Midwife, RM A

A Report by the
Deputy Health and Disability Commissioner

(Case 19HDC01789)

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Executive summary

1. This case highlights the importance of appropriate assessment of a woman's condition, accurate monitoring of a baby's growth, and the need for appropriate action in response to the development of clinical concerns that have the potential to affect the health of a woman and/or her baby.

2. During a woman's pregnancy, her LMC midwife did not measure the fundal height in centimetres at every antenatal visit, and encouraged the woman to count the fetal movements, which was not consistent with current midwifery practice. In the final weeks of her pregnancy, the woman developed oedema, headaches, and elevated blood pressure, but the midwife did not request a pre-eclampsia blood test at 37 weeks' gestation when this was indicated, or perform a urinalysis at each visit. When the woman was in labour, the midwife assessed her condition by telephone, but did not recommend an assessment in person, when this was warranted.

Findings

3. The Deputy Commissioner found the midwife in breach of Right 4(1) of the Code. The Deputy Commissioner considered that cumulatively the woman showed signs of impaired health that were not recognised, which meant that a referral to secondary care was warranted but not done. The Deputy Commissioner was critical that the midwife did not perform a urinalysis at each visit, did not take a blood test to monitor the woman for pre-eclampsia, did not measure the fundal height in centimetres, and did not monitor the fetal growth adequately. The Deputy Commissioner was also critical that the midwife recommended to the woman that she monitor fetal movements by counting them to 10, and did not recommend an assessment of the woman in person when this was warranted.

4. In addition, the Deputy Commissioner was critical that the midwife did not maintain accurate records of the antenatal care she provided, and that her arrangement to provide remote oversight was not suitable to detect and respond to the issues that arose as the woman's pregnancy progressed.

Recommendations

5. The Deputy Commissioner recommended that the midwife undertake training on pre-eclampsia and documentation; provide HDC with a reflection on the training undertaken on the Growth Assessment Protocol; and provide a written apology to the woman and her whānau.

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Complaint and investigation

6. The Health and Disability Commissioner (HDC) received a complaint from Ms B about the services provided by Registered Midwife (RM) A. The following issue was identified for investigation:

- *Whether RM A provided Ms B with an appropriate standard of care between Month1[1] and Month8 2019 (inclusive).*

7. This report is the opinion of Deputy Health and Disability Commissioner Rose Wall, and is made in accordance with the power delegated to her by the Commissioner.

8. The parties directly involved in the investigation were:

RM A	Provider/registered midwife
Ms B	Consumer/complainant
Consumer's mother	

9. Further information was received from a DHB.

10. Independent expert advice was obtained from a registered midwife, Nicholette Emerson (Appendix A).

Information gathered during investigation

Introduction

11. This report concerns the midwifery services that RM A[2] provided to Ms B between 18 Month1, when Ms B booked RM A to be her Lead Maternity Carer (LMC),[3] and 17 Month8, when Ms B went to hospital to give birth.

12. Ms B became pregnant in 2018; this was her first pregnancy. At the time of events, Ms B was aged in her late teens and lived in a rural area.

13. RM A owns and operates her own midwifery practice in a town approximately one hour's drive from Ms B's home. RM A told HDC that her practice area covers a large portion of the district. Ms B's home did not fall within her practice area.

Booking visit (18 Month1)

14. RM A stated that Ms B and her whānau "wanted a Māori midwife and were familiar with me as I had looked after other whānau members over the last 10 years". RM A told HDC

[1] Relevant months are referred to as Months 1–8.
[2] RM A received her midwifery qualification in 2002.
[3] An LMC can be a midwife, a specialist doctor, or a GP, and is chosen by the woman.

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that normally she does not book women from outside her practice area, and that she told Ms B:

a) All visits would need to take place at RM A's clinic (rather than at Ms B's home).

b) Ms B's primary consultations with her would be over the telephone.

c) If Ms B needed a consultation at hospital, it was possible that she (RM A) would not be able to attend in time, in which case Ms B would need to consult the hospital midwives for advice.

15. Ms B told HDC that she booked RM A because she was known to her and her whānau, and she wanted a Māori midwife to facilitate a home birth. In response to the provisional opinion, Ms B told HDC that it was not a priority to have a Māori midwife, and that she booked RM A because of her expertise and experience. Ms B agrees that at the booking visit, RM A advised her that visits would be held at the clinic, that consultations would be over the phone, and that RM A would visit Ms B at home when she was travelling through the area. However, Ms B has no recollection of a discussion about the involvement of the hospital midwives if RM A was unable to attend the hospital in time.

Antenatal care (Month1–Month8)

16. During her antenatal period, Ms B was seen by RM A on ten occasions — nine visits were in the clinic and one visit was at Ms B's home.

18 Month1

17. At the booking visit on 18 Month1, RM A documented that the baby's maturity was calculated as 13+3 weeks' gestation,[4] and that Ms B's blood pressure was normal.[5]

Fetal growth measurement

18. RM A saw Ms B at 18+5 weeks' gestation. RM A documented in the fundal height[6] column of a GROW chart that the fetal growth of the baby was 18. RM A's practice was to measure the fetal growth of a baby with her hands. During the antenatal period, RM A documented the fundal height on six occasions. In response to the provisional opinion, Ms B told HDC that RM A documented the fundal height on nine occasions in her hand-held notes.

19. RM A stated:

> "I was taught at the beginning of my training how to measure a baby's growth by using my hands. This skill was taught to me by very experienced midwives at the time, pioneer midwives whom I have great respect for. I have used this technique to measure fundal height, abdominal palpation, ascertain lie and size of the baby and estimate liquor volume for over 18 years. I consider this a midwifery skill that I am very good at."

[4] This calculation is not consistent with the other calculations in the Antenatal Record.

[5] Ms B's blood pressure was 120/70mmHg. Normal blood pressure for an adult is between 90/60mmHg (millimeters of mercury) and 120/80mmHg.

[6] A measure of the size of the uterus.

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20. RM A told HDC that she measures in centimetres with her hand by using landmarks on both her hand and on her client's abdomen to get an "approximate centimetre measurement". She said that her measurements of Ms B were always in line with expectations, and speculated that Ms B's weight gain may have "clouded or hindered" her ability to measure uterine growth correctly. RM A stated: "I do feel that if I was using a measuring tape it would have measured the same."

Fetal movements

21. RM A stated that from 18 weeks' gestation she asked Ms B how active her baby was, and asked about her baby's movements, but Ms B was not very communicative during the visits. RM A stated that in light of this, she asked Ms B to count her fetal movements as either 10 a day or 10 kicks in 12 hours, to gain a better understanding of what was normal for her. RM A submitted that a mother is able to recognise normal fetal movements for her baby, and if the movements are less than usual then this is not normal. RM A stated that she did not use kick charts in this case, or in her practice generally. In response to the provisional opinion, RM A told HDC that Ms B raised no concerns about a lack of fetal movements during her pregnancy. RM A stated that she is aware that counting kicks is not usual practice. She said that her usual practice is to ask, "How has your baby been moving, any changes?", but Ms B did not reply, so she reframed the question. RM A said that on reflection, she could have spent more time explaining what is meant by "changes in movement".

22. Ms B told HDC that she does not recall RM A advising her to count the baby movements to 10 during the antenatal period. In response to the provisional opinion, Ms B told HDC that during the clinic visits, RM A would usually ask whether she had "felt about 10 a day", and she would respond, "yes" or "yes about 10". Ms B stated that her mother would repeat RM A's questions about counting baby movements, and that she would pause in her response, because the questions were not clear. Ms B said that at around 18 weeks' gestation she frequently felt baby movements, particularly at night time, and she reported these to RM A.

