Midwife, RM C

A Report by the

Health and Disability Commissioner

(Case 15HDC00540)

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Executive summary

1. In 2014 Ms A (then aged 27 years) confirmed that she was pregnant with her first baby. On 7 Month1[1], Ms A had an introductory consultation with a registered midwife (RM) RM C. Ms A's body mass index (BMI) was noted to be high at 44.6. An ultrasound scan (USS) at six weeks and four days gave an estimated due date of 5 Month9.

2. The Ministry of Health (2012) Guidelines for Consultation with Obstetric and Related Medical Services (the Referral Guidelines) require that if the mother's BMI is above 40, the lead maternity carer must recommend to the woman that the responsibility for her care be transferred to a specialist, given that her pregnancy, labour, birth or puerperium (or the baby) is or may be affected by the condition. RM C did not discuss this recommendation with Ms A during her pregnancy, or refer Ms A to the obstetric team for specialist review.

3. Ms A began experiencing back pain on 11 Month9, and then regular contraction pains. She sent two text messages and had two telephone conversations with RM C that afternoon about the pains, and one telephone conversation with RM C's back-up midwife, RM F, overnight, during which Ms A was advised to stay at home.

4. Ms A's membranes ruptured spontaneously at 7am the following day. She contacted RM F and was told to go to the hospital. Ms A arrived at about 8am and was assessed by RM C as being 8cm dilated. RM C began CTG monitoring, and this continued for about 30 minutes. The CTG was non-reassuring. RM C discontinued the CTG monitoring so that Ms A could go to the toilet, and did not recommence it.

5. RM C next tried to listen to the fetal heart rate (FHR) after about 90 minutes. She could not hear a heartbeat, so she attached a fetal scalp clip. The tracing was abnormal. RM C sought assistance from a hospital midwife, and then the obstetrics and gynaecology registrar. It was confirmed by ultrasound scan that there was no fetal heartbeat.

6. Ms A's care was taken over by the obstetrics team, and she delivered her stillborn baby at 7.45pm. A post mortem showed that Baby A died as a result of infection with Group B Streptococcus.

Findings

7. RM C failed to provide adequate care to Ms A in a number of regards as follows:

   a) Ms A had clear risk factors. RM C should have recommended to Ms A that the responsibility for her care be transferred to a specialist at an early stage of her pregnancy, as required by the Referral Guidelines.

   b) RM C did not document telephone assessments, including whether or not the baby was active, and the advice given.

[1] Relevant dates are referred to at Months 1-10.

c) RM C did not follow the RANZCOG Intrapartum Fetal Surveillance Clinical Guideline and DHB policy, which both recommend continuous FHR monitoring in labour when a woman has a high BMI. In addition, even if RM C did not consider that a CTG was warranted, she failed to auscultate the FHR every 15 to 30 minutes, which the RANZCOG Guideline recommends as the minimum fetal assessment required for any woman at this stage of labour.

8. Overall, RM C failed to provide services to Ms A with reasonable care and skill, and, accordingly, breached Right 4(1) of the Code.[2]

9. By not recommending to Ms A that the responsibility for her care be transferred to a specialist, RM C failed to provide Ms A with essential information that a reasonable consumer in Ms A's circumstances would expect to receive. Accordingly, RM C breached Right 6(1) of the Code.[3]

10. The Commissioner referred RM C to the Director of Proceedings for the purpose of deciding whether any proceedings should be taken, and recommended that RM C provide a written apology to Ms A.

11. The Commissioner recommended that the DHB provide an update to HDC on the implementation of the recommendations made in the root cause analysis.

12. The Commissioner noted that, should RM C wish to return to midwifery practice, the Midwifery Council of New Zealand would decline to issue a practising certificate prior to undertaking a review of RM C's competence. The Commissioner supports this approach.

Complaint and investigation

13. The Commissioner received a complaint from obstetrician and gynaecologist Dr G about the services provided to Ms A by midwife RM C. Ms A confirmed that she supports the complaint. The following issue was identified for investigation:

- *Whether midwife RM C provided appropriate care to Ms A.*

14. An investigation was commenced on 10 August 2015. The parties directly involved in the investigation were:

Ms A	Consumer
Mrs B	Consumer's mother
RM C	LMC midwife
Dr D	Obstetrician and gynaecologist

[2] Right 4(1) of the Code states: "Every consumer has the right to have services provided with reasonable care and skill."
[3] Right 6(1) of the Code states: "Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive."

Dr E	Obstetrics and gynaecology registrar
RM F	Back-up LMC midwife
Dr G	Complainant

Also mentioned in this report:

RM H	Hospital core midwife
Dr I	Perinatal pathologist

15. Information was reviewed from:

District Health Board
The Midwifery Council of New Zealand

16. Independent expert advice was obtained from midwife Michelle Bailey (**Appendix A**).

Information gathered during investigation

Background

17. In 2014 Ms A (then aged 27 years) confirmed that she was pregnant with her first baby. Ms A told HDC that RM C was recommended to her by another midwife. Ms A text messaged RM C and they arranged a first appointment for 7 Month1 at a midwifery clinic.

18. The midwifery clinic has a group of midwives practising together, each of whom is responsible for her own client load, including pregnancy monitoring and referring to secondary care as required, labour and birth, and follow-up postnatal care to women and babies. The midwives provide cover for each other's absences.

19. RM C is a registered general nurse and midwife who completed her midwifery training overseas. On returning to New Zealand she was employed in hospitals as a midwife. RM C then commenced working as a community based LMC midwife.

Antenatal care

20. Ms A had an introductory consultation with RM C. Ms A's estimated date of delivery (EDD) was 26 Month8. Ms A's gestation was recorded as 7 weeks, her weight was 123kg, and her Body Mass Index (BMI) was noted to be 44.6.[4]

21. RM C noted in the maternity assessment plan that Ms A smoked 1–10 cigarettes per day, and that she had a maternal family history of diabetes, and her past medical history included asthma. Ms A's blood pressure (BP) was 128/78mmHg.[5] RM C

[4] BMI is a measure of body fat based on height and weight. Morbid obesity is defined as a BMI greater than 40.
[5] Normal blood pressure in pregnancy is generally 90/60 to 120/80mmHg. Blood pressure is considered low if it falls below 90/60mmHg or high if it exceeds 140/90mmHg.

stated that, although Ms A's BMI suggested that a transfer to secondary care was indicated, the reason she did not organise the transfer was:

> "In my experience a large number of women, like [Ms A] fall into this category. [Ms A] was not unusual among the women I provide care for as having a large BMI. In my previous experiences with the DHB it is difficult to transfer women with high BMIs unless they have other medical issues such as hypertension or diabetes. As [Ms A] did not have either of these conditions and she had been such a poor attender at my clinic I saw no benefit in organising a secondary referral, as I did not think she would have attended."

22. On 14 Month1 Ms A had an ultrasound scan (USS), which suggested that Ms A's gestation was only six weeks and four days (6+4 weeks) with an EDD of 5 Month9. The radiologist noted: "[T]his is not consistent with LMP."

23. On 25 Month2, RM C recorded that Ms A did not want to undergo genetic screening. Ms A told HDC that she told RM C she "would not go through with a scan for down syndrome as [my partner at the time] and I were prepared for whatever we were given". Ms A did not have a 12-week dating scan, which would have confirmed the EDD.

24. On 6 Month3 (14+1 weeks), RM C noted that Ms A's blood pressure was 130/72mmHg, and that she had cut down her smoking. RM C gave Ms A the form to have an anatomical USS, which was conducted on 20 Month4 (20+4 weeks). The result suggested that the mean gestational age based on the fetus's measurements was 22 weeks. The radiologist noted: "[S]ize agrees with present gestational age." RM C stated:

> "I believe this scan supported the EDD of the 5 [Month9] and suggests the baby is growing well as [babies of this ethnicity] generally do. This doesn't suggest the EDD should be changed."

25. On 18 Month5 (24+1 weeks) Ms A's blood pressure was 148/88mmHg. She had no proteinuria[6] and had stopped smoking. On 15 Month6 (28+5 weeks) Ms A's BP was 112/60mmHg, she had no proteinuria, and she remained smoke free. Her weight was 138kg. She was given a laboratory form for blood tests and polycose testing.[7] There is no record of RM C having weighed Ms A after that date.

26. On 29 Month6 (30+5 weeks), Ms A's BP was 120/70mmHg, she had no proteinuria, and the fetal heart rate (FHR) was normal. The polycose results were noted to be

[6] Urinary protein excretion is considered abnormal in pregnant women when it exceeds 300mg/24 hours at any time during gestation, a level that usually correlates with 1+ on urine dipstick. Preeclampsia must be excluded in all women with proteinuria first identified after 20 weeks of gestation.

[7] A 50g glucose tolerance test (the polycose test) is used to screen for gestational diabetes. 50g glucose is given to a non-fasting patient, and the glucose level is determined by a blood test after one hour.

abnormal at 9.4mmol/L.[8] RM C discussed gestational diabetes with Ms A and gave her forms for a glucose tolerance test (GTT) and a USS to check the fetal growth.

27. Ms A told HDC that she was extremely worried about having diabetes, and rang the midwifery practice on the weekend to get the results, which showed a normal GTT result of a fasting glucose of 4.1mmol/L and a two hour glucose of 5.6mmol/L.[9] Ms A was told that this was a normal result and there were no concerns about diabetes from the test.

28. On 19 Month7 (33+5 weeks) Ms A's BP was 134/76mmHg, there was no proteinuria, she was smoke free, the fetus was in a cephalic (head down) presentation, and the FHR was heard and fetal movements noted. Ms A had a USS, which showed an estimated fetal weight (EFW) of 2764g, which was plotted on a customised growth chart as being on the 84th centile.

29. On 5 Month8 (35+5 weeks) Ms A's BP was 120/78mmHg, there was no proteinuria, the fetus was in a cephalic presentation, the fetal heart was heard, and there were normal fetal movements. Ms A remained smoke free. She was given birth plan documentation and information leaflets, and it was planned that there would be a repeat growth USS at 38 weeks' gestation.

30. From 12 Month8 to 9 Month9 Ms A had weekly antenatal visits with RM C, and her assessment findings remained normal. A USS was performed at 38 weeks' gestation to monitor growth. The EFW was 3768g, which was plotted on a customised growth chart as being on the 75th centile.

