Registered Midwife, RM B

A Report by the

Deputy Health and Disability Commissioner

(Case 18HDC01959)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Contents

Executive summary

1. This report concerns the care provided to a woman during her pregnancy, and birth, by her lead maternity carer (LMC). At 40+2 weeks' gestation, the woman reported reduced fetal movements, and the LMC referred her for an urgent ultrasound scan (USS). The LMC did not read the USS report adequately or interpret it correctly, and did not recognise the complexity of the clinical picture. She should have made a referral for an obstetric review and followed up with a CTG the following day. The LMC did not identify that the woman was no longer a low-risk pregnancy and birth, and therefore unsuitable to birth at a primary birthing unit.

Findings

2. The Deputy Commissioner found the LMC in breach of Right 4(1) of the Code. The Deputy Commissioner was critical that she (a) did not adequately read and interpret the USS; (b) did not refer the woman for a specialist consultation; (c) did not recognise the compounding factors; (d) did not identify the woman as being at risk; (e) did not identify her as requiring continuous monitoring; and (f) did not identify her as no longer suitable to birth at a primary care birthing unit. As a consequence of these failings, the LMC did not identify that the baby was compromised.

Recommendations

3. The Deputy Commissioner recommended that the LMC provide a reflection to HDC on her learnings and changes to her practice, following her 12 months of supervised practice and education, as required by the Midwifery Council of New Zealand, and provide an apology.

4. The Deputy Commissioner will be writing to the New Zealand College of Midwives and the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) to suggest collaboration on an education package for LMCs to provide guidance on interpreting ultrasound scan reports.

Complaint and investigation

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

- *Whether RM B provided Mrs A with an appropriate standard of care in 2018.*

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

7. The parties directly involved in the investigation were:

Mrs A	Complainant/consumer

RM B	Registered midwife/lead maternity carer

Also mentioned in this report:

RM C	Midwife
RM D	Back-up midwife
RM E	Midwife
RM F	Midwife

8. Further information was received from:

Birthing Centre
District Health Board
Midwifery Council
Radiology service

9. Independent clinical advice was obtained from in-house midwifery advisor RM Nicky Emerson, and is included as **Appendix A**.

Information gathered during investigation

Background

10. In 2017, Mrs A, aged in her early thirties, was in her first ongoing pregnancy. Mrs A chose RM B to be her lead maternity carer (LMC).

Antenatal care

11. RM B provided antenatal care throughout the pregnancy, which proceeded normally.

Reduced fetal movement

12. On Day 1[1], Mrs A was 40+2 weeks' gestation. She woke earlier than usual that day, about 3am, and was concerned that she could not feel the baby move. At 7am, Mrs A's partner, Mr A, telephoned RM B. She suggested that Mrs A try eating and having a bath or shower, and that if there was still nothing in the next hour then Mr A should call her back. At 8am, Mr A telephoned again, and RM B arranged to meet them at the clinic rooms immediately for CTG[2] monitoring.

13. At the clinic, RM B palpated Mrs A's abdomen and found the fetus to be in a direct occipito posterior (OP) position, meaning the back of the baby's head was against the maternal back. RM B observed a fetal movement and detected the fetal heart rate (FHR) but was unable to obtain a good CTG tracing. RM B said she thought that this was because the

[1] Relevant dates are referred to as Days 1-9 to protect privacy.
[2] Cardiotocography (CTG) monitoring is the combined monitoring of the baby's heartbeat in utero and the mother's uterine contractions, if any. This allows for an interpretation of the fetal heart rate, either alone or in relation to the contractions, to assist with the identification of fetal well-being and/or distress.

baby's position was direct OP. Mr A told HDC that RM B advised them that she thought the CTG machine was faulty. RM B stated: "I also saw a movement from baby whilst palpating and asked [Mrs A] if she had felt this. She said she doesn't feel movements unless she has her hands on her abdomen."

14. RM B then asked another midwife (RM C) to check the position. RM C agreed that the baby was in a direct OP position. Using a hand-held Doppler, RM B was able to hear the FHR over a few minutes. She and RM C again attempted to obtain a CTG trace but were unsuccessful. Mr and Mrs A also met RM B's back-up midwife, RM D, at this appointment.

15. RM B discussed with Mr and Mrs A that she would request an ultrasound scan (USS) to assess fetal well-being. She telephoned the radiology service immediately and recorded in the antenatal notes that she faxed through a form. The radiology service saw Mrs A without delay. RM B told HDC: "I advised [Mrs A] and [Mr A] to contact me if they had any further concerns and that if the scan showed anything I would be in touch." However, Mr A told HDC: "We were not advised to contact [RM B] if we had any further concerns. We were actually advised that [RM B] thought everything was normal."

16. At 10.48am, Mr A sent a text to RM B saying: "The scan went well, the baby is on the small side, 22nd percentile & has a smaller stomach. It is currently posterior. The radiographer said to keep an eye on movements & to get back intouch with you if she doesn't move much." RM B replied: "No problem — I will check report and customise etc when I get it which will give us a better idea of size." RM B booked Mrs A for a CTG in five days' time — on the morning of Day 6 — with the intention of making a plan from there. Mrs A was also booked for an induction of labour (IOL) at the hospital on Day 9 if labour had not commenced before then.

Interpretation of ultrasound scan

17. The USS was performed at 9.28am at the radiology service. RM B had requested the USS to assess the fetal position, growth, dopplers,[3] and BPP.[4] It was recorded that Mrs A's pregnancy had continued two days after the estimated due date, and that reduced fetal movements had been felt that day.

18. The report findings and conclusion were:

> "[Biparietal diameter (BPD)] = 96mm (47th centile)
>
> [Head circumference (HC)] = 350mm (77th centile)
>
> [Abdominal circumference (AC)] = 325mm (<5th centile)
>
> [Femur length (FL)] = 75mm (25th centile)
>
> [Estimated fetal weight (EFW)]= 3282 gms (+/-15%) = 20th centile

[3] Doppler ultrasound uses sound waves to detect the movement of blood in vessels. It is used in pregnancy to study blood circulation in the baby, uterus, and placenta.
[4] Biophysical profile.

> Due to the AC [being] <5th centile doppler profiles were performed.
>
> Umbilical artery doppler [pulsatility index (PI)]: 0.92 normal
>
> [Middle cerebral artery (MCA) PI]: 1.10 normal
>
> [Cerebroplacental ratio (CPR)]: [5] 1.19 abnormal
>
> CONCLUSION: 40 weeks 2 days.
>
> AC is <5th centile. EFW is on the 20th centile (non customised).
>
> Recommend plotting on a customised chart for improved accuracy.
>
> Liquor volume is normal and BPP 8/8. [Umbilical artery (UA)] PI and MCA PI dopplers are normal. Abnormal CPR, if delivery has not occurred within 7 days a further scan for doppler profiles and fetal well being is recommended."

19. The Ministry of Health's *Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines)* 2012 provide that an LMC must recommend to a woman that a consultation with a specialist is warranted given that her pregnancy, labour, birth, or puerperium (or the baby) is or may be affected by the condition, if an ultrasound shows an estimated fetal weight below the 10th percentile on a customised growth chart, or when the liquor volume is normal but there is an abdominal circumference below the 5th percentile, or discordancy between the abdominal circumference measurement and other growth parameters.

20. Although Mrs A's USS report showed normal liquor volume and an estimated fetal weight on the 20th percentile, the abdominal circumference was below the 5th percentile and was discordant with the other growth parameters, which meant that Mrs A should have been advised to consult with a specialist.