23. RM A saw Ms B on 29 Month5, at 27+6 weeks' gestation. RM A documented in the maternity book under the heading "movements", "10 A Day". RM A recorded "10 A Day" at subsequent visits on 28 Month7, 4 Month8, and 11 Month8.

Pre-eclampsia[7]

26 Month6

24. RM A stated that an appointment was scheduled for 26 Month6, but she documented retrospectively that she was "unsure whether this [was] a missed appointment or [she] did not document due to computer Wi-Fi not going".

[7] Pre-eclampsia is a condition in pregnancy that normally is characterised by high blood pressure and increased protein in the urine. Other symptoms include swelling (especially in the hands, face, and feet), headaches, and visual disturbances. Pre-eclampsia, if not treated, may have serious effects on the mother and baby.

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25. In response to the provisional opinion, Ms B told HDC that on 26 Month6, she saw RM A in her clinic, and RM A recorded in Ms B's notes that Ms B had "slight oedema", a BP of 130/80mmHg, and a negative urinalysis. However, this information was not documented in the maternity record.

28 Month7

26. RM A's eighth appointment with Ms B was on 28 Month7. The Antenatal Record documents the following:

- The baby's maturity was calculated as being 36+1 weeks' gestation.
- RM A estimated the baby's growth at 36 weeks.
- Ms B's blood pressure was 138/88mmHg, which was elevated from the booking visit BP of 120/70mmHg.
- Ms B's urinalysis results were negative.
- Ms B's weight increased by 10kg over the previous two months.
- Ms B was experiencing some slight swelling[8] in her hands and knees.
- The fetal heart rate was normal at 130 beats per minute (bpm).
- RM A advised Ms B to keep active and to drink more water.

27. RM A recollected that Ms B had "some minor pedal oedema[9]", and that her diastolic blood pressure[10] was slightly elevated from her normal blood pressure. RM A advised Ms B to elevate her feet and drink more water.

28. Ms B told HDC that during the third trimester of her pregnancy she had signs of pre-eclampsia, including increased blood pressure and swollen feet, on more than one visit with RM A. Ms B said that she accepted RM A's advice to elevate her feet, and that at that time she did not understand the condition of pre-eclampsia. In response to the provisional opinion, Ms B told HDC that she researched pre-eclampsia on the internet because of concerns that she had the symptoms. However, RM A reassured her on more than one occasion that she would be okay. Ms B told HDC that no urinalysis was taken on this visit because RM A did not have a supply of urine sticks.

4 Month8

29. RM A's ninth appointment with Ms B was on 4 Month8. The Antenatal Record documents the following:

- The baby's maturity was calculated as being 37 weeks' gestation.
- RM A estimated the baby's growth at 37 weeks.
- Ms B's blood pressure remained elevated, measuring 135/88mmHg.

[8] Oedema.
[9] Swollen feet.
[10] Blood pressure in between heartbeats.

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- Ms B was experiencing occasional headaches, and was not drinking any water.
- The fetal heart rate was normal at 140bpm.
- RM A explained pre-eclampsia to Ms B and advised her to rest more, eat more vegetables and protein, and to let her (RM A) know if she experienced blurry vision or further headaches.
- RM A gave Ms B a form for blood tests for a complete blood count and antibodies, but pre-eclampsia was not included in this test.
- RM A did not perform a urinalysis.[11]

30. RM A recollected that Ms B reported no swelling but had a headache one time. RM A said that she explained to Ms B that symptoms of pre-eclampsia could include severe frontal headaches, blurry vision, and reduced baby movements, and told her to report these symptoms if she experienced them.

31. RM A stated:

> "As [Ms B's blood pressure] was still only slightly elevated and unchanged from last week I did not feel the need to check liver function at this time. She appeared well, good baby movements."

32. Ms B told HDC that at this visit she felt baby movements, and her feet were very swollen.

33. In response to the provisional opinion, Ms B told HDC that RM A did not explain the condition of pre-eclampsia adequately during this visit. Ms B said that she continued to drink water after she became aware of the importance of drinking water during her pregnancy.

11 Month8

34. RM A's tenth appointment was on 11 Month8 at Ms B's home. The Antenatal Record documents the following:

- The baby's maturity was calculated as being 38 weeks' gestation.
- RM A estimated the baby's growth at 38 weeks.
- Ms B's blood pressure remained elevated, measuring 135/88mmHg.[12]
- The baby was "active".
- Ms B was experiencing mild swelling in her feet but nowhere else.
- The fetal heart rate was 140bpm.
- RM A advised Ms B to elevate her feet and to let her (RM A) know if she experienced any symptoms.

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[11] A test that screens the urine for the presence of proteins (an indicator of pre-eclampsia or possibly infection) and glucose (an indicator of gestational diabetes).

[12] Ms B stated that her notes record her BP as 135/80mmHg.

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35. Ms B told HDC that at the time of the appointment, her feet were still swollen, and when she pressed the swollen area it made an indentation. She stated that RM A dismissed her symptoms of increased blood pressure and swollen feet, and told her that she "[would] be alright". In response to the provisional opinion, Ms B told HDC that during this visit she told RM A that she continued to have headaches, but that the headaches were not as bad as reported previously. Ms B stated that RM A asked whether she was experiencing blurry vision, but she was unsure whether she was having blurry vision at this time.

36. RM A said that her impression at this home visit was that Ms B was "well enough and her baby was well enough to have the planned homebirth". RM A recollected that Ms B was looking forward to having a home birth. RM A said that she advised Ms B to call her when she entered labour, or if she otherwise had any concerns. RM A also recollected that the baby's head was low in the pelvis on abdominal palpation.[13]

Urinalysis

37. RM A's contemporaneous documentation shows that during the antenatal period, urinalysis was performed on five out of the ten visits. However, in response to the provisional opinion, Ms B stated that her notes record that RM A performed urinalysis on three occasions. RM A told HDC that she did not perform urinalysis on 18 Month1 and 25 Month2, because Ms B was not able to pass urine. RM A stated that an appointment was scheduled for 26 Month6, but she documented retrospectively that she was "unsure whether this [was] a missed appointment or [she] did not document due to computer Wi-Fi not going". In response to the provisional opinion, Ms B told HDC that on 26 Month6 she saw RM A at the clinic and that her urinalysis was negative, and that on 28 Month7, no urinalysis was taken.

38. RM A told HDC that she did not perform urinalysis on 4 Month8 (37 weeks' gestation) because she had no supply of urinalysis sticks, which were on order. Regarding the home visit on 11 Month8 (at 38 weeks' gestation), RM A still did not have a supply of urinalysis sticks, and acknowledged that this was unacceptable.

Clinical decision-making

39. RM A stated that she felt that Ms B's blood pressure was not high enough to warrant a consultation with a specialist in the absence of other symptoms of pre-eclampsia. She submitted that *The Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines)*[14] provide that a referral to a specialist is warranted where the client's blood pressure is higher than 140/90mmHg or higher than 30/15 above the client's blood pressure at booking, and there are other symptoms.[15]

[13] A process for examining the abdomen by applying hand pressure.

[14] Ministry of Health, *Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines)*, Wellington: Ministry of Health, 2012. The guidelines previously appended to Section 88 of the Maternity Services Notice 2002 are to be used in conjunction with the Primary Maternity Services Notice 2007.

[15] Symptoms in relation to: proteinuria; platelets; abnormal renal or liver function; and imminent eclampsia.

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40. RM A said that although she documented Ms B's headaches and oedema, she did not consider them "serious enough to be of concern". She submitted that oedema is "quite common in the last weeks of pregnancy", and that she attributed Ms B's headache to her being dehydrated.

