HEALTH & DISABILITY COMMISSIONER
TE TOIHAU HAUORA, HAUĀTANGA

Care provided by Lead Maternity Carer

Introduction

1. The Health and Disability Commissioner (HDC) received a complaint from Mrs A about the primary maternity care she received from her Lead Maternity Carer (LMC),[1] registered midwife (RM) D. The complaint concerns the antenatal care RM D provided to Mrs A, including her management of Mrs A's labour.

2. RM D became Mrs A's LMC in the third trimester of her pregnancy at 31 weeks' gestation. Prior to this date, Mrs A and her husband had been living in the South Island, with relocation to the North Island necessitating a change in LMC provider.

3. On Day3 February 2020, Mrs A was admitted to the maternity unit at the local public hospital and underwent an emergency Caesarean section[2] (C-section). Shortly after Baby C was delivered, his condition deteriorated. Unfortunately, Baby C suffered significant brain damage.

4. HDC was informed that Baby C passed away in late 2023. I extend my sincere and deepest sympathies to Mrs A, her husband, Mr A, and their family for their loss.

Background

Antenatal care

5. Mrs A told HDC that she is concerned about the antenatal care RM D provided to her in the later stages of her pregnancy, after RM D became her LMC at 31+1 weeks' gestation.[3] Mrs A is concerned that RM D did not refer her for obstetric review at an earlier stage given her high body mass index[4,5] (BMI), and that the option of a C-section was not discussed with her. Mrs A also raised concerns that it was not until her second-to-last antenatal appointment that she was informed that the growth scans[6] had shown issues with her baby's growth.

6. RM D advised that Mrs A had a total of 11 antenatal midwifery consultations. Nine consultations were with RM D, one was with a locum midwife, and one was with RM B.[7]

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[1] LMCs are responsible for organising maternity care and for developing care/birth plans. They will organise any monitoring procedures and tests that are offered during pregnancy. They provide care throughout pregnancy, labour, birth, and in the postnatal period.
[2] An emergency C-section is performed when a vaginal birth is not possible or safe.
[3] Mrs A recalls that often RM D was distracted during antenatal appointments and had trouble keeping track of her due date. Mrs A's birth plan was completed a week before the due date.
[4] BMI is a measure of body fat based on height and weight. In pregnancy, it is a crucial indicator that can reflect a woman's health and influence the risks associated with pregnancy and delivery.
[5] Mrs A told HDC that, at the time of her pregnancy, her BMI was 45.
[6] Mrs A said that she had three to four scans from the seventh month of her pregnancy under RM D's care. Three of the scans showed issues with the baby's growth.
[7] RM B works alongside RM D at the same midwifery clinic and provides back-up midwifery care for weekends off and annual leave.

Referral for obstetric review

7. RM D told HDC that she commenced midwifery care for Mrs A at 31+1 weeks' gestation in 2019. Prior to this, Mrs A had been living in the South Island and had received antenatal care under the midwives at a tertiary maternity facility. RM D advised that Mrs A's routine antenatal tests[8] undertaken in the South Island were within normal range. Her only risk factor for her pregnancy was her BMI of 52.[9]

8. RM D said that at the booking appointment in 2019, she advised Mrs A that due to her high BMI, she would need to birth at a tertiary hospital due to possible complications at delivery. Mrs A was also advised that she would need to be referred for obstetric review and planning due to her high BMI. Prior to referring Mrs A for obstetric review, RM D considered that it would be helpful for Mrs A to have a recent growth scan. RM D advised that she discussed the need for more serial scanning to enable more accurate assessment of fetal growth, as it is difficult to assess by fundal height measurement[10] and palpation when a BMI is over 35.

9. At 32+6 weeks' gestation, Mrs A had a growth scan that showed normal growth. Ten days later, RM D made a referral to the obstetric team at the local general hospital.

10. At 34+6 weeks' gestation, Mrs A was reviewed by an obstetrician. The obstetrician discussed the risks associated with a high BMI. The obstetrician told HDC that she considered that Mrs A's pregnancy was progressing well. Therefore, the obstetrician discharged Mrs A back to her LMC with recommendations that included having a re-scan at 36 weeks' gestation, delivery at a tertiary hospital (not an elective C-section) and anaesthetist review. The obstetrician considered that at that time there was no indication for Mrs A's care to be transferred to the obstetric service and that ongoing care could be provided by the LMC. The obstetrician advised that if any risk factors (BMI associated or other) manifested, Mrs A was to be referred back by her LMC.

