HEALTH & DISABILITY COMMISSIONER
TE TOIHAU HAUORA, HAUĀTANGA

Lack of adequate CTG recording prior to insertion of epidural

1. On 2 July 2021 this Office received a referral from the Nationwide Health and Disability Advocacy Service on behalf of Ms A about the care provided to Ms A by Lead Maternity Carer (LMC) and Registered Midwife (RM) B. The complaint concerns the care provided by RM B during Ms A's labour and the birth of her daughter, Baby A, on 17 August 2020.

2. Ms A first met with RM B on 28 January 2020. RM B told HDC that she had a good working relationship with Ms A throughout her pregnancy and that antenatal care visits were carried out with no major concerns.

Labour

3. Ms A stated that on the morning of 17 August 2020 she attempted to contact RM B to advise that she had gone into labour and left a message with RM B's family member. RM B provided evidence that she received a text from Ms A at 10.38am while waiting for a COVID-19 test result and that she replied to Ms A. RM B stated that she stayed in touch with Ms A during the day and instructed her to call back when her contractions were stronger and longer than 45–60 seconds.

4. RM B arranged to meet Ms A at the hospital following a call from Ms A's husband around 3.30pm that day. On palpation and vaginal examination, Ms A was determined to be in early (latent) labour and was advised to return home, as she was only 2cm[1] dilated. Ms A was reluctant to go home, due to high levels of pain, and she remained in hospital.

5. The fetal heart rate (FHR) was recorded on admission at 5.10pm but was not recorded regularly after this primary assessment. RM B told HDC that healthy women not in established labour do not normally require one-on-one care, and there is no requirement for regular monitoring of the FHR provided it is normal on primary assessment. The hospital Intrapartum care – Physiological Labour and Birth guideline requires observations to be recorded once labour is established.

6. Pain control methods including Entonox gas were provided. At 7.30pm Ms A requested an epidural,[2] but RM B advised Ms A to try the birthing pool. RM B told HDC that she started running the water and left the room to talk to the charge midwife. When RM B returned, she found that Ms A had entered the pool. RM B noted that the temperature was 37.4 degrees, which she considered was too high,[3] and she turned on the cold tap to reduce the

[1] The Health New Zealand | Te Whatu Ora (Health NZ) intrapartum care guidelines at the time of events noted the latent stage of labour being dilatation up to 5cm, and the active first stage of labour being dilatation from 5cm.
[2] An injection into the space around the spinal nerves to provide pain relief.
[3] The Health NZ Water for Labour and Birth Policy notes that the temperature of the water should start at 35.5–36.5°C during labour and should be kept as cool as the woman finds comfortable. The temperature should not exceed 37.5°C.

temperature. Ms A did not cope well with the birthing pool, so at 8.15pm RM B spoke to an obstetric registrar to arrange an epidural.

7. In her complaint, Ms A said that her waters broke in the birthing pool, and she informed RM B that she had observed meconium,[4] but no action was taken. In response to my provisional decision, Ms A corrected this information, confirming that her waters broke just as she had exited the pool. This is supported by the cardiotocograph (CTG) record, which includes a handwritten note documenting spontaneous rupture of membranes (SROM) with meconium at 8.10pm. RM B recalls a gush of copious amounts of liquor[5] containing watery-thin meconium splashing all over the floor next to the bed. RM B referred HDC to the hospital protocol, which states that continuous CTG monitoring is required only for moderate to thick meconium, and the NICE[6] guidelines, which state that continuous CTG monitoring need not be offered for non-significant meconium.

8. The hospital Epidural Analgesia in Labour — Management and Care clinical guideline (the Guideline) states that CTG monitoring should be recorded for at least 20 minutes prior to the epidural insertion. If there are any concerns about the quality of the CTG recording, a fetal scalp electrode (FSE)[7] should be applied prior to the epidural insertion. The CTG monitor can then be removed for the epidural insertion process if the CTG recording is normal.

9. RM B stated that Ms A was distressed, making it difficult to position the CTG machine. However, RM B said that between 8.25pm and 8.33pm she received mostly clear audio and could hear a normal FHR with some loss of contact. RM B acknowledged that variability in FHR is not always evident on audio. The clinical record contains a brief CTG recording printed at 8.33pm, which shows a normal FHR. The anaesthetist attended at 8.29pm, which was earlier than RM B had expected, and at this point RM B recognised that the CTG had not been recording adequately. The anaesthetist asked RM B if she wanted her to leave, as she had another epidural to do. RM B requested that the anaesthetist proceed, as she had not identified any abnormality in the FHR audio, and Ms A was distressed.

10. During the insertion of the epidural, which took approximately 30 minutes, there was no CTG monitoring. When the CTG was put back in position, RM B was unable to obtain a reasonable quality recording and requested assistance. The Clinical Nurse Manager (CNM) informed RM B that the CTG machine being used had been problematic in the past.

11. At 9.09pm an FSE was placed, and abnormal FHR recordings were noted. At 9.12pm an obstetric registrar arrived, and Ms A was placed in the left lateral position.[8] At 9.18pm a senior medical officer arrived and the medications terbutaline[9] and omeprazole[10] were

[4] The first stool passed by an infant. Normally this is retained in the infant's bowel until after birth, but sometimes it is expelled into the amniotic fluid prior to birth, and the stained amniotic fluid is recognised as a possible sign of fetal distress.
[5] The amniotic fluid (fluid that surrounds the developing baby in the womb).
[6] The UK National Institute for Health and Care Excellence.
[7] A medical device consisting of a spiral wire that is attached to the fetal scalp through the cervix, allowing for more accurate heart rate readings than with external monitors.
[8] A position used in intrauterine fetal resuscitation intended to improve oxygen delivery to the fetus.
[9] Medication to relax the uterus and prevent or slow contractions.
[10] Medication to reduce the risk of pulmonary aspiration of gastric contents during Caesarean section.

administered. A category one (Cat 1)[11] emergency Caesarean was booked with theatre. The CTG machine continued to cause issues with failure to print while Ms A was prepared for surgery.

Birth

12. Ms A stated that she experienced complications, including postpartum haemorrhage, an inverted uterus, and the requirement for antibiotics due to the FSE not being removed. She said that she was advised by a doctor that she and her baby were lucky to be alive. Ms A stated that her baby was born with pallor[12] and poor tone, and she is concerned that her baby has developmental delay due to her traumatic birth.

13. RM B said that she was asked to remove the FSE prior to the Caesarean section, as no one else in the operating room had experience with this. She explained that she was familiar with removing FSEs after birth, but she had no experience removing an electrode prior to birth, and it was not a normal component of her training. RM B was unable to access the electrode due to the position of the fetal head, and she was told by the operating doctor to 'cut it'. RM B stated that she cut the wires as close to the clip as possible, as she did not want to delay the Caesarean. RM B told HDC that she realised that there had been a misunderstanding when she reviewed the FSE removal procedure with the CNM that evening. She discovered that she was expected to cut the wires and separate them into individual strands to make it easier to undo the clip when access was difficult. RM B has expressed extreme regret for her mistake, which led to Ms A requiring more antibiotics than usual. Antibiotics are given routinely prior to surgery, but Ms A was given additional antibiotics after surgery as a precaution to reduce the risk of infection from the scalp clip passing through the abdomen.

14. Health NZ told HDC that trimming the wires close to the clip is a standard way to manage the circumstance if removal is difficult in an emergency, but unfortunately, RM B did not inform the surgical team that the FSE clip had not been removed.

15. Ms A's daughter, Baby A, was born via Caesarean section at 9.55pm. Resuscitation was not required, and Baby A's Apgar[13] scores were '8' at one minute after birth and '9' at five minutes. Cord blood results[14] showed mild abnormality in pH[15] and moderately abnormal lactate.[16] Due to the abnormal blood results, Baby A was placed under the care of the paediatric team and observed for 24 hours. The observations were reassuringly normal, and she was discharged from their care.

[11] This was later downgraded to category 2 following improvement in the FHR after terbutaline administration.
[12] Abnormally pale appearance of the skin and mucous membranes, caused by a decrease in blood supply and oxygen.
[13] A scoring system used to assess newborns after they are born. A score of 7 to 10 five minutes after birth is reassuring, 4 to 7 is moderately abnormal, and 0 to 3 is concerning.
[14] Indicator of gases transferring between the placenta and baby prior to birth.
[15] Measurement of acidity or alkalinity.
[16] Also known as 'lactic acid' and produced as a by-product of aerobic metabolism (breakdown of glucose in the body without using oxygen).