41. RM A stated: "There was never a major shift in [Ms B's] blood pressure in combination with swelling and headaches all at the same visit." She submitted that Ms B's swelling on 28 Month7, her headache on 4 Month8, and her swelling on 11 Month8 "were in isolation and not [cumulative]". RM A said that Ms B "never reported reduced baby movements and/or epigastric pain, or other related symptoms to preeclampsia".

42. In relation to the increase in Ms B's weight between 29 Month5 and 28 Month7, RM A stated that she "did not consider the excessive weight gain as a precursor to preeclampsia", and attributed it to lifestyle and diet factors.

Labour

Telephone conversation on 15 Month8

43. On the evening of 15 Month8, Ms B's mother telephoned RM A and told her that Ms B had had a show[16] consisting of mucous with pink and green tinges, that she had wet underpants (the liquid did not have any colour or smell), that she had been experiencing mild irregular pains for the past two days, and that the baby was active. Ms B speculated that her waters may have broken. She told HDC that during the telephone call, she also spoke to RM A.

44. RM A documented these details in the midwifery notes, and that Ms B should let her know "if anything comes out or if regular contractions". In response to the provisional opinion, RM A told HDC that she advised Ms B to "put a clean pad on and observe what comes out onto pad, let me know if there is any change in colour or smell or any more fluid".

45. RM A told HDC that this was "a normal type of phone call from a primip[17] in early labour", and that the advice she gave was her "normal practice if women are unsure about their waters breaking". RM A stated that she did not believe a physical visit to Ms B's house was warranted at this point. She submitted that given that Ms B's membranes had not ruptured, that Ms B's mother did not believe the waters had broken, and that Ms B did not call her back to report further observations (such as contractions, ruptured membranes, or no baby movements), her not visiting Ms B on 15 Month8 was accepted practice.

Home (16–17 Month8)

46. At 7.30pm on 16 Month8, Ms B's mother telephoned RM A and told her that Ms B was experiencing mild to moderate contractions at six-minute intervals, was in a lot of pain, and that no "show" or any liquor was reported. Ms B was unsure about whether she felt baby movements because of the pain she was experiencing, and did not want to speak to

[16] Referring to the vaginal discharge of mucus and blood that occurs during late pregnancy, signifying that the blood vessels in the cervix are rupturing.

[17] A woman in her first pregnancy.

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RM A directly. RM A recollected that Ms B's mother said that Ms B was quite sore and had changed her mind about having a home birth, and had decided to give birth in hospital.

47. Ms B told HDC that because RM A did not have a birth pool available as planned, and that primarily she was available for consultations by telephone, she did not feel confident to have a home birth. Ms B said that she sent a text message to RM A advising her that she wanted a hospital birth. In response to the provisional opinion, RM A stated that a birth pool and home birth equipment was delivered to Ms B at her home on 11 Month8, and that this is evidenced by her contemporaneous documentation. RM A said that Ms B did not advise her that she was not feeling confident to have a home birth, until Ms B's mother told her at 7.30pm on 16 Month8 that Ms B wanted a hospital birth. RM A stated that no text message was received from Ms B advising that she wanted a hospital birth, and that this was conveyed to her by Ms B's mother by telephone.

48. RM A told HDC that she asked Ms B (through her mother) to start timing her contractions and monitor any baby movements, and to let her know when she wanted her to attend.

49. RM A stated that "the clinical picture was quite normal for a first time mother and did not warrant recommendation for assessment". She specified that "[t]his build up to established labour is quite normal for a first time mother", as was the "uncertainty of baby movements during painful contractions". RM A further stated that Ms B's blood pressure had remained the same during the final three antenatal appointments, with the last appointment having been only five days previously. In response to the provisional opinion, RM A told HDC:

> "There was no suspected rupture of membranes from myself, only the [mother]. The two weeks prior [Ms B] had one episode of swelling in her feet, her BP was unchanged four days prior and not elevated enough for a consultation. I believe that these are not reasons for a consultation at home in early labour as suggested,[18] however, the uncertainty of baby movements should be the only reason in hindsight. Keeping in mind though that there were never any issues with decreased baby movements prior to this at all."

50. At 8.30pm on 16 Month8, RM A sent a text message to Ms B to reiterate that she would attend when asked. Ms B shared information about her contractions (recorded from a phone application) with RM A, which indicated that the contractions were irregular and six minutes apart. RM A documented that she advised Ms B that "she still had plenty of time", and that she should aim to go to the hospital when her contractions were four minutes apart. RM A told HDC that she specifically advised Ms B to aim to go into hospital when she had six contractions in 30 minutes. Ms B agreed to contact RM A when her contractions became more frequent. In response to the provisional opinion, Ms B told HDC that she felt that a visit from RM A was warranted, but she was not confident to make that decision.

[18] See paragraph 97 below.

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51. RM A documented that she advised Ms B that she had the option of visiting the hospital and consulting the hospital midwives if she wanted. RM A told HDC that she offered to assess Ms B for reassurance, but this was declined. In response to the provisional opinion, Ms B told HDC that she declined RM A's offer of an assessment because she was reassured by RM A that "everything was ok".

52. In response to the provisional opinion, Ms B told HDC that on 16 Month8, she told RM A on more than one occasion that she suspected that her waters had broken. Ms B recollected that she removed her track pants and noticed a considerable amount of water. She stated that her mother informed RM A, and because of concerns about the pain Ms B was experiencing, and because her waters had broken, it was decided that they would attend the hospital. Ms B's mother explained:

> "Earlier on [Ms B] seemed to be experiencing normal labour, managing herself and her labour pains as well, even managing to walk around inside our house. However, approximately towards the latter stages, which is just before realising that her waters had come away her pains became very intense, [Ms B] explained a stabbing pain, and couldn't be touched in any way, even when as I tried. I explained all this to [RM A]."

53. In response to the provisional opinion, Ms B's mother told HDC that she began timing her daughter's contractions, and the first contraction was at 10.56pm on 16 Month8. Ms B's mother stated that after midnight, her daughter's contractions were two minutes long and between one minute and five minutes apart, and she contacted RM A to advise that they had made a decision to go to the hospital.

54. At 3.30am on 17 Month8, RM A documented that Ms B's mother telephoned her to say that Ms B's contractions were now stronger and more regular. RM A told HDC that Ms B's mother said that Ms B wanted to go to the hospital for a review. RM A asked Ms B (through her mother) about baby movements, and Ms B said that she did not know whether she was feeling movements.

55. RM A stated that owing to the long latent phase, and because Ms B was unable to confirm any baby movements and wanted to go to the hospital, they agreed to meet at the hospital.

Hospital (17 Month8)

56. At 4.30am, RM A met Ms B at the hospital. RM A documented that Ms B's contractions at this time were four to five minutes apart. She told HDC: "Upon arrival [Ms B] was not experiencing many strong contractions; she was not in established labour."

57. RM A could not feel the membranes. She tried to locate a fetal heartbeat with cardiotocography,[19] but was not successful.

58. At 5.30am, an obstetrician saw Ms B. Tragically, he confirmed that the baby had died. He documented and advised that there was no fetal heartbeat, the ultrasound showed

[19] A method of recording fetal heartbeats using a machine.

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Spalding,[20] and his impression was that the baby had probably passed away several days previously because of pre-eclampsia.

59. That day, Ms B remained at the hospital, where she received care and support from her whānau, RM A, and hospital staff.

60. The baby was delivered at 8.02pm, and the birthweight was 1,990 grams.

61. RM A told HDC that when Ms B's baby was born, she was shocked by her size. RM A stated:

> "I then knew I was wrong in my judgement of the uterine size and the size of the baby.
>
> …
>
> It is my belief that this baby stopped growing at 28 weeks approximately, due to whatever reasons I am unsure. [Ms B's] [blood pressure] became elevated at 36 weeks with mild symptoms of PET.[21] I did not diagnose this severe IUGR[22] and I cannot even say why."