31. On 9 Month9 (40+4 weeks) Ms A was reviewed by RM C. Ms A's BP was 130/72mmHg and her urinalysis showed traces of protein. RM C noted that Ms A remained smoke free, fetal movements were felt, the fetal heart was heard, and the fetus was in a cephalic presentation with the head being 3/5th palpable.[10] RM C undertook a vaginal examination (VE). Ms A said that this was to perform a membrane sweep,[11] but that RM C told her that she was unable to reach the cervix or assess dilatation. RM C recorded that the cervix was posterior behind the fetus's head, and that the head was at "station –1".[12]

32. RM C gave Ms A evening primrose capsules, with two to be inserted vaginally each night for the following two days. Ms A said she told RM C that she had been unable

[8] If the blood glucose level is higher than 7.8mol/ml, the woman will be asked to take a glucose tolerance test (GTT).
[9] The woman will be diagnosed as having gestational diabetes if the first blood sample shows a blood glucose level of greater than 5.5mmol/L and the second above 9mmol/L.
[10] 3/5th of the baby's head can be felt out of the pelvis.
[11] During a VE, the practitioner moves a finger around the cervix to stimulate and/or separate the membranes around the baby from the cervix. This causes a release of prostaglandins, which can help to start labour.
[12] The fetal station refers to the position of the baby's head in relation to the ischial spines. The ischial spines are bony points on the mother's pelvis. Station 0 is when the baby's head is level with the ischial spines. If the presenting part lies above the ischial spines, the station is reported as a negative number from –1 to –5.

to walk the previous day, and that she had had a bloody show[13] just before midday that day. Ms A stated that RM C said that the baby was very low and was possibly hitting a nerve, which was why she had been unable to walk. RM C arranged a post-dates appointment for the following Monday (so that Ms A would be induced in hospital if gestation reached 41 weeks).

33. Ms A said that she continued to pass a show for the next two days and, on 10 Month9 at 10.08pm, she called RM C for advice and was told that this was normal.

34. On 11 Month9 RM C text messaged Ms A at 9.04am: "Morning. How about trying to express for baby as it may stimulate labour and increase your supply of colostrum (food for baby)." Ms A stated that she called RM C at 9.31am to ask how to go about doing this.

Commencement of labour

35. Ms A stated that labour started at around midday on 11 Month9, when she began to experience light back pain, and at 4.13pm she called RM C about the pain, as she was unsure whether she was in labour. Ms A said that RM C told her she would definitely know once she was in labour, and would be able to tell the difference between back pain and labour. RM C advised her to start timing the pains if they continued. Ms A does not recall being asked about fetal movements during this telephone conversation, and there is no documentation regarding this telephone call.

36. RM C stated that she was distracted with another woman at the time of the conversation and has little recollection of it. She stated that this suggests that there were no concerns and it was a routine query.

37. At 7.35pm Ms A text messaged RM C: "Hi there, still getting back pains every 3–4 mins, last about 40 secs and feeling cold and nauseous. Have quite a raw bottom from going bathroom often so not sure if contractions or just back pain, have been feeling since about midday." At 7.37pm Ms A text messaged RM C: "Am trying to cope when pain comes through but is quite regular."

38. RM C told HDC that she telephoned Ms A at that time to tell her that her back-up midwife, RM F, was on call overnight. Ms A recalls telling RM C that she was feeling sick, and that RM C said that this might be an effect of labour. Ms A recalls RM C telling her that labour had started but it was still in very early stages, and to call back once her contractions were lasting at least one minute and were two minutes apart. Ms A does not recall being asked about fetal movements during this telephone conversation, and there is no documentation regarding this telephone call. Regarding her two telephone conversations that evening with Ms A, RM C told HDC that while she cannot specifically recall the discussions, she has no doubt that she asked Ms A about fetal movements and was reassured by her reply.

39. RM F told HDC that at 6pm during handover she and RM C had a discussion about whether there was any woman likely to labour overnight. RM C informed RM F that

[13] A show is the passing of the mucus plug from the cervix. Often the mucus contains a small amount of blood.

Ms A was a "primip"[14] with a big baby on board who was in the latent phase of labour. RM F said that RM C told her that she wanted Ms A to remain at home for as long as possible, to allow labour to establish before she was brought into hospital.

40. RM F stated that Ms A telephoned her at around 2am on 12 Month9 and said she was having irregular short contractions around every five minutes, had no PV (vaginal) bleeding, her membranes had not ruptured, and she "thought she had felt baby move". Ms A does not recall discussing fetal movements with RM F during this telephone conversation. RM F stated that the only concern Ms A had at that time was that she was tired.

41. Ms A said she advised RM F that at this time her contractions were lasting close to a minute and were two minutes apart (she had timed these for an hour), and that she was feeling exhausted.

42. RM F said that she discussed with Ms A getting into the bath, trying heat on her back, and trying to rest as much as she could between contractions. RM F stated that she also advised Ms A to keep her fluids up, and told her to call again when she was ready to go to hospital. There is no documentation regarding this telephone call. RM F stated that she felt that Ms A was in early labour and was still safe to be at home. In response to the "information gathered" section of the provisional opinion, Ms A said that she was advised to stay at home as long as possible, and that hospital was the "last resort".

43. Ms A stated that she "struggled through the night as contractions were so regular but [did her] best to walk and breathe through contractions and stay home as advised". Ms A stated that just before 7am, she went to the bathroom and had a strong and quick gush of water that was "yellowy" in colour. Ms A stated that she was not sure whether her waters had broken, so she called RM F at 6.57am to tell her what had happened.

44. RM F advised Ms A to go to the delivery suite in the next hour for an assessment and pain relief options, and told her that either she or RM C would meet her there. RM F stated that she advised the delivery suite that Ms A was coming, and also let RM C know what was happening.

45. RM F stated that she met RM C in the delivery suite, and they made a plan that RM C would stay with Ms A and RM F would do postnatal visits for RM C, as they expected Ms A would be in the delivery suite most of the day.

Delivery suite

46. Ms A stated that she, her partner and her sister arrived at the hospital just before 8am and met RM C at the entrance. They then went to the delivery suite. In response to the "information gathered" section of the provisional opinion, Ms A said that she advised RM C, as soon as she met her at the entrance, of the fluid loss at 7 o'clock that morning.

[14] Primiparous — pregnant for the first time.

47. RM C took Ms A's BP, pulse and temperature (which were normal) and conducted a VE. She stated: "I was surprised to find her 8cms dilated." RM C stated that the head was "–1 but more towards 0". RM C said that Ms A had spontaneously ruptured her membranes at 7am and that the liquor was yellow. There is no record that RM C performed an abdominal palpation or asked about fetal movements at this time. RM C began CTG monitoring,[15] and the CTG ran for about 30 minutes from 8.20am.

48. RM C told HDC:

> "The trace appeared slightly flat with shallow decelerations with contractions and because [Ms A] was asking to go to the toilet I took it off, which I considered reasonable at the time. I read the trace as a 'sleep trace' and the decelerations as compression of the head. In hindsight, it may have been a cord compression."

49. Ms A stated that after she went to the bathroom, she continued to walk through the contractions as RM C suggested, while RM C began completing paperwork. Ms A's mother, Mrs B, who arrived at 9.30am, said that RM C told her that Ms A was not to sit or lie down because she needed to keep active, so Ms A walked around for about an hour and then complained she was very tired.

50. Mrs B stated that, during this time:

> "[T]he midwife was busy filling out the paperwork both on hard copy and sometimes on her laptop. She often said that this was too difficult to fill out and that she didn't know how to use the computer properly."

51. During this period there was no further continuous CTG monitoring and no intermittent auscultation of the fetal heart rate (FHR). RM C stated that she cannulated[16] Ms A because she had "+++ketones" in her urine.[17] RM C recorded at 9.03am that Ms A had been commenced on intravenous (IV) fluids.

52. RM C stated that it was possibly 90 minutes after she had ceased CTG monitoring before she tried to listen to the FHR again, at which time she could not hear a heartbeat by listening abdominally, so she tried to apply a fetal scalp electrode (FSE) to the baby's head.[18] RM C said that the tracing was abnormal so she rang for assistance, and the hospital core midwife, RM H, arrived quickly and agreed that the tracing was very unusual. RM H said that the CTG sounded as if it had some sort of interference, which may have been the maternal heartbeat. She said that it did not sound like a fetal heartbeat. RM C said that she went next door to get another FSE, but the tracing was the same.

[15] Cardiotocography (CTG) measures the baby's heart rate. At the same time it also monitors the maternal contractions. CTG is used during labour to monitor the baby for any signs of distress.
[16] The process of inserting a cannula (a thin tube) into a vein to allow for administration of intravenous fluids or medications, or to take blood samples.
[17] Ketones are chemicals that the body creates when it breaks down fat to use for energy.
[18] A fetal scalp electrode is a device placed just under the skin on the presenting part of the fetus to assess the FHR pattern when external FHR monitoring is unable to be used or when the signal quality is poor.

53. RM H told HDC:

> "When the second scalp electrode was also making the same interference type sound I asked the LMC whether if she would like me to get the Registrar to review, she replied yes and I left the room. Prior to going to [the room] I had come from the postnatal ward and so knew the Registrar was there. I went directly to the desk, phoned the ward and asked the midwife that answered to send the Registrar straight away to [the] Delivery Suite due to a non reassuring heartbeat and this was immediately done."

54. RM C stated:

> "[RM H] walked out of the room without saying a word. I assumed she'd gone to get help. I waited a few minutes and when nothing happened, I walked quickly to the desk where another hospital midwife was sitting. I said I needed [Obstetrics and Gynaecology registrar Dr E] urgently. The midwife said [Dr E] was upstairs and I asked her to please get her for me."

55. RM C stated: "[Dr E] followed me back, looked at the tracing and suggested she get the scanner. There was no fetal heart and the registrar then contacted the Consultant."

56. When interviewed for the DHB's root cause analysis (RCA),[19] Dr E said that she was not informed or consulted when Ms A presented to the delivery unit that morning so, when contacted, she was not aware that Ms A was there. Dr E recorded in the clinical notes: "Phone call to maternity ward (where I was doing ward round) with a message to assess CTG — I was not paged. Phone call at approx. 1030am — attended immediately."

57. Dr E stated that she attended the delivery suite immediately and looked at the CTG trace, which she thought did not look like an FHR (ie, it was detecting and recording the maternal heart rate). Dr E watched this for one minute then decided to do a USS. She could find no FHR. As Dr E was a registrar, she was not able to confirm fetal death, and so needed the consultant to complete the imaging to confirm this. Consequently, she asked obstetrician and gynaecologist Dr D to come to the delivery suite.

58. Dr E noted that bloods were taken, which showed a maternal white blood cell count of $32x10^9$/L.[20] Dr E recorded in the clinical notes:

> "CTG on earlier (0820 for around 30 min) — reduced variability with shallow decelerations and one deeper deceleration, difficult to time with contractions as these not picked up well. I was not consulted about earlier CTG. CTG taken off for [Ms A] to go to bathroom/mobilise. CTG replaced at 1000 — LMC unable to find FHR abdominally — FSE placed but ? disconnected or ? [maternal heart rate]

[19] Detailed later in this report.
[20] Normal white blood cell count is $5.6–14.5x10^9$/L. A high white blood cell count can be caused by an infection.

on FSE — same replaced the second FSE but CTG continued to have similar appearance."

59. At 11.22am on 12 Month9, Dr D recorded in the clinical notes:

"I received a phone call from the Obstetric Registrar about inability to listen to [fetal] heart for an independent midwife client. Neither myself nor the Registrar have been consulted prior to that moment. Apparently [Ms A] has been having irregular pains for the last 2 days. [Ms A] was not here in Delivery suite at 08:00 at handover when I discussed the cases with the night registrar."

