paged to assess the CTG.

[Ms H's] notes, also written in retrospect, indicate that [Mrs A] arrived about 13:20; that on assessment [Mrs A] was pale and cold; that an anaesthetist was called; and [Dr C] was notified to assess [Mrs A]. She noted that there had been some difficulty hearing the fetal heart rate but that it was heard. She noted that [Mrs A] was seen by [Dr C] who confirmed the cervix was fully dilated, a scalp electrode was applied, an intravenous line was inserted, and bloods were sent for a blood count and cross-match. Warmed intravenous fluids were administered.

[Dr C's] retrospective notes indicate that on her initial assessment she found that [Mrs A] was contracting every three to four minutes, and that there was difficulty obtaining an abdominal tracing with the CTG. On vaginal examination the cervix was fully dilated with the station just below spines, and occipito posterior position. Clear liquor was noted and a fetal scalp electrode was applied. [Dr C] noted that the initial baseline was 140 b.p.m. She noted that the fetal heart rate should be monitored continuously and that an epidural should be given after intravenous fluids.

A copy of the CTG has been provided. It commences at 13:20 and shows the fetal heart rate at around 150 b.p.m with virtually no variability and no clear accelerations or decelerations. There is no tocograph recording. The tracing continues in a similar pattern with the heart rate rising to 160 with no variability.

An anaesthetist attended at 13:25 and an intravenous was inserted. [Mrs A's] temperature was recorded as 37.6.

At 13:45 [Mr A] is noted to have requested an epidural and [Dr C] was contacted to confirm that an epidural could be inserted.

The epidural was inserted at around 14:00.

At 14:20 [Mrs A's] blood pressure was 112/64 and there was a comment that the CTG was flat; and at 14:30 [Mrs A] was hypotensive with a blood pressure of 53/34. Intravenous fluids and ephedrine were administered. [Dr C] and the consultant, [Dr K], both attended to review [Mrs A]. A catheter was inserted and frank hematuria was noted. [Mrs A] remained hypotensive. A decision was taken to transfer [Mrs A] to theatre for an emergency caesarean section.

At operation the baby was delivered in a very poor condition with a 1 minute APGAR score of 0 and no response to resuscitation. The time of birth was 15:00. The baby's birth weight was 3775 grams.

A significant hemoperitoneum was found on opening the abdomen and it was subsequently found that this was due to a rupture on the posterior surface of the uterus. Despite attempted repair, hysterectomy was required with conservation of both ovaries. [Mrs A] required massive blood transfusion.

Her post-operative course was subsequently complicated by:

- Coagulopathy requiring massive transfusion.
- Adult Respiratory Distress syndrome.
- Therapeutic embolisation of both iliac arteries.
- Tissue necrosis on her left upper arm requiring skin grafting.
- Obstructed left kidney requiring a nephrostomy.
- Neurological symptoms, including expressive dysphasia and diplopia.

In summary, [Mrs A] was a 31-year-old woman who went into spontaneous labour 5 days past term in her second pregnancy. Labour became obstructed and she was delivered by an emergency caesarean section, but was found to have a ruptured uterus requiring a hysterectomy.

<u>You have requested comment on the following matters</u>:

1. **Please comment generally on the standard of care provided by [Dr C]. Please provide your advice in the alternative, for example, the adequacy of the care provided by [Dr C] if [Mrs A's] care had been handed over to secondary services, and the adequacy of care provided by [Dr C] if [Mrs A's] care had *not* been handed over to secondary services**.

[Mrs A] was transferred from [the clinic] to [the hospital] as she had a prolonged second stage of labour and spontaneous vaginal birth had not occurred after 90 minutes of active pushing. [Dr C] became involved in her care when she was admitted to the birth suite at [the hospital].

When [Dr C] assessed [Mrs A], sometime after 13:15, I believe she should have clinically assessed [Mrs A] and established a plan of management. As a minimum the assessment required her to take a brief history of her pregnancy and her labour up to that time, either on direct questioning of [Mrs A] or obtaining the information from her LMC, [Ms B]. Her clinical assessment needed to include knowing maternal observations, such as temperature, pulse and blood pressure, and abdominal palpation to assess the size of the baby and whether the fetal head was palpable. Assessment also required a vaginal examination to assess whether

the cervix was fully dilated and the station and position of the baby's head. Assessment also needed to include an assessment of fetal wellbeing and this would be done by the cardiotocograph.

In the absence of contemporary documentation, it is unclear to what extent [Dr C] made a full assessment of [Mrs A]. Having completed her assessment, I would expect that [Dr C] would then have made a management plan for [Mrs A]. Again, in the absence of contemporary notes, it is difficult to be sure what the plan was, but it seems likely it involved intravenous rehydration, provision of pain relief, no active pushing and continuing to monitor the baby with a continuous CTG and to reassess at some stage later in the afternoon.

On the basis of the information obtained from [Mrs A's] medical record, it does not appear that [Dr C] made a thorough assessment of [Mrs A], in that, it is unclear whether she had an adequate understanding of the course of [Mrs A's] labour up until that point. It is also unclear whether she was aware of maternal observations, and it is unclear whether she performed an abdominal assessment. It is clear that a vaginal examination was performed, and a fetal scalp electrode was attached.

With regard to her plan of management for [Mrs A], it was appropriate to provide intravenous rehydration and to provide adequate pain relief, however, for two reasons I feel it was not appropriate to allow [Mrs A's] labour to continue:

One, is that the CTG from 13:20 shows an abnormal pattern which subsequently becomes worse in the sense that there is no variability and an increasing fetal tachycardia. This suggests that the baby's well being was compromised.