62. A "Medical Certificate of Causes of Fetal and Neonatal Death" was completed. This recorded that the baby died of a bacterial infection that occurred before or during labour,[23] growth restriction, and severe pre-eclampsia.

Midwifery Council New Zealand

63. After these events, the Midwifery Council of New Zealand (MCNZ) commenced a competence review in respect of RM A. MCNZ considered that RM A is competent across the midwifery scope of practice. MCNZ noted that documentation was "brief at times", but that RM A "met her professional responsibilities" in regard to documentation.

Further information — RM A

64. RM A stated:

> "Obviously in hindsight and reviewing my practice preeclampsia bloods would have given a better view on what was going on internally and a urinalysis may have shown proteinuria, in this case [an obstetric] consult would have been warranted. My actions were not proactive enough and I have considered the desire for her to homebirth may have clouded my judgment and caused my inaction. This whānau are a strong homebirthing whānau, I have attended other homebirths for them. They are very responsible for the care and wellbeing of all the hapū māmā[24] in the whānau, and I

[20] "Spalding" refers to the baby's cranial bones having an irregular appearance.
[21] Pre-eclampsia toxaemia.
[22] Intrauterine growth restriction — the condition of a baby being smaller than expected, given the period of gestation.
[23] Chorioamnionitis.
[24] Pregnant women.

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have no doubt they also believed everything to be normal for [Ms B]. I did not believe she had pre-eclampsia at the time."

65. RM A told HDC that her usual practice was to visit her clients casually from time to time at their homes. She stated: "[In Ms B's case,] distance was a barrier, as it prevented me from doing casual stop ins or visits when there were some uncertainties."

66. RM A stated:

> "Finally, my deepest aroha for [Ms B], her partner, and her whānau for the loss of [the baby]. A precious daughter, mokopuna, cousin, and niece. I believe I gave the best care possible at the time. I regret some of my decisions, however, I will never know if other decisions were to make a difference in saving [the baby]. I do hope they find peace."

Responses to provisional opinion

67. Ms B and RM A were given the opportunity to respond to the relevant sections of the provisional opinion. Where appropriate, their comments have been incorporated into the report.

68. Ms B told HDC:

> "My partner and I were looking forward to bringing our baby home. We had prepped her room, bought everything she would ever need furniture, clothing etc. Our drive to the hospital was exciting and we couldn't wait to share her with our big whānau. We are still impacted by the loss of our baby. Despite what happened, I sincerely hope that no other 'hapū māmā' including her whānau will ever have to experience what we have and that all the measures are taken to ensure the health and safety of mother, baby and whānau are upheld and respected in the future."

69. Ms B's mother told HDC:

> "I do believe that something mysterious has happened, that could've been avoided if care and consideration for [Ms B's] concerns were taken seriously, in addition to the lack of resources (urine sticks)."

70. RM A told HDC that having carefully considered the provisional opinion and the expert advice, she accepts the shortcomings in recognsing symptoms in Ms B's condition.

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Opinion: RM A — breach

Introduction

71. This opinion considers the care provided by RM A to Ms B antenatally and during her labour. I acknowledge that these events for Ms B and her whānau led to a tragic outcome for them with the loss of their baby.

72. The concerning issues in this case relate to how well Ms B's health was monitored by RM A as Ms B's pregnancy progressed.

73. The case highlights the importance of appropriate assessment of a woman's condition, monitoring of a baby's growth accurately, and the need for appropriate action in response to the development of clinical concerns that have the potential to affect the health of the woman and/or her baby.

Fetal measurements

Fundal height

74. The New Zealand College of Midwives consensus statement (22 February 2012), "Assessment of fetal wellbeing during pregnancy", states:

> "From 24 weeks gestation it is recommended that the fundal-symphysis height should be measured and recorded in centimetres at each antenatal appointment, preferably by the same person."

75. The maternity record shows that RM A measured the fundal height on six occasions between 18+5 weeks' gestation and 38 weeks' gestation. In contrast, Ms B stated that her notes show that RM A measured the fundal height on nine occasions. I note the discrepancy in the documentation, and, in any event, the measurements are not recorded in centimetres; rather, RM A measured the fundal height with her hands. She documented her measurements in centimetres on a GROW chart in the column for fundal height measurements. Ms B's baby was 1990g at birth and was severely growth restricted for a term baby.

76. RM A told HDC: "I have used this technique to measure fundal height, abdominal palpation, ascertain lie and size of the baby and estimate liquor volume for over 18 years." She further stated that her measurements were always in keeping with her expectations. However, she acknowledged that when Ms B's baby was born, she "then knew [she] was wrong in [her] judgment of the uterine size and the size of the baby".

77. My expert advisor, RM Nicholette Emerson, advised that RM A's practice of measuring the fundal height with her hands does not reflect current accepted midwifery practice. RM Emerson noted that RM A documented her hand measurements in the fundal height column on the GROW chart. RM Emerson advised that RM A's measurements were not measured in centimetres, and therefore not accurate. RM Emerson considers that RM A's monitoring of the growth of Ms B's baby represents a moderate departure from the accepted standard of care.

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78. I agree with RM Emerson's advice. In the context of a severely growth-restricted baby, I am highly critical that RM A failed to measure Ms B's fundal height in centimetres from 24 weeks' gestation. In my view, RM A's practice in this regard was unconventional and, as such, the monitoring of the growth of Ms B's baby during the antenatal period was inadequate. Had RM A measured the fundal height in centimetres, there may have been earlier signs indicative of a potentially growth-restricted baby, and an opportunity for specialist advice.

Fetal movements

79. Between 14 weeks' and 38 weeks' gestation, RM A listened to the fetal heart rate as part of her maternity assessments to check fetal well-being. RM A said that during the visits, Ms B was not very communicative about fetal movements, and from 18 weeks' gestation Ms B was asked to count the fetal movements as either 10 a day or 10 kicks in 12 hours to understand better what was normal for her. RM A stated that counting kicks is not her usual practice, and that on reflection she should have spent more time with Ms B to explain fetal movements and changes in fetal movements.

80. The New Zealand College of Midwives consensus statement (2012) on fetal well-being states that there is no evidence to support "[f]ormal fetal movement counting in pregnancy".

81. On four occasions during the antenatal period, RM A recorded the fetal movements as 10 a day. Ms B cannot recall being asked to count the fetal movements to 10. In a further response, Ms B stated that RM A did ask her whether she felt baby movements of 10 a day.

82. In this respect, RM Emerson advised that current practice is that maternal concern regarding fetal movements overrides any definition of decreased fetal movements based on numbers of fetal movements.

83. I agree with RM Emerson's advice. I do not accept RM A's submission that in the context of Ms B's lack of communication, it was appropriate to count fetal movements to 10 when this is not consistent with current midwifery practice. I note that RM A acknowledged that further explanation about fetal movements and changes may have been helpful for Ms B. I agree that this would have been appropriate in the circumstances. RM A's contemporaneous documentation records that on four occasions the fetal movements were 10 a day. I am critical that RM A's practice in this regard did not support current practice to monitor fetal movements based on maternal concern.

Monitoring of pre-eclampsia

84. During the antenatal period, RM A's contemporaneous documentation showed that she saw Ms B on ten occasions, and on five occasions performed urinalysis. In contrast, Ms B told HDC that RM A took urinalysis on three occasions during the antenatal period.