60. Dr D noted that Ms A was 42+3 weeks' gestation by her LMP dates and her 20-week scan, although the earlier scan at 6 weeks had suggested a later due date. Dr D noted that Ms A had a high BMI of 44.6, a strong family history of type 2 diabetes, and an abnormal polycose test at 28 weeks, with negative GTT subsequently but no repeat blood sugar tests at 34 weeks and beyond, and noted her ethnicity. Dr D wrote: "In spite of all these risk factors she was not referred to secondary care for even a consultation."

61. Sadly, Dr D confirmed intrauterine fetal death. Dr D planned to proceed with labour and a vaginal delivery of the baby, and discussed this plan with Mrs B and her family.

Delivery

62. RM F said that RM C telephoned her mid-morning and told her that Ms A's baby had died. RM F said that she returned to the delivery suite and provided support for RM C, Ms A and her family for the remainder of Ms A's labour.

63. Ms A said that at some point she noticed that she was leaking "yellowy/browny" coloured fluid and advised the midwives that this was the same as the fluid she had seen earlier that morning.

64. Ms A had an epidural[21] sited at 11.23am. The epidural was not controlling Ms A's pain and had to be re-sited.

65. At 4.50pm Dr E recorded that Dr D had seen Ms A and advised her and her family that they would try to avoid a Caesarean section unless absolutely necessary.

66. By 6.34pm, Ms A was pushing and having long contractions. At 6.55pm, Dr E noted that there had been a failure to progress and queried whether Ms A's labour was obstructed. The plan was for a trial of instrumental delivery and/or Caesarean section.

67. Ms A continued pushing, and there was a "peep" of the baby visible at 7.21pm. Baby A was stillborn at 7.45pm. He weighed 4000g. During the birth, Ms A experienced a second degree perineal tear,[22] which was repaired by Dr D.

[21] In the context of labour, an epidural is a method of pain relief whereby medication is injected into the epidural pace of the spinal cord via a thin flexible tube entering the lower back.
[22] Second degree tears extend below the skin into the muscle and often require stitches.

68. At 11.20pm, Ms A and her family were transferred to a room for mothers/families who have lost their baby.

Post mortem findings

69. A post mortem was conducted on 13 Month9 by perinatal pathologist Dr I. This found that Baby A's diagnosis was intrapartum death at term in association with *Streptococcus agalactiae* sepsis.[23]

70. Dr I noted that Baby A was an anatomically normal well grown male infant, and that there had been a large meconium[24] discharge into the amniotic cavity. The examination of the lungs showed that the large conducting airways were filled with meconium. Microscopy of the lungs showed extensive meconium aspiration as well as widespread congenital pneumonia.[25]

71. Dr I summarised:

> "This infant has died in association with congenital sepsis that was in turn a complication of ascending infection likely to have followed rupture of the membranes. The membranes were documented as having ruptured at 0700 hours but fetal death was identified 3 hours later and thus it was likely that the infection had been present at least several hours prior to the observed rupture of the membranes."

72. Ms A told HDC that on 13 Month9 she was advised that she had to stay in hospital to be treated with antibiotics, so her sister went with Baby A for the post mortem. Ms A stated:

> "[RM C] came to see me during this time and [reiterated] that I had now got an infection and that there was a possibility I could have infected my son and that maybe the polycose/diabetes issue also had a role in what happened. I was shocked."

73. In response to the "information gathered" section of the provisional opinion, Ms A said that RM C made the statement in relation to her (Ms A's) high white blood cell count. In contrast, RM C said that following Baby A's birth she did not mention infection to Ms A and denied that this statement was made.

Postnatal care

74. On 13 Month9, Dr E saw Ms A. At that stage the plan was to treat her with 24 hours of antibiotics.

75. That day, Ms A was also visited by RM C, who recorded: "Happy for me to continue with the postnatal care." RM C also discussed with Ms A a medication used to suppress lactation. It is recorded that Ms A was thinking about it.

[23] Group B Streptococcus (GBS), also known as *Streptococcus agalactiae*, is best known as a cause of postpartum infection, and as the most common cause of neonatal sepsis.
[24] Dark green substance forming the first faeces of a newborn infant.
[25] Congenital pneumonia or neonatal pneumonia is an inflammatory condition localised in the lungs. It can be caused by a virus or bacteria.

76. On the afternoon and evening of 13 Month9, Ms A was given antibiotics and medication to suppress lactation, and was observed by hospital core midwifery staff.

77. On 14 Month9 Ms A left the hospital to attend Baby A's funeral, and returned to the ward afterwards as she required further antibiotics. RM C visited the hospital to see Ms A, but the family were at the funeral.

78. A clinical note taken at 10.52am on 15 Month9 by a hospital core midwife states that Ms A was discharged into the care of RM C. At 1.15pm, Dr E recorded that she had gone to the delivery suite to see Ms A and discuss her treatment plan, but found that Ms A had been discharged without medical clearance. Dr E noted:

> "Associate charge midwife aware she was discharged but not aware she wasn't given medical clearance for same. LMC also unaware she was not medically cleared, had just been told she had been discharged."

79. Ms A stated that, at 1.41pm on 15 Month9, RM C text messaged her: "Hi. The hospital would like you to have a blood test today. I shall bring the form and visit you if the timing is OK." At 1.53pm RM C text messaged: "Plus continue oral antibiotics." Ms A said she advised RM C that she could pick up the form when she was free.

80. RM C told HDC that postnatal care is usually provided in the woman's house. However, Ms A lived with her mother, and RM C felt that Ms A's mother was angry and never wanted to see her (RM C) again. RM C stated that Ms A suggested meeting her, but she had no venue in which to see her as their practice rooms were busy. RM C arranged to meet Ms A on 15 Month9 at the house of one of RM C's family members. In response to the "information gathered" section of the provisional opinion, Ms A said that RM C text messaged her an address, and Ms A was unaware of what or whose address this was. RM C stated:

> "I was waiting at the gate as they pulled up and remember the whole episode as being an awful experience. I was crouched in the gutter and talking to [Ms A] at the car window. This was not an ideal consultation by any means."

81. Ms A said that she and her partner met with RM C at 3.30pm. In response to the "information gathered" section of the provisional opinion, Ms A stated that because RM C was waiting at the gutter, "it was suggested that we were not going past the mailbox". Ms A's partner stated: "[A]fter everything, dealings were left to be done on the street rather than in a professional manner and environment. We felt worthless, not good enough to be met in a room or office."

82. Ms A said that, after discussing the need to continue antibiotics and pain relief:

> "[RM C then] continued to talk about what happened, stating again that the dates were most likely wrong [and] that normal procedure is to take the earlier date of the estimated due dates but she didn't. [RM C] then said the 20 week scan suggested she should take that earlier date but she assumed baby would be big

anyway. She then advised again he would have been very damaged if he had made it."

83. Ms A said that that was the last contact she had with RM C until 20 Month9, when RM C text messaged to see if she was "okay". Ms A said that she was left in the lurch with no midwife, and neither RM C nor any other midwife from the midwifery clinic supported her postnatally. Ms A said that she had to rely on family members for advice on what was going on with her body post-baby, until some weeks later when the hospital arranged a midwife for her.

84. RM C stated that on 20 Month9, she text messaged Ms A: "Hi, I know this is difficult but I just want to make sure you are okay. Phone or text me. Thanks." RM C stated that Ms A did not respond to the text message, so RM C assumed that Ms A did not wish her to continue postnatal care. RM C stated: "I phoned the hospital and organised through secondary care for them to complete [Ms A's] postnatal care."

85. The DHB's midwifery educator told HDC that RM C telephoned her on 20 Month9 stating that she was concerned that Ms A had had an adverse outcome and was not being visited postnatally. The midwifery educator stated that RM C told her that she had text messaged Ms A but had not received a reply, and she wanted to be sensitive to Ms A and her family and did not want to inflame the situation by going to their home if she was not wanted. The midwifery educator said that she spoke to the Acting Charge Midwife, who said that a midwife from the DHB had been appointed and that Ms A was being seen postnatally.

86. RM C stated that she received a text from Ms A on 22 Month9 stating: "Hey [RM C] sorry for the late reply. Physically am recovering well, thank you." RM C said she replied: "Great to hear. Please take care," and Ms A responded, "Thank you. You too." On 12 Month 10, RM C sent Ms A a text message stating: "[Ms A] I would like to see you once more so I can discharge you. Maybe some closure for both of us. How about [the midwifery clinic] either Friday or Monday at 12.20?" RM C stated that she did not receive any reply, and sent a further text message on 18 Month10. In response to the "information gathered" section of the provisional opinion, Ms A said that she was confused as to why she was being discharged, again, and that she felt it was "peculiar and almost inappropriate" for RM C to suggest closure for both of them, after not being contacted since 20 Month9.

Root Cause Analysis

87. The DHB conducted a Root Cause Analysis (RCA)[26] following the unexpected death. The RCA identified three causal factors,[27] and two associated root causes[28] for the event. The causal factors identified were that Ms A was not referred to secondary care

[26] The DHB used the TapRooT system to conduct the RCA. TapRooT is a systematic process, software and training system for RCA.
[27] The TapRooT definition of a causal factor is: "A mistake or failure that, if corrected, could have prevented the incident from occurring or would have significantly reduced its consequence."
[28] The TapRooT definition of a root cause is: "The most basic cause (or causes) that can be reasonably identified that management has control to fix, and when fixed, will prevent (or significantly reduce the likelihood of) the problem's recurrence."

(an obstetric consultation); the CTG was interpreted as normal and was discontinued; and a 12-week antenatal USS was not completed.

88. In relation to the last causal factor, the DHB RCA found that, although Ms A declined the 12-week nuchal[29] USS, she should have been advised to have the 12-week scan without nuchal screening to help confirm the EDD, as 12 weeks is the most accurate time for dating purposes.

89. Two root causes were identified and linked with the causal factors. They were the failure to comply with the Ministry of Health (2012) Guidelines for Consultation with Obstetric and Related Medical Services (the Referral Guidelines), discussed further below); and the failure to recognise a non-reassuring CTG.

90. The RCA found, incidentally,[30] that at about 10am, when it was difficult to find the FHR abdominally, the process as set out in "Obstetric Emergency — ALERT Guideline" was not followed. That process is to place an emergency call to the operator, and an urgent page to on-call medical and midwifery staff. The room emergency call bell should be utilised in addition to the emergency call to summon assistance.