The other is that [Mrs A] had been in the second stage of labour for at least three hours and the baby remained undelivered. This is very prolonged second stage of labour for a multiparous woman and the possibility of obstructed labour should have been considered.

In that situation I believe that [Dr C] should have made immediate plans for delivery.

You have requested that I consider [Mrs A's] management with respect to whether she had or had not been handed over to secondary services.

My interpretation of the situation is, that by virtue of the fact that [Mrs A] had been admitted to [the hospital] and that [Dr C] had been asked to assess her, that [Dr C] had assumed responsibility for her ongoing management, in collaboration with her LMC, [Ms B]. Even if there had been no formal hand-over of [Mrs A's] care to secondary services, I believe that had [Dr C] made an adequate assessment of [Mrs A], it would have been evident that obstetric intervention was required whether or not there had been a formal hand-over of care.

2. Please comment generally on the standard of care provided by Waikato District Health Board. If relevant, please provide your advice in the alternative, for example if care had been handed over to secondary services, and if care had *not* been handed over to secondary services.

The responsibility of the Waikato District Health Board obviously covers a very wide range. However, given that you have asked me specifically to comment only on the obstetric care provided, I will focus on that area.

I believe it was the responsibility of the Waikato District Health Board to ensure that there were appropriately trained obstetric staff to care for [Mrs A], and that the staff had appropriate resources to provide that care.

It appears that the obstetric staff providing care to [Mrs A] on [that day] were a registrar, a resident and a consultant. [This] was a Saturday. I note from the document *'Submissions of Counsel for [Dr C] [2011]'* that it stated that, 'the responsibility of [Dr C] on that day was that, with the support of one senior house officer, she was responsible for the delivery unit; the gynaecology ward of 16 beds; the antenatal and postnatal wards; and any gynaecological presentations to the emergency department.' To be able to more realistically assess this work load, it would be helpful to know the number of births that usually occurred each day in [the hospital] and how many gynaecological presentations would be expected through the emergency department. On a weekend, covering gynaecology, antenatal and postnatal wards would usually involve a ward round and then dealing with any issues that arose. From my experience of the junior staffing levels at many Level 2 hospitals, it would not be unusual for there to be a registrar and a resident in [the hospital] together with a consultant on-call.

At the time of this incident [Dr C] was in her first year of the RANZCOG training programme, but I believe had previously worked as an unaccredited registrar in obstetrics and gynaecology.

I therefore believe it is likely she had sufficient experience to be working in the role of a registrar with consultant back-up. It appears the consultant, [Dr K], was readily available to support [Dr C].

With regard to [Dr C's] training, one of the aspects of this case is the interpretation of the CTG. Hospitals providing maternity care need to ensure that staff who have responsibility to interpret CTG's have appropriate training. Also, at that time, trainees in the RANZCOG training programme were required to complete training in fetal surveillance. It is not clear whether [Dr C] had completed training at the time of the incident. This may be relevant, given that I believe one of the deficiencies in care was failure to recognize that the CTG on admission to [the hospital] was very abnormal.

It appears that other necessary resources, such as the availability of an anaesthetic service and a staffed operating theatre, were appropriate.

You have requested comment on the following:

1. ***The adequacy and the appropriateness of [Dr C's] assessment of [Mrs A] at [the hospital].***

As indicated above, from the evidence provided it appears that [Dr C's] assessment was inadequate in that it is unclear whether she obtained a clear history of [Mrs A's] pregnancy and the course of her labour up to that time; it is unclear whether she was aware of maternal observations, such as temperature,

pulse and blood pressure; and there is no record of an abdominal palpation of [Mrs A]. However, [Dr C] did perform a vaginal examination and attach a scalp electrode. I believe [Dr C's] assessment of [Mrs A's] CTG failed to recognize that it was very abnormal.

2. The adequacy and appropriateness of [Dr C's] treatment plan for [Mrs A] following her assessment.

[Dr C's] treatment plan included intravenous rehydration, continuous fetal monitoring and an epidural anaesthetic. While I believe these were all appropriate, I believe [Dr C's] treatment plan should have included prompt delivery on the basis of a prolonged second stage in a multiparous patient, and a non-reassuring CTG.

3. Whether [Dr C] should have discussed [Mrs A's] presentation with a consultant, and if so, at what time.

I believe [Dr C] should have discussed [Mrs A's] presentation with a consultant following her assessment which I presume was around 13:30.

4. The adequacy of the instructions [Dr C] gave to the midwives about monitoring [Mrs A].

It is unclear what instructions [Dr C] gave to the midwives. [Mrs A] required an initial assessment of maternal observations, abdominal palpation, and commencement of a continuous CTG. Ongoing monitoring was not necessary in the sense that I believe [Mrs A] required prompt delivery.

5. The adequacy of [Dr C's] response when advised at 14:25 that there had been no improvement in the trace.

It appears that [Dr C] and [Dr K] attended soon after being advised that the CTG was abnormal and [Mrs A] was hypotensive, and responded appropriately by immediately transferring her to theatre for a caesarean section. The time of birth was recorded as 15:00. While a decision to delivery interval of 30 minutes is generally regarded as reasonable, it does seem relatively slow considering that at that time [Mrs A] was severely hypotensive.

6. Any aspects of the care provided by [Dr C] and/or Waikato District Health Board that you consider warrant additional comment.

No additional comment.

I believe the severity of [Dr C's] departure from an appropriate standard of care would be regarded as moderate, primarily in the absence of any record of a thorough assessment of [Mrs A] when she was first admitted to [the hospital] and failure to recognise that the CTG was very abnormal.

DR BERNADETTE WHITE
M.R.C.O.G., F.R.A.N.Z.C.O.G."