85. RM A documented retrospectively that she was unsure whether an appointment on 26 Month6 was missed or occurred and was not recorded owing to computer Wi-Fi issues. Ms

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B confirmed that she had an appointment on 26 Month6, and that urinalysis was performed and this was negative.

86. It is difficult to reconcile the two accounts of the number of times urinalysis was performed. However, on the basis of RM A's contemporaneous documentation, I find that RM A performed urinalysis on five occasions during the antenatal period.

87. During the visit on 28 Month7, at 36 weeks' gestation, Ms B's blood pressure was 138/88mmHg, which was a significant increase from her booking visit measurement of 120/75mmHg. Ms B was also noted to have had a 10kg weight gain over the previous two months, and to have some slight oedema. RM A documented a negative urinalysis at that time, and that she advised Ms B to elevate her feet and drink more water. Ms B said that she accepted this advice because she did not understand the condition of pre-eclampsia at that time. Ms B stated that urinalysis was not performed at this visit. I note the disputed evidence about whether urinalysis was performed at this visit. I note that RM A contemporaneously documented her assessment on this visit, and I find that she did take a urinalysis on 28 Month7.

88. On 4 Month8, at 37 weeks' gestation, Ms B's blood pressure remained elevated at 135/88mmHg, and she reported occasional headaches. RM A ordered a routine blood test, but did not include screening for pre-eclampsia. RM A did not perform urinalysis because she did not have any dipsticks available. RM A discussed the symptoms of pre-eclampsia with Ms B and advised her to contact her if she experienced any symptoms or noticed any reduced fetal movements. Ms B said that her feet were very swollen at that time. She stated that RM A did not provide her with an adequate explanation of the condition of pre-eclampsia.

89. RM A saw Ms B at 38 weeks' gestation. Her blood pressure remained elevated at 135/88mmHg, and she had mild swelling in her feet. RM A advised Ms B to elevate her feet and to let her (RM A) know if she experienced any symptoms. RM A did not perform a urinalysis on this visit, as she did not have any dipsticks available. Ms B told HDC that RM A dismissed her symptoms of increased blood pressure and swollen feet, and told her that she "[would] be alright".

90. The Referral Guidelines that applied at the time required the LMC in cases of "Pre-eclampsia (BP of ≥140/90 and … 2+ protein on a dipstick testing)", to transfer care to a specialist.[25]

91. RM A told HDC that she did not believe that Ms B had pre-eclampsia at the time. RM A said that Ms B's raised blood pressure was not elevated enough to warrant a referral to a

[25] Code 4022 of the *Referral Guidelines* defines pre-eclampsia as: "BP of ≥ 140/90 and/or relative rise of > 30/15 mmHg from booking BP **and** any of:

1. proteinuria > 0.3g/24 hours; or protein/creatinine ratio ≥.3, or 2+ protein on dipstick testing
2. platelets < 150 x 10/9/l
3. abnormal renal or liver function
4. imminent eclampsia"

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specialist, and that Ms B's symptoms presented in isolation, which she attributed to lifestyle and diet factors, dehydration, and that oedema is a common feature of pregnancy. RM A acknowledged that had she taken bloods for pre-eclampsia and performed urinalysis, she would have had a better clinical picture of Ms B's condition, and taken further actions such as an obstetric consultation.

92. RM Emerson advised:

> "In my opinion, we cannot say retrospectively whether [Ms B] was developing pre-eclampsia at her antenatal appointments or whether the onset was rapid and severe. If it is accepted that there cannot be any retrospective confirmation of timing regarding the onset of severe pre-eclampsia then I have considered whether the measures to monitor for pre-eclampsia for [Ms B] met with accepted midwifery standards."

93. I accept RM Emerson's advice and accordingly I discuss RM A's monitoring for pre-eclampsia below.

94. RM Emerson noted that urinalysis was not performed in five of the ten antenatal appointments, and advised that dipstick urinalysis is a fundamental expectation at each antenatal appointment. She said that the presence of weight gain, swelling, headache, and increased blood pressure in isolation may not have indicated pre-eclampsia but, in her view, RM A failed to appreciate that cumulatively these factors warranted a pre-eclampsia blood test with the routine blood test at 37 weeks' gestation — particularly as no urinalysis was undertaken at that time to provide reassurance. RM Emerson considers that RM A's failure to monitor Ms B adequately for pre-eclampsia symptoms represents a moderate departure from accepted practice. I accept that advice.

95. Early intervention and management of pre-eclampsia can minimise the risk to a mother and baby. Between 36 weeks' and 38 weeks' gestation there were a number of missed opportunities for RM A to identify and screen for pre-eclampsia. I am critical of the lack of attention to the concerns that Ms B reported, and the lack of recognition by RM A that cumulatively a concerning picture was developing. Had RM A been more pro-active and arranged a blood test, performed urinalysis, and considered a referral to a specialist, then earlier intervention for Ms B's pre-eclampsia may have occurred.

Assessment in labour

Initial telephone assessment — 15 Month8

96. I note the discrepancy in relation to the recollection of the timing of the initial telephone call between RM A and Ms B, but it was documented that the initial telephone assessment occurred on the evening of 15 Month8. Irrespective of whether the call occurred on 15 or 16 Month8, the issue before me is whether the telephone assessment by RM A met the standard of care.

97. RM Emerson advised that the initial telephone assessment of Ms B's condition, and the advice RM A gave, was in keeping with accepted midwifery practice. I accept that advice.

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98. I discuss below the subsequent management of Ms B's labour.

Management on 16 Month8

99. At 7.30pm on 16 Month8, Ms B's mother contacted RM A and reported that Ms B was having mild to moderate contractions that were six minutes apart. Ms B was in pain, and no show or liquor was reported, and she was unable to confirm any fetal movements owing to the pain. RM A gave advice to time the contractions, monitor the baby's movements, and let her know when she was wanted to attend. Approximately one hour later, RM A sent a message to Ms B to advise her that she could be contacted if required. Ms B responded via text message that her contractions were irregular and six minutes apart. RM A told Ms B to contact her when the contractions became more frequent, and to go to the hospital when the contractions were four minutes apart.

100. Ms B and her mother told HDC that on 16 Month8 they told RM A that Ms B's waters may have broken. RM A told HDC that she did not suspect that Ms B's waters had broken, but that Ms B's mother believed they had broken.

101. RM A told HDC that she considered that Ms B's labour was developing normally for a first-time pregnancy, and that uncertainty of baby movements during painful contractions was also a normal feature. RM A said that she did not consider that an assessment in person was warranted at that time. RM A submitted that Ms B's blood pressure had remained the same during the final three antenatal appointments, with the last appointment having been only five days previously.

Home birth

102. Ms B told HDC that RM A did not provide a birth pool as planned. Ms B said that because the consultations were by telephone, she did not feel confident to have a home birth, and sent RM A a text on 16 Month8 advising that she wanted a hospital birth. In contrast, RM A submitted that she delivered the home birth equipment to Ms B on 11 Month8, and this is reflected in her contemporaneous documentation. On the evidence available to me, I am not able to determine whether RM A delivered the home birth equipment to Ms B on 11 Month8. I note that this issue is not relevant to my breach findings below, but I remain concerned about RM A's support of Ms B during her labour, and this is also discussed below.

103. RM Emerson noted that Ms B was having her first baby, and that she had reported that her waters may have broken the previous night. RM Emerson advised that had the waters broken 24 hours earlier, then antibiotics should have been commenced. She noted that Ms B described her contractions as moderate, and that she was unable to confirm that she had felt any fetal movements owing to the pain she was experiencing. RM Emerson advised that taking all of the factors into account, and that in the previous two weeks Ms B's blood pressure had been raised and no urinalysis had been performed, Ms B required an assessment in person. RM Emerson considers that the failure to recommend an assessment following the telephone call at 7.30pm on 16 Month8 represents a moderate departure from the accepted standard of care.