91. The following recommendations were made from the RCA:

a) Develop and complete an audit to establish current compliance with the Referral Guidelines.

b) Develop a process for bedside clinical interpretation for practitioners, with a view to developing a policy that requires a double check of intrapartum CTG readings.

c) Explore the recommendations from the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) that hospitals combine the annual education and assessment with regular CTG meetings to build on knowledge and communication skills.

d) Review the Obstetric Emergency — ALERT Guideline and audit compliance with the policy.

e) Communicate via multiple methods to all staff, including LMCs, the expected escalation process for obstetric emergencies.

f) When there is a discrepancy between estimated delivery date from LMP and early antenatal ultrasound scans, women should be offered an appropriately timed growth ultrasound scan.

g) Review current communication and documented process around medical clearance and documenting transfer of care for those women who require it.

h) Develop training related specifically to communication with women and their families when an adverse event occurs with the aim to ensure that women and

[29] A nuchal scan is a sonographic prenatal screening scan (ultrasound) to help identify an increased likelihood of chromosomal conditions including Down syndrome in a fetus.
[30] The incidental findings were not considered to have contributed to the baby's death.

their families are fully informed and understand what is being communicated to them.

i) Review communication and processes around the number of people present when epidurals are inserted.

Further information

Ms A

92. Ms A stated that she felt let down. She said that she was unaware of what was happening to her body before and after she had her baby, and put all her faith in the midwives to be the voice for her that she needed as a first-time mother. Ms A stated:

> "Often I felt like I was not listened to as per during labour and at times looked down upon for my decisions during pregnancy. I also felt there was so much emphasis on my ethnicity and weight that the approach was almost blasé, I felt as if I was just another pregnancy and not an individual, pregnant for the first time. The worst part of this experience was [RM C's] reactions and outbursts during and after labour. I didn't need to hear those things at that particular time. I needed to feel safe, I didn't need to look for what went wrong only having just lost my son or have been told it may have been my 'fault' in not so many words."

RM C

93. RM C stated:

> "At no time do I believe I placed blame on [Ms A] for her baby's death. However, I am answerable for my professional role in a system that judges harshly, as evidenced by [Dr G's] response to the sad outcome. It was only following the post-mortem results that infection was identified as a significant issue and until then I would not have mentioned infection in the manner that [Ms A] has recalled. [Ms A] saw so many people while she was in hospital and I am sure that it is hard for her to remember who said what in the context of her shock and grief."

94. Regarding a referral to secondary care, RM C told HDC:

> "I did overlook [Ms A's] recorded BMI. Usually high BMI women need referrals for other health issues but this wasn't the case here. I failed to talk to [Ms A] about her BMI and referral, as she often failed to keep appointments and then appointments were rescheduled to suit her."

95. RM C stated that she had a good understanding of the Referral Guidelines and frequently referred to them as a regular part of her practice. She stated: "I strongly support the philosophy behind the [section 88 notice] which is concerned with primary maternity services, identifying a three way communication system between the mother, the LMC and specialist."

96. RM C acknowledged that her initial interpretation of the CTG trace was incorrect and that the CTG was in fact a non-reassuring trace. RM C agreed that she should have continued the CTG monitoring once Ms A returned from the toilet.

97. RM C has subsequently retired from practice as a midwife.

Midwifery Council of New Zealand

98. The Midwifery Council of New Zealand (the Midwifery Council) was notified by the DHB of serious concerns about RM C's practice in relation to this case. The Midwifery Council made enquiries and received a report and reflection from RM C. RM C advised the Midwifery Council that she planned to complete the postnatal care of five women and then would retire from midwifery.

99. The Midwifery Council accepted RM C's reassurance that she would only complete the postnatal care of five women. However, because of its primary responsibility to protect the health and safety of the public, it made an order under section 39 of the Health Practitioners Competence Assurance Act 2003 (HPCAA) that RM C's scope of practice be altered by placing the conditions that she:

- can only provide postnatal care to the five women in her caseload;
- cannot practise as a backup or second midwife at any labour and birth either in a facility or at home; and
- cannot provide antenatal care to women.

100. Should RM C wish to return to midwifery practice at some future date, the Midwifery Council stated that it would decline to issue a practising certificate pursuant to section 27(1)(a) of the HPCAA, pending a review of her competence under section 36 of the HPCAA.

Responses to provisional opinion

101. RM C responded to the provisional opinion, and Ms A responded to the "information gathered" section of my provisional opinion. Where appropriate, comments have been incorporated above.

102. Regarding the postnatal care, RM C told HDC that she does not accept that she was lacking in empathy. She stated that she was very concerned about Ms A and did ask her to text message or telephone if she was unwell or had any concerns. RM C considered that it was not appropriate to visit Ms A in Ms A's mother's home without invitation or prior agreement, and considered that she was showing respect in this manner. RM C considered that text messaging would cause the least distress and would allow Ms A to respond in her own time.

103. RM C provided HDC with a letter of opinion from her colleague and friend, a registered midwife, who reiterated points that had been raised by RM C during the investigation.

104. Ms A told HDC that RM C was aware that she worked full time. Ms A stated:

> "I believe I made all appointments which were often rescheduled to suit my half hour lunch breaks or to days better suited around my work commitments. Waiting times at [the midwifery clinic] could often last 30 mins before even being seen which I could not afford … I feel a great assumption was made on [RM C's] part

> in regards to me not attending a second referral. I don't see how I would have said no to having been advised my health indicated more or secondary care was required for the safety of my baby however the option was never given."

105. Regarding the postnatal care, Ms A's sister stated:

> "Regardless of how [RM C] felt about my mother, as a professional she should have … met [Ms A] at my house or in a place or business rather than at her [family member's] or side of the road. My mother was the voice on the day of our raw feelings and had [RM C] come to our home my mother would've allowed her to undertake the meeting and not attack her."

106. Ms A said that rather than text messages asking how she was doing, she wanted follow-ups and postnatal appointments, and wanted to know "where to from here". Ms A said that she was surprised when she was advised of the new care arrangements, and that RM C discontinued her care based on "her own assumptions not mine".

Relevant standards

Referral Guidelines

107. The Referral Guidelines provide guidelines for circumstances in which an LMC must recommend a transfer of clinical responsibility to a specialist. The Referral Guidelines, previously appended to the Section 88 Maternity Services Notice 2002, are to be used in conjunction with the Primary Maternity Services Notice 2007. The Referral Guidelines require that if the mother's BMI is above 40:

> "The LMC must recommend to the woman (or parent(s) in the case of the baby) that the responsibility for her care be transferred to a specialist given that her pregnancy, labour, birth or puerperium (or the baby) is or may be affected by the condition."

108. The decision regarding ongoing clinical roles/responsibilities must involve a three-way conversation between the specialist, the LMC and the woman. With the woman's agreement the specialist will assume ongoing clinical responsibility, and the role of the LMC from that point on is agreed between those involved. This should include discussion about timing of transfer of clinical responsibility back to the LMC when the condition improves. Decisions on transfer should be documented in the woman's records.

109. The DHB's "Management of Obese Pregnant Women Guideline" also states that the woman should be transferred to consultant-led care if her BMI is over 40.

RANZCOG Intrapartum Fetal Surveillance Clinical Guideline

110. The RANZCOG Intrapartum Fetal Surveillance Clinical Guideline — Third Edition 2014 (the RANZCOG Guideline)[31] provides: "Continuous CTG should be recommended when either risk factors for fetal compromise have been detected antenatally, are detected at the onset of labour or develop during labour." The RANZCOG Guideline lists a BMI of or above 40 as an antenatal risk factor that increases the risk of fetal compromise.

111. The RANZCOG Guideline provides that where continuous CTG monitoring is required, and if the CTG is considered to be normal, it may be interrupted for short periods of up to 15 minutes to allow personal care (eg, shower, toilet). However, such interruptions should be infrequent and not occur immediately after any intervention that might be expected to alter the FHR.

112. The RANZCOG Guideline states that the normal CTG is associated with a low probability of fetal compromise and has the following features:

> "
> - Baseline rate 110–160bpm.
> - Baseline variability of 6–25bpm.
> - Accelerations of 15bpm for 15 seconds.
> - No decelerations.
>
> All other CTGs are by this definition abnormal and require further evaluation taking into account the full clinical picture."

113. In addition, the RANZCOG Guideline provides that, where there are no risk factors and a CTG is not required, the FHR should still be monitored by intermittent auscultation every 15 to 30 minutes in the active phase of the first stage of labour.

114. The DHB's "Fetal Surveillance Guideline" sets out the same requirements as above from the RANZCOG Guideline, including those for intermittent auscultation.

The Midwives Handbook for Practice

115. The New Zealand College of Midwives (NZCOM) Midwives Handbook for Practice 2008: Standards of Practice (midwifery standards) state:

> "Standard Two
> The midwife upholds each woman's right to free and informed choice and consent throughout the childbirth experience …
>
> Standard Six
> Midwifery actions are prioritised and implemented appropriately with no midwifery action or omission placing the woman at risk."

[31] Endorsed by the New Zealand College of Midwives.

Opinion: RM C — Breach

116. I am highly critical of aspects of the care provided by RM C to Ms A antenatally, during labour, and postnatally, as set out below.

Antenatal care

117. Ms A became pregnant in 2014 and had her first consultation with RM C on 7 Month1. Ms A's EDD, based on her LMP, was 26 Month8. A USS later suggested that Ms A's gestation was 10 days fewer than originally assessed, and that her EDD was 5 Month9. Ms A was noted to be a current smoker, have a BMI of 44.6, and have a family history of diabetes.

118. The Referral Guidelines provide, in the case of a pregnant woman with a BMI of over 40, that the LMC must recommend to the woman that the responsibility for her care be transferred to a specialist, given that her pregnancy, labour, birth or puerperium (or the baby) is or may be affected by the condition. The decision regarding ongoing clinical roles/responsibilities must then involve a three-way conversation between the specialist, the LMC and the woman. With the woman's agreement, the specialist will assume ongoing clinical responsibility, and the role of the LMC from that point on will be agreed between those involved. The three-way conversation should include discussion about timing of transfer of clinical responsibility back to the LMC when the condition improves. Decisions on transfer should be documented in the woman's records.

119. My midwifery expert adviser, Ms Bailey, said that, in her view:

> "[Ms A] presented with increased risk due to her increased BMI, smoking status and family history of diabetes. I would have expected [RM C] to discuss healthy eating and recommended weight gain in pregnancy with [Ms A] and also offer or recommend to refer [Ms A] for an antenatal consultation with a specialist regarding her increased body-mass index (BMI)."

120. Ms A had clear risk factors, and RM C should have recommended to her that responsibility for her care be transferred to a specialist at an early stage of her pregnancy, as required by the Referral Guidelines. I am highly critical that this did not occur.

121. RM C stated that although Ms A's BMI suggested that a transfer to secondary care was indicated, she did not organise the transfer because:

> "In my previous experiences with the DHB it is difficult to transfer women with high BMIs unless they have other medical issues such as hypertension or diabetes. As [Ms A] did not have either of these conditions and she had been such a poor attender at my clinic, I saw no benefit in organising a secondary referral, as I did not think she would have attended."

122. RM C confirmed that she did not talk to Ms A about her BMI or recommend a referral and transfer of care. Ms Bailey advised that it was her opinion that "[RM C] did not offer care in this situation as per standard two of the midwifery standards which

states: 'The midwife upholds each woman's right to free and informed choice.' No choice was given in this instance."