Discussion about Caesarean section

11. RM D advised that, from around 36 weeks of pregnancy, she provides all women with information about what to expect in the last few weeks of pregnancy.[11] In the weeks leading up to birth, she makes a plan with the mother that includes their preferences for birthing, pain relief, and any interventions that may be necessary due to risk factors.

12. RM D advised that is she is unable to recall a conversation with Mrs A on Day1 January 2020 regarding a C-section. RM D advised that if Mrs A had raised questions about the option of a C-section, she would have explained that the obstetric team did not conclude in the plan that an elective C-section was indicated. Had Mrs A indicated a wish to re-discuss her birth plan and ask the obstetric team for an elective C-section, she would have noted this in the clinical notes and actioned her request to the obstetric team for their consideration.

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[8] Routine second trimester blood tests were within normal range, a glucose tolerance test was negative for gestational diabetes, and her scans were normal.

[9] Mrs A told HDC in her complaint that her BMI was 45.

[10] Fundal height measurement is taken from the uppermost part of the fundus to the top rim of the symphysis pubis to measure the size of the uterus and fetus.

[11] This would include signs of labour, the stages of labour, when to call the midwife, when to consider going to the hospital, and what constitutes an emergency.

Growth scan results

13. RM D advised that the first scan she arranged was at 32+6 weeks' gestation, which showed normal liquor volume and satisfactory growth.

14. The next ultrasound scan was ordered at 36 weeks' gestation by the obstetrician. A referral form was provided to Mrs A, and a scan was completed at 37+2 weeks' gestation. The scan was reviewed by the obstetric team. RM D said that she was faxed a copy and noted that the obstetric team requested no further follow-up. RM D said that the scan indicated a slowing of growth, but when plotted on a customised growth chart,[12] the results of the scan did not appear concerning.

15. RM D advised that she arranged a follow-up scan at Mrs A's 40-week appointment. RM D said that the follow-up scan was arranged to check the interval growth[13] and to do a Bio-Physical Profile[14] (BPP) to check the fetal wellbeing.

16. On Day3 January 2020, Mrs A completed a growth scan. At the time, she was under the care of back-up midwife RM B.[15] RM B told HDC that she received a call from Mrs A requesting a review of the scan. RM B noted that the scan results showed a normal BPP score (8/8[16]), normal liquor levels, and slightly slowed fetal growth. When RM B plotted the growth scan results on Mrs A's customised growth chart, this showed appropriate growth, with the centile above the 50th. RM B said that she discussed the report and findings with Mrs A and advised her that the report supported waiting for spontaneous labour. RM B discussed the birth plan and reminded Mrs A to monitor fetal movements and to call her should any concerns arise or if labour became established.

17. Health New Zealand | Te Whatu Ora (Health NZ) advised HDC that serial ultrasound scans were ordered for Mrs A. The scans showed a slowing of growth between 33 and 40 weeks. However, this did not reach the threshold for small for gestational age[17] (SGA) or fetal growth restriction[18] (FGR).

Bleeding

18. Mrs A told HDC that on the morning of Day2 January 2020 she found fresh blood on her liner and called RM D. RM D arranged to meet Mrs A in the clinic. RM D assessed Mrs A's liners, blood pressure (BP), and the baby's heartbeat. RM D advised that she considered that the fresh blood was probably a 'show'.[19] RM D said that she called in the afternoon to follow up

[12] Growth charts can be customised to adjust for variables such as maternal height, weight, ethnic origin, and parity.
[13] Interval growth scans are used to monitor the baby's growth and identify any potential issues. The minimum interval between growth scans is 14 days.
[14] A BPP score is made up of four ultrasound-derived components (fetal movements, amniotic fluid assessment, gross body movements, and tone, observed over 30 minutes).
[15] RM D advised that she was on her weekend off.
[16] A BPP score of 8/8 is considered normal and indicates that the baby is healthy.
[17] SGA means that the baby may be at higher risk of problems. Sometimes these can occur before the baby is born.
[18] FGR occurs when growth is abnormally reduced due to pathology.
[19] A bloody show refers to vaginal discharge that occurs at the end of pregnancy. It is a sign that pregnancy is ending and labour is beginning.

and later received a text message from Mrs A advising that she had had no further bleeding. RM D advised that this was the only incidence of vaginal bleeding.

Labour

Early labour care by RM B

19. On Day1 February 2020, RM B, who was again on call for RM D, received a call from Mrs A requesting an assessment of labour. RM B met Mrs A at the local tertiary hospital and commenced cardiotocography (CTG) monitoring, which showed a normal trace and a normal fetal heartbeat.[20] RM B assessed Mrs A and documented that the contractions were mild, and that Mrs A was able to talk through some tightenings.[21] RM B advised that Mrs A had no signs of infection at that stage.