21. RM B received the USS report on Day 2. She told HDC that she checked the liquor volume and noted the comment that the CPR was abnormal but that all other Doppler profiles were normal and the BPP was 8/8, and the comment that because of the abnormal CPR, the USS should be repeated in seven days' time if the baby had not been delivered.

22. RM B told HDC that her plan at this stage remained for Mrs A to meet her on Day 6 for a CTG, for a repeat USS on Day 8 before a clinic appointment and CTG with RM D, then an IOL the following day. Mr A told HDC that he and Mrs A had not been made aware of this plan.

[5] A cerebro-placental ratio may be an indicator of fetal well-being. When this ratio falls, it is a sign of redistribution of blood supply to the brain, and is an indicator of failing placental function.

23. RM B told HDC:

> "I had a very busy clinic this day and I skimmed through the report in between clients … I had the intention to go back and review later in the day but got busy with other clients and did not do this."

24. RM B acknowledged to HDC that she did not read the abdominal circumference measurement, and so did not see that it was below the 5th centile and required a referral. RM B said that she was aware that an abdominal circumference below the 5th centile required a referral, and that had she read the scan correctly when she received it, she would have completed a referral immediately. She told HDC: "I realise that by my not fully checking the scan on the day it was received was not ideal for [Mr and Mrs A] and am sorry for this."

25. RM B stated that she filed the report into Mrs A's file immediately, plotted the estimated fetal weight (EFW) on the GROW[6] chart, and printed this off to take to the public hospital when booking the IOL. She told HDC that the EFW plotted just above the 20th centile, so an obstetric referral was not required for that measurement. However, the EFW had crossed centiles on the customised chart, meeting the criteria for obstetric referral. RM B stated that her training included the reading of ultrasound reports and the FSEP.[7] She said that she reviewed the *Referral Guidelines* regularly and kept them with her files.

26. No follow-up CTG was arranged by RM B.

Communication with radiologist

27. RM B stated that she "did not receive a phone call from [the radiology service] voicing any concerns".

28. The radiology service told HDC that its usual process at the time for communicating USS results to the test requester, particularly where abnormal findings were made, was based on the specific case findings and the level of urgency. In a severely abnormal or critical situation, results were discussed with the radiologist immediately and the referrer telephoned. In less urgent cases, the report with any abnormal scan findings was verified and distributed by the end of the day. Recommendations made for further specialist referrals were based on guidelines, such as the *New Zealand Obstetric Doppler Guideline* (NZMFMN[8] 2014) and/or radiologist recommendation.

29. The *New Zealand Obstetric Doppler Guideline* flow chart recommended adding the MCA PI and CPR to the scan, and a specialist review in 1–2 weeks' time. The recommendation of Mrs A's scan report included the MCA PI and CPR in line with those guidelines, and recommended a further scan for doppler profiles and fetal well-being if delivery had not occurred within seven days.

[6] An antenatal chart to plot fundal height and estimated fetal weight measurements.
[7] Fetal Surveillance Education Programme.
[8] NZ Maternal Fetal Medicine Network.

Latent stage of labour

30. At 10.48am on Day 3, Mrs A sent a text to RM B to advise that she had lost her mucus plug, and asked if she should continue to insert evening primrose oil capsules. RM B responded and advised that it was safe as her waters were still intact.

31. Mrs A experienced contractions from the afternoon of Friday Day 3 and all day on Saturday, and on Sunday morning she sent a text to RM B to advise of her labour and ask what time they would be meeting on Monday morning.

32. The Sunday morning text was not received by RM B until 8am on Monday morning, as she had set her phone so that text messages would not disturb her over the weekend. RM B stated that she had advised Mr and Mrs A at their booking visit that she does not answer text messages after hours or on weekends, and that during these times they should always telephone her. Text messages are considered to be non-urgent matters, and therefore not answered outside of business hours. RM B said that she also advised Mr and Mrs A that if they sent a text message and did not receive a reply for something they considered urgent/important, then they should always telephone her. Mr A told HDC: "We only sent a txt as [RM B's] explicit instructions were to not disturb her, unless there was cause for significant concern, or we met her criteria for going to the [birthing unit]."

33. At about 12am on Monday morning Day 6, Mr A telephoned RM B to say that on going to the toilet, Mrs A had seen some blood streaked with mucus. Mr A told HDC that he explained to RM B how long Mrs A had been experiencing contractions, and that she had neither eaten nor drunk much water since Friday. At this time, Mrs A was experiencing two contractions every 10 minutes (2:10), lasting 30–40 seconds. RM B advised Mr A that the blood-streaked mucus was normal in labour, but that if the amount increased or became fresh blood, or there were any concerns, Mr A should telephone again — otherwise, she would wait for their telephone call to say that contractions were closer together and they would like to go to the birthing unit.

34. RM B told HDC: "I was first informed of [Mrs A's] labour at about midnight Sunday night/Monday morning (phone call from [Mr A] approx. 1205am)." RM B stated that she had not been informed that Mrs A had commenced a latent phase of labour over a period of 36 hours, and said: "[I] certainly would have acted if I had been notified." Mr A told HDC: "We felt that as [RM B] knew [Mrs A's] mucus plug had been lost on Friday that [RM B] would be aware how long things had been going for." He stated that during the telephone call at midnight, he advised RM B of how long he believed Mrs A had been in labour.

35. At 5.15am, Mr A telephoned RM B to say that Mrs A was contracting 3:10 lasting 60 seconds, and wanted to go to the birthing unit.

Choice of primary birthing service

36. The birthing unit offers a primary[9] birthing service, and women are booked in by their registered LMC in accordance with the Admission Policy and Admission and Discharge Protocol (the Protocol). The Protocol states that "it is the LMC's responsibility[10] to inform the [unit] about any health changes of the client that might affect the admission to [the unit]". The birthing unit told HDC that it had no knowledge of the USS performed on Day 1.

37. Mrs A told HDC:

> "At no point in time did [RM B] give us [the USS] results, talk about risk management or advise us we needed additional monitoring … We put our trust in [RM B] to monitor [Baby A's] safety and communicate risk to us should it arise."

38. RM B told HDC:

> "I realise and acknowledge that it was the wrong choice to use the primary birthing [unit] as the birthplace for [Mr and Mrs A]. Had I read the scan correctly when I received it, the day after the scan took place, then I would have completed a referral immediately and [they] would have been advised that they were unsuitable birthing unit candidates."

Established labour

39. Mrs A was admitted to the birthing unit at 6am on Day 6. Admission was recorded at 5.45am in the admission book, and RM B commenced the clinical documentation at 6am.

40. The Labour and Delivery Form records that Mrs A's labour was established at 5am, and RM B's clinical notes record a history of contractions over the course of the night, with contractions becoming stronger and more regular from 5am.

41. RM B told HDC: "I did not perform a CTG on arrival at the birthing centre as [Mrs A] was primary care." Instead, the FHR was checked regularly with a hand-held Doppler device. The standard for intermittent auscultation is to check the FHR every 15–30 minutes in the first stage of labour.

42. At 6am, Mrs A was experiencing contractions of "3–4:10 lasting 60secs+". Her observations were within the normal range, with blood pressure (BP) 114/64mmHg and temperature 37°C. An abdominal palpation showed that the baby was now in a more favourable left occiput anterior position, and that three-fifths of the head had descended into the pelvis. RM B performed a vaginal examination (VE) and found that Mrs A's cervix was 4cm dilated with the membranes intact.