123. RM C stated that she had a good understanding of the Referral Guidelines and frequently referred to them as a regular part of her practice. She stated: "I strongly support the philosophy behind the Maternity Services Notice (Section 88) which is concerned with primary maternity services, identifying a three way communication system between the mother, the LMC and specialist." However, RM C failed to follow the Referral Guidelines and did not offer Ms A the opportunity for a three-way conversation.

124. I am highly critical that, in view of Ms A's risk factors, RM C did not recommend to Ms A that the responsibility for her care be transferred to a specialist as required by the Referral Guidelines. By not doing so, RM C failed to provide Ms A with essential information that a reasonable consumer in Ms A's circumstances would expect to receive.

Labour

Labour at home

125. At 4.13pm on 11 Month9, Ms A called RM C about her pain, as she was unsure whether she was in labour. RM C advised Ms A to start timing the pains if they continued. Ms A does not recall being asked about fetal movements during this telephone conversation, and there is no documentation regarding this telephone call and the advice given.

126. At 7.35pm, Ms A text messaged RM C: "Hi there, still getting back pains every 3–4 mins, last about 40 secs and feeling cold and nauseous … have been feeling since about midday." At 7.37pm, Ms A text messaged RM C: "Am trying to cope when pain comes through but is quite regular."

127. RM C telephoned Ms A at that time to tell her that RM F was on call overnight. Ms A recalls telling RM C that she was feeling sick, and that RM C said that this might be an effect of labour. Ms A recalls RM C telling her that labour had started but it was still in the very early stages, and to call back once her contractions were lasting at least one minute and were two minutes apart. Ms A does not recall being asked about fetal movements during this telephone conversation, and there is no documentation regarding this telephone call and the advice given. Regarding her two telephone conversations that evening with Ms A, RM C told HDC that while she cannot specifically recall the discussions, she has no doubt that she asked Ms A about fetal movements and was reassured by her reply.

128. Ms Bailey advised: "I would have expected a reported discussion to be documented at every point of contact during the early labour phase." I agree and I consider it suboptimal that RM C did not document telephone assessments, including whether or not the baby was active, and the advice given.

Monitoring FHR

129. At around 7am, Ms A passed a gush of water that was "yellowy" in colour. She spoke to back-up midwife RM F, who advised her to go to the delivery suite in the next hour

for an assessment and pain relief options. Ms A arrived at the hospital just before 8am. They went to the delivery suite, where RM C took Ms A's BP, pulse and temperature and conducted a vaginal examination. RM C found that Ms A was 8cm dilated.

130. RM C commenced CTG monitoring. She said that the trace appeared slightly flat with shallow decelerations with contractions, and she interpreted the trace as a "sleep trace" and that the decelerations were from compression of the head. Ms Bailey advised that the CTG was abnormal, and "RM C's interpretation of the CTG was inaccurate".

131. After approximately 30 minutes, RM C removed the CTG so that Ms A could go to the toilet, following which RM C recommended Ms A keep active, and RM C attended to documentation. RM C did not recommence CTG monitoring at that time despite the RANZCOG Guideline and the DHB's policy recommending continuous CTG monitoring during labour where the mother's BMI is 40 or above and stating that CTG monitoring should be interrupted only for short periods of up to 15 minutes to allow personal care. As accepted by RM C:

> "My initial interpretation of the CTG trace was incorrect. I misinterpreted the trace as a head compression rather than a non-reassuring trace. I should have placed the CTG monitoring trace back in place once [Ms A] returned from the toilet."

132. Ms Bailey advised that it was reasonable for RM C to remove the CTG for Ms A to go to the bathroom, but she would have expected the CTG to be reapplied immediately after Ms A's return, to assess whether the non-reassuring features continued or resolved. Ms Bailey stated:

> "I believe [RM C] should have reapplied the CTG before attending to documentation. In this instance [RM C] did not meet the requirements of standard six of the midwifery standards which states midwifery standards are prioritised and implemented appropriately with no midwifery action or omission placing the woman at risk."

133. In addition, I note that the RANZCOG Guideline provides that, in circumstances where there are no risk factors and a CTG is not required, the FHR should still be monitored by intermittent auscultation every 15 to 30 minutes in the active phase of the first stage of labour. RM C did not carry out even those basic assessments, and acknowledged that it was possibly 90 minutes after the first CTG trace before she tried to listen to the FHR again.

134. I am highly critical of RM C's actions in regard to FHR monitoring. RM C did not follow the RANZCOG Guideline and the DHB policy, which both recommend continuous FHR monitoring in labour when a woman has a high BMI. In addition, even if RM C did not consider that a CTG was warranted, and was not aware of the guidelines and policies as relate to women with high BMIs, she failed to auscultate the FHR every 15 to 30 minutes, which was, according to the RANZCOG Guideline, the minimum fetal assessment required for any woman at this stage of labour.

Emergency assistance

135. When RM C could not find the FHR abdominally she tried to apply an FSE. She stated that the tracing was abnormal, so she rang for assistance and RM H arrived quickly and agreed that the tracing was very unusual and that it did not sound like an FHR. RM C said that she went next door to get another FSE, but the tracing was the same with the new FSE.

136. Ms Bailey advised:

> "It would be common practice for a midwife to attempt to locate the fetal heart using a FSE before contacting the obstetric team, however once the FSE had been applied and the fetal heart was not recorded the obstetrician should have been called urgently via the emergency systems in place in [the DHB]."

137. RM H said that she asked RM C whether she would like her to get Dr E, and RM C said yes, so she left the room. RM H said that she had been on the postnatal ward previously, so she knew that Dr E was there. She said that she went directly to the desk, telephoned the ward, and asked a midwife to send Dr E to the delivery suite to review the CTG.

138. RM C stated:

> "[RM H] walked out of the room without saying a word. I assumed she'd gone to get help. I waited a few minutes and when nothing happened, I walked quickly to the desk where another hospital midwife was sitting. I said I needed to see [Dr E] urgently. The midwife said [Dr E] was upstairs and I asked her to please get her for me."

139. Ms Bailey advised me that it would be reasonable practice for an LMC to stay with the woman she was providing care for, and for a core midwife to summon help. However, she noted: "[W]hen no assistance arrived I would have expected [RM C] to call the emergency bell or summon an obstetrician urgently via the paging system." The DHB's Obstetric Emergency guideline sets out the process of placing an emergency call to the operator, or an urgent page to the on-call medical and midwifery staff, and states that the room emergency call bell can be used to summon assistance. RM C did not follow this process. I accept that advice and consider that RM C should have followed the emergency process in this situation.

Delivery

140. Following confirmation of Ms A's baby's death, Ms A's care was managed by Dr D and the obstetric team. Accordingly, I have not commented on the care provided by RM C during the delivery.

Postnatal care

141. On 15 Month9 at 10.52am, Ms A was discharged by a hospital midwife into the care of RM C. Ms A had suffered a second degree perineal tear during the birth. Before she left hospital, Ms A had been given medication to suppress lactation, and had been treated with IV antibiotics.

142. Ms A said that she was "left in the lurch" after she was discharged from hospital, with no midwifery care and neither RM C nor any other midwife from the midwifery clinic supporting her postnatally, and she had to rely on family members for advice on what was going on with her post-baby body until the hospital arranged a midwife for her some weeks later.

143. RM C's account is that on 15 Month9 she felt unable to provide postnatal care in Ms A's home because she lived with her mother, and RM C felt that Ms A's mother was angry with her and never wanted to see her again. RM C stated that she had no venue in which to see Ms A, as the midwifery clinic's practice rooms were busy, so she arranged to meet Ms A at RM C's family member's house that day. RM C stated: "I was crouched in the gutter and talking to [Ms A] at the car window. This was not an ideal consultation by any means." I consider it was insensitive and inappropriate for RM C to conduct a consultation with a recently bereaved mother in this way.

144. RM C stated that on 20 Month9 she text messaged Ms A: "Hi, I know this is difficult but I just want to make sure you are okay. Phone or text me. Thanks." RM C stated that Ms A did not respond to the text, so she assumed that Ms A did not wish her to continue postnatal care. RM C then telephoned the hospital and organised for it to complete Ms A's postnatal care.

145. RM C stated that she received a text message from Ms A on 22 Month9, stating that she was recovering well physically. RM C did not attempt to make any further contact with Ms A for three weeks.

146. On 12 Month 10, RM C sent Ms A a text message stating: "[Ms A] I would like to see you once more so I can discharge you. Maybe some closure for both of us. How about [the midwifery clinic] either Friday or Monday at 12.20?" RM C stated that she did not receive any reply, and sent a further text message on 18 Month10.

147. The section 88 notice requires that an LMC provide a minimum of seven postnatal visits.[32] Following the birth of her baby, Ms A received no visits from RM C after her discharge from hospital, apart from the meeting on 15 Month9 outside RM C's family member's house.

148. Following that meeting, I consider that RM C should have contacted Ms A by telephone or visited her in person, as Ms A was particularly vulnerable.

Conclusion

149. In my view, RM C failed to provide adequate care to Ms A in a number of regards as follows:

a) Ms A had clear risk factors. RM C should have recommended to Ms A that the responsibility for her care be transferred to a specialist at an early stage of her pregnancy, as required by the Referral Guidelines.

b) RM C did not document telephone assessments on 11 Month9, including whether or not the baby was active, and the advice given.

[32] See DA29 Service specification: services following birth (1)(b).

c) RM C did not follow the RANZCOG Guideline and the DHB policy, which both recommend continuous FHR monitoring in labour when a woman has a high BMI. In addition, even if RM C did not consider that a CTG was warranted, she failed to auscultate the FHR every 15 to 30 minutes, which was the RANZCOG Guideline minimum fetal assessment required for any woman at this stage of labour.

150. Overall, I find that RM C failed to provide services to Ms A with reasonable care and skill, and, accordingly, breached Right 4(1) of the Code.

151. Furthermore, by not recommending to Ms A that the responsibility for her care be transferred to a specialist, RM C failed to provide Ms A with essential information that a reasonable consumer in Ms A's circumstances would expect to receive. Accordingly, I find that RM C breached Right 6(1) of the Code.

Recommendations

152. I recommend that RM C provide a written apology to Ms A within three weeks of the date of this report. The apology is to be sent to HDC for forwarding to Ms A.

153. I note that, should RM C wish to return to midwifery practice, the Midwifery Council of New Zealand would decline to issue a practising certificate prior to undertaking a review of RM C's competence. I support this approach.

154. I recommend that, within three months of this report, the DHB provide an update to HDC on the implementation of the recommendations made in the RCA.

Follow-up actions

155. RM C has been 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.

156. A copy of this report has been sent to the DHB.

157. A copy of this report with details identifying the parties removed, except the expert who advised on this case, will be sent to the Midwifery Council of New Zealand, and it will be advised of RM C's name.

158. A copy of this report with details identifying the parties removed, except the expert who advised on this case, will be sent to the New Zealand College of Midwives, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Addendum

The Director of Proceedings did not institute proceedings against RM C. The matter was resolved by way of a negotiated agreement.