20. RM B showed the CTG to the charge midwife for peer review and discussed an appropriate plan for Mrs A. It was agreed that it was appropriate to discharge Mrs A home until labour established. The plan was discussed and agreed to by Mrs A and her family.

21. RM B told HDC that she had noted that Mrs A had been referred for obstetric review and that her raised BMI had not necessitated a change in plan with respect to awaiting and allowing spontaneous labour to develop. RM B said that, based on her assessment of Mrs A on Day1 February 2020, Mrs A was not in established labour and therefore was discharged home.

Referral for induction of labour

22. On Day2 February 2020, Mrs A attended a routine appointment at the midwifery clinic and was assessed by RM D. Mrs A reported experiencing tightening over the weekend and trouble sleeping. RM D said that she reassured Mrs A that these were common signs for first babies and that this phase is called a 'latent phase[22] of labour'. RM D advised that she checked Mrs A's blood pressure and ruled out pre-eclampsia.[23] Mrs A was at this point 40 weeks + 5 weeks ' gestation.

23. RM D also discussed the growth scan results with Mrs A and advised that there had been a slight slowing of growth but that the BPP indicated satisfactory fetal wellbeing. RM D called the midwifery coordinator at the local tertiary hospital to query whether an urgent obstetric review should be requested for Mrs A. RM D said that she was advised to fax the obstetrician a copy of Mrs A's growth scan. RM D told Mrs A that she was likely to receive an induction. RM D said that she would follow up with Mrs A once she heard back from the obstetrician.

24. RM D received a response back from the obstetrician with instructions to book an induction for Mrs A. RM D contacted the birthing suite to arrange an induction. She was provided with an induction date of Day4 February and told that this was the earliest date the birthing suite could provide, as it was fully booked. RM D advised that the timing of an induction is decided

[20] Normal fetal heart rate is usually between 110 and 160 beats per minute.
[21] Tightenings are uterine contractions. They are characterised by the uterus becoming firm and then relaxing.
[22] The stage of labour where the cervix begins to soften and open so that the baby can be born. This stage lasts on average 12–24 hours, but it can stop and start over several days or weeks. Active labour is considered to have begun once the cervix is over 4cm dilated.
[23] RM D advised that she ordered a 'Gestational Proteinuric Hypertension (GPH) test to test for preeclampsia'.

by the obstetric team. She said that there was no instruction for her to book an induction urgently.

25. RM D told HDC that, on reflection, she should have advocated for Mrs A to be induced at term, given that a slowing of fetal growth had been seen on two consecutive growth scans, and considering Mrs A's high BMI. However, RM D advised that she had been reassured as the obstetrician had reviewed Mrs A's scans, and no urgency was conveyed by the obstetrician about the timing of Mrs A's induction.

26. Health NZ told HDC that, for healthy, well women with a normal pregnancy, induction for a prolonged pregnancy is usually arranged between 41 and 42 weeks' gestation. The induction arranged for Mrs A where Mrs A would have been 41 weeks and 2 days' gestation on Day4 February was within current guidelines.

27. Health NZ advised that decisions around priority are based on the risk factors shared by the LMC. At the time, inductions of labour were arranged via telephone booking, and in retrospect it is not possible to know how Mrs A's induction was prioritised.

Urgent referral to hospital

28. Mrs A told HDC that on the morning of Day3 February 2020 she woke up to find discharge that was a 'darker yellow'. She called RM D, who advised that yellow or brown discharge was ok but that if it was green to contact her. Mrs A also told RM D that she was concerned that the baby's movements had reduced to the point where the baby was barely moving at all. Mrs A said that she was told to observe the movements for four to five hours and to contact RM D again. RM D told HDC that upon reflection, she deeply regrets that she did not arrange to see Mrs A immediately after this call, given Mrs A's concerns about her discharge and the baby's reduced movements.

29. Mrs A told HDC that, by 4pm, the baby had stopped moving. Mrs A also noted that she was having discharge that was 'turning green'. Mrs A and her husband presented to the midwifery clinic to meet with RM D.

30. At the midwifery clinic, RM D checked Mrs A's blood pressure and the fetal heartbeat for one minute, and both were within normal range. Mrs A produced a pad that showed a clear indication of meconium.[24] RM D said she called the birthing suite at the local tertiary hospital immediately and advised the Clinical Charge Midwife that she was sending Mrs A in for urgent care.

31. RM D said that Mrs A and her husband went to the local tertiary hospital immediately. RM D said that, later that evening, she was informed that Mrs A was to have an emergency C-section due to fetal distress. RM D advised that Mrs A's postnatal care was transferred to another midwife.