[9] Primary Maternity Services are provided to women and their babies for an uncomplicated pregnancy, labour and birth, and postnatal period (Maternity Services — DHB Funded Tier One Service Specifications, 2014, page 5).

[10] Maternity Services Notice Pursuant to section 88 of the New Zealand Public Health and Disability Act 2000, page 35, DA6 — the LMC is responsible for assessing the woman's and baby's needs and planning the woman's care with her, and the care of the baby.

43. RM B recorded in the clinical notes the "excellent support from family", with Mrs A's and Mr A's mothers present. At 6.55am, the FHR was noted to be 135–147bpm[11] over one minute, at 7.15am as 130–140 bpm, and at 7.30am as 134–145bpm.

44. At 7.40am, Mrs A entered the pool for pain relief. At 8.05am, the FHR was 125–143bpm over two minutes, at 8.25am it was 134–142bpm, and at 8.45am it was 140–145bpm, and contractions were 2–3:10, lasting 50–90 seconds. RM B recorded that Mrs A had a good rest between contractions, was feeling bowel pressure, and was doing well.

45. By 8.55am, Mrs A had some involuntary pushing at the peak of contractions. At 9am the FHR was 140–144bpm, and at 9.25am the FHR was 140–145bpm.

46. RM B recorded that at 9.50am Mrs A was finding it hard to cope, and RM B performed a VE to assess progress. She noted that Mrs A was 6–7cm dilated, and the FHR was 137–145bpm.

47. The clinical notes record that at 10.20am, the FHR was 134–143bpm, and Mrs A was breathing well with contractions. At 10.40am the FHR was 138–145bpm, and at 11am the FHR was 135–142bpm. Mrs A's contractions were 3:10 lasting 60–70 seconds. At 11.25am, RM B recorded that the FHR was 133–148bpm before, during, and after a contraction. At 11.50am the FHR was 131–136bpm, and at 12.20pm it was 130–143bpm.

48. At 12.40pm, RM B performed a VE to assess progress. She recorded in the clinical notes that Mrs A was "6cm dilated. ? some oedematous cervix at front". RM B attempted an artificial rupture of membranes (ARM) but recorded in the clinical notes that she was "unable to find membranes". The FHR after a contraction was recorded as 120–127bpm. Mrs A was finding it hard to cope, and requested pain relief. RM B provided her with Entonox.[12]

49. At 12.45pm, RM B telephoned her back-up midwife, RM D, to attend.[13] RM B recorded in the notes that she was "tired and needing 2nd opinion/midwifery support". RM B told HDC that she wanted a second opinion, as the VEs at 9.50am and at 12.40pm had shown little progress from the VE at 6am. She also wanted RM D to attempt to break the membranes, as she felt that her attempt had been unsuccessful.

50. At 1pm, the FHR was 120–127bpm, and the maternal pulse was 76bpm. Mrs A was finding the Entonox insufficient for pain relief, and RM B recorded in the clinical notes: "Wanting to transfer to [the public hospital] for epidural." RM B stated that around this time, whilst waiting for RM D to arrive, a decision was made to transfer to the public hospital, and RM B began preparation for placement of an IV luer in case bloods needed to be taken. However, Mr A stated that a decision to transfer to the public hospital for pain relief had not been made at this time.

[11] Beats per minute.
[12] Nitrous oxide gas used as pain medication.
[13] Mr A commented that the phone call was earlier than 12.45pm, so the wait for RM D to arrive was longer than 15 minutes.

51. RM D arrived at 1.04pm, and discussed with Mr and Mrs A the plan to perform a VE and check the cervix. The incontinence sheet was seen to have fresh, clear amniotic fluid on it, indicating that the ARM RM B had attempted had been successful. At 1.15pm, RM D attempted to auscultate the fetal heart with the Doppler, but was unable to detect the FHR, and at 1.20pm RM B retrieved another Doppler from her car in case the battery was flat. RM B used the new Doppler but was unable to detect the FHR.

52. At 1.25pm, RM D pushed the staff bell and requested the midwife on duty; RM E responded. RM E added the following to the clinical notes retrospectively: "The call bell was rung at 1.25pm and [RM E] attended. She was informed that the FHR was not detectable, and at 1.27pm she telephoned for an ambulance and requested "lights and sirens"". She also requested the urgent attendance of RM F, the Clinical Midwife Manager. Attempts to find the FHR with the hand-held Doppler and CTG monitor were unsuccessful. RM F entered the room and assisted RM D to insert an IV luer and take blood samples, while RM B continued to try to auscultate the FHR. Another CTG monitor was brought into the room to try to detect the FHR.

53. The next entry in the clinical notes, at 1.27pm, states: "[A]mbulance en route." At 1.30pm, a call was made to the obstetric registrar at the public hospital to inform staff of the imminent transfer, and the SBARR[14] transfer report was prepared for handover. The ambulance arrived at the birthing unit at 1.37pm.

54. RM E recorded in the clinical notes that the ambulance departed at 1.40pm.

55. On arrival at the public hospital, Mrs A was admitted to the delivery suite at 1.50pm. Unfortunately, no fetal heart was detected on the USS, and Baby A was pronounced dead. Mrs A delivered her stillborn daughter at 10.16pm. Baby A weighed 3,235g at birth.

Care during labour

56. Mrs A has questioned why RM B did not use the birthing unit midwives during the labour. RM B told HDC that she did not use the midwife on duty for a second opinion as the midwife on duty was less experienced than herself, and although the midwife on duty was experienced in emergency situations, RM B said that she needed a more experienced midwife to assess Mrs A's cervix. RM B added that she knew that there was an experienced midwife in the unit — the Clinical Midwife Manager RM F. RM B told HDC: "I did not ask a [birthing unit] midwife to do an examination as at this stage I was requesting a 2nd opinion and this was not an emergency." RM B said that in her opinion, RM D was the best option, as she was experienced and was her arranged back-up midwife, and was only 15 minutes away.

57. The birthing unit stated that under its Safe Staffing policy there is always a senior midwife on site. The birthing unit said that on that day there was the Clinical Midwife Manager, RM F, "who is a very experienced and senior midwife, registered for 24 years, and [RM E] who has been a Registered Midwife for three years and is not considered to be a junior midwife".

[14] Situation, Background, Assessment, Recommendations, Review/Response (SBARR).

58. Mrs A has asked why checks were not done by the birthing unit midwives during her labour. The birthing unit told HDC that "[a birthing unit] midwife will not enter a woman's room unless they are invited", in line with the section 88 Access Agreement.[15] The relationship between the maternity facility or birthing unit and the practitioner is such that "the facilities shall not inquire into or specify matters relating to the operation or administration of the practitioner's practice". The birthing unit also told HDC that "[i]n the event of an emergency it is the duty of all midwives onsite at the birthing unit to immediately respond to the emergency bell which is what birthing unit staff midwives did do". The birthing unit stated: "It is the expectation the LMC Midwife will alert [unit] staff of any concerns or deviations from normal labour and call for back up at any time."

59. Mrs A has voiced her concerns about feeling unheard, uncared for, and unsupported, and she is critical of the assistance RM B gave her during the labour. Mr A's mother commented that "[t]he problem is the attitude of [RM B]". RM B said that she was encouraging, and guided Mrs A with breathing through contractions and talking through them, giving positive affirmations. RM B stated that she spent time in the room while Mrs A was in the pool in the bathroom, as she did not want Mrs A to feel that she was watching her all of the time. RM B said that she was always aware of what was happening, and every 15–20 minutes auscultated the fetal heart rate, as is documented in the labour notes.