Appendix A: Independent midwifery advice to the Commissioner

The following expert advice was obtained from Michelle Bailey, a registered midwife:

"My name is Michelle Bailey. I have been asked to provide an opinion to you on case number C15HDC00540. I have read and agree to follow the Health and Disability Commissioner's Guidelines for Independent Advisors.

I qualified as a Registered General Nurse in 1989 and as a Registered Midwife in 1991 in Newcastle upon Tyne, United Kingdom. I worked as a midwife in a tertiary hospital in Newcastle upon Tyne from 1991 to 2003. During this time I worked across the scope of midwifery practice, including time spent in a midwifery led unit, working as a practice support midwife and working as part of a team managing complex maternity care. On moving to New Zealand I worked as a Clinical Charge Midwife on the Assessment Labour and Birthing Unit at Middlemore Hospital from 2005 to 2009, followed by a position as a Community Midwife in a Primary Unit. My current role is the Maternity Quality and Safety Programme Facilitator at Northland District Health Board. I held the position of co-chair of the Northland branch of the New Zealand College of Midwives (NZCOM) from July 2012 through to July 2015. I am a current member of the National NZCOM finance committee. I provide competency supervision on behalf of the Midwifery Council and was a member of the Maternity Quality and Safety Programme Evaluation Expert Advisory Group for the Ministry of Health. I am working towards a post graduate diploma in health leadership and management.

Background
[Ms A] (27 years old) had her first appointment with [RM C] on 7 [Month1] at [a midwifery clinic]. […] She had a high Body Mass Index (BMI) of 44.1; a strong family history of type 2 diabetes and an abnormal Polycose test at 28 weeks but had a normal oral glucose tolerance test. She had a history of asthma and smoked until the 24th week of her pregnancy. [Ms A] was not referred for an obstetric consultation during her pregnancy.

On 12th [Month9], [Ms A] presented to [the public hospital's] Delivery suite. Her gestation was 41 weeks according to her 6 week scan, but 42 weeks and three days according to her last menstrual period. She had irregular pains for the past two days. [RM C] performed a Cardiotocograph (CTG) which indicated reduced variability and some shallow decelerations. The CTG ran from 8.20am–8.50am and remained poor, but it was removed so that [Ms A] could mobilise and go to the bathroom. The CTG was replaced at around 10.10am when [RM C] could not find a fetal heart rate abdominally. She then placed a scalp clip which showed maternal pulse, but as this did not trace well she replaced the scalp clip, however it indicated the same trace.

The obstetric Registrar [Dr E] was asked to review the trace at about 10.25 am. She said there was no discussion between herself and [RM C], and no indication of urgency. She reviewed the trace for one minute before deciding to scan to find

the fetal heart rate. Unfortunately, [Dr E] was not able to find the fetal heart rate and she called consultant obstetrician [Dr D] at 10.35 to assess [Ms A] urgently. [Dr D] repeated the scan and confirmed intrauterine fetal death. [I have been asked to] provide comment on the following:

[RM C's] overall management

1. I have been asked to advise whether I consider the care provided to [Ms A] by [RM C] to be reasonable.
2. Whether [RM C] should have referred [Ms A] for an obstetric consultation during her pregnancy.
3. Whether [RM C] provided an appropriate standard of care to [Ms A] after her estimated due date per scan, (5 [Month9]) had passed.
4. Whether [RM C] provided an appropriate standard of care to [Ms A] once she presented in delivery suite on 12 [Month9].
5. [RM C's] interpretation of the CTG trace.
6. Whether the CTG trace indicated earlier assistance was required.
7. Whether I consider [RM C's] call for assistance from the obstetric registrar was appropriate in the circumstances.
8. Any other aspects of care provided to [Ms A] that warrant comment.

I have also been asked to advise you upon:

1. What the standard of care/accepted practice is
2. If there has been a departure from the standard of care or accepted practice, how significant was the departure?
3. How would it be viewed by my peers?

I have read the following information provided by you prior to writing this advice:

- Complaint dated […] from [Dr G] (Obstetrician)
- [Ms A]'s clinical notes from [the DHB]
- Initial report to HDC from [the DHB], dated [2015]
- Further Response from [the DHB], dated [2015]
- [The DHB's] Root Cause Analysis report, dated [2015], and investigation notes
- [The DHB's] fetal surveillance guideline
- [The DHB's] access agreement documentation for [RM C]
- Statement from Midwife [RM F] to HDC ([RM F] was on the weekend night duty for [the midwifery clinic] at the time of [Ms A's] labour
- Clinical records held by [RM C]
- Response to complaint from [RM C], dated [2015]
- Response to Notification of investigation from [RM C], dated [2015]
- [Ms A's] mother, [Mrs B's] account of events
- [Ms A's] account of events
- HDC's Guidelines for Independent advisors
- [The DHB's] guideline management of obese pregnant women
- [The DHB's] guideline management of prolonged pregnancy in low risk women

Timeline of events taken records supplied

[RM C] registered [Ms A] for midwifery care at 7 weeks gestation. It was [Ms A's] 2nd pregnancy and 1st baby. [Ms A] was noted to be an asthmatic, a current smoker with a BMI of 44.1 and had a family history of type two diabetes. At the initial visit [RM C] documented [Ms A] to have a normal blood pressure of 128/78 and weigh 123kgs. Her estimated date of delivery was calculated to be 26 [Month8] by her last menstrual period (LMP). [RM C] gave [Ms A] a referral form for a dating ultrasound scan (USS) and a laboratory request form for her to have her 1st Antenatal (A/N) blood tests, a Mid-Stream Urine sample and a vaginal swab for Group B streptococcus culture. [RM C] provided [Ms A] with a Bounty Pack at this visit which she states included extra information leaflets, one of which was healthy eating in pregnancy. She prescribed Folic Acid and Iodine and arranged to see her again in 2 weeks following the scan results.

[RM C] saw [Ms A] again on the 22nd [Month1]. The USS gave an EDD which was not consistent with the LMP date therefore her EDD was revised to 5 [Month9] by USS, as advised by the radiologist. At this point [Ms A] was given a form for 1st trimester serum screening and nuchal translucency scan. [RM C] also gave [Ms A] copies of her blood and scan results and confirmed she was taking folic acid and iodine supplements. A next appointment was arranged for 5 weeks which [Ms A] did not attend. She was contacted by text and another appointment was made for 2 weeks' time. At this point [RM C] was advised that [Ms A] was not proceeding to 1st trimester screening following discussion with family.

At 14 weeks [Ms A] has a routine antenatal appointment where smoking was discussed and is given smoking cessation advice and nicotine replacement therapy (gum) and reports she has reduced her smoking. Was given information regarding A/N classes and a form for her anatomy scan at 20 weeks.

[Ms A] was seen on 21st [Month4] at 20 weeks, having not attended a previous appointment. Anatomy scan was normal and the radiologist commented that the size agrees with gestational age.

On 18 [Month5] at 24 weeks gestation, [Ms A] has a blood pressure (BP) of 148/88, no proteinuria and has stopped smoking. Fetal heart was heard and regular. [Ms A] was noted to have heartburn.

On 18[Month6] at 28 weeks gestation BP 112/60, no proteinuria, fetal movements are felt and fetal heart is heard. Remains smoke free. Laboratory form is given for subsequent A/N bloods and Polycose.

29 [Month6] at 30 weeks gestation BP 120/70 no proteinuria, normal fetal heart. Polycose noted to be abnormal at 9.4mmols/litre. Explanations given regarding screening for gestational diabetes and [Ms A] was given a form for a glucose tolerance test (GTT). Scan form to check growth was given.

31 [Month6] Phone call to back up LMC from [Ms A] requesting her GTT result. Result obtained from computer records showed a normal GTT result of fasting

4.1mmols/L and a 2 hour glucose of 5.6mmols/L. [Ms A] was advised this was a normal result and there were no concerns re diabetes from this test as the result was normal.

[Ms A] did not attend an appointment at 32 weeks because she was attending a funeral. She was contacted by [RM C] and another appointment was arranged.

19 [Month7] at 33 weeks gestation BP 134/76, no proteinuria, smoke free, cephalic presentation, fetal heart heard and fetal movements noted. Has been away and USS was rearranged. USS showed estimated fetal weight (EFW) of 2764g. This was plotted on a customised growth chart between the 50th and 90th percentiles.

5 [Month8] at 35 weeks BP120/78, no proteinuria, cephalic presentation, fetal heart heard and normal fetal movements. Remains smoke free. Taking Gaviscon for heartburn. Birth plan documentation was given with information leaflets. Plan repeat growth Scan at 38 weeks gestation.

From 12th [Month8] to 9th [Month9] [Ms A] had weekly A/N visits with [RM C]. Her BP remained normal, no proteinuria, fetal heart heard at each visit and fetal movements were noted. Remained smoke free. USS was done at 38 weeks to monitor growth — EFW 3768g. This was plotted on customised chart between the 50th and 90th centiles and was noted on scan report as normal interval growth.

9th [Month9] at 40+4 weeks gestation BP 130/72, trace protein in urine, fetal movements and fetal heart heard remains smoke free, cephalic presentation 3/5th palpable. A VE examination was performed with a view to stretch and sweep — cervix posterior station –1, unable to reach cervix or assess dilatation. Evening primrose capsules given — 2 tablets nightly for 2 nights. Having more problems walking latent stage of labour. Postdates appointment was arranged for 41weeks +1 day.

11th [Month9] during the day [Ms A] and [RM C] have a number of text and phone conversations as [Ms A] is contracting and has had a show. [RM C] informed [Ms A] that [RM F] would be on call overnight. At 19.35 [Ms A] texted [RM C] and informed her she was contracting every 3–4 minutes with contractions lasting 40 seconds. [RM C] advised her she was in early labour and not to come to hospital.

12 Month9 [RM F] has one call from [Ms A] overnight and a second in the morning. [Ms A] informed her at 07.00 she thought she might have ruptured membranes and was passing yellow fluid. [RM F] advised [Ms A] to attend delivery suite for assessment at 08.30.

[Ms A] was admitted to delivery suite at 08.00. On admission her observations were recorded as follows — BP 106/56 Pulse 104 temperature 36.1 and respiration rate of 16. She was having 3 contractions in 10 minutes that were noted to be strong. Her membranes had ruptured at 07.00 with yellow liquor draining. Abdominal examination was performed, lie was longitudinal, and presentation was

cephalic. Descent was D2–3/5th palpable, position — Left Occipito Transverse. Cardiotography (CTG) was commenced at 08.20. At 08.25 Vaginal Examination performed — Cervix 0.5 — 1cm thick, Os 8cms dilated, cephalic presentation, and station at ischial spines. 08.30 IV cannula was sited and 1L of Normal Saline was commenced. The CTG tracing showed a difficult to assess contraction pattern, a fetal heart baseline rate of 135bpm with variability of less than 5bpm with shallow variable decelerations. The CTG was discontinued at 08.45 to allow [Ms A] to mobilise and use the bathroom. Interpretation of the CTG in the electronic records was noted as normal. At 10.12 [RM C] attempted to listen to fetal heart and could not locate it. She performed a vaginal examination to apply a fetal scalp electrode (FSE) and found that the cervical dilatation was unchanged. She had two attempts to apply the FSE 10 minutes apart as the trace appeared to be recording the maternal pulse. The second FSE continued to record maternal pulse. A core midwife was present and assisting [RM C] at this point. The obstetric registrar [Dr E] was asked to attend to review the CTG and attended at 1033. She performed an USS and no fetal heart was detected. Consultant [Dr D] was called and confirmed intrauterine fetal death using USS. [Dr D] completed an assessment and made a plan for [Ms A] to have an epidural for pain relief and have augmentation of labour with Syntocinon. Plans included all necessary investigations to be undertaken.