32. Health NZ told HDC that Mrs A presented with a history of reduced fetal movements and meconium liquor, possibly for 24 hours. Mrs A had irregular contractions and an elevated

[24] Meconium is the name of the first bowel motion passed by the baby. It is thick, sticky, and a blackish green colour. A baby who is sick or under stress before or during birth may pass meconium. There is a risk of meconium getting into the baby's lungs and causing breathing problems.

blood pressure. A CTG was undertaken and showed abnormal features. The fetal heartbeat was also assessed as abnormal. Given the abnormalities seen and the presence of meconium in the liquor, a category 2 C-section[25] was arranged.

Adverse Event Review

33. Health NZ undertook an Adverse Event Investigation into the management of Mrs A's care in the lead-up to her labour and delivery.

34. Health NZ identified the following care delivery concerns:

- Mrs A had significant severe obesity that placed her at risk of several adverse maternity outcomes. While Mrs A was seen in the antenatal clinic at 36 weeks' gestation, no further follow-up was planned. Severe obesity meets Ministry of Health Referral Guidelines for transfer of clinical responsibility to obstetric care. It was recommended that all morbidly obese women (BMI >50) should have ongoing obstetric care planning and oversight.
- While the slowing of growth between 33 and 40 weeks' gestation did not meet diagnostic thresholds for SGA or FGR, a formal obstetric review at 40 weeks would have put these results in the context of severe obesity and most likely would have resulted in an induction of labour prior to 41 weeks.
- It is unclear what conversations occurred between the LMC,[26] the Senior Medical Officer, and the Charge Midwife at the Birthing Suite, to determine whether Mrs A's case was more urgent than other procedures already booked. Health NZ has since changed this system to an electronic request form that includes details of the request.

Relevant standards

35. The Ministry of Health Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines) 2012 state:

> '• If a woman has a BMI >40 (morbid obesity), the LMC must recommend to the woman that the responsibility for her care be transferred to a specialist given that her pregnancy, labour, birth or baby, may be affected by the condition.'

36. The New Zealand College of Midwives Handbook for Practice states:

> '• Standard One: The midwife works in partnership with the woman …
> - Standard Three: The midwife collates and documents comprehensive assessments of the woman and/or baby's health and wellbeing …
>   — … collects information using all relevant sources in consultation with the woman …
> - Standard Six: Midwifery actions are prioritised and implemented appropriately with no midwifery action or omission placing the woman at risk …

[25] A category 2 C-section indicates maternal or fetal compromise not immediately life-threatening.
[26] RM D.

— … ensures assessment is on-going and modifies the midwifery plan accordingly …

— … identifying deviations from the normal, and after discussions with the woman, consults and refers as appropriate …

— … has the responsibility to refer to the appropriate health professional when she has reached the limit of her expertise …'

Responses to the provisional opinion

37. RM D and Health NZ were given the opportunity to provide a response to the provisional division. Mrs A was provided a copy of the 'Background' and 'Follow-up actions' sections of the provisional opinion.

38. RM D accepted the provisional opinion and recommendations as they relate to her. RM D provided a written apology to Mrs A. RM D provided evidence that she completed the "Meeting with Midwifery Records Requirements" course as recommended in the provisional opinion. RM D also provided evidence of further professional development in relation to documentation in which she engaged in a peer documentation audit process.

39. Health NZ accepted the provisional opinion and had no further comments to make.

40. No further comments were received from Mrs A in response to the provisional opinion.

Decision: RM D — breach

41. Having reviewed all the information in this case, I find RM D in breach of Right 4(2) of the Code of Health and Disability Services Consumers' Rights (the Code). Right 4(2) of the Code states that '[e]very consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards'. In my opinion, RM D failed to provide Mrs A with care that complied with relevant professional standards and relevant guidelines.

42. I acknowledge that RM D appropriately referred Mrs A for obstetric review at 31 weeks' gestation given Mrs A's high BMI. The growth scans undertaken after Mrs A's review at 36 weeks' and 40 weeks' gestation showed a slowing of fetal growth, but when plotted on the customised growth chart, the fetal growth appeared to be within normal range. I note that no other abnormalities were identified in the growth scans, and the fetal growth scan results did not meet the diagnostic threshold for SGA or FGA. I acknowledge that RM D sought input from a senior midwife and the obstetric team and would have been reassured by the advice provided.