Request for epidural

60. Mrs A said that RM B "[d]enied Epidural request[s] three times throughout labour", and that "[RM B] discounted the fact that [Mrs A] was at her limit and needed pain assistance". RM B stated that "[Mrs A] mentioned an epidural a couple of times but she did not ask for one until after [the] last VE at 1240", at which time they were waiting for RM D to arrive. RM B said that at that time she felt that it would still be beneficial for RM D to assess the situation before deciding on whether to transfer to the public hospital for pain relief.

61. Mr and Mrs A asked RM B whether an ambulance would attend when a woman requested an epidural. RM B replied that an ambulance does not usually attend for pain relief unless the woman is very far along and unable to travel in her own vehicle. This conversation is not recorded in the notes, and RM B told HDC that the conversation occurred a couple of hours after arriving at the birthing unit. Mr A said that being told that they would have to transfer in their own car made them feel "trapped at [the birthing unit]". He added that they felt it would not have been safe for Mrs A to transfer by car.

62. The birthing unit told HDC that it calls an ambulance whenever it is needed for a transfer to the public hospital's Maternity Unit or the Emergency Department, depending on the nature and acuity of the emergency. Women can choose to transfer to the public hospital by private car for pain relief if the LMC midwife is satisfied that the mother and baby are both stable and it is safe for them to do so.

Action taken — RM B

63. RM B told HDC that since this incident she has made significant changes to her practice, including the following:

[15] Section 88 of the New Zealand Public Health and Disability Act 2000 — Schedule 3 — Access Agreement.

- She has reduced her caseload so that she can spend more time with women and keep up to date with all paperwork, laboratory and scan processing, and referrals. As of mid 2019, she is no longer working as an LMC, but is employed as a staff midwife at the birthing unit.

- She regularly checks and updates GROW charts for her clients. At booking visits, she checks the GROW charts for all clients who are using the birthing unit midwives as their LMC, to ensure that any previous SGA or other complications are picked up early and appropriate action is taken. She checks every birthing unit client to establish and ensure that anyone at risk will be identified, and thus appropriate management taken (growth scans, referral, laboratory tests, etc). These clients are checked by her weekly, and any results are actioned appropriately.

- She has increased the amount of information included in her documentation to capture everything discussed with the client, so that colleagues can always see what has been discussed previously, and care plans can be completed accurately.

- She ensures that she reads all laboratory and scan reports thoroughly as they arrive, and follows up the result within 24–48 hours. She discusses the results with the client, and again at the next visit, and documents this in the antenatal notes.

- She is proactive in ensuring that other colleagues are aware of the *Referral Guidelines* and refer accordingly, and she is more aware of her professional responsibility to women/whānau and the midwifery profession.

- She is undertaking mentorship via supervision, and meets with her supervisor monthly to review all antenatal, labour and birth, postnatal actions/reactions, and care plan planning. She has identified areas requiring improvement, such as communication with clients and whānau during labour.

- She has completed the FSEP workshop and GAP/GROW training. In July 2019, she provided reflections to the Midwifery Council on her learnings and how she has changed her practice.

- She has enrolled in a course on complicated childbirth, as requested by the Midwifery Council, and has discussed with the educator at the public hospital the arrangement of a peer course on palpation and vaginal assessment.

- She has attended the Midwifery Emergency Skills Refresher, as per annual practising certificate requirements.

Midwifery Council of New Zealand

64. This matter was brought to the Midwifery Council's attention and, as a result, in 2018, RM B underwent a performance assessment under section 36 of the Health Practitioners Competence Assurance Act 2003.

65. During the review, the Midwifery Council found several deficiencies in RM B's competence and, as a result, put in place a section 38 Order concerning competence, effective from 2019. The Council also put in place requirements for RM B's practice. These are detailed further in the "recommendations" section of the report.

Responses to provisional opinion

66. RM B was given an opportunity to respond to the provisional opinion. She stated that she had nothing further to add and accepts the findings and recommendations.

67. Mr and Mrs A were given an opportunity to respond to the "information gathered" section of the provisional opinion. Where appropriate, Mr A's comments have been incorporated into the report above.

68. Mr A told HDC:

> "[I believe that] [RM B] should have paid close attention to my comments about the scan showing that [Baby A] was on the smaller side & has a smaller stomach. Wouldn't this prompt her to ensure she reads the scan results in detail? From my perspective [RM B] was given signals that there were issues with [Baby A] & simply skimming the report was negligent."

Relevant standards

69. The guideline "Interpretation of growth scans: Guideline for the management of suspected small for gestational age singleton pregnancies after 34 weeks gestation" (New Zealand Maternal Fetal Medicine Network, September 2013) states: "Continuous fetal monitoring in labour is recommended for all pregnancies with suspected SGA fetuses."

70. The New Zealand Midwifery Council *Competencies for Entry to the Register of Midwives* (Competency 2.2) states:

> "2.2 confirms pregnancy if necessary, orders and interprets relevant investigations and diagnostic tests, carries out necessary screening procedures, and systematically collects comprehensive information concerning the woman's/wahine health and well-being."

Opinion: RM B — breach

Introduction

71. Mrs A was expecting her first baby, and chose RM B to be her LMC. I have a number of concerns about the care RM B provided to Mrs A, primarily the failure to read and interpret the USS report adequately, which resulted in Mrs A not being referred for a specialist consultation, and not being identified as at risk and no longer suitable to birth at a primary care birthing unit.

72. My consideration of any complaint is not to assess whether the actions of healthcare providers caused the outcome. Rather, my role is to assess whether, on the information available to the healthcare providers at the time the events occurred, those providers acted appropriately and in accordance with accepted standards of practice. I note that the cause of Baby A's death is unknown, and I make no finding of causation in this report.

Response to reduced fetal movement

73. When Mrs A was 40+2 weeks' gestation, she reported to RM B that she had not felt the baby move that morning, and RM B responded promptly by trying to perform a CTG. Neither she nor another midwife could get a good CTG trace, so an urgent referral for a USS was made, and Mrs A was seen promptly.

Interpretation of ultrasound scan

74. The results of the scan met the criteria for referral for an obstetric review under the *Referral Guidelines*. The baby's abdominal circumference was below the 5th percentile and was discordant with the other growth parameters, and the CPR was abnormal. Following the scan, Mr A sent a text message to RM B and specifically mentioned that "the baby is on the small side" and "has a smaller stomach". RM B had this information and the USS report to inform her that she needed to act and make a referral for obstetric review. This is set in the context of reduced fetal movement in a post due date baby.

75. However, RM B did not read all of the information on the scan report, and failed to make a referral. She told HDC:

> "I had a very busy clinic this day and I skimmed through the report in between clients … I had the intention to go back and review later in the day but got busy with other clients and did not do this … I realise that by my not fully checking the scan on the day it was received was not ideal for [Mr and Mrs A] and am sorry for this."

76. RM B failed to interpret the USS report correctly and take the necessary actions. She told HDC that she was aware that the results, had she read them in full, required a referral for obstetric review. I accept the advice of my midwifery advisor, RM Nicky Emerson, who stated:

> "In my opinion, following the scan result on [Day 1], a referral for an obstetric review was warranted under the referral guidelines. There appears to be an omission of [RM B] to recognise the complexity of the clinical picture presented following the scan."