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104. I agree with that advice. In these circumstances, given that it may have been up to 24 hours since the suspected ruptured membranes, and that there was no confirmation of fetal movements, RM A should have recommended an assessment of Ms B's condition. This was particularly important given that Ms B had reported symptoms of pre-eclampsia in the preceding two weeks. In my view, there was a lack of attention or recognition, and a lack of support by RM A in her monitoring of Ms B's condition in the final days of Ms B's pregnancy.

Midwifery care provided at hospital

105. RM Emerson advised me that the care provided to Ms B following the telephone call at 3.30am on 17 Month8 met the accepted standards from this point onwards.

Conclusion

106. In my view, RM A failed to provide services to Ms B with reasonable care and skill in the following respects:

a) RM A failed to monitor Ms B adequately for the symptoms of pre-eclampsia; urinalysis was not performed at each visit; and a blood test for pre-eclampsia was not arranged.

b) Monitoring of the fetal growth was inadequate, as evidenced by the use of unconventional methods by measuring the fundal height using landmarks, and inaccurately recording these measurements as centimetres in the fundal height column of the GROW chart.

c) RM A's advice to Ms B to count the fetal movements to 10 was not consistent with current midwifery practice.

d) RM A failed to recommend an assessment of Ms B's condition following her telephone call with Ms B on 16 Month8, when this was warranted.

107. Cumulatively there were signs of impaired health that were not recognised, which meant that a referral to secondary care was warranted in the circumstances but not done. Had this occurred, the symptoms of pre-eclampsia, intrauterine growth restriction, and reduced fetal movements may well have been detected sooner. Accordingly, I find that RM A failed to provide Ms B with services of an appropriate standard, and, as such, breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights.[26]

Remote oversight — adverse comment

108. RM A worked in isolation, and her rural practice is about one hour's drive from Ms B's home, which was outside her practice area. RM A and Ms B agreed that visits would take place in RM A's clinic, and that consultations would occur over the telephone. RM A told HDC that she no longer accepts bookings from women who live outside her district, as she believes that the increased travel time presents a barrier to providing her usual standard of care.

[26] Right 4(1) states: "Every consumer has the right to have services provided with reasonable care and skill."

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109. I acknowledge that it was important for Ms B to exercise her choice of midwife and her desire to have a home birth. I note that despite the distance, RM A saw Ms B regularly, and on 10 occasions during the antenatal care. However, I am concerned that the arrangement to provide remote oversight did not lend itself to RM A having the opportunity to readily detect and respond to the issues as Ms B's pregnancy progressed. I note that RM A no longer accepts bookings from women who live outside her district, and I consider this appropriate.

Visit 26 Month6 — adverse comment

110. RM A scheduled an appointment for 26 Month6, but retrospectively she documented in the maternity notes that she was unsure whether this was a missed appointment, or whether it was not documented owing to issues with Wi-Fi. Ms B told HDC that on 26 Month6, she saw RM A at her clinic, and this was recorded in her hand-held notes.

111. RM Emerson advised that documentation is an essential aspect of midwifery practice, and the omission to document one appointment represents a mild departure from the accepted standard of care. I accept that advice, and I am critical that RM A did not maintain accurate records of the antenatal care she provided to Ms B.

Changes to practice

112. RM A told HDC that she has made the following changes to her practice:

a) She attended further education on the Growth Assessment Protocol.

b) She commences measurement of fetal growth from 26 to 28 weeks' gestation onwards.

c) She documents everything that is said over the phone, on line, and by text.

d) She no longer accepts bookings from women who live outside her district, as she believes that the increased travel time presents a barrier to providing the usual standard of care.

e) She refers women to antenatal clinics because of blood pressure increases. RM A noted that often attending these antenatal clinics can be inconvenient for these women because of the difficulty involved in travelling in a rural area.

f) She ensures that she has a "generous supply of urinalysis sticks" at her clinic, and she always carries an extra container in her car.

g) She uses a measuring tape as well as her hands to measure fundal height.

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Recommendations

113. I recommend that RM A:

a) Provide a written apology to Ms B and her whānau. The apology should be sent to HDC, for forwarding to Ms B, within three weeks of the date of this report.

b) Undertake training on pre-eclampsia in pregnancy, and report back to HDC within three months of the date of this report, confirming the scheduled attendance date for the training. Once complete, evidence of attendance and a reflection on the training should be provided to HDC within two months of completing the training.

c) Undertake training on documentation, and report back to HDC within three months of the date of this report, confirming the scheduled attendance date for the training. Once complete, evidence of attendance should be provided to HDC within two months of completing the training.

d) Provide a reflection on the training undertaken on the Growth Assessment Protocol, within three months of the date of this report.

Follow-up actions

114. 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 A's name.

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

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Appendix A: Independent midwifery advice to the Commissioner

The following expert advice was obtained from RM Nicholette Emerson:

"Thank you for the request that I provide clinical advice in relation to the complaint from [Ms B] about the care provided by LMC Midwife [RM A]. In preparing the advice on this case to the best of my knowledge I have no personal or professional conflict of interest. I agree to follow the Commissioner's Guidelines for Independent Advisors.

I have reviewed the documentation on file: Complaint from [Ms B] via advocacy in 2019, Complaint Response including clinical notes from [RM A] 2019, Clinical letter [Obstetrics and Gynaecology consultant] dated 2019, [Clinical notes from the DHB] (including laboratory results, fetal and neonatal death certificate).

Background: [In her late teens] [Ms B] was in her first pregnancy and booked with LMC Midwife [RM A]. Nil medical or Obstetric history of note. BMI normal at 27. [Ms B] has complained about the quality of care provided in her pregnancy. In particular she complains that her urine was not tested at all antenatal appointments and appropriate blood tests were not taken. [Ms B] commenced spontaneous labour on 15 [Month8], when she arrived in hospital on 17 [Month8], her baby was found to have died. [Ms B] had an acute infection and pre-eclampsia and [her baby] was severely growth restricted at birth.

Advice request: I have been asked to advise whether the standard of care provided to [Ms B] by [RM A] was appropriate in the circumstances and why.

In particular I have been asked to comment on

1) **Whether [RM A] adequately monitored [Ms B] for pre-eclampsia, bearing in mind the symptoms that [Ms B] was experiencing.**
2) **Whether the midwife adequately monitored fetal growth during pregnancy**
3) **Whether the midwife acted appropriately on 15 [Month8]–17 [Month8] when notified that [Ms B's] waters may have broken**
4) **That an appointment was completed on 26 [Month6] but was not documented in the midwives antenatal records**
5) **Whether you have any other concerns regarding midwifery management either during pregnancy or during the labour of [Baby B].**

[Ms B] booked with LMC midwife [RM A] at 13 weeks and 3 days gestation.

[Ms B] was seen on 10 occasions antenatally by [RM A]. These appointments occurred between 18 [Month1] (13 weeks gestation) and 11 [Month8] (38 weeks gestation).

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Contemporaneous midwifery notes record blood pressure at all appointments. Fundal height measurements are recorded from 18 weeks gestation. 5 of the 10 antenatal appointments do not record urinalysis.

Antenatal notes:
The following are noted in analysis of the antenatal documentation and are no longer considered current practice:

- Fundal height measurement is in landmarks. **Addressed in question 2**
- Fetal movements are recorded as *10 a day* on 4 occasions

In regard to fetal movements, the practice of counting fetal movements until 10 are felt is no longer considered current. *New Zealand College of Midwives (NZCOM)* statement on fetal wellbeing (Feb 2012–2019 currently under review) the following statement is made:

> There is no evidence to support:
>
> - Formal fetal movement counting in pregnancy

The above consensus document was in keeping with international literature. The current thinking is that maternal concern regarding fetal movements overrides any definition of decreased fetal movements based on numbers of fetal movements. The use of kick-charts is not currently recommended as part of routine antenatal care.