16. Health NZ told HDC that while delivering the placenta, a uterine inversion[17] occurred. A likely contributing cause was thought to be loss of muscle tone in the uterus following the administration of terbutaline, which was necessary for intrauterine fetal resuscitation. The uterine inversion was corrected by manual removal of the placenta and restoration of uterine anatomy. Medication was given to tighten the uterus muscle and prevent excessive bleeding. Health NZ said that these measures resulted in reasonable control of bleeding, with an estimated blood loss of 850mL, which would be regarded as satisfactory for this situation. Ms A did not require any transfusion of blood products, and her postoperative haemoglobin was 110g/L,[18] which is slightly lower than normal. Health NZ said that there is no reason to suggest that Ms A and her baby were lucky to be alive. In response to my provisional decision, Health NZ conveyed its apologies for the distress and ongoing anxiety about Baby A's development caused by the staff member's comment about her being lucky to be alive.

17. Health NZ conducted an internal review of Ms A's case because of the uterine inversion. The review was comprehensive and identified areas for learning in the pre-theatre events. RM B was involved in the review and reflected on her care during this process. RM B acknowledged that her documentation was sparse in the hour prior to Baby A's birth, as she was more focused on the events at hand and intended to document in retrospect. On reflection, she would ask another midwife to help in a similar situation. RM B has also reflected on further findings of the review, including requesting that Ms A exit the birthing pool while the water temperature was lowered to an acceptable level, escalating the issue of a faulty CTG machine to the CNM, and familiarising herself with the expectations of the secondary care team after an epidural is requested.

Responses to provisional decision

Ms A

18. Ms A was provided with a copy of the 'Facts gathered during investigation' section of my provisional report and given an opportunity to comment. Ms A's comments have been incorporated into this report where relevant.

RM B

19. RM B was provided with a copy of my provisional report and given an opportunity to comment. RM B advised that she accepted my provisional decision and proposed recommendations.

Health NZ

20. Health NZ was provided with a copy of my provisional report and given an opportunity to comment. Health NZ advised that it accepts my educational comment and noted that, since these events, it has adopted a more transparent and communicative approach to reviews. Changes include a letter inviting LMC input and a staff member assigned to be the whānau contact person to update the whānau on progress and arrange sharing of findings. Further comments have been incorporated into the report where relevant.

[17] A rare complication where the uterus turns inside out.
[18] Normal haemoglobin for a woman ranges between 115 and 160g/L.

Opinion: RM B — breach

21. HDC sought independent clinical advice from RM Valerie Daprini. RM Daprini's advice report was provided to RM B for comment. In response, HDC received a second opinion from another clinical advisor, RM Christine Griffiths. In making my decision, I have carefully considered the opinion of both advisors. Whilst RM Daprini has commented on antenatal care, the focus of Ms A's complaint and the scope of this investigation covers the events that occurred on 17 August 2020.

22. Ms A has expressed concern for Baby A's future and is worried that her traumatic birth has led to developmental delay. Reassuringly, my advisors can find no reason to suspect that Baby A's birth has resulted in long-term harm. Baby A was born with normal Apgar scores, and the paediatric review, including 24 hours of observation, did not identify any reason for concern.

23. RM Daprini advised that RM B's communication and consideration for Ms A's preferences and emotional and psychological wellbeing was of an acceptable standard and an example of excellent care, particularly regarding arranging hospital admission in latent labour. However, both advisors agree that the frequency of maternal observations taken, and documentation of the FHR was less than that recommended by established guidelines.[19] In contrast, the hospital guideline did not require observation to be commenced until labour was established. I have considered that Ms A remained in hospital for pain control and had been assessed as not in established labour and safe to go home without hospital-level monitoring. I have also considered that RM B was providing active one-on-one care in an effort to relieve Ms A's distress. I note RM Daprini's advice that RM B's efforts to manage Ms A's pain constitute mitigating circumstances. For these reasons, I am not critical of RM B's monitoring of Ms A and the FHR while she was in latent labour.

24. There is clear documentation of SROM occurring after Ms A left the birthing pool. RM B has provided an account of her recollection of the event and noted that thin meconium was present in the liquor. RM Daprini advised that it is possible that Ms A passed a mucousy show[20] while in the pool and mistook the discolouration of the water for meconium. RM Daprini is critical of a lack of communication by RM B to the attending obstetric registrar or CCM[21] regarding the presence of meconium. In contrast, RM Griffiths referred to the hospital guideline, which requires the midwife to monitor with continuous CTG whenever meconium is present and to consult with the obstetric team when meconium is moderate or thick. RM B was attempting to position the CTG at the time watery thin meconium was identified, and therefore I am not critical of her actions.

25. The advisors do not agree on whether it was appropriate for RM B to instruct the anaesthetist to proceed with an epidural without a proper CTG recording 20 minutes prior to insertion. RM Daprini advised that there was inadequate monitoring of the FHR during labour to be confident of the wellbeing of the fetus, particularly when meconium was present, and she disagrees with RM B's assertion that she could be certain of the wellbeing of the fetus from listening to the CTG audio. RM Daprini advised that continuing with the

[19] NICE guidelines.
[20] A 'show' is the mucous plug that functions as a seal for the cervix during pregnancy.
[21] Community Midwifery Carer

epidural without a good quality CTG recording represented a severe departure from accepted practice. In contrast, RM Griffiths advised that when all circumstances were considered, it was appropriate for RM B to proceed with an epidural without a printed CTG, and with meconium present. RM Griffiths stated that it was important to note that the anaesthetist was happy to proceed after consulting with RM B.

26. In making my decision, I have considered that an epidural is not a normal component of latent labour. It requires the intervention of secondary care services and admission to hospital. The hospital had guidelines in place for monitoring fetal wellbeing prior to epidural insertion, and once the decision had been made to insert an epidural, there was a requirement to follow these guidelines and have a clear picture of maternal and fetal wellbeing. This responsibility fell within the scope of RM B's role. The anaesthetist deferred to RM B's judgement on this issue prior to proceeding. I note that the anaesthetist offered to postpone the procedure and to return after completing another epidural. This offer was declined due to Ms A's distress. Whilst understandable, in my view, ensuring fetal wellbeing prior to a secondary care procedure takes precedence, and ultimately care was compromised by RM B's decision not to obtain a clear CTG trace, which would have provided a pattern of FHR, including variability, over a 20-minute timeframe. Whilst critical of this decision, I consider that the severity of the departure is moderated to some extent by mitigating factors, including maternal distress and a poorly functioning CTG machine. However, I remain concerned about RM B's decision in this regard.

27. RM Daprini noted an apparent delay of three minutes in positioning Ms A in the left lateral position, recommended as a first-line intra-uterine fetal resuscitation measure. The clinical record notes that immediately after identification of the abnormal FHR and call for assistance at 9.08pm, an FSE was applied at 9.09pm and Ms A was placed 'onto left lateral' at 9.12pm. It is more likely than not that maternal positioning to apply the FSE accurately was prioritised, and once this was complete, Ms A was placed in the left lateral position. I am therefore not critical of this aspect of care.

28. Both advisors agree that RM B's documentation was not as comprehensive as expected. However, when considering the context of care, mitigating circumstances were identified. RM Daprini advised that, although shorter and patchier in the later stages, RM B's documentation was as expected given the circumstances. RM Griffiths advised that the gaps in documentation represented a mild departure from the expected standard.

29. I note RM B's reflection on the deficits in her clinical documentation and her intent to record events retrospectively. I acknowledge that RM B was busy managing maternal distress and an emergent situation when her documentation became sparse. However, not documenting events as soon as possible during a time of rapid change risks information deficits that may be critical for understanding and quality improvement processes. Although RM B intended to document the events retrospectively, she did not do so. I therefore remain critical of RM B's documentation.

Conclusion

30. Although RM B was extremely busy attempting to relieve Ms A's distress and was struggling with malfunctioning equipment, her role encompasses ensuring the wellbeing of both the mother and the baby. RM B did not obtain a clear 20-minute CTG recording prior to insertion

of the epidural, and she had the opportunity to do so when the anaesthetist offered to postpone. Although the meconium was watery and thin, it is an early indicator of possible fetal distress. FSR recordings were not frequent prior to the epidural, and there was a missed opportunity to gather further information on the wellbeing of the fetus before introducing a procedure that could impact this. In addition, RM B failed to document the events retrospectively, resulting in significant gaps in documentation. Accordingly, I find that RM B breached Right 4(1)[22] of the Code of Health and Disability Services Consumers' Rights.