77. I note that the interpretation of radiology reports is a basic midwifery competency.[16] I consider that RM B's failure to read and interpret the USS report correctly was a significant failure and, as a result, there was a missed opportunity for Mrs A to be reviewed by a specialist, and also for RM B to recommend to Mrs A that she birth in hospital and have continuous fetal monitoring during her labour.

[16] The New Zealand Midwifery Council Competency 2.2.

78. I note RM Emerson's advice that scanning is an adjunct to, and not a substitute for, a reassuring CTG, and it would have been prudent for RM B to have followed up with a CTG the following day. While I consider the greater concern is that RM B did not act on the USS report in the circumstances of reduced fetal movements, I am critical that, in the context of reduced fetal movement in a post due date baby, RM B did not ensure that she obtained a reassuring CTG the following day.

Communication with radiology

79. As stated above, it was RM B's responsibility to read and interpret the USS report that she ordered. It appears that she placed some reliance on receiving a telephone call from the radiologist if there was a concern. However, RM B had all the information she needed to make the referral regardless of whether she received a telephone call from the radiologist.

Choice of primary birthing service

80. Had RM B interpreted the USS correctly and made a referral for an obstetric review, she would have realised that this was no longer a low-risk pregnancy and birth, and that Mrs A was no longer suitable to birth at a primary birthing unit. RM B told HDC:

> "I realise and acknowledge that it was the wrong choice to use the primary birthing centre as the birthplace for [Mr and Mrs A]. Had I read the scan correctly when I received it, the day after the scan took place, then I would have completed a referral immediately and [they] would have been advised that they were unsuitable birthing unit candidates and the outcome may have been different."

81. I note RM Emerson's advice that following the scan report on Day 1, Mrs A was no longer a low-risk pregnancy. RM Emerson stated:

> "The pregnancy now met with the criteria for continuous labour monitoring at a secondary facility … The subsequent management of [Mrs A's] labour with a primary focus, in my opinion represents a moderate departure."

82. I note RM Emerson's opinion that continuous fetal monitoring would have been appropriate for Mrs A's labour and birth. Continuous monitoring was not performed, as RM B still considered Mrs A to be a low-risk primary care birth.

83. RM Emerson outlined the following compounding factors that do not appear to have been recognised by RM B in choosing to access the primary unit for Mrs A's labour and birth:

1. Mrs A was overdue by six days.
2. The baby was known to be small, as reported on the USS on Day 1.
3. EFW had crossed centiles on the customised chart.
4. Reduced movements had been reported five days earlier without a reassuring CTG.
5. Mrs A met the guideline criteria for referral but was not referred.
6. There was no follow-up plan for monitoring between Day 1 and Day 6.
7. The effect of the long latent phase of labour on a small baby was not recognised at the time of contact and assessment.

84. I am critical that RM B failed to recognise that these compounding factors meant that Mrs A was no longer a low-risk pregnancy, and therefore failed to identify that Mrs A was no longer suitable to birth at a primary care birthing unit.

Conclusion

85. RM Emerson has advised that there were a number of departures from the expected standard of care by RM B. Of greatest concern is RM B's failure to read and interpret the USS report adequately, which resulted in Mrs A not being referred for a specialist consultation. RM B did not recognise the compounding factors, and did not identify Mrs A as being at risk, requiring continuous monitoring, and no longer suitable to birth at a primary care birthing unit. In addition, I am critical that in the context of reduced fetal movement in a post due date baby, RM B did not ensure that she obtained a reassuring CTG the day following the USS.

86. As a consequence of these issues, RM B failed to provide services to Mrs A with reasonable care and skill and, accordingly, breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code).[17]

Other comment — ultrasound guidelines

87. In March 2019, the *New Zealand Obstetric Ultrasound Guidelines — Consultation document*[18] was released, which clarifies and guides the reporting of abnormal results and the level of urgency. The purpose of the consultation document was to establish detailed, quality guidelines for maternity USS, as recommended by the Maternity Ultrasound Advisory Group, to ensure that diagnostic ultrasound usage in New Zealand is clinically appropriate and uniformly of high quality. I note that the guideline was finalised and published in December 2019.[19]

88. The reporting alert for "small for gestational age (SGA) without abnormal Doppler" is the same day, and requires a "same-day phone discussion with the referrer". In RM Emerson's opinion, under the new guidelines Mrs A's scan results would trigger a telephone call to the midwife on the same day. It is reassuring to note the practice changes, as they reinforce a safety-net for the consumer. However, I reiterate that it is the responsibility of the requestor to read and interpret any USS reports ordered.

Recommendations

89. I note that the Midwifery Council undertook a competence review of RM B in 2018, and found several deficiencies in RM B's performance. The Council put in place the following requirements:

[17] Right 4(1) states: "Every consumer has the right to have services provided with reasonable care and skill."
[18] Ministry of Health. 2019. *New Zealand Obstetric Guidelines: Consultation document*. Wellington: Ministry of Health. Published March 2019.
[19] Ministry of Health. 2019. New Zealand Obstetric Ultrasound Guidelines. Wellington: Ministry of Health, 13 December 2019.

a) Effective from 18 February 2019, an order requiring RM B to undertake a period of supervised practice for a minimum of 12 months. This consists of monthly case reviews with a supervisor to review safety of practice and to monitor engagement with education and support to integrate this into clinical practice.

b) By 31 December 2019, RM B to have completed the following Midwifery Council endorsed courses satisfactorily: an integrated short course on complicated childbirth; fetal heart rate monitoring; and fetal growth assessment (GAP education).

c) By 30 April 2019, RM B to have completed with a Council-approved peer a one-on-one session on palpation and vaginal assessment.

d) On completion of each component above, RM B is to provide the Deputy Registrar with a reflection that demonstrates the learning she has undertaken, and the changes she has made to her practice.

90. In light of these appropriate actions being taken by the Midwifery Council, I recommend that RM B provide a reflection to HDC on her learnings and changes to her practice, within three months of the date of this report.

91. I also recommend that RM B provide a written apology to Mrs A, to be sent to HDC within three weeks of the date of this report, for forwarding.

Follow-up actions

92. I will be writing to the New Zealand College of Midwives and the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) to suggest collaboration on an education package for LMCs to provide guidance on interpreting ultrasound scan reports.

93. 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 B's name.

94. 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, RANZCOG, the Ministry of Health, the Royal Australian and New Zealand College of Radiologists, the Medical Radiation Technologists Board, and the Health Quality & Safety Commission, and will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A: Independent advice to the Commissioner

The following expert advice was obtained from midwifery advisor RM Nicky Emerson:

"1.Thank you for the request that I provide clinical advice in relation to the complaint from [Mrs A] about the care provided by LMC [RM B]. 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 the documentation on file: Letter of complaint — The coming of [Baby A], Complaint response to HDC — LMC [RM B] [2018], Complaint response to Midwifery Council — LMC [RM B] [2018] (including clinical notes, blood and scan results), [Birthing unit] letter of response [2018], clinical notes [Day 6] including scan forms, blood results, Admission policy, Admission and discharge protocol, transfer policy, booking form, labour and delivery form, SBARR report for transfer, terms and conditions for maternity facility, practitioners access agreement, safe staffing policy, safe staffing escalation, roster policy, statements from [four midwives from the birthing unit]; [DHB] response [2018] including Maternity booking form, labour and delivery record [Day 6], notice of birth [Day 6], customised growth chart, scan reports, blood results, Maternity assessment [Day 6], clinical note [Days 6–9], Ambulance care summary, referral to [counselling services], Consent for post mortem, PMMRC booklet.