43. However, I consider that there were key failures in RM D's management of Mrs A's care.

44. Given Mrs A's high BMI, and that two consecutive growth scans had shown a slowing of fetal growth, I am concerned that RM D failed to consider referring Mrs A back to the obstetric team at 40 weeks' gestation. I acknowledge that RM D would have been reassured by the care plan advised by the obstetric team following their review of Mrs A at 36 weeks' gestation. However, in the context of a high BMI and slowing of fetal growth on two consecutive scans, RM D's failure to escalate Mrs A's care was contrary to the Ministry of Health referral guidelines and accepted standards of midwifery practice. RM D

acknowledged that she should have followed up with the obstetric team to reassess Mrs A's care plan and whether consideration should have been given to an induction at an earlier stage.

45. I am also concerned that RM D failed to assess and escalate Mrs A's care immediately when Mrs A reported experiencing 'darker yellow discharge' and marked reduced fetal movements on the morning of Day3 February 2020. Considering Mrs A's existing risk factors (high BMI and pattern of slowing fetal growth) and Mrs A's reports of discharge and reduced fetal movements, I am concerned that this did not alert RM D to the possibility of an abnormality. While I am unable to determine whether earlier action would have mitigated the outcome, in my opinion, RM D's decision to delay assessing Mrs A until later in the afternoon was contrary to the accepted standards of midwifery practice. RM D acknowledged that she should have arranged to see Mrs A soon after the phone call about her discharge and concerns about her baby's movements.

Health NZ – Adverse Comment

Decision to refer care back to LMC following obstetric review

46. While I acknowledge that the obstetrician was reassured by her assessment of Mrs A at 34+6 weeks' gestation, I am critical that the decision to discharge Mrs A back to her LMC was not consistent with the Ministry of Health Consultation and Referral guidelines. At the time, Mrs A's BMI was greater than 50, and it is noted that a BMI >50 placed her at risk of a number of adverse maternity outcomes. The Referral guidelines outline that, if a woman has a BMI >50 (severe obesity), she meets the criteria for transfer of clinical responsibility to obstetric care. I acknowledge that Health NZ have since made changes to its obstetric triage guidance to ensure that it is consistent with the Ministry of Health Consultation and Referral guidelines.

Lack of formal documentation of induction booking process

47. I am concerned that, at the time of the events, there was no formal documentation of the discussions that occurred between Mrs A's LMC, the Senior Medical Officer and the Charge Midwife regarding the prioritisation of the booking of Mrs A's induction. Due to the lack of documentation of this discussion, it is not possible to determine if the timing of Mrs A's induction was appropriately prioritised. I acknowledge that Health NZ has since changed its induction booking process to an electronic request form where details of the request and the date offered are now recorded and saved on the woman's file.

Other comment

Delay of emergency C-section

48. The decision to undertake a category 2 C-section was made at approximately 7:40pm on Day3 February 2020. It is noted that an abnormal fetal heart rate and the presence of meconium in the liquor indicated a need to undertake a c-section. At approximately 9:03pm, Baby C was delivered via c-section.

49. Health NZ advised that there was a slight delay in time from decision to birth due to the workload in the birthing suite. Due to the high acuity in the birthing suite, there was a delay in surgery of around 60 minutes. Health NZ advised that this is unlikely to have affected the outcome.

Changes made since events

50. RM D told HDC that she has become more assertive when advocating for women with high-risk pregnancies. She now requests that women who are under secondary care have their scans done at the hospital rather than in the community to ensure that scans are timely and reviewed promptly by the obstetric team.

51. RM D now follows up with the obstetric team if further concerns develop after a care plan has been put in place or if she has concerns about the adequacy of a care plan.

52. RM D now takes a more proactive approach when requesting an obstetric plan for induction at term for women with a BMI >35. RM D advised that Health NZ has since changed the protocol around booking inductions. Inductions are now booked and scheduled by the obstetric team.

53. RM D now requests a photo of any PV (per vagina)[27] loss, as she considers that this can be more helpful than a verbal description.

54. RM D has booked a course on 'Meeting Midwifery Records Requirements' for further education. She is in the process of switching from paper-based to electronic notes.

Recommendations

55. Provisional recommendations were made to RM D that she provide a written apology to Mrs A and provide evidence of completion of the 'Meeting Midwifery Records Requirements' course. RM D has complied with these recommendations.

56. I recommend that Health NZ report on the changes introduced in response to the Adverse Event Investigation and confirm whether they are meeting their intended objectives. A response is to be provided to HDC within three months of this report.

Follow-up actions

57. The final report will be provided to RM D, Midwifery Council, and Health NZ.

58. A partly anonymised copy of this decision will be placed on the HDC website (www.hdc.org.nz) for educational purposes.

Rose Wall
Deputy Health and Disability Commissioner

[27] Discharge from the vagina.