Opinion: Health NZ — educational comment

31. Health NZ carried out a comprehensive review of Ms A's case. I note that the recommendations included review and distribution of guidelines, and a review of the process for checking equipment functionality. I trust that Health NZ has learnt from this case and that the actions outlined in the review have been completed. It is unfortunate that the outcome of the review was not communicated to Ms A. Health NZ told HDC that communication with patients and whānau is expected, and it apologised for the oversight.

Recommendations and follow-up actions

32. I acknowledge RM B's reflection on the events, which is evident in her response letter to HDC. Further to this, I recommend that RM B review the Health NZ guidelines on Epidural Analgesia in Labour — Management and Care, and Intrapartum Care — Physiological Labour and Birth and provide HDC with a formal written reflection on her learnings within six weeks of the date of this report.

33. I note that the New Zealand College of Midwives (NZCOM) is running a workshop on record-keeping for midwives during October 2025. I recommend that RM B consider attending as part of her professional development and report back to HDC on her learnings within three months of the date of the workshop.

34. In accordance with the proposed recommendations in my provisional decision, RM B provided HDC with a formal written apology to Ms A for the deficiencies identified within the report. I consider this recommendation met.

35. A copy of the sections of this report that relate to RM B will be sent to the Midwifery Council of New Zealand (MCNZ), and MCNZ will be advised of RM B's name.

36. A copy of this report with details identifying the parties removed, except the independent clinical advisors on this case, will be sent to MCNZ and NZCOM and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Rose Wall
Deputy Health and Disability Commissioner

[22] Every consumer has the right to have services provided with reasonable care and skill.

Appendix A: Independent clinical advice to Commissioner

The following independent advice was obtained from RM Valerie Daprini:

> 'I have been asked to review the care of Ms A by LMC [RM] B, and also to address specific concerns raised by the complainant. My role is to look at the documentation provided and to give my expert opinion as to whether Ms A received reasonable and appropriate treatment. I have also been asked to quantify any departures from accepted practice as mild, moderate, or severe. The following opinions are based on my considerable experience as a midwife of 30 years, working day-to-day with pregnant, labouring and post-natal women. As such, I am well positioned to make educated deductions based on the information in this case. I will endeavour to deliver unbiased, logical and practical opinions based on my midwifery knowledge.
>
> The points that I have been asked to consider:
>
> **Whether the care provided to Ms A by LMC [RM] B during her labour was of an appropriate standard?**
> I believe LMC [RM] B was thoughtful and woman-centred in her care. She had numerous conversations with the couple as far as the strategies for coping with the labour pain, providing what I believe to have been balanced information. There was a plan of care that all parties agreed upon, with the focus on Ms A's needs being met. LMC [RM] B especially recognised that Mr A was unhappy/anxious about being his wife's primary support at home in the early stage of labour. She arranged with the Charge Midwife to enable the couple to remain in hospital, rather than to go home, even though Ms A was in the latent stage of labour. LMC [RM] B then elected to remain at the hospital with the couple as there were no core staff to hand over care to. This is an example of excellent care, especially since LMC [RM] B knew this would inevitably add many extra hours to the length of time she would be with Ms A in her labour. This shows she certainly considered Ms A's preferences and her emotional and psychological needs. LMC [RM] B encouraged and facilitated non-invasive, non-pharmacological methods of pain relief. LMC [RM] B offered IV fluids to rehydrate Ms A, knowing that this may often assist with the progress of labour if the woman is dehydrated. All of the above aspects are examples of a good standard of midwifery care. However, LMC [RM] B's care fell well below an acceptable standard in the surveillance of mother and baby, especially regarding vital signs/observations. I will elaborate on this later.
>
> **In particular, do you consider that RM LMC B acted appropriately when Ms A was found to have meconium-stained membranes?**
> The need for a pre-epidural CTG (a continuous recording of the fetal heart rate and Ms A's contractions) occurred at the same time as the spontaneous rupture of membranes, and the discovery of meconium. It is therefore impossible to speculate as to whether LMC [RM] B would have commenced a CTG just on the basis alone of the presence of the meconium. LMC [RM] B has stated that she knew that should there have been meconium in the pool (as recalled by Ms A), that she would have assisted her to leave the pool. This shows that LMC [RM] B clearly knew the inappropriateness of a woman labouring in the pool with meconium-stained liquor. There is no mention in the patient notes that LMC [RM] B updated the Obstetric Registrar and/or CCM as to the presence

of meconium. This was a new development and may have been an indication that there was fetal distress. This leads me to state that I feel there has been a severe departure from expected practice in this aspect of care by LMC [RM] B. I acknowledge the difficulty for LMC [RM] B in that Ms A was distressed, and she knew that to proceed with the epidural would alleviate the pain, and this in turn would enable LMC [RM] B to monitor the baby's wellbeing by CTG! This was a problematic situation that LMC [RM] B would have had to quickly weigh up, in the context of a woman who was exhibiting her distress by thrashing and vocalisation.

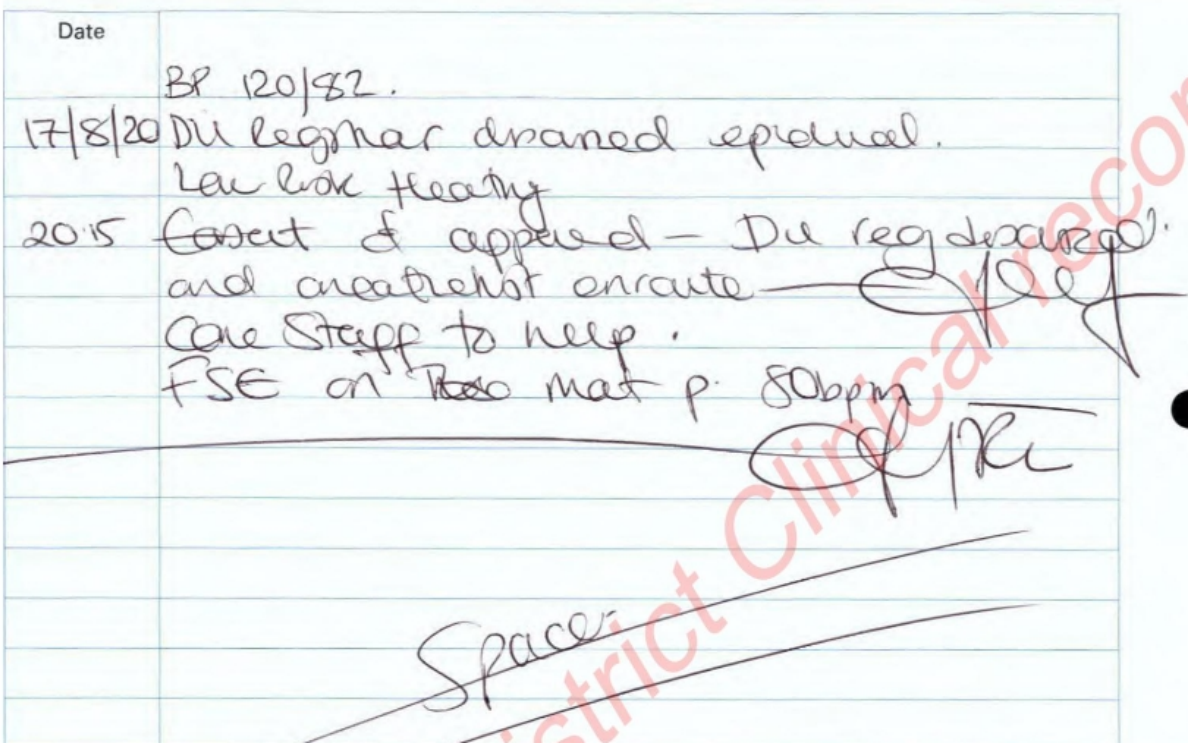
Do you consider LMC [RM] B's decision to proceed with an epidural still appropriate with the presence of meconium and without a printed CTG, taking into account the circumstances?

