

## Failings in standard of care provided to pregnant woman in maternity unit

---

1. On 13 September 2022, the Health and Disability Commissioner (HDC) received a referral from the Nationwide Health and Disability Advocacy Service regarding the care provided to Mrs A and Baby A by Health New Zealand | Te Whatu Ora Hauora a Toi Bay of Plenty (Health NZ). On Day2 April 2022, Mrs A gave birth to Baby A who was born in a poor condition and sadly passed away 22 hours after birth. I express my sincerest condolences to Mrs A and her husband, Mr A, for their profound loss.
2. This report considers the key issues that Mrs A raised about the care she and Baby A received on Day2 April 2022.
3. Mrs A, in her response to the provisional report, said that she wanted a safer Aotearoa for future mothers and pēpi. I fully support Mrs A's sentiment and agree that learnings must be taken from this family's tragic experience and acted upon to remedy the shortcomings in care highlighted in this report. The findings from this investigation will be shared with relevant agencies with the aim of giving further attention to the challenges facing our current maternity system.

### Information gathered

4. At the time of the events, Mrs A was aged 29 years and was pregnant for the first time as a result of in vitro fertilisation.<sup>1</sup> Mrs A presented to Tauranga Hospital on 7 February 2022 and 25 March 2022 because of reduced fetal movements. On Day1 April 2022, Mrs A requested an induction of labour because she was concerned that she could not monitor fetal movements while she was experiencing severe migraines. Induction of labour was planned for Day3 April 2022.

#### *Initial presentation*

5. At 8.04am on Day2 April 2022 (at 40 weeks and 2 days' gestation), Mrs A called her lead maternity carer (LMC) registered midwife (RM) B with concerns about an absence of fetal movements since midnight and intermittent pain. As RM B was attending another patient, she advised Mrs A that her back-up, RM C,<sup>2</sup> would meet her at the hospital.
6. At around 9am, Mrs A presented to Tauranga Hospital's maternity unit. At 9.20am, Mrs A was admitted to hospital but remained under the care of her LMCs. RM C checked Mrs A's maternal observations<sup>3</sup> and completed a physical examination. The observations were normal, but RM C documented that Mrs A's abdomen was 'tight' on palpation, she had severe pain, and that there were no fetal movements or vaginal bleeding.

---

<sup>1</sup> A type of fertility treatment where eggs are combined with sperm outside of the body in a laboratory.

<sup>2</sup> RM B and RM C are independently employed.

<sup>3</sup> This involves monitoring of temperature, blood pressure, heart rate, and respiratory rate.

7. Cardiotocography (CTG)<sup>4</sup> monitoring was commenced at 9.26am, and the fetal heart rate was noted to be 145 beats per minute (bpm) with reduced variability<sup>5</sup> and no accelerations<sup>6</sup> or decelerations<sup>7</sup> (which is an abnormal CTG finding). RM C completed a stretch and sweep<sup>8</sup> and repositioned Mrs A to help improve the CTG. However, the variability did not improve. Mrs A remained on continuous CTG monitoring until Baby A's birth (discussed further below).
8. As the CTG was abnormal, RM C sent a photo of the CTG trace to RM B and requested a medical review from the obstetrics and gynaecology registrar, Dr D, at 10am. RM C said she had a discussion with Dr D in the corridor outside Mrs A's room (Mrs A was not present) and explained the situation, providing Mrs A's history, including that she had not experienced any fetal movements since midnight, that she had a tight abdomen, and that RM C was unable to palpate the baby's position.
9. Health NZ completed an adverse event report (AER) into the care provided to Mrs A and Baby A, which noted that assessments and discussions of concerns should take place in the presence of the consumer and that, if consultation is required, this is to be completed with the consumer. The AER found that 'corridor conversations' and advice were frequently sought from clinicians without assessment or advisement of the full clinical situation.