3. **Background:** [Mrs A], [a woman in her thirties] with a normal ongoing pregnancy, BMI 28.73, obstetric history included 2 miscarriages, medical history included history of […]. On the morning of [Day 1] [Mrs A] attended an ultrasound scan following reduced fetal movements. Aspects of the scan report were not reassuring. On [Day 6], whilst in labour, the fetal heartbeat was lost. Following [Mrs A's] transfer to Hospital in labour, [Baby A] was pronounced dead.

4. **Advice request**: With a focus on the care provided [Days 1–6], please provide your assessment of the care. In particular:

- Was the ultrasound report appropriately responded to? Please indicate if a report from the sonographer is required?
- Was the assessment on [Day 1] appropriate
- Was [Mrs A's] labour managed appropriately.

There are broader concerns about communications and other management which you could address if you wish to if you think that these matters have really affected Right 4.

1. Was the ultrasound report appropriately responded to?

Please indicate if a response from the sonographer is required?

On the morning of [Day 1] [RM B] received a phone call at 7:00am from [Mrs A's] partner] to say that [Mrs A] had woken at 5:00 am and hadn't felt the baby move. [RM

B] suggested *try some food and maybe a bath or shower and if nothing happens in the next hour then call me back. (Complaint response [2018].)*

a) Following a further phone call at 8:00 am, [RM B] arranged to meet [Mr and Mrs A] at the clinic immediately, and to perform a CTG to assess fetal wellbeing.

b) [RM B] was able to detect a fetal heart with a hand held doppler but was unable to obtain an accurate recording with the CTG machine. [RM B] attributes this to the fetal position which was direct OP (occipito posterior)

c) On [RM B's] request another midwife, [RM C] came into the room and confirmed the baby's position

d) As [RM B] was unable to obtain a clear trace from the CTG machine, she listened to the fetal heart over several minutes with a hand held doppler. (Complaint response [2018])

e) Both midwives were unable to get a clear trace from the CTG machine so an immediate community scan for fetal well being was arranged.

f) In her complaint response [2018] [RM B] states that *I advised [Mr and Mrs A] to contact me if they had further concerns and that if the scan showed anything I would be in touch*. [RM D] also reassured [Mr and Mrs A] that the sonographer would inform them if there were any concerns. *I did not receive a phone call from the radiology service voicing their concerns.*

g) [RM B] states in her complaint response [2018] *I received the ultrasound report and checked the liquor volume. I also checked the comment on the bottom that said CPR was abnormal but all other Doppler profiles were normal and BPP (Biophysical Profile) 8/8. There was also a comment that because of the abnormal CPR the ultrasound should be repeated in 7days if not yet delivered. My plan at this stage remained for [Mrs A] to meet me on Monday ([Day 6]) for a CTG and repeat ultrasound on Wednesday ([Day 8]) before CTG with [RM D] in her clinic Wednesday (this appointment was to be made on Monday) and IOL (Induction of Labour) booked for the next day.*

In forming my opinion regarding whether the ultrasound report was appropriately responded to I have considered the following

- [Mrs A] was 40 weeks and 2 days gestation on [Day 1] (2 days overdue)
- She had an episode of reduced fetal movements on the day of the scan ([Day 1])
- A CTG was not able to be obtained and this resulted in a referral for a same day scan
- The comment at the end of the scan report [Day 1] is: *AC is <5th centile. EFW is on the 20th centile (not customised). Recommend plotting on a customised chart for improved accuracy. Liquor volume is normal and BPP 8/8. UA PI and MCA PI*

Dopplers are normal. Abnormal CPR, if delivery has not occurred within 7 days a further scan for Doppler profiles and fetal well being is recommended.

- [RM B] appears to have only partially interpreted the scan report comment above *I received the ultrasound report and checked the liquor volume. I also checked the comment on the bottom that said CPR was abnormal but all other Doppler profiles were normal and BPP 8/8.* There was also a comment that because of the abnormal CPR the ultrasound should be repeated in 7 days if not yet delivered (complaint response [2018])
- In [RM B's] interpretation of the comment she does not appear to have considered the following information which also constituted part of the comment, The AC (abdominal circumference) is < 5th Centile. EFW (Estimated fetal weight) is on the 20th Centile (not customised) Recommend charting on a customised chart for improved accuracy.

a) The above portion of the comment is relevant for the following reasons: The AC of <5th centile alone constituted the need for referral under *Guidelines for Consultation with Obstetric and Related Medical Services — Referral guidelines 2012 page 25, 4011*)

b) Furthermore in the body of the scan report [Day 1] there is a discordancy between the HC (head circumference) at the 77th centile and the AC (abdominal circumference) at <5th centile, this also constitutes criteria for referral *(Guidelines for Consultation with Obstetric and Related Medical Services — Referral guidelines 2012 page 25,4011*)

c) In addition, I have considered the following

Interpretation of growth scans: Guideline for the management of suspected small for gestational age singleton pregnancies after 34 weeks gestation (New Zealand Maternal Fetal Medicine Network, Sept 2013)

Note: The abdominal circumference (AC) is usually the first fetal measurement to become reduced in SGA (Small for Gestational Age). Suboptimal fetal growth should be suspected when:

- *The abdominal circumference on the population chart is less than or equal to the 5th centile*
- *Discrepancy between head and abdominal circumference (e.g. HC 75th centile and AC 20th centile which suggests wasting)*
- *AC is >the 5th % but is crossing centiles e.g. 20% reduction*
- *EFW on GROW chart is <10th centile*
- *EFW on GROW chart is crossing centiles*
- Based on the above guidelines 3 out of 5 criteria met the threshold for referral. (points 1,3,5)

- I am unable to comment on whether [RM B] plotted the scan on a customised growth chart as recommended in the scan report [Day 1]. There is a customised chart in the clinical notes and [RM B] states in her complaint response ([2018]) that she generated a customised growth chart; however I cannot say when the [Day 1] scan result was plotted.
- If it is accepted that the scan result was plotted immediately on receiving the report, then the EFW has crossed centiles going from above the 50th centile (by fundal height measurement) to just above (or just on) the 10th centile by scan. This information (crossing of centiles) also constitutes criteria for referral requiring an obstetric opinion.
- If it is accepted that the scan result was not plotted at the time of scan as recommended, referral criteria still existed based on the AC< 5th centile and the discordancy between the HC and the AC.

2. Was the assessment on [Day 1] appropriate?

In my opinion [RM B] has responded promptly to [Mrs A's] report of reduced fetal movements on [Day 1]. She has arranged to meet [Mrs A] at the clinic (within 2 hours) and has attempted to gain a clinical picture by endeavouring to undertake a CTG. She was not successful and after seeking the opinion and assistance of a colleague she has referred for an urgent scan. Fetal movement was palpated by [RM B] at the appointment prior to the scan and the fetal heart was auscultated with a hand held doppler prior to [Mrs A] attending her scan. These actions were in keeping with accepted Midwifery practice.

The scan result comments were reassuring in some aspects (normal UA and MCA Dopplers, normal liquor volume and BPP 8/8). Other aspects of the comments were not reassuring (AC <5th centile, abnormal CPR). The AC alone constituted criteria for referral. In addition interpreting the body of the scan report; discordancy between HC and AC is identified. This additionally constituted criteria for referral under the referral guidelines.