No, I do not believe it was appropriate to proceed with the epidural. There was an inadequacy in the monitoring of the fetal heart (FH) during the labour. LMC [RM] B could not be confident as to the wellbeing of the fetus. I base this on the documentation that shows only one FH check (at 1710), up until the time that the CTG recording was attempted. This is therefore only one FH check over a period of 3.5 hours. This is not sufficient. There should have been hourly FH and maternal pulse checks in latent labour (NICE guidelines). As per the policy of Hospital, in active labour the auscultation of FH should be undertaken and documented every 15–30 minutes. This leads me to state that I feel there has been a severe departure from expected practice in this aspect of care by LMC [RM] B. LMC [RM] B stated that she could hear the FH via the CTG while getting Ms A positioned for the epidural. Unfortunately, due to technical problems with the CTG, the machine had not been recording what LMC [RM] B could hear. LMC [RM] B stated "I could recognise from the audio that the fetal heart was normal and would have recognised if there was a deceleration or sudden change to the fetal heart rate". There are many factors that contribute to the determination that the fetus is well oxygenated and not at risk from hypoxia, and I disagree with LMC [RM] B in her assertion that she could be certain of the wellbeing of the fetus from simply listening the FH. The CTG malfunction contributed to a lack of information as to fetal wellbeing. To her credit, LMC [RM] B attempted to remedy this by asking staff to help resolve the issue; however, I do not understand why a replacement CTG machine was not sourced and utilised.

Do you consider that proceeding to an epidural in light of this finding was appropriate?

No, it was not appropriate to proceed with an epidural at that point; a good-quality, pre-epidural CTG recording should have been obtained first. As per the Hospital "Epidural in labour management" policy it states: "Cardiotocograph (CTG) fetal monitoring should be recorded for at least 20 minutes prior to the epidural insertion. If there are any concerns about the quality of the CTG recording, a fetal scalp electrode (FSE) should be applied prior to the epidural insertion". The documentation is patchy around the time of the epidural insertion, but states that an FSE was sited at 2015 which was prior to the epidural. This would normally show up on the CTG paper (as being an FSE) and that is not visible. Also a hospital midwife has documented at 2109 "applying FSE". This leads me to believe that the FSE at 2015 was not functional, and LMC [RM] B was monitoring abdominally. The resulting CTG is abysmal in quality. The Ministry of

Health Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines) recommends that a labour epidural should prompt a secondary care consultation. The name and designation of the medical practitioner carrying out this consultation should be documented in the woman's notes prior to anaesthetic attendance to site the epidural. I have reviewed the section of clinical notes where mention of an epidural is documented. I am struggling to interpret what has been written by LMC [RM] B.



I have surmised the above to state: 17.8.20 DU registrar **illegible** epidural Low risk healthy 2015 (partially crossed out?) **illegible** Consent of approved — DU reg **illegible** and anaesthetist en route. It is therefore not clear if an obstetric review occurred. Certainly, there is no entry by a doctor stating that they have reviewed Ms A, and that an epidural may proceed. LMC [RM] B may have obtained permission to proceed with an epidural without an obstetric consultation in person, but this is conjecture as there is no documentation stating this fact. Also, if this was the case I would have expected the LMC to have documented something along the lines of "I have spoken to the registrar to request review of Ms A so that epidural can proceed if appropriate. At this time the registrar cannot come in person to review, but has stated that if the CTG is normal and if I have no concerns, that I may proceed with organising an epidural." These points lead me to state that I feel there has been a severe departure from expected practice in this aspect of care by LMC [RM] B.

Please comment on the standard of RM LMC B's documentation during Ms A's labour
In the earlier part of the labour from admission at 1700 to around 1900, LMC [RM] B's documentation is quite descriptive. Later, as Ms A was becoming increasingly distressed the documentation becomes correspondingly shorter/patchier. This is entirely understandable given that LMC [RM] B would have been focused on supporting Ms A.

There is very little time in between contractions (often only 2–3 minutes) for LMC [RM] B to be able to document in detail, as well as manage a labouring woman struggling with the pain of labour. I therefore believe that the standard of LMC [RM] B's documentation is as I would expect it to be given the difficult circumstances. There is a specific place on the medication sheet for all staff involved in the care of the woman to write their full name, designation, and signature. If LMC [RM] B did this, it is wholly illegible. It appears LMC [RM] B administered the Terbutaline. It has not been counter-signed as being checked prior to its administration.

Do you consider that Ms A was monitored appropriately during her labour? Please comment on the appropriateness, frequency and methods of monitoring utilised
There is an absence of documentation of maternal and fetal observations. This leads me to have to assume that they were not done. 1/ Fetal heart rate (FHR) checks: LMC [RM] B states that she listened to the fetal heart (FH) at 1930, but I can find no documentation supporting this. There is therefore only one entry that documents the FH having been listened to; this is at 1710, when it is documented as 145. Otherwise, it appears that no other FH checks were done up until the time close to the epidural being sited, some 3.5 hours. 2/ Maternal temperature: No temperature check was ever recorded. This should have been done on admission, then every 4 hours. However, if labouring in water, Ms A's temperature should have been done hourly as per the Hospital policy ("Water for labour and birth"). There is a temperature recorded at 1955, but from the context it appears to be the bath temperature, not the maternal temperature. The fact that this is unclear is very poor documentation. As I have previously stated: there should have been hourly FH and maternal pulse checks in latent labour (NICE guidelines). As per the policy of the Hospital, in active labour the auscultation of FH should be undertaken and documented every 15–30 minutes. This leads me to state that I feel there has been a severe departure from expected practice in this aspect of care by LMC [RM] B.

Any other matters in this case that you consider warrant comment or recommendation.
LMC [RM] B's response to this complaint (points 37, 38, 39), she comments that there was a fetal bradycardia. I note that she states that Ms A was then positioned left lateral and the IV fluids were opened up to full bore. Why these basic intra-uterine fetal resuscitative measures took three minutes to be actioned is not explained. Certainly, repositioning the woman to her side is a first-line measure, to be actioned immediately upon a concern with a fetal bradycardia. It is of course possible that LMC [RM] B did actually do this speedily, but that she documented it (3 minutes later) when she had time to write. Unfortunately, this is not reflected in the patient notes, so I must state that this delay to a lateral position is a severe departure from expected practice by LMC [RM] B.

I note that in the antenatal visits that there is no documentation of Ms A's weight being checked. Although there is no consensus on whether women should be weighed at each visit, I believe it would have been best practice as Ms A's booking BMI was already over 35. This would have highlighted the necessity for LMC [RM] B to discuss several things with Ms A, including, but not limited to:

1/ The recommendation to have serial growth scans in the third trimester. This is because Ms A's fundal height measurements would be deemed inaccurate with her level of elevated BMI. There has been no evidence supplied to show that these serial growth scans occurred. The estimated fetal weight would then have been plotted on a customised GROW chart. The hospital policy ("Customised antenatal growth chart") states "each pregnant woman should be provided with a customised growth chart that estimates the expected growth in fundal height and/or estimated fetal weight (if a growth scan is done) for her individual pregnancy". This document has not been provided for my review, so I must assume it does not exist.

2/ Ms A qualified as being at moderate risk for pre-eclampsia (two risk factors = being a primigravida ("first-time mum"), and a BMI of over 35). With this risk having been identified, LMC [RM] B should have consulted with the appropriate obstetric service as to whether they would recommend Ms A to commence on aspirin and calcium.

3/ The offer of a referral to a dietician did not occur. I acknowledge that the above points *did not* contribute to the events which unfolded in labour. However, I feel that the lack of the opportunities to improve the care of Ms A in the antenatal period constitute a severe departure from accepted practice. In the antenatal appointments, the fetal heart has been documented as being "heard". This needs to be documented numerically. This constitutes a severe departure from accepted practice.

When a CTG is commenced, it is best practice to document the maternal pulse by hand on the CTG paper, and to circle the date, time, and CTG speed (confirming 1cm/min). This ensures identification of any errors as to the programming of the machine. In this instance it would have made apparent the fault on this particular machine as the time stamp on the CTG was incorrect. This constitutes a mild departure from accepted practice. Two CTG machines malfunctioned in this episode, and one had the wrong time. This situation is unacceptable and needs immediate service attention by the hospital.

Ms A's BMI on booking was 35.5. If we assume that she put on a further (conservative amount of) 12kg during the pregnancy, this elevates her BMI to over 40. Under the NICE guidelines, women with a BMI of 40 are not recommended to labour in water. This recommendation is made for the safety of the woman, with the potential for a maternal collapse being unmanageable with an obese woman in a pool full of water. I also note that as per the hospital policy ("Water for labour and birth"), labouring in water with a BMI of over 35 should have necessitated a discussion of appropriateness "… with the CCM or medical team, and have appropriate fetal monitoring with underwater telemetry". (It is already quite difficult to obtain an accurate fetal heart assessment with a woman with an elevated BMI, and to do so in water is even more challenging). None of these recommendations were actioned by LMC [RM] B, constituting a severe departure from expected practice.