#### *Initial medical review*

10. Dr D assessed Mrs A at 10.20am and noted that the CTG had reduced variability with no decelerations and that it had a stable baseline. She recorded that Mrs A's abdomen was soft and not tender and that there was intermittent lower abdominal tightening and no vaginal bleeding. This was documented retrospectively as Dr D stated it was an 'incredibly busy shift'. In contrast to Dr D's assessment and documentation, Mrs A told HDC that Dr D had barely felt her 'woody abdomen' even though RM C had alerted her to this, that she had informed Dr D about a sharp pain and a burning, tearing sensation and absence of fetal movements before leaving home, and that she did not get a chance to fully discuss her concerns with Dr D. In response to the provisional opinion, Mrs A said that her husband and her mother had also noted her stomach as being hard.
11. Following the medical review, Dr D made a plan for RM C to monitor the CTG for a further 30 minutes to see whether the variability improved, and then another medical review would be completed after this period. Dr D said this plan was made given that everything other than the variability was reassuring and that the CTG suggested that the fetus was in a sleep cycle.
12. Following the initial review and before the management plan was implemented, Dr D called the Senior Medical Officer (SMO), Dr E, to discuss the situation. Dr E agreed with the

---

<sup>4</sup> A method used to monitor the fetal heart rate and uterine contractions during pregnancy and labour.

<sup>5</sup> Variability refers to the variation of fetal heart rate from one beat to the next. A normal fetal heart rate has a variability of 5–25 bpm.

<sup>6</sup> An abrupt increase in the baseline fetal heart rate of more than 15bpm for more than 15 seconds.

<sup>7</sup> Reduction in fetal heart rate.

<sup>8</sup> A procedure used to induce labour.

management plan. Dr E said Dr D had advised her that Mrs A had a CTG trace with reduced variability but no accelerations or decelerations and that her plan was to reposition, offer fluids, and re-review Mrs E in 30 minutes. The CTG trace was not shown to Dr E, nor did she request to see it. RM C told HDC that, in hindsight, because of the abnormal CTG trace, she wished she had not accepted Dr D's plan to re-review in 30 minutes.

13. The AER found that the CTG had been misinterpreted,<sup>9</sup> that it indicated fetal distress, and that this should have triggered immediate management or urgent delivery. Therefore, Dr D should not have made a 30-minute monitoring plan. Health NZ said immediate management includes identification of any reversible causes of the abnormality, consideration of further fetal evaluation or delivery if significant abnormality persists, and escalation of care to a more experienced practitioner. However, this did not occur.
14. Although RM C and Dr D documented the CTG abnormalities in the obstetric clinical notes, they did not use the CTG interpretation sticker<sup>10</sup> to interpret the trace or document the plan, as required by Health NZ's Antenatal Fetal Heart Rate (FHR) Monitoring Policy (dated 2021).

*Actions taken after lack of follow-up by Dr D*

15. Despite planning to re-review Mrs A within 30 minutes, Dr D did not return because she was attending an emergency. Dr D did not inform another staff member about the need to review Mrs A in 30 minutes.
16. Health NZ said that, on Day2 April 2022, there were three emergencies, two staff members had called in sick, and the maternity service had a deficit of nine full-time RMs. Health NZ said the delivery and maternity suites were placed in code yellow (and later orange) in the variance response management system,<sup>11</sup> which is overseen by the operations centre, to indicate that there were concerns regarding capacity and resource availability. Health NZ did not state what support was offered by the operations centre.
17. The AER found that, despite the staffing shortages on the day, the obstetrics and gynaecology team did not call for additional obstetric support. The AER states there was an option to escalate resourcing issues during the daytime hours to a second obstetrician on site or, alternatively, the gynaecology registrar, although this would have required the midwifery coordinator to review the staffing roster.
18. As the CTG trace remained non-reassuring and Dr D did not return to re-review Mrs A, RM C left Mrs A's room at around 11am to find Dr D. Mrs A said RM C left the room many times to try and get help. RM C could not find Dr D or the midwifery coordinator and was advised by Health NZ midwife, RM F, that Dr D was busy with an emergency and to call her. Although

---

<sup>9</sup> The AER noted that staff had been missing the weekly CTG Education sessions because of reduced staff availability.