In her complaint response [RM B] states *[Mr A] texted me later in the day to say that the ultrasound had gone well; baby was in an OP position and was a bit on the small side* (complaint response [2018]).

In my opinion a referral or at the very least, a discussion with an obstetrician involving a plan should have taken place on [Day 1]. This should not have been delayed for 5 days later as planned for Monday [Day 6].

On review of the history,

I. [Mrs A] was now overdue,

II. There had been an episode of reduced movements in the morning, a reassuring CTG was not obtained (though attempted)

III. The ultrasound scan reported abnormal CPR, an AC< 5th centile and discordancy between the HC and the AC.

[RM B] was reassured by the BPP 8/8, normal liquor volume and other normal dopplers. [RM B] does not appear to have considered the whole picture and context.

In her complaint response [2018] [RM B] refers to a text from [Mr A] following the scan saying '*the baby was a bit on the small side'.*

I am unable to verify when the baby was plotted on the customised chart; there were prompts to do so (recommendation from scan report, plus comment regarding baby size from [Mr A]). The crossing of centiles on the customised chart would have further reinforced the need to take immediate action and to have a discussion and formulate a plan. The current plan was to review in five days time on [Day 6]. (Complaint response [2018])

Given that the baby was now overdue, there had been reduced movements, the baby was small and aspects of the ultrasound warranted immediate review and referral, it is my opinion that [RM B] has moderately departed from accepted midwifery practice in not referring on [Day 1].

3. Please indicate if a response from the sonographer is required?

In my opinion a response is not required from the sonographer as the onus is on the midwife to interpret and act on the scan result. [RM B] appears to have interpreted some of the scan report information as reassuring and not considered more concerning aspects reported.

Competency Two (NZ Midwifery Council — Competencies for Entry to the Register)

2.2 *confirms pregnancy if necessary, orders and interprets relevant investigations and diagnostic tests, carries out necessary screening procedures, and systematically collects comprehensive information concerning the woman's/wahine health and well-being*

4. Was [Mrs A's] labour managed appropriately?

In preparing an opinion on labour care, I have considered [Mr and Mrs A's] complaint; in addition I have considered accounts from other family members.

I have considered [RM B's] complaint response and her clinical notes throughout the pregnancy and labour and clinical notes from [the birthing unit] and [the public hospital]. I have considered the scan report [Day 1].

I am saddened to hear that [Mr and Mrs A] did not feel confident to ask questions and seek support during the pregnancy and latent phase of labour.

Following careful consideration of clinical notes, it is my opinion that from a clinical perspective the majority of care provided by [RM B] met with accepted midwifery standards.

I do, however acknowledge that communication and partnership are fundamental underpinnings of New Zealand Midwifery. On this count, [Mr and Mrs A] feel that the

empathy and communication from [RM B] did not meet expectation and I acknowledge this.

In response to the specific question above relating to the management of labour care, I have considered the following;

A. [Mr and Mrs A] express their feeling of abandonment during the latent phase of labour over the weekend of [Days 4-6], stating that [RM B] did not respond to their text communication. In her complaint response [2018], [RM B] states '*I advised [Mr and Mrs A] at our booking visit that I do not answer text messages after hours or on weekends and during these times they should always call me. I have my phone set so that text messages do not disturb me.'*

[RM B] has provided the written information below regarding communication at the time of booking. This has been signed at booking by [Mrs A].

'**Always phone if urgent or you are concerned.** Text messages are considered non-urgent and may not be answered after hours or weekends.'

B. Information handed out at booking has been referred to by [Mr and Mrs A] in their complaint ([2018]) so they appear to have received it.

C. [RM B] states that she was first informed of the labour by phone call from [Mr A] at midnight on Sunday/Monday.

I note that [Mr and Mrs A] (Complaint [2018]) felt that they had been labouring throughout the weekend and [RM B] did not consider that they were in labour until Monday morning. (Complaint response [2018])

A difference in perspective is likely to be reflective of a differing interpretation of labour. The latent phase of labour is prior to the period of established/active labour.

1. NICE (2007) recommend the following definition of latent phase — a period of time, not necessarily continuous, when there are painful contractions and there is some cervical change, including cervical effacement and dilatation up to 4cm and the onset of active labour when there are regular painful contractions and there is progressive cervical dilatation from 4cm.

2. **DIAGNOSIS OF PROLONGED LATENT PHASE** — There is no uniformly accepted definition for a prolonged latent phase. It had been defined by Friedman as a nullipara who has not entered the active phase by 20 hours after the onset of the latent phase and a multipara who has not entered the active phase by 14 hours after the onset of the latent phase (up to date **Literature review current through:** Jun 2018.)

3. Further definitions include prolonged latent labour as defined by a period of 2–3 days.

[Mrs A] was 4cm dilated on arrival to [the birthing unit]. At this time she would have been considered established in labour and requiring midwifery input. It would appear that she had been in latent labour since Saturday [Day 4].

Whilst clarifying the above definition, I am not suggesting that midwifery input could or should not be sought earlier or that the latent phase contractions were not painful, tiring or in need of consideration once labour had established. I do consider that [RM B] had provided sufficient information to [Mr and Mrs A] regarding availability and methods of contact had they needed additional support in the latent period.

My concern regarding labour is whether [Mrs A] was suitable to labour and birth in a primary birth unit.

[Mrs A] had been recording contractions since 5:58pm on [Day 4] (report from contraction App — Complaint — [2018]) [RM B] was not aware of the labour until midnight Sun/Mon [Day 6].

In forming an opinion, I have considered the following

1. [RM B] does not appear to have appreciated the significance nor referred [Mrs A] following the scan on [Day 1].
2. [RM B's] complaint response indicates that she did not appreciate that this was no longer a pregnancy suitable for primary care. *I did not perform a CTG on arrival at the birthing centre as [Mrs A] was primary care* (complaint response [2018]).
3. Given that [RM B] had not understood the significance or appropriately referred, the clinical actions and documentation were in my opinion, in keeping with accepted midwifery practice for a low risk pregnancy.

However this was now, since the scan report 5 days earlier, on [Day 1], no longer a low risk pregnancy. The pregnancy now met with the criteria for continuous labour monitoring at a secondary facility. I have considered the apparent oversight of [RM B] to recognise the deviation from a primary pregnancy and labour to one that required additional surveillance and monitoring.

For SGA fetuses with evidence of brain sparing (low MCA resistance or low CPR) continuous fetal heart rate monitoring is recommended from the onset of uterine activity. (Underlining of onset in original document) *Interpretation of growth scans: Guideline for the management of suspected small for gestational age singleton pregnancies after 34 weeks gestation (New Zealand Maternal Fetal Medicine Network, Sept 2013).*

In forming an opinion, I have considered the following

1. [Mrs A] was now overdue by 6 days
2. [Mrs A's] baby was known to be small as reported on scan 5 days earlier (including AC < 5th centile and HC and AC discordancy, abnormal CPR; noting that

HC was on the 77th centile and the AC was below the 5th centile). This constituted criteria for referral.

3. The baby's estimated fetal weight had crossed centiles on the customised chart (going from the 50th by fundal height measurement to just above the 10th by scan result).

4. Reduced movements were reported 5 days earlier on [Day 1] without a reassuring CTG *(Decreased Fetal Movement Guideline page 13 — A CTG should be performed to exclude immediate fetal compromise).* Whilst I appreciate that a CTG was attempted unsuccessfully, scanning is an adjunct and not a substitute for a reassuring CTG. In my opinion, it would have been prudent for [RM B] to arrange a follow up CTG the next day [Day 2].