In response to specific statements made by Ms A in her complaint, I would like to address these.

"She feels regular assessments for her, and her baby's well-being did not occur in a timely manner". Essentially, I agree that LMC [RM] B did not perform adequate vital signs for both mother and fetus. Yes, there were certainly mitigating circumstances; there were occasions when Ms A was "distressed, thrashing around and yelling in a distressed state". LMC [RM] B would have been empathetically attempting to help her client manage her pain. However, despite this, she had an obligation to perform regular vital sign checks. As previously stated, I feel this constitutes a severe departure from expected practice.

"She felt that there was no action taken when she reported seeing meconium in the birthing pool". It may well have been that Ms A saw some discoloration in the water, which was possibly part of her "'mucousy show". Certainly, LMC [RM] B reports very clearly the spontaneous rupture of membranes: "It was a huge gush, splashing up everywhere over our feet and clothes …" It is unlikely that that was a secondary "gush" from waters that had already broken in the pool. I also believe that LMC [RM] B has the experience over Ms A to correctly identify meconium. Based on this, I therefore do not think that there was meconium present when Ms A was in the pool.

"Ms A became concerned LMC [RM] B was not listening to her and did not identify or manage the intrapartum placental insufficiency or the possibility of fetal distress". There is documentation commenting that the couple and LMC [RM] B had a plan of care that was agreed upon. Therefore, this indicates LMC [RM] B was "listening to her" (Ms A). I am uncertain what the complainant means by "managing intrapartum placental insufficiency". There is no suggestion of this being an issue antenatally, and certainly a diagnosis of intrapartum placental insufficiency is something that would not be made by LMC [RM] B, but by a senior medical officer. At no stage is this identified.

"Post birth complications, haemorrhage and an inverted uterus". The blood loss at caesarean was estimated at 850ml, above the average of approximately 500ml. However, the blood loss documented by the SMO (who attended the uterine inversion) stated that there was "no bleeding" from this event. Ms A's subsequent haemoglobin dropped from 131 to 110, which does not reflect a significant haemorrhage. The uterine inversion cannot be attributed to the lack of care by staff, and most likely was caused by the medication Terbutaline, given to relax the uterus and slow down/stop contractions. This is a form of intrauterine resuscitation of the fetus which is done to "buy time" to get organised to do a caesarean. The inverted uterus, although an uncommon occurrence, was managed very speedily by appropriate staff.

"The doctor that did the caesarean stated that she and baby were lucky to be alive" I find this to be an unlikely statement to have been made. I base this on the facts that: 1/ The initial call to perform a "category 1" caesarean was downgraded to "category 2", certainly still signifying urgency, but less so. This was a medical decision, which indicates that the SMO was confident the crisis had stabilised. 2/ Ms A's observations (pulse and blood pressure) during the Caesarean were stable and normal. Neither do I believe that her baby was "lucky to be alive"; in fact, baby was born with an excellent Apgar score. Baby A's lactates were high, but a subsequent check showed they had normalised. This would indicate an acute hypoxic event, not a chronic/prolonged one. Yes, Baby A was

born somewhat stunned, as is quite common in a situation of an emergency caesarean for fetal distress, but she required no resuscitation. Also, baby was skin-to-skin with Ms A in the operating theatre within 5 minutes of birth. This again shows that the paediatrician at the birth considered baby was well. Baby A went on to have normal Sarnet scoring for 24 hours and was discharged by the paediatric team. Baby A was also reviewed by a paediatrician at approximately 4 weeks of age, with no comment stating any abnormalities were detected. I acknowledge Ms A certainly experienced a birth experience that would have left her feeling very overwhelmed. I can only speculate that this perhaps "translated" into her feeling that she had a near death experience.

"The scalp clip that was left on causing further complications, requiring intravenous antibiotics". Ms A required two different antibiotics, for a period of 24 hours. I do not believe that this constitutes a complication. Antibiotics are routinely used with all caesarean sections. Even though the fetal scalp electrode (FSE) was left on by accident, its presence did not eventuate to any documented complication. I note that LMC [RM] B later (that very evening), reviewed the FSE removal procedure with a senior midwife, and learned what was required to perform the skill of removing a scalp electrode. This shows an excellent reflective process on the part of LMC [RM] B.

"There was a delay in monitoring the baby's distress/fetal heart rate". Yes, I agree. However, I also (as above) mentioned that this was an extremely busy time for LMC [RM] B, who would have been juggling multiple tasks. For the midwife it is an enormous task to recognise that every woman's physiology, medical conditions, and birth processes are very different … to identify these … and to action them in a timely manner is certainly very challenging. LMC [RM] B reflected in her response that she should have asked for help from the core staff, and this is what I anticipate that she will do in the future.

"LMC [RM] B was unable to be contacted and there was a time delay in seeking medical support". This is refuted by LMC [RM] B who has given very solid evidence of the documentation and information that she provides women about contacting her with any concerns. Certainly, given the fact that Ms A presented to the hospital at a much earlier stage than normally acceptable, suggests no adverse outcome occurred even if there was a delay in communicating with her LMC.

"She believes she did not receive the care and support to meet her needs during her labour and that LMC [RM] B did not listen to her when she told her about her high levels of pain in the labour" From the documentation, LMC [RM] B clearly offered a range of pain relief options including, but not limited to, aromatherapy, TENS, Entonox, epidural. I believe that this shows that LMC [RM] B certainly was acknowledging that her client was in pain, and that she was attempting different strategies to manage this.

Finally, I would like to comment upon what is — to me — a concerning allegation in this complaint. "Ms A is now concerned that the baby is exhibiting signs of development delay as a result of traumatic birth". I would like to make it clear that this is a suspicion by Ms A, and not a diagnosis from a qualified medical professional. There is no supporting evidence that Baby A has any physical or mental deficit resulting from the circumstances of her birth. As previously mentioned, Baby A was also reviewed by a

paediatrician at approximately 4 weeks of age, with no comment stating any abnormalities were detected. In summary, I feel that it is difficult for women whose labours do not go as they envisaged. Often, they have a highly specific and sometimes idealised birth vision in mind. This can put undue pressure on what is, ultimately, a totally unpredictable experience. A birth in which everything unfolds perfectly, and without the need for intervention, remains far from the norm. It can be that women are blindsided by the reality and feel grief for not getting to experience the birth that was what they wanted. This negative experience may evolve into a desire to blame someone. I believe that this complaint focuses upon an accumulation of issues that eventuated in a negative birth experience, but not any physical harm to mother or baby. I sincerely hope that Ms A finds some solace in this detailed examination of her labour, and I wish her all the best.'

Appendix B: Clinical advice — second opinion

The following advice was obtained from RM Christine Griffiths:

> 'My name is Christine Griffiths. I have worked full time as a midwife since first registering in September 1985. Since 1985 I have worked in a number of roles including as a community-based Lead Maternity Carer (LMC) midwife, as a core midwife, and in midwifery management positions at Hutt and Wellington Hospitals. I have worked in midwifery undergraduate and postgraduate education since January 2010 when I began working in the School of Midwifery at Otago Polytechnic (OP). 2025 is my 16th year working at OP. I am currently Head of the School of Midwifery there. 2025 will be my seventh year in this role after a year of being Associate Head of School. I have continued to practi[c]e midwifery since commencing at OP. Since stopping my own LMC practice I have worked as a casual midwife at Hutt Hospital, Te Awakairangi Birthing Unit in Lower Hutt, Kenepuru Maternity Unit and Paraparaumu Birthing Unit. I have always held a full Practi[c]ing Certificate with the Midwifery Council of New Zealand.
>
> I am a founding member (1989) of the New Zealand College of Midwives (NZCOM) and remain an active member of NZCOM Wellington Region. I was the NZCOM Board of Management as the National Treasurer from 1991–1993, Secretary for the NZCOM Wellington region from 2013–2015, the midwife member of the Resolutions Committee for the NZCOM Wellington region from 2015–2020, a member of the NZCOM Wellington region core group 2013–2020. I have been a NZCOM Journal peer reviewer for a number of years. I have mentored graduate midwives in the Midwifery First Year of Practice programme since the programme's inception, including throughout 2024.
>
> I have been a NZCOM Accredited Midwifery Advisor since 2009. In this role I have given expert opinions to the Health and Disability Commissioner, and one to a Coroner. I have attended the yearly Expert Midwifery Advisor workshops NZCOM holds, to ensure I maintain currency in this role and to meet up with and share experiences with the other NZCOM Accredited Midwifery Advisors nationally. I have been appointed to several Midwifery Council of New Zealand (MC) Professional Conduct Committees and also facilitated Competency Reviews for MC.
>
> My highest professional qualification is Doctor of Philosophy (PhD), AUT University, 2019.
>
> Other professional qualifications obtained:
>
> Graduate Certificate in Tertiary Learning and Teaching (Level 7), OP, 2012
>
> Master of Arts (1st class Hons), Massey University, Palmerston North, 2002
>
> Diploma in Social Sciences (Distinction), Massey University, Palmerston North, 1998
>
> Advanced Diploma in Nursing (Maternal and Child Health), Wellington Polytechnic, 1989
>
> Registered Midwife, St John's Hospital, Chelmsford, United Kingdom, 1985
>
> Registered General and Obstetric Nurse, Hutt Hospital, 1980.