<sup>10</sup> The CTG trace should be classified as NORMAL or ABNORMAL. An abnormal CTG should be continued, and immediate obstetric registrar review should be requested. Health NZ said that the use of the CTG interpretation sticker supports less-experienced clinicians in identifying the cause of and/or the appropriate response to an abnormal CTG trace.

<sup>11</sup> The variance response management system provides an indication of concerns regarding capacity and resource availability. It is not known what actions code yellow and orange lead to.

Health NZ agreed that RM C could not easily obtain obstetric advice, it said that Dr D could have been contacted by phone (even in an emergency) and that this did not occur.

19. RM C acknowledged that she could have called Dr D and that she did not do so because she had been advised that Dr D was attending an emergency and because the CTG trace had not deteriorated and had remained consistent since admission. In addition, RM C did not attempt to call the midwifery coordinator, who at the time was also attending an emergency, or call the 777-emergency bell for support. Health NZ said that the phone numbers of the midwifery coordinator, registrar, and other senior staff, such as the duty manager and midwifery director, were displayed at various places around the obstetrics and gynaecology ward. No hourly progress updates in relation to Mrs A were written on the unit whiteboard to alert other staff to concerns or to allow them to assist with follow-up. It is not known whether RM C was aware of the escalation pathway at the time.
20. As RM C was unable to find Dr D, she showed RM F a picture of Mrs A's CTG trace on her phone. RM F advised RM C to move Mrs A to an antenatal room (near the delivery suite) and commence intravenous fluids. RM C said she completed this at 11.30am; while doing so, she advised Mrs and Mr A of the possibility that induction might be brought forward. RM F said she was later called to an emergency. She was with this patient for 1.5 hours and did not see RM C again. The AER found that this meant no formal midwifery consultation had occurred.

#### *Second medical review*

21. At 11.51am, RM C handed over Mrs A's care to another Health NZ midwife, RM G, as she was unable to find the midwifery coordinator. RM C explained that she was waiting for a registrar review because of the abnormal CTG. RM G said she went straight to Mrs A's room to check the CTG. After reviewing the CTG, she removed the printout to show to another obstetrics and gynaecology registrar, Dr H, who was in the staff office. Dr H recalled that he was not rostered for acute duties but came to help as he had heard that the delivery suite was busy.
22. Dr H arrived in Mrs A's room at 12.10pm. He said he completed an assessment, examined Mrs A's abdomen for signs of placental abruption,<sup>12</sup> and noted that she had some mild back pain. He also found the CTG very concerning and said he was unaware that Dr D had completed a registrar assessment earlier in the day. He then completed a bedside ultrasound scan. Health NZ said the ultrasound was unnecessary in the context of continued CTG monitoring that had indicated fetal compromise. The scan showed that the liquor volume (the amount of amniotic fluid) was normal and the presence of meconium<sup>13</sup> in the liquor (a possible sign of fetal distress). Following discussion with the consultant<sup>14</sup> at 1.10pm, Mr H advised Mrs A that she would require a caesarean section.
23. The request for a caesarean section was made with category 2 urgency (to be completed within 60 minutes). The AER noted that the caesarean section should have been classified

---

<sup>12</sup> A condition where the placenta separates from the uterus before birth.

<sup>13</sup> The baby's first stool.

<sup>14</sup> It is not known who this consultant is.

as category 1 (urgent) as the CTG had remained unchanged from the initial presentation to the maternity unit at approximately 9am. Health NZ stated that, had a category 1 caesarean occurred within the hour of presentation to the hospital, it would have ‘significantly improved the outcome for Baby A and may have prevented his death’.