11.50 Epidural sited and Syntocinon commenced at 12.05. CTG monitor was reapplied and left on for the rest of the labour, presumably to record the contractions, although for much of the labour the recording of the contractions on the CTG record was inadequate. A urinary catheter was sited at 12.12. All epidural observations were within normal limits and [Ms A] was noted to be apyrexial at 12.12. Blood results were noted at 12.14 to have a raised white cell count which may be indicative of infection. IV antibiotics were commenced. Routine blood tests following a stillbirth and blood cultures were taken. At 13.52 [RM C] contacted the Anaesthetist regarding the epidural which was not effective. [RM C] also performed another examination at 14.00 to assess progress. The cervix was 7 cm dilated with the presenting part at the spines with no moulding. Epidural top-ups were given which appeared ineffective and the epidural was resited. During this time maternal observations remained in the normal range. The family were unhappy that the second anaesthetist did not allow family members in the room during the procedure. A further vaginal examination was performed by the Obstetric Consultant at 16.48. The cervix was now 9 cm dilated with the presenting part at the spines with some moulding. Descent of the presenting part in abdominal examination was not documented. Instruction was given to commence pushing in one hour if fully dilated and to be prepared for possible shoulder dystocia and post-partum haemorrhage. The Obstetric Registrar was to be present in the Delivery Suite when [Ms A] was pushing. Bloods were to be repeated after delivery. At 17.45 another vaginal examination was performed but there was minimal documentation of findings except that the cervix was fully dilated and the position was occipito-posterior. Pushing was started. At 18.35 another examination was performed and there was no significant progress. Descent of the fetal head on abdominal examination was not documented. The Obstetric Registrar was informed and repeated the examination at 18.55. After discussion with the

Obstetric Consultant a plan was made to deliver the baby in theatre with forceps or by caesarean section. However before [Ms A] could be transferred to theatre she progressed to a vaginal delivery. The head was delivered at 1932 but there was no further progress so the emergency bell was pressed and both the Obstetric Consultant and Registrar attended and delivered the baby at 19.45 with McRoberts manoeuvre. The placenta and membranes were delivered at 19.50 after an Oxytocin injection. Misoprostol was also administered and a second degree perineal tear was repaired by the Consultant. Estimated blood loss was 450 mL. At 22.44 the epidural and urinary catheters had been removed and [Ms A] had a shower. Observations were repeated at 22.56; this is the first record of observations since delivery. There was a low-grade pyrexia of 37.6°C with a heart rate of 125/min and normal blood pressure and respiratory rate. [Ms A] was transferred to the [family] room at 23.20. An earlier record of observations following delivery recorded a temperature of 38.8°C but the time was given as 02.12, which is presumed to be a documentation error; it is unclear what time this was recorded.

On the morning of 13 [Month9] blood tests were performed which showed haemoglobin 102 g/L, white cell count 23.3 and CRP 131 mg/L. The Obstetric Registrar contacted the coroner and was informed that this was a stillbirth and did not fall under their jurisdiction. A retrospective note by the Registrar documented that the delay transferring [Ms A] to theatre the previous evening was because of another emergency. [Ms A] and her family chose to have a post mortem examination on the baby. Observations and examination in the morning were normal and IV antibiotics were discontinued but restarted in the afternoon by the Obstetric Registrar. Positive blood cultures were thought likely to be due to contamination. There are multiple entries in the electronic record by Midwifery but the staff member making the record was not documented. Dostinex (Cabergoline) was administered, presumably to suppress lactation, but no discussion or explanation of this was documented.

On 14 [Month9] IV antibiotics were discontinued and [Ms A] and her family left the hospital to attend the funeral. She returned to the hospital later the same day. Observations were normal and IV antibiotics were continued until the morning of 15 [Month9] when she was discharged.

On 20 [Month9] a complaint was lodged with HDC by [Dr G] regarding the care provided by [RM C]. This followed reporting of the case in [the DHB's] incident reporting system by the Obstetric Registrar at the request of [Dr G]. Later there was a root cause analysis of this case at [the DHB] which reported [later in] 2015.

There appeared to be a strained relationship between [Ms A] and [RM C] after the delivery and [RM C] asked the hospital to arrange postnatal care in the community. [RM C] attempted to contact [Ms A] several times over the next few weeks by text; only some of these texts were replied to.

The subsequent statement by [Ms A's] mother indicated she considered [RM C] did not handle the emergency situation well when she could not pick up the fetal

heartbeat, but appeared indecisive and did not communicate well. Some of her comments about lack of communication were also directed to the hospital staff.

The statement by [Ms A] regarding her care stated that throughout the labour [RM C] made frequent reference to her difficulty with the electronic records system and appeared to have difficulty managing some of the equipment. Following the birth she reported that [RM C] did not behave towards her in a professional manner, expressed that she felt responsible for the baby's death but also giving confusing information regarding whether the death might have been due to wrong dates or infection or diabetes. It appears there was a considerable delay of weeks before she was contacted by the hospital regarding postnatal care.

[RM C's] overall management of [Ms A].

Antenatal Management
[RM C's] responsibilities under the Maternity service notice pursuant to section 88 of the New Zealand public health and disability act 2000 pertinent to this case are as follows:

DA19 Service specifications for first and second trimester

(1) For a woman in the first trimester of pregnancy, the LMC must provide the following services as required:

(a) Inform the woman regarding:

(ii) The contact details of the LMC and back-up LMC; and

(iii) The standards of care to be expected:

(b) Provide appropriate information and education about screening, and offering referral for the appropriate screening tests that the Ministry of Health may, from time to time, notify maternity providers about:

(c) Pregnancy care and advice, including —

(ii) Ensuring that the woman has a copy of the Ministry of Health's consumer information on primary maternity services; and

(iii) All appropriate assessment and care of a woman:

(2) For a woman in the second trimester of pregnancy, the LMC must provide all of the following services:

(a) Inform the woman regarding —

(i) The availability of pregnancy and parenting education; and

(ii) The availability of paid parental leave, if applicable; and

(b) At the start of the second trimester or at the time of registration —

(i) Conduct a comprehensive pregnancy assessment of the woman including, an assessment of her general health, family and obstetric history; a physical examination; and

(ii) Commence and document a care plan to be used and updated throughout all modules including post-natal that meets the guidelines agreed with the relevant professional bodies; and

(c) Throughout the second trimester —

(i) Monitor progress of pregnancy for the woman and baby, including early detection and management of any problems; and

(ii) Update the care plan; and

(iii) Provide appropriate information and education; and

(iv) Offer referral for the appropriate screening tests that the Ministry of Health may, from time to time, notify maternity providers about:

(d) Book in to an appropriate maternity facility or birthing unit (unless a homebirth is planned).

DA21 Service specification: third trimester

In addition to the requirements set out under the service specifications for the first and second trimester, the LMC must —

Organise appropriate arrangements for care during labour and birth and following birth, including, if possible, organising for the woman to meet any other practitioners who are likely to be involved in her care.

In my opinion, [RM C] provided [Ms A] with antenatal care as per the above service specification requirements and as per standard practice for a woman with an uncomplicated pregnancy, however, [Ms A] presented with increased risk due to her increased BMI, smoking status and family history of diabetes. I would have expected [RM C] to discuss healthy eating and recommended weight gain in pregnancy with [Ms A] and also offer or recommend to refer [Ms A] for an antenatal consultation with a specialist regarding her increased body-mass index (BMI). It is my opinion that [RM C] did not offer care in this situation as per standard two of the midwifery standards which states: The midwife upholds each woman's right to free and informed choice. No choice was given in this instance.

[Ms A] attended 13 routine antenatal visits with [RM C] where antenatal assessment was completed as per standard, with the exception that she was not weighed at every visit, which is the current recommended best practice. Fundal height measurements were not recorded, however it is recognised that assessment of fetal growth by measurement of fundal height is unreliable in obese women and serial growth scans were requested in the third trimester in accordance with [the DHB] guidelines. [RM C] provided appropriate recommended testing for diabetes; these tests were delayed because [Ms A] did not attend some of her visits. [Ms A] was referred promptly for a glucose tolerance test (GTT) following an abnormal Polycose test. The GTT was normal and the growth scans demonstrated a normal pattern of growth within the normal range. It was therefore acceptable that a further GTT was not required. Although [RM C] did not refer [Ms A] as per guidelines she provided the rest of her care as per [DHB] guidelines. [RM C]

provided midwifery care as per standards three and four of the midwifery handbook which states: The midwife collates and documents comprehensive assessments of the woman and/or baby's health and wellbeing. And standard four which states: The midwife maintains purposeful, on-going, updated records and makes them available to the woman and other relevant persons. [RM C] was able to present well documented antenatal assessments in a copy of [Ms A's] hand maternity records.

Labour and Birth Management

[Ms A] was thought to be in the early stages of labour from about midday on 11 [Month9]. Advice was sought and given on a number of occasions throughout the day and overnight. [Ms A] was advised to stay at home, which would be considered acceptable practice on the basis of the symptoms she reported. However there is only one documented discussion about fetal movements over this time. I would have expected a reported discussion to be documented at every point of contact during the early labour phase. [RM C] had advised [Ms A] that [RM F] was covering the night duty and would be informed about her situation. When [Ms A] informed [RM F] at 7 am that she thought she was draining yellow fluid she was advised to attend the hospital for assessment. This was appropriate management and would be considered standard practice. On admission to hospital [RM C] completed appropriate assessments and a CTG was commenced to assess fetal wellbeing. In my opinion application of a CTG was appropriate due to [Ms A's] increased BMI and the yellow coloured liquor and was in accordance with [the DHB] and RANZCOG fetal surveillance guidelines. The CTG recorded for 20 minutes and in my opinion the trace was abnormal. [RM C] removed the CTG for [Ms A] to use the bathroom, which was reasonable, but I would have expected the CTG to be reapplied immediately on [Ms A's] return from the toilet. [RM C] notes she was entering information on to the electronic maternity information system which she found challenging to use and attributed the delay in reapplying the CTG to this. Although contemporaneous documentation is a standard requirement it should not take priority over women's care. I believe [RM C] should have reapplied the CTG before attending to documentation. In this instance [RM C] did not meet the requirements of standard six of the midwifery standards which states midwifery actions are prioritised and implemented appropriately with no midwifery action or omission placing the woman at risk.