In addition:

Certificate in Bicultural Competency (Level 4), OP, 2024.

Poupou Huia Te Reo (Level 4), Te Wānanga o Raukawa, Ōtaki, 2020.

I have been asked by the Legal Advisor at the New Zealand College of Midwives, […], to review the opinion and conclusions provided to the Health and Disability Commissioner (HDC) by RM Valerie Daprini regarding the care LMC [RM] B provided to Ms A during Ms A's pregnancy, labour and birth of her daughter Baby A, and postnatally.

I do not know Mr or Ms A, their daughter Baby A, [RM] B or Valerie Daprini at all and therefore have no professional or personal conflicts of interest to declare.

In preparation for reviewing RM Daprini's opinion and conclusions I initially received and reviewed the following documents (received from the NZCOM Legal PA 12.09.2024):

1. 21.09.01 Consumer Complaint: Written by HDC Advocate dated 2 July 2021
2. 21.09.01 Lf HDC: HDC letter to [RM] B advising complaint received
3. 21.11.19 RM B — C21HDC01503: Response to HDC dated 19 November 2021
4. 24.05.12 Daprin [sic] opinion: RM Daprini's advice to HDC dated 12.05.2024
5. RAMP contributory factors FINAL: Hospital RAMP review.
   In response to my request for additional information I subsequently received and reviewed the following documents (received from the NZCOM Legal PA 21.11.2024):
6. 21.11.19 Clinical Notes
7. [Ms A] — Pregnancy
8. [Ms A] — AN Visits
9. [Ms A] — Labour
10. [Ms A] — Medical History
11. [Ms A]— PN Hospital
12. [Ms A] — AN Summary
13. [Ms A] — Contacts
14. [Ms A] — LabScans
15. [Ms A] — Obs History
16. [Ms A] — PN Visits
17. 21.11.08 Response — RM B_C21HDC01503: Response to HDC dated 8 November 2021
18. Baby Record — Maternity Soluntions [sic]: Baby record
19. Information for Women
20. [Ms A] ihospital notes
21. 21.09.11 WHATS APP COMMUNICATION: [RM B]'s phone text record
22. baby hospital notes
23. RAMP contributory factors FINAL: Hospital RAMP review (copy of document 5)
24. [Baby A] — Baby Postnatal Notes

25. 24.11.13 — from HDC — Water for labour and birth: Clinical Guideline — Health New Zealand | Te Whatu Ora. First issued November 2005. This version reviewed 16 August 2024
26. 24.11.13 — from HDC — Epidural-Analgesia-in-Labour-Management-and-Care: Clinical Guideline —District Health Board. First issued 11 November 2020 (1st issue)
27. 24.11.13 — from HDC — 21.11.07 Intrapartum-Care-Normal-Labour-and-Birth: Intrapartum Care — Physiological Labour and Birth Clinical Guideline —District Health Board. First issued: "Yet to be determined". This version updated and issued 03 June 2020
28. 24.11.13 — from HDC — Small for Gestational Age (SGA) and Fetal Growth Restriction from 34 weeks — Detection and Management: Policy —District Health Board. First issued 04 February 2014. This version updated and issued 13 October 2020.

After reviewing the documents listed above, I requested additional information from NZCOM Legal on 21.11.2024. On 06.01.2025 I received an email from NZCOM Legal with [RM B]'s responses to the additional information requested.

I have read and reviewed all the documents (#1–28) listed above, and the additional information received on 06.01.2025, considering whether the care [RM B] provided to Ms [A] during Ms [A]'s pregnancy, labour, birth of [Baby A] and postnatally was reasonable and appropriate. Having reviewed these documents including the opinion and conclusions RM Valarie Daprini has provided to the Health and Disability Commissioner's office regarding the care LMC [RM B] provided, I do not agree with many of the conclusions RM Daprini has reached, particularly her conclusions around many of the departures from acceptable practice she identifies in her expert opinion being severe departures. Despite calling many of the departures from acceptable practice "severe" departures, I note that at the conclusion of her opinion to HDC RM Daprini states "I believe that this complaint focuses upon an accumulation of issues that eventuated in a negative birth experience, but not any physical harm to mother or baby".

As stated above, I do not know RM Daprini, however as far as I am aware she is not a NZCOM Accredited Midwifery Advisor. This means that RM Daprini has not had access to the yearly workshop education updates NZCOM provides for accredited midwifery advisors who provide expert opinions. I do not know whether RM Daprini has undertaken any education on providing expert advice to the Health and Disability Commissioner to enable her to be able to provide expert opinions. Therefore I am unsure what she is basing her opinions and conclusions on, especially related to her decisions about the severity of the departures from accepted practice she considers [RM B] has made. This is apart from, as she states at the beginning of her opinion, her experience as a midwife, which she believes makes her well positioned to make educated deductions based on the information in this case.

I will respond to the points RM Daprini has considered in her opinion to HDC. As I have not seen the original letter RM Daprini received from HDC asking for her opinion on

specific questions I have had to assume from the opinion RM Daprini's provided to them that these were the questions she was asked to respond to.

1. Whether the care provided to Ms [A] by LMC [RM B] during her labour was of an appropriate standard?

In her response to receiving the letter from HDC (21.11.19 RM [B] —C21HDC01503) [RM B] has written a comprehensive account of the care she provided to Ms [A] during Ms [A]'s labour, including the preparation undertaken in the antenatal period (surveillance, resources, discussion) and referring to the Clinical Guidelines she used to guide her practice including decision making around latent labour (Intrapartum Care — Physiological Labour & Birth DHB Clinical Guideline, dated 3.6.2020). Ms [A] was distressed by the pain she was experiencing and [RM B] attempted to provide her with some relief (positional techniques, warm packs, Entonox) before considering use of water and then an epidural. While supporting Ms [A], [RM B] was also attempting to monitor the baby, contact the registrar for consent to the epidural, and the anaesthetist to insert it, document, and prepare for the epidural. She did not call on the core staff for assistance. On reflection [RM B] has written that she should have called to have another midwife in the room to assist with the CTG or documentation. This would have been a complex time in the labour with Ms [A] requiring intense one on one care and due to this [RM B] does not appear to have taken all the maternal observations generally monitored or repeated them as frequently as the hospital Clinical Guidelines (Intrapartum Care — Physiological Labour & Birth DHB Clinical Guideline, dated 3.6.2020) recommend. While the gaps in maternal observations and documenting the fetal heart rate as often as recommended could be considered a mild departure from acceptable practice, [RM B] was attempting to support Ms [A] through a very difficult period when Ms [A] was extremely distressed. [RM B] has provided a comprehensive account of the care she provided to Ms [A] during her labour, which, apart from the gaps in maternal and fetal observations mentioned above demonstrates, in my opinion, an acceptable standard of care.

2. In particular, do you consider that RM LMC [B] acted appropriately when Ms [A] was found to have meconium-stained membranes?

[RM B] is clear in her documentation in Ms [A]'s clinical notes, plus on her subsequent reflections of the events of Ms [A]'s labour and delivery, that she saw no evidence of Ms [A]'s membranes having ruptured in the pool, and certainly no evidence of there being meconium liquor present. She is clear that she would have acted appropriately and followed the ADHB protocol had this been the case (asked Ms [A] to leave the pool, commenced continuous CTG monitoring, consulted if moderate or thick meconium was observed). [RMB] gives a very clear description of when Ms [A]'s membranes did spontaneously rupture at 2020 hours noting there was watery thin meconium present. ADHB guidance at the time was to monitor with a continuous cardiotocograph (CTG) whenever meconium was present, whether the meconium was considered thin, moderate or thick, and to consult with the obstetric team if the meconium was moderate or thick. The Referral Guidelines (2012) referral code 5018 recommended a consultation when thick or moderate meconium is present. As watery thin meconium was present a consultation was not a requirement. [RM B] attempted to commence a pre-epidural CTG monitoring on Ms [A] who was very distressed at the time. I do not

support RM Daprini's opinion that [RM B]'s actions were a severe departure from expected practice. Instead, I believe [RM B]'s actions demonstrated an acceptable standard of care.