In this case, I cannot say whether this practice has impacted on outcome or not.

Whether [RM A] adequately monitored [Ms B] for pre-eclampsia, bearing in mind the symptoms that [Ms B] was experiencing.
[Ms B's] booking blood pressure was 120/70 at 13 weeks gestation. At 27 weeks gestation her blood pressure was 140/75 and remained elevated for the remainder of the pregnancy (138/88 at 36 weeks, 135/88 at 37 weeks, 138/88 at 38 weeks).

Analysis of protein by urine dipstick occurred in 5 of the 10 antenatal appointments. Protein was negative on dipstick at 36 weeks gestation; urine was not tested at 37 and 38 weeks.

The *Guidelines for consultation with Obstetric and Related Medical Services (referral guidelines — section 88)* state (page 26, Line 4022 — Pre-eclampsia)

> BP of ≥ 140/90 and/or relative rise of 30/15 mmHg from booking BP and any of
>
> 1) proteinuria > 0.3g/24 hours; or protein/creatinine ratio ≥.3, or 2+ protein on dipstick testing
> 2) platelets < 150x 10/9/1
> 3) abnormal renal or liver function
> 4) imminent eclampsia

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[Ms B] had a blood pressure of 138/88 at 36 and 37 weeks. Urine was negative for protein at 36 weeks. Slight swelling of hands and knees were reported by [Ms B] at 36 weeks. At 37 weeks pre-eclampsia symptoms were discussed and documented, advising [Ms B] to alert [RM A] if she had blurry vision or headaches. Some occasional headaches are documented. No urinalysis was completed at that appointment.

Blood forms were given to [Ms B] for routine antenatal blood tests; pre-eclampsia bloods were not included.

At 38 weeks gestation, swelling in feet is documented and a further discussion of 'symptoms' is documented with advice to contact [RM A] if any symptoms. No urinalysis was performed as [RM A] documents that she 'forgot her sticks'.

When [Ms B] arrived to hospital in labour 17 [Month8] at 38 weeks and 6 days gestation she had severe pre-eclampsia. Her blood pressure was 160/110 and protein/creatinine ratio was 512 (30 considered criteria for referral).

In forming an opinion regarding whether [Ms B] was adequately monitored for pre-eclampsia I have considered the following:

- [Ms B's] blood pressure is recorded in clinical notes as 120/75 at booking and 138/88 at 36 weeks gestation. Whilst this does not meet the section 88 referral criteria of 140/90 the rise is worth noting.
- Dipstick urine test for protein was negative at 36 weeks gestation. This was not performed at 37 and 38 weeks gestation.
- Occasional headache was reported at 37 weeks gestation, slight swelling was reported in the feet at 38 weeks gestation.
- At 37 weeks gestation a form for routine blood tests was given to [Ms B], pre-eclampsia bloods were not added although pre-eclampsia symptoms were discussed, urine protein had not been obtained and [Ms B] had reported occasional headache. I note that [Ms B] had gained 10 kilos in two months.

[RM A] states in her complaint response (2019) that *As her BP was still only slightly elevated and unchanged from last week I did not feel the need to check liver function at this time. She appeared well, good baby movements.*

In [Ms B's] complaint 2019 she states that *[RM A] was dismissive of her symptoms relating to pre-eclampsia, i.e. high blood pressure and swollen feet at more than one appointment. At the last appointment her symptoms were dismissed advising [Ms B] that 'she will be alright'.*

In my opinion, we cannot say retrospectively whether [Ms B] was developing pre-eclampsia at her antenatal appointments or whether the onset was rapid and severe.

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If it is accepted that there cannot be any retrospective confirmation of timing regarding the onset of severe pre-eclampsia then I have considered whether the measures to monitor for pre-eclampsia for [Ms B] met with accepted midwifery standards.

In my opinion there was a moderate departure from accepted midwifery practice in the monitoring of [Ms B] in relation to her pre-eclampsia symptoms for the following reasons.

- Urinalysis did not take place in 5 of 10 antenatal appointments (according to midwifery contemporaneous documentation) and 7 of 10 appointments according to [Ms B's] hand held notes. Dipstick urine analysis is a fundamental expectation at each antenatal appointment. The purpose is to screen for protein which may indicate infection and/or pre-eclampsia. In addition dipstick urine may alert to increased glucose, which can be an indicator of gestational diabetes.
- Whilst the increased blood pressure did not meet the 140/90 criteria for referral it had increased to 138/88 from a booking BP of 120/75.
- Weight gain was 10 kilos in two months.
- Symptoms of swelling and headache were reported in at least two appointments.

In isolation, the weight gain, swelling, headache and increase in blood pressure may not have been indicative of pre-eclampsia. However cumulatively, in my opinion the above warranted the inclusion of pre-eclampsia blood tests with the routine antenatal blood tests at 37 weeks; particularly in the absence of ability to be reassured by urinalysis.

The detection of a very small baby had not occurred therefore it could not be factored into the decision making at that point.

Whether the midwife adequately monitored fetal growth during pregnancy
At birth [the baby] was 1990gm which is severely growth restricted for a term baby in the context of [Ms B's] height and weight.

When considering whether [RM A] adequately monitored fetal growth in [Ms B's] pregnancy I have considered the following

- Fundal height was measured without the use of a tape measure throughout the pregnancy. This practice is not currently accepted Midwifery practice. The use of landmarks has been addressed by [RM A] in her complaint response stating:

  At each of [Ms B's] visits I measured her fundal height with my hands and never found the growth to be abnormal. Liquor volume always felt normal and baby

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> *movements were reported as active by [Ms B]. The measurements were automatically plotted on a growth chart as is the standard on the expect programme which I use. This was tracking normally. I have since completed my (Growth Assessment Protocol) GAP training one month after the birth of this baby to assist me to better measure uterine growth, to ensure this does not happen again.*

When considering the above statement, it is reassuring to hear that [RM A] has now completed the GAP programme and has now changed her practice. During the pregnancy however the notes highlight several concerns regarding growth.

There are three relevant columns in standard antenatal notes regarding fetal growth. They are:

1) A column to record gestation (based on estimated due date)
2) A column to record clinical finding of gestation (whether this is clinically equal in the practitioner's estimation)
3) A column to record fundal height (in centimetres)

The relevance here is that [RM A] has entered her clinical estimation in the fundal height column. It could only have been clinical estimation as the fundal height column is for recording the measurement in centimetres and [RM A] has measured with her hands and not centimetres.

In addition estimated measurements on the customised growth chart generated for [Ms B] cannot be accurate because the left hand column on a customised chart requires fundal height in centimetres in order to be accurate. The further impact of this inaccuracy is that [the O&G consultant] has commented in his follow up report *that according to [Ms B's] antenatal records the baby measured equivalent to dates all the way through pregnancy.*

In my opinion this is an understandable assumption on the part of [the O&G consultant] as the fundal height column is used for recording in centimetres.

[RM A] states: *When [Ms B's] baby was born and I held her in my hands. I then knew I was wrong in my judgement of the uterine size and the size of the baby. I thought how could I have missed such a small baby? She was 1900gm. I was visibly shocked by her size.*

In my opinion there is a moderate departure from accepted midwifery practice in the way that growth was monitored in [Ms B's] pregnancy. I do note however that [RM A] has since addressed the issues raised and undertaken appropriate education and changed her practice to address these issues.