5. As previously stated, [Mrs A's] pregnancy met the guideline criteria but was not referred by [RM B] following the scan on [Day 1].

6. There had been no follow up plan for monitoring in the days between [Day 1] and [Day 6]. ([Day 6] assessment had been arranged and Induction of labour booked for [Day 9].)

7. Latent phase of labour had commenced on Sat [Day 4] and continued throughout the weekend. Whilst it is reasonable that [RM B] was not aware of the contractions till midnight Sunday/Monday as previously explained, the consideration of the effect of the latent phase on a small baby at the time of contact and assessment, in my opinion, warranted recognition.

The compounding factors above do not appear to have been recognised by [RM B] in choosing to access the primary unit for [Mrs A's] labour and birth.

Labour and Birth

Small for gestational age (SGA) fetuses have an increased rate of acidosis in labour. Women with SGA pregnancies and spontaneous labour should be advised to be admitted early in labour to enable fetal monitoring.

For SGA fetuses with evidence of brain sparing (low MCA resistance or low CPR) continuous fetal heart rate monitoring is recommended from the <u>onset</u> of uterine activity. (Underlining of <u>onset</u> in original document). *Interpretation of growth scans: Guideline for the management of suspected small for gestational age singleton pregnancies after 34 weeks gestation (New Zealand Maternal Fetal Medicine Network, Sept 2013).*

[RM B] was first informed of [Mrs A's] labour after midnight on Sunday/Monday [Day 6] (complaint response [2018]). [RM B] was in attendance at [the birthing unit] at 6:00am. On arrival at [the birthing unit] [Mrs A] was 4cm dilated. Four hours later she was 6–7cm dilated. The vaginal examination 2 hours later that resulted in the same findings, prompted [RM B] to seek the opinion of a colleague. When [RM B's] colleague arrived, the fetal heart had not been heard for 4 minutes (Complaint

response [2018]). The fetal heart is last recorded in contemporaneous clinical notes at 1:00pm on [Day 6].

At 1:25pm the call bell was rung following unsuccessful attempts to auscultate the fetal heart. Ambulance was in transition at 1:40pm. Fetal heart was not found and on admission to hospital [Baby A] was pronounced dead.

In my opinion, following the scan result on [Day 1], a referral for an obstetric review was warranted under the referral guidelines. There appears to be an omission of [RM B] to recognise the complexity of the clinical picture presented following the scan. The subsequent management of [Mrs A's] labour with a primary focus, in my opinion represents a moderate departure from accepted Midwifery practice. In my opinion continuous fetal monitoring was appropriate for [Mrs A's] labour and birth.

Summary

I have been asked to provide an opinion regarding the care provided by [RM B] to [Mrs A]. I have been asked to focus on the care provided in particular [Days 1-6]. I have been asked to address the following questions

- Was the ultrasound report appropriately responded to? Please indicate if a report from the sonographer is required?
- Was the assessment on [Day 1] appropriate
- Was [Mrs A's] labour managed appropriately

In my opinion there are moderate departures from accepted Midwifery practice in the response to the ultrasound report and management of labour.

Education note

Comment on eating food for reduced movements

I note that [Mrs A] was advised to have something to eat prior to calling [RM B] back on the morning [Day 1].

- Advising a cold drink or food for reduced fetal movements is a common but not evidence based approach. Current evidence advises clinical assessment within two hours of reporting reduced movements. An update on current advice can be obtained by reading the *Clinical Practice Guideline for the Care of Women with Decreased Fetal Movements — Perinatal Society of Australia and NZ 10 August 2017).* This document is available online. Furthermore, there is a recent online module available for midwives regarding reduced fetal movements. http://perinatal.matereducation.qld.edu.au/ this module is supported by the perinatal society of Australia and New Zealand.

I do note that [Mrs A] was assessed by [RM B] within 2 hours of reporting reduced movements and this is in keeping with the above guideline and accepted midwifery practice.

Finally I would like to express my heartfelt condolences to [Mr and Mrs A] and family for the loss of their precious baby.

I hope this report has clarified some of their remaining questions.

Nicky Emerson BHSc — Midwifery
Midwifery Advisor
Health and Disability Commissioner"

Further expert advice

The following further advice was received from RM Emerson:

"I have reviewed and considered the information that you have sent me below and in particular the question in your memo.

Questions
Please can you provide further advice on the care provided by [RM B] to [Mrs A] from [Days 1-6], and whether the information alters your opinion. In particular: [RM B] claims that she 'skimmed through' the [Day 1] scan report and did not read the AC so did not see that it was <5th centile. She states that she 'was aware at the time that an AC <5th centile did require referral'. Does this change your view that this is a moderate departure from accepted midwifery practice?

I acknowledge that [RM B] did not read the ultrasound report correctly as stated above, however this supports my original report that outlines [RM B's] non recognition of the significance of the ultrasound. I note that she has recognised this and is undertaking and engaging in a competence programme supervised by Midwifery Council.

On review of the information supplied, my opinion of moderate departures of accepted practice are not altered.

Regards, Nicky"

Further expert advice

The following further advice was received from RM Emerson:

"I have reviewed the information provided in your email 1 November 2019 (My advice 26 March, NZ Obstetric Consultation Guidelines document March 2019).

1) Can you clarify whether failing to arrange a follow up CTG was a departure from accepted midwifery practice and if so the degree of departure

Given that [RM B] was reassured by the ultrasound scan and did not appear to appreciate fully the significance of the final comment in the ultrasound scan, I do not think that she departed from accepted midwifery practice in not following up with a CTG the following day. My opinion remains that this action would have been prudent

in the circumstances but not a departure not to have done so. My greater concern is not acting on the ultrasound report on the background of reduced movements.

2) Please advise what level of alert these new guidelines would have triggered in the circumstances of [Mrs A's] scan.

In my interpretation of the new NZ Obstetric Ultrasound Guidelines Consultation document March 2019 it is my opinion that [Mrs A's] scan would have triggered a phone call to the midwife on the same day had the guidelines been current (they were not in use at the time).

The reason for my opinion is that

Same day

Requires same-day phone discussion with referring LMC/doctor.

Examples include:

- **small for gestational age (SGA) without abnormal Doppler**
- unexpected fetal anomaly or demise
- abnormal amniotic fluid.

I note that the Dopplers were reported as normal however the cerebroplacental ratio was not, whether this additional information in conjunction with the SGA would have escalated from same day to urgent I cannot say; however given that the report suggests follow up after 7 days I consider that a same day phone call as opposed to urgent would be required under the new guidelines."

Further expert advice

The following further advice was received from RM Emerson:

"**Should [the birthing unit] be checking that patients are low risk on admission or can they rely on the LMC's assessment?**

It remains my opinion that it is the responsibility of the LMC to adhere to the guidelines of [the birthing unit] (including access agreement guidelines), section 88, NZCOM standards and Midwifery Council competencies to determine whether a woman is suitable to labour in a primary unit. As outlined in my report: In my opinion the lack of recognition of the implications of [Mrs A's] scan ([Day 1]) led LMC [RM B] to consider that [Mrs A] was still suitable to birth at the birthing unit. In my opinion, it was not the role of the birthing unit to question the suitability of [Mrs A] to birth at the birthing unit and it was reasonable for them to rely on LMC assessment."