3. Do you consider LMC [RM B]'s decision to proceed with an epidural still appropriate with the presence of meconium and without a printed CTG, taking into account the circumstances?

[RM B] has explained that she was attempting to get an accurate CTG due to the thin watery meconium present and as a requirement pre-epidural insertion. [RM B] appeared to be managing a very challenging situation. She has stated that during this time Ms [A] was very distressed, "it was challenging to get the tocos for the CTG around [Ms A]. When I was able [to] she was mobilising so much and understandable found it hard to sit for the moment, I had to keep adjusting the toco … and it took all of my attention. So much in fact I was not aware that although I had the machine on and expected the printout. It was not printing." It was subsequently established that the CTG machine was faulty.

In addition to caring for a very distressed woman and her husband, [RM B] was trying to commence a pre-epidural CTG monitoring, to take bloods and send them to the laboratory, talk to the registrar for consent to the epidural and the anaesthetist when they arrived, prepare for the epidural insertion and trying to document what was happening. In these situations there is a lot going on at once and the midwife is working through all that is required to achieve what needs to be done. [RM B] is adamant that despite not being aware initially that the CTG was not printing, she was aware of the fetal heartbeat, was listening to it and was satisfied she heard a normal fetal heart rate (FHR) before the epidural was inserted.

The anaesthetist arrived within 15 minutes of being called and [RM B] had only had the CTG on for a short time, and as identified, the CTG had not been printing. [RM B] let the anaesthetist know that she had not had enough time to get a CTG. The anaesthetist said they could go to do another epidural in another room and come back after that, however [RM B] declined this and requested they stay and insert the epidural for Ms [A]. This was based on the level of distress that Ms [A] was experiencing and [RM B]'s strong confidence that the FHR was reassuring based on what she had heard. The CTG was discontinued for the procedure as is normal practice, and intermittent auscultation utilised during the time the epidural was inserted. [RM B] had no concerns about the FHR during this time. Although the result of each intermittent auscultation of the fetal heart during this time is not documented, I do not support RM Daprini's assertion that this represents a severe departure from expected practice. As I have stated above, in my opinion this represents a mild departure from an acceptable standard of care.

[RM B] has stated that with reflection, she realises she should have asked for support from one of the core midwives during this complex time. However, even with this reflection, taking the circumstances of the whole situation into consideration, I consider LMC [RM B]'s decision to proceed with an epidural still appropriate with the presence of meconium and without a printed CTG. It is also important to note that the

anaesthetist was happy to proceed with the epidural having been updated by [RM B] about the progress of Ms [A]'s labour to that point.

4. Do you consider that proceeding to an epidural in light of this finding was appropriate?

See my response to Point 3 above. I presume "in light of this finding" refers to [RM B] realising the CTG machine wasn't printing out a trace. I note that in her response to this point in her opinion to HDC RM Daprini has referred to the Women's Hospital "Epidural in labour management" policy which states: "Cardiotocograph (CTG) fetal monitoring should be recorded for at least 20 minutes prior to the epidural insertion. If there are any concerns about the quality of the CTG recording, a fetal scalp electrode (FSE) should be applied prior to the epidural insertion" (p.10). The Clinical Guideline I believe RM Daprini is referring to is titled "Epidural Analgesia in Labour —Management and Care" (Epidural — Analgesia-in-Labour-Management-and-Care: Clinical Guideline — District Health Board) was first issued on 11 November 2020 which is several months after Ms [A] gave birth, so was not available to staff to guide their practice in August 2020. [RM B] has stated she contacted the registrar for consent to proceed with the epidural as recommended under Referral Code 5009 in the Guidelines for Consultation with Obstetric and Related Medical Services (MoH, 2012), and has also provided a response to RM Daprini's query about the documentation in Ms [A]'s clinical notes around this consultation and the subsequent discussion with the anaesthetist when they arrived to insert the epidural. While [RM B] could have documented this in Ms [A]'s clinical notes, it is my opinion that this represents a mild departure from expected practice rather than a severe departure as stated by RM Daprini.

5. Please comment on the standard of RM LMC [B]'s documentation during Ms [A]'s labour.

Although gaps in documentation have been identified in Ms [A]'s clinical notes, as above, this needs to be considered within the context of all that was happening while [RM B] was attempting to provide Ms [A] with the support and care she required, particularly in response to the level of distress Ms [A] was exhibiting from when the decision to proceed with an epidural was first considered up until when [RM B] was able to leave Ms [A] at the core facility to return home close to midnight the night of [Baby A]'s birth. As stated above, [RM B] could have documented more thoroughly in Ms [A]'s clinical notes. Given all that was happening at the time, it is my opinion that the documentation gaps represent a mild departure from expected practice.

6. Do you consider that Ms [A] was monitored appropriately during her labour? Please comment on the appropriateness, frequency and methods of monitoring utilised.

See my comments in Point 1 above and the first dot point below. As stated, for a significant amount of time during her labour Ms [A] was requiring intense one on one care. This would have been a very complex situation to manage as a midwife and due to this [RM B] does not appear to have taken all the maternal observations generally monitored or repeated them as frequently as the hospital Clinical Guidelines (Intrapartum Care — Physiological Labour & Birth DHB Clinical Guideline, dated 3.6.2020) recommend. While the gaps in maternal observations and documenting the

fetal heart rate as often as recommended could be considered a mild departure from acceptable practice, [RM B] was attempting to support Ms [A] through a very difficult period when Ms [A] was extremely distressed. [RM B] has provided a comprehensive account of the care she provided to Ms [A] during her labour, which, apart from the gaps in maternal and fetal observations mentioned above demonstrates, in my opinion, an acceptable standard of care, not a severe departure from expected practice as RM Daprini has stated.

7. Any other matters in this case that you consider warrant comment or recommendation.

In her opinion given to HDC regarding the care provided by [RM B] to Ms [A], RM Daprini states she was also asked to address specific statements made by Ms [A] in her complaint to HDC. While I am not aware of the specific statements RM Daprini was requested by HDC to address I note that all of the statements dot pointed below apart from the final one (re Ms [A] now being concerned that the baby is exhibiting signs of development delay as a result of traumatic birth) were identified as Key Issues in the Consumer complaint to HDC dated 2 July 2021 (21.09.01 Consumer complaint). I have responded to those RM Daprini has commented on in her opinion to HDC:

- "She feels regular assessments for her, and her baby's well-being did not occur in a timely manner".

Without knowing the context of the regular assessments Ms [A] is specifically referring to in this comment, the Intrapartum Care — Physiological Labour & Birth DHB Clinical Guideline (dated 3.6.2020) recommends recording temperature on admission, then four hourly, two hourly if ruptured membranes, and hourly if over 37.4. Pulse on admission then hourly. BP on admission then four hourly. Recording and documenting contractions, liquor, fetal heart rate, urine output once labour is established is also covered in this document.

Body mass index (BMI) is a measure of body fat based on a person's height and weight. The Referral Guidelines (MoH, 2012) recommend a Consultation for a BMI greater than 35 in a current pregnancy (Referral Code 4017). BMI is usually calculated at the first booking visit. Ms [A]'s booking BMI is recorded as being 34.5 in the [Ms A] ihospital notes, 35.4 in her Clinical Notes and 36 at the 37-week antenatal check done by [RM B]. [RM B] has documented in her response to the HDC letter she received (21.11.19 RM [B] C21HDC01503) that BMI was the only risk factor discussed at booking. RM [B] has written that due to her BMI, Ms [A] planned to birth at the Hospital as recommended by RM [B]. It is not recorded whether the recommendation of a consultation for obesity due to a BMI above 35 as per the Referral Guidelines (MoH, 2012) was discussed with Ms [A], and if so, what the outcome of the discussion was. Baby [A]'s birth weight was documented on the National Women's Health Form as being on the 46th centile for gestational age, so slightly smaller than was calculated based on Ms [A]'s inputted details.