There appeared to be a delay between [RM C] not being able to locate the fetal heart rate and the Obstetric review from the Registrar. It would be common practice for a midwife to attempt to locate the fetal heart using a FSE before contacting the obstetric team, however once the FSE had been applied and the fetal heart was not recorded the obstetrician should have been called urgently via the emergency systems in place in [the DHB].

Once the IUFD had been diagnosed [RM C] continued to provide midwifery care with the support of her practice partner, with the obstetric team taking the clinical responsibility and providing a management plan.

Whether [RM C] should have referred [Ms A] for an obstetric consultation during her pregnancy.

The Ministry of Health Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines) recommend referral and transfer of clinical responsibility to an obstetric specialist for a woman with a BMI of >40. [The DHB's] 'Management of Obese Pregnant Women' also recommends a transfer of clinical responsibility to an obstetric specialist for a woman with a BMI of >40. [RM C] should have discussed and recommended referral to the obstetrician for [Ms A] due to her increased BMI.

Whether [RM C] provided an appropriate standard of care to [Ms A] after her estimated due date per scan, (5 [Month9]) had passed.

Throughout the documentation provided there are a number of entries by the obstetric team which suggested [Ms A] was 42+ weeks when she birthed her baby. The pregnancy was dated by early ultrasound scan at 6 weeks gestation, which had been requested by [RM C]. The Radiologist report recommended an expected date of delivery (EDD) which was inconsistent with the date calculated from [Ms A's] last menstrual period date (LMP). Whilst some clinicians would consider 6 weeks too early to provide reliable dating [RM C] was following the recommendations of the Radiologist when providing care for [Ms A]. The scan date of 5 [Month9] was used for all subsequent decisions as per current best practice and as per [the DHB] current guidelines which state:

'Sure menstrual dates or an early dating scan (a scan that occurred within the first trimester) ensures certainty around prolonged pregnancy assessments and planning. If dates are uncertain then individualised management will be necessary (Briscoe et al, 2005; RCOG, 2001; Cochrane, 2006)

It is my opinion that a post-dates management plan in this case should have been made by an obstetrician following an early referral for increased BMI. [RM C] provided routine postdates care for [Ms A] as indicated by [the DHB's] guideline for prolonged pregnancy in low risk women. The referral guidelines recommend referral for postdates IOL in a timely manner before 42 weeks and [the DHB] recommend[s] a referral to Antenatal Day Unit (ADU) in the 41st week of pregnancy and IOL as near to 42 weeks as possible. Both these guidelines are appropriate for the management of low risk pregnancy, however [Ms A] did not have a low risk pregnancy. At 40+4 weeks [RM C] undertook a vaginal examination, although not documented a stretch and sweep would be common practice with midwives at this stage. [RM C] prescribed evening primrose capsules to aid the onset of labour — appropriate doses were used and the timing of this was also appropriate. [RM C] had organised a post-dates assessment in the ADU for 41 weeks. It is not possible to know whether a different plan would have been made if she had been under specialist care.

Whether [RM C] provided an appropriate standard of care to [Ms A] once she presented in delivery suite on 12 [Month9].

In my opinion on admission the initial standard of care [RM C] provided was reasonable for the following reasons:

- [RM C] was there to meet [Ms A] on her arrival to the birthing unit
- She completed appropriate baseline assessments including an abdominal palpation, vaginal assessment, and records the fetal heart rate as 138
- A CTG was commenced to assess fetal wellbeing.
- Inserts an intravenous cannula and requests blood tests

However I consider the following care was not of an acceptable standard:

- The medical staff were not informed of [Ms A's] admission in a timely manner
- The CTG was not reapplied immediately after [Ms A] had returned from the bathroom
- There was a delay in contacting the medical team once the fetal heart could not be detected

In my opinion undertaking a CTG was indicated due to [Ms A's] increased BMI and the reporting of the yellow coloured liquor. It was in accordance with [the DHB] and RANZCOG fetal surveillance guidelines. The CTG recorded for 20 minutes and in my opinion the trace was abnormal. [RM C] removed the CTG for [Ms A] to use the bathroom, which was reasonable, but I would have expected for the CTG to be reapplied immediately on [Ms A's] return from the toilet. There appeared to be a delay between [RM C] not being able to locate the fetal heart rate and the obstetric review. It would be common practice for a midwife to attempt to locate the fetal heart using a FSE before contacting the obstetric team, however once the FSE had been applied and the fetal heart was not recorded or appeared abnormal the obstetrician should have been summoned immediately.

[RM C's] interpretation of the CTG trace.
It was noted in the electronic record entered at 08.50 that the CTG had a baseline of 130–139 with variable decelerations and variability of 5–25 bpm and was documented to be normal. The monitoring was completed by [RM C], however in her response to the HDC [RM C] notes that the CTG trace appeared slightly flat with shallow decelerations with contractions. She notes that she read the trace as a sleep trace and the decelerations as head compression.

On interpreting a CTG trace the overall risk factors need to be taken into account, in this [Ms A] had an increased BMI and was draining yellow coloured liquor so was considered high risk. She was documented as having 3 strong contractions in 10 minutes, however reviewing the CTG it is impossible to ascertain the contraction pattern. This in itself makes the CTG difficult to interpret as you cannot assess the timing of any decelerations in association with the contractions. The baseline rate of 135bpm is normal, the variability is between 3–5bpm which is reduced and there are decelerations of unknown timing. The CTG is abnormal. [RM C's] interpretation of the CTG was inaccurate.

Whether the CTG trace indicated earlier assistance was required.
The fetal heart was recorded for 20 minutes and in my opinion the trace was abnormal but did not require immediate assistance from the obstetric team. [RM C] removed the CTG for [Ms A] to use the bathroom, which was reasonable, but I would have expected for the CTG to be reapplied immediately on [Ms A's] return from the toilet. Although the initial CTG was abnormal, in practice I would have expected [RM C] to reapply the CTG to see if the non-reassuring features continued or resolved. If they had continued for another 20 minutes I would have expected [RM C] to have a core midwife to give a second opinion and call for obstetric review. If the CTG features worsened I would have expected a more prompt review.

Whether I consider [RM C's] call for assistance from the obstetric registrar was appropriate in the circumstances
I consider [RM C's] call for assistance was not appropriate given the circumstances. It is difficult to determine exactly what happened with regards to the call for assistance as [RM C] and the Obstetric Registrar give conflicting versions of events at this point.

There appeared to be a delay between [RM C] not being able to locate the fetal heart rate and the obstetric review. It would be common practice for a midwife to attempt to locate the fetal heart using a FSE before contacting the obstetric team, however once the FSE had been applied and the fetal heart was not recorded or appeared abnormal the obstetrician should have been summoned immediately.

There is nothing documented by [RM C] in the electronic record regarding consultation with the medical staff. It is documented, in the electronic note, by [RM C] that she applied a scalp clip twice as the fetal heart could not be found abdominally. She tried twice because of poor tracing and said that hospital staff [RM H] was assisting. In her statement to HDC she noted that on placing the first scalp clip the tracing was abnormal so she rang for assistance and placed a second scalp clip but the trace was still abnormal. She notes that at this point she walked to the desk and asked the registrar to come and the registrar followed her back to the room to assess the situation.

In the electronic record the registrar notes that she was doing a ward round on the maternity ward and a message was passed to her to review a CTG in delivery suite. She reiterates this in the RCA discussion.

Taking both versions of events into account it appears that there was no urgency in the request for assistance from either [RM C] or the staff assisting her. It stated in the electronic notes that [RM C] had assistance from staff from [the DHB] but does not state their names nor their roles. The obstetrician should have been called urgently via the emergency systems in place in [the DHB].

Any other aspects of care provided to [Ms A] that warrant comment.
Maternity Clinical Information System (MCIS)
It was noted by [RM C] that she found entering data onto the MCIS system to be challenging. She found that it was time consuming and that it was difficult to enter

data and provide clinical care simultaneously. Using a new system is always challenging, and always more time consuming than using something that is familiar. It is of concern that it seemed to take more than an hour for an admission to the birthing unit to be entered onto the system and in this case provided a clinical risk to the woman.

I have found the notes provided by the MCIS system a challenge to review. There is inconsistency in the data, a true timeline of events cannot be established and the information gleaned from the notes themselves was limited. Blood tests were taken in the morning and reported clinically in the afternoon but the results were recorded in the system as the time taken rather than the time reported.

At no time should the documentation take precedence over clinical care and it is my opinion that because [RM C] found this system difficult to use it may have been a contributory factor to the standard of care she was able to provide.

…

Previous Referrals
[RM C] notes in her responses to HDC that she had made previous referrals to [the DHB] for women with increased BMI, but has found it difficult to transfer clinical responsibility to [the DHB] unless other risk factors present. She does however acknowledge that she did not consider referral in this case.

In summary it is my opinion that some of the care provided to [Ms A] was of a good standard, however I consider that not referring [Ms A] to obstetric services was not accepted practice and her interpretation and management of the CTG tracing was not of an acceptable standard.

References
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Midwives Handbook for practice. New Zealand College of Midwives. 2005

Whitworth, M, Bricker, L, Mullan, C. *Ultrasound for fetal assessment in early pregnancy*. Cochrane Library 2015. DOI: 10.1002/14651858.CD007058.pub3.”

The following further advice was received from Ms Bailey on 1 March 2016:

“Thank you for the opportunity to review [RM C’s] reply to the report I provided to the Health and Disability Commission. I have reviewed the comments in [RM C’s] response to the report and would make the following comments.

[RM C] has acknowledged in her response that [Ms A] should have been referred for Obstetric consultation due to her increased Body Mass index and also acknowledged her incorrect review of the CTG. I have no amendments to make to my report regarding these items.

[RM C] noted that I had commented on page five of my report that she had advised [Ms A] that she was in early labour and not to come to the hospital. I note that on page ten I documented that this would be considered reasonable practice given the symptoms reported to her. I have no further comments to make regarding this.

I note that [RM C] provided a more detailed version of events regarding the call for assistance from the obstetric registrar. [RM C] notes the following:

I could not find an abdominal fetal heart beat so I put a scalp clip on and called for help. [RM H] arrived very quickly. It was a very unusual tracing and I suggested maybe I had cervix. She agreed so I quickly went next door to get another scalp clip. The tracing was the same. [RM H] then walked out of the room without saying a word. I assumed she had gone to get help. I waited a few minutes and when nothing happened, I walked quickly to the desk where another hospital midwife was sitting. I said I needed [Dr E] urgently. The midwife said she was upstairs and I asked her to please get her for me. [Dr E] looked at the tracing for a while and went to get the scanning machine.

In my original report I considered that [RM C's] call for help was not appropriate given the circumstances.

[RM C's] subsequent statement details that she was assuming that [RM H] had gone to get medical assistance. It would be reasonable practice for the Lead Maternity Carer to stay with the woman she is providing care for and for a core midwife to summon help, however, when no assistance arrived I would have expected [RM C] to call the emergency bell or summon the obstetricians urgently via the paging system. The lack of communication from [RM H] on her leaving the room may have contributed to the delay in assistance being sought. …"