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Whether the midwife acted appropriately on 15 [Month8]–17 [Month8] when notified that [Ms B's] waters may have broken

I have reviewed [RM A's] complaint response and I have reviewed the clinical notes from 15–17 [Month8].

The initial phone conversation on 15 [Month8] between [RM A] and [Ms B] is not documented but it is addressed in [RM A's] complaint. The complaint response states that on 15 [Month8] [Ms B] phoned reporting a 'show' and wet underwear, she was unsure if her waters had broken and was having mild irregular contractions. [RM A] states that this is a normal type of phone call from a woman in her first labour. In my opinion [RM A] is correct and the advice she has given is in keeping with accepted Midwifery practice, noting that because of the non-recognition of a small at risk baby [RM A] treated this as a normal early labour discussion.

There was no further contact till 24 hours later (16 [Month8] 7.30pm) when [Ms B's] Mother called reporting moderate contractions; at this point [Ms B] was unsure if she was feeling movements as she was in too much pain.

[RM A] then messaged [Ms B] saying that she could be contacted via private message if she wanted to. [RM A] stated that she felt [Ms B] still had plenty of time but could go to the hospital to be checked by the hospital midwife if she wanted to. [Ms B] replied that she was OK for the moment and could feel the contractions getting stronger.

Following a further phone call from [Ms B's] Mother at 3.30am, arrangements were made to meet at the hospital.

On arrival to hospital at 4.30am, no fetal heartbeat was found. Fetal death was confirmed by scan.

In forming an opinion on whether [RM A] acted appropriately on 15–17 [Month8] I have considered the following

- In my opinion, best practice would have led to an assessment with the initial phone call on 15 [Month8] however I consider that given the information at that time some of my colleagues would argue that [RM A's] actions were acceptable
- On 16 [Month8] the phone call at 7.30pm from [Ms B's] Mother, it is my opinion that assessment should have occurred at this time. Whilst the contractions had not established and were described as moderate, [Ms B] was unable to confirm that she had felt any fetal movements as she was in too much pain.

According to her complaint response, [RM A] states that she private messaged [Ms B] an hour later to say she was contactable via private message if necessary. In my opinion an assessment was warranted following the 7.30pm phone call for the following reasons:

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1) [Ms B] was having her first baby, she had reported that she thought she had possibly broken her waters the night before. I accept there was no evidence to support this, however it was worthy of consideration and assessment 24 hours later as, had the waters broken, the commencement of IV antibiotics would have been recommended at this time. [Ms B's] blood pressure had been raised in the previous weeks and there had been no urinalysis for protein assessment in the previous two visits. During the conversation between [RM A] and [Ms B's] Mother [Ms B] was unsure about whether she had felt fetal movements.
2) In consideration of the partnership between the woman and the midwife it remains my opinion that a recommendation for assessment, either in hospital or via a visit from [RM A] should have been expressed. The clinical picture warranted a recommendation for assessment following the phone call at 7:30pm on 16 [Month8] and not to have done so, in my opinion is a moderate departure from accepted Midwifery practice.

A further phone call was received from [Ms B's] Mother at 3.30am and arrangements were made to meet in Hospital. On review of the Midwifery care from this point, in my opinion the care meets accepted Midwifery practice.

That an appointment was completed on 26 [Month6] but was not documented in the midwives antenatal records

Whilst documentation is an essential aspect of Midwifery practice, in my opinion to have not documented one appointment (which was documented in woman's hand held notes) is a mild departure from accepted Midwifery practice. [RM A] has written in her notes that she is unsure if this was a missed appointment or whether this was not documented due to Wi-Fi not working.

Whether you have any other concerns regarding midwifery management either during pregnancy or during the labour of [Baby B].

[RM A] has reflected that she has worked in isolation (not by choice) and has had to travel long distances in her rural practice. In this case she has looked after family members previously so travelled further than normal to care for [Ms B].

On reflection, she states that this may have impacted the care that she provided and has changed her practice to no longer travel such long distances.

I have reflected on [RM A's] complaint response and her commitment to traditional Māori practices outlined in her documentation submitted to the HDC. She has stated that Kaupapa Māori, Tikanga and Kawa underpin her practice.

In writing this report I have consulted with a Senior Māori Midwife to consider whether Kaupapa Māori, Tikanga or Kawa have impacted on the care provided by [RM A] to [Ms B].

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The advice I have received is that Kaupapa Māori, Tikanga/Kawa reflect traditional Māori birthing practices and are relevant as such.

The contemporaneous documentation does not record that these practices were incorporated into the care provided from [RM A]; nor is there documentation stating that Tikanga Māori practices were requested by [Ms B].

In this case there is nothing to indicate that a Kaupapa Māori practice was directing the midwifery care.

Summary
I have considered the care provided and the questions raised. In my opinion there are moderate departures from accepted Midwifery practice in the monitoring of pre-eclampsia, monitoring of fetal growth, monitoring of possible rupture of membranes and fetal movements on 15–17 [Month8].

Some practice issues raised have been addressed by [RM A] as documented above.

Finally I extend my heartfelt condolences to [Ms B] and her Whānau for the loss of their precious [Baby B].

I hope this report has addressed some of their remaining questions."

On 16 February 2021 RM Emerson provided the following further advice:

"1.Thank you for the request that I review my clinical advice dated 27 March 2020 in relation to the complaint from [Ms B] about the care provided by LMC Midwife [RM A]. In preparing the advice on this case to the best of my knowledge I have no personal or professional conflict of interest. I agree to follow the Commissioner's Guidelines for Independent Advisors.

2. I have reviewed documentation file: Complaint from [Ms B] via advocacy in 2019, Complaint Response including clinical notes from [RM A] 2019, Clinical letter from [Obstetrics and Gynaecology consultant] 2019, [Clinical notes from the DHB] (including laboratory results, fetal and neonatal death certificate). Advice response from [RM A] 7 September 2020.

3. Background: [In her late teens] [Ms B] was in her first pregnancy and booked with LMC Midwife [RM A]. Nil medical or Obstetric history note. BMI normal at 27. [Ms B] has complained about the quality of care provided in her pregnancy. In particular she complains that her urine was not tested at all antenatal appointments and appropriate blood tests were not taken. [Ms B] commenced spontaneous labour on 15 [Month8], when she arrived in hospital on 17 [Month8], her baby was found to have died. [Ms B] had an acute infection and pre-eclampsia and [her baby] was severely growth restricted at birth.

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4. Advice Request: I have been asked to review my advice dated 20 March 2020 and to consider if there are any areas that I would change in consideration of [RM A's] advice response 7 September 2020.

I have considered [RM A's] advice response dated 7 September 2020 and as a result do not consider there are any areas of my original advice requiring updating.

I have discussed the Māori aspects of care addressed in [RM A's] advice response with the senior Māori Midwife whom I consulted with the original advice. I acknowledge Kaupapa Māori is normal for [RM A] and in her response she states that in doing so does not require writing down or recording. The advice submitted on 20 March 2020 is based on documentation supplied therefore these practices may be directing practice but are not evidenced in the documentation reviewed.

Nicholette Emerson BHSc — Midwifery."

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Appendix B: Relevant standards

The Ministry of Health's *Referral Guidelines* state that when a pregnant woman has a blood pressure of 140/90 or higher, or when her blood pressure has increased by 30/15 or more since booking, and this is accompanied by any of the following:

- Evidence of proteinuria;
- Low numbers of platelets;
- Abnormal renal or liver function; or
- Imminent eclampsia;

the woman's LMC must recommend to her that responsibility for her care be transferred to a specialist, because of the risk that she or her baby may be affected by pre-eclampsia.

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