Although as I have also documented in Point 1 above, there were some gaps in the type and frequency of maternal observations [RM B] took compared to those recommended in the Referral Guidelines and the hospital Clinical Guideline, I do not support RM

Daprini's opinion that these represent a severe departure from expected practice. It is my opinion that these departures represent a mild departure from an acceptable standard of care.

- "She felt that there was no action taking when she reported seeing meconium in the birthing pool".

See my response to Point 2 above.

- "Ms [A] became concerned LMC [RM B] was not listening to her and did not identify or manage the intrapartum placental insufficiency or the possibility of fetal distress". I do not know what Ms [A] means regarding identifying or managing the "intrapartum placental insufficiency" in the statement above. Without more detail of context and stage of labour she is referring to, this is unclear. Regarding identifying and managing the possibility of fetal distress, [RM B] has given detailed responses about the care she provided to Ms [A], the actions taken and the decisions she made. In addition, [RM B] has reflected on her decision making and the actions she took at this time during Ms [A]'s labour. This indicates she is a reflective practitioner and demonstrates her commitment to the high standards of care she strives to provide to women and families in her care.

- "Post birth complications, haemorrhage and an inverted uterus".

The medical notes including the subsequent RAMP review reflect that possibly the tocolysis given (Terbutaline medication) to relax Ms [A]'s uterus and slow/stop contractions in view of the fetal distress could have made uterine inversion more likely through the uterus becoming atonic, though it is noted that this is a very rare complication and the tocolysis was used appropriately in the context of fetal distress. The SMO attending the uterine inversion has documented "no bleeding" from this event. The estimated blood loss of 850 ml at caesarean needs to be considered from the perspective of the impact it had on Ms [A] individually. Her haemoglobin post caesarean was 110 and had been 131 prior to. Her observations remained normal. No other effects, e.g. feeling dizzy or looking pale, are documented. These results do not indicate compromise from a haemorrhage. Ms [A]'s observations remained normal postnatally.

- "The doctor that did the caesarean stated that she and baby were lucky to be alive".

Ms [A]'s urgency category of 1 when the decision for a caesarean was initially made was downgraded to an urgency category of 2. Both these decisions were made by medical doctors. Ms [A]'s epidural was used as anaesthesia for the caesarean rather than the urgency of the situation requiring a general anaesthetic rather than waiting for a heavy block epidural to work effectively. This can be quicker to administer if there is great urgency to deliver the baby depending on the individual situation. [Baby A] had pallor and poor tone at birth, but it is documented she was trying to cry. [Baby A] required no resuscitation. She was evaluated to have normal Apgar scores of 8 at 1 minute, 9 at 5 minutes and 10 at 10 minutes. [Baby A] received skin to skin in OT with her mother from 5 minutes of age for 20 minutes and breastfed 65 minutes after birth, also indicative of

being well. Although her lactates were high at birth, all SARNAT observations (due to high lactate result) and ACTR monitoring (for meconium exposure) were reassuring/normal, and [Baby A] was discharged from the paediatric team. Ms [A]'s observations remained stable during the caesarean. I am not a medical doctor so cannot comment on another profession's care, but it is documented in the clinical notes that the uterine inversion was identified immediately, and managed appropriately and expediently by appropriate personnel, including blood loss being managed to maintain homeostasis. This was supported in the RAMP review.

- "The scalp clip that was left on causing further complications, requiring intravenous antibiotics".

Although it is unfortunate that a lack of communication meant the Fetal Scalp Electrode (FSE) was not removed prior to [Baby A]'s birth, it was removed at birth and 24 hours of intravenous antibiotics was commenced to lower the chance of an infection developing. Giving a course of antibiotics is common for many surgeries, including caesarean sections. RM [B] sought support from the Acting Charge Midwife (ACM) the evening of the caesarean regarding her responsibilities in OT for removing a FSE prior to caesarean as [RM B] had never been asked to do this in Operating Theatre previously. Together RM [B] and the ACM went over what the medical doctor would have meant when she was asked to remove the FSE in OT and practiced the skill. The responsibilities of the LMC when attending a caesarean include supporting the woman, receiving the baby, supporting any resuscitation required and initiating skin to skin and breastfeeding. Who the doctor expected to be responsible for removing the FSE in OT is unclear. If this was not OT staff, this needs to be communicated to the midwifery staff so they can be educated in this skill for women having a caesarean.

- "There was a delay in monitoring the baby's distress/fetal heart rate".

As stated in Point 3 above, [RM B] appeared to be managing a very challenging situation. In addition to caring for a very distressed woman and her husband, she was trying to take bloods and send them to the laboratory, trying to commence a pre-epidural CTG monitoring, talking to the registrar and the anaesthetist, and trying to document what was happening. In these situations, there is a lot going on at once and the midwife is working through all that is required to achieve what needs to be done. On reflection [RM B] has stated she should have asked for support from one of the core midwives.

- "LMC [RM B] was unable to be contacted and there was a time delay in seeking medical support".

With no further background information, I am assuming that this refers to when Ms [A] first contacted [RM B] on 17.08.2020 to inform her that her labour had begun. [RM B]'s WHATS APP COMMUNICATION record shows a text from Ms [A] at 1038 checking [RM B] was the correct person to get in touch with and saying she had been "cramping" since 0400. [RM B] has documented that Ms [A] had been experiencing cramping since 0400, membranes were intact, fetal movements were normal, and she was managing well. There was a plan made with Ms [A] to call back when contractions became stronger and longer and for [RM B] to see Ms [A] at home later that day when labour appears

established. [RM B] states that during the day her and Ms [A] spoke regarding the progress of her day. [RM B] has given a detailed explanation as to her availability and the details covered in her phone answer message including who in her midwifery practice is the midwife on call and covering what to do if she cannot be reached. [RM B] states she has her phone on 24 hours a day, checks it regularly throughout the day and always takes her phone with her whenever she leaves her home. It would appear from her responses that [RM B] goes to considerable lengths to be easily contactable.

- "She believes she did not receive the care and support to meet her needs during her labour and that LMC [RM B] did not listen to her when she told her about her high levels of pain in the labour".

In the core facility, Ms [A] was assessed by [RM B] to be in latent labour. It was [RM B]'s recommendation that Ms [A] return home until labour established. Ms [A] and her husband were reluctant to return home so [RM B] remained with her to monitor labour progress including the pain she was experiencing. Ms [A] had been offered resources to read antenatally regarding pain relief options by her midwife. It is documented in Ms [A]'s Clinical Notes at the 37-week antenatal visit that all pain relief options and the appropriate timing for them were discussed including Entonox, water and epidural. In her response to HDC [RM B] has documented that she sends all women information on what to expect in labour and latent labour in preparation for discussion of these when the birth plan is commenced at around 36 weeks' gestation. Ms [A] had also attended antenatal classes where it is most likely pain relief options were also discussed. Ms [A] was offered several pain relief options by [RM B] on 20.8.2020. These included positional techniques, use of heat packs, use of water and the offer of Entonox. The level of Ms [A]'s pain was clearly recognised by [RM B], and the decision was made to move to an epidural even though, as [RM B] has stated, using an epidural anaesthesia in latent labour with normal healthy low-risk women is not supported by research. Despite this, [RM B] acknowledges that there is no "one method fits all" model and people are assessed individually. This demonstrates that [RM B] was listening to Ms [A] and recognised the level of pain that she was experiencing.

- "Ms [A] is now concerned that the baby is exhibiting signs of development delay as a result of traumatic birth".

[Baby A] was born with normal Apgar scores. All SARNAT observations (due to high lactate result) and ACTR monitoring (for meconium exposure) were reassuring/normal, and [Baby A] was discharged from the paediatric team with no concerns. [Staff midwife] postnatal documentation states that [Baby A] progressed well postnatally. The midwife requested a paediatric referral at three weeks of age due to [Baby A] not yet being back to birthweight (was 20g under birthweight at this point). No concerns with [Baby A] were identified at the subsequent paediatric consultation at four weeks of age. There was no change made to the feeding plan already in place prior to this paediatric consultation taking place. At five weeks of age no concerns were raised, and [Baby A] was discharged to General Practitioner and Plunket follow up at 3955g (355g over birthweight). There were no concerns raised about the baby at discharge from midwifery care.

References

1. NZCOM. (2006). Consensus Statement: Normal Birth. October. References updated July 2009. Christchurch: NZCOM.
2. Ministry of Health. (2012). Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines). Wellington: Ministry of Health.
3. NZCOM. (2015). Midwives Handbook for Practice. Christchurch: NZCOM.

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6 February 2025'