#### *Baby A*

24. Mrs A was taken to theatre at 2.05pm, and Baby A was born at 2.35pm on Day2 April 2022. He was born covered in blood and in a critical condition, including aspiration of blood into his lungs and stomach, requiring artificial ventilation and care in the Neonatal High Dependency Unit. The AER noted that a partially concealed placental abruption may have occurred in the early hours of the morning on Day2April 2022, which was suspected by the obstetric team, who identified a blood clot behind the placenta and blood-stained liquor.
25. Specialist advice was sought from Tauranga Hospital paediatric intensivists and paediatric consultants, the Waikato Hospital neonatal retrieval team, and Waikato Hospital neonatologists. The AER found that the decision-making around Baby A’s care after delivery was the best it could have been at the time, and his medical management did not require any changes to be made in this respect.
26. However, the AER highlighted concerns with the retrieval and transport team involved in Baby A’s care. As Baby A was born in a critical condition, he was initially on a pathway to be transferred to Waikato Hospital, which had been requested to retrieve him.
27. The retrieval team from Waikato Hospital was expected to arrive at Tauranga Hospital at 6pm; however, the helicopter could not land at the hospital because of poor weather conditions and had to divert to Tauranga Airport. Ambulance transport was then required from Tauranga Airport to Tauranga Hospital. The AER found that, although the weather conditions were out of their control, there was a delay in getting the retrieval team from the airport to the hospital because the ambulance was not configured to accommodate the transport incubator (which is only compatible for right-handed loading ambulances).<sup>15</sup> The AER found that, when ordering the ambulance, the configuration requirements need to be specified, which did not occur in this case. The AER also found that there was a small opportunity for transfer by ambulance from Waikato to Tauranga; however, this would not have affected the outcome in this case.
28. Unfortunately, Baby A deteriorated while waiting for the retrieval team and was redirected to palliative care. Sadly, Baby A passed away 22 hours after his birth at 12.18pm on Day3 April 2022. Information provided by ACC indicated that there was a total delay of around 3.5–4 hours, but the AER noted that there was a delay of over five hours in delivering Baby A and that this delay likely contributed to his death.

#### *Bereavement support*

29. Mr and Mrs A expressed that the bereavement support they were provided was poor and that they felt unsupported by maternity staff. The AER also found deficiencies in the bereavement support provided to the family. Health NZ said that initial support was

---

<sup>15</sup> Ambulances are not universal and have left and right configurations.

provided to the family by a bereavement midwife on Day3 April 2022. It is not known what other support was provided on the day of Baby A's death. Further, a social worker review occurred on Day4 April 2022, which noted that referrals had been completed to grief support services and Bellyful.<sup>16</sup> In addition, Mr and Mrs A were advised that they could contact the social worker if they needed further assistance. It is not known whether Mr and Mrs A sought further assistance from the social worker. Finally, ACC forms were completed post-discharge for ongoing counselling funding.

### Clinical advice

30. In-house midwifery advice was sought from RM Nicholette Emerson (**Appendix A**), who advised that there was a moderate departure from the accepted standard of care with respect to RM C not contacting Dr D when the re-review was due. However, RM Emerson noted that this was mitigated by the ongoing obstetric emergencies and the lack of a clear pathway to escalate concerns.
31. Clinical advice provided to ACC by obstetrician and gynaecology professor, Dr I, states that the CTG pattern initially assessed by Dr D was very concerning in the absence of fetal movements and that Dr D should have recognised that during her initial assessment. Dr I also advised that the CTG appearance was consistent with severe hypoxia (low oxygen levels) of 12 hours or more.

### Responses to provisional report

32. Mrs A, Health NZ and RM C were provided with a copy of the provisional report for comment.
33. Mrs A appreciated the work undertaken by the HDC. She emphasised that the failures in the care provided to her and Baby A have changed her family's lives forever and that these events have caused ongoing harm. Mrs A's comments have been incorporated into this report.
34. Health NZ said it accepted that it did not provide services to Mrs A and Baby A with reasonable care and skill. Other comments made by Health NZ have been incorporated into this report where relevant.
35. RM C accepted the decision and provided an apology to Mrs A for the deficiencies in her care, as per my proposed recommendation in the provisional decision.

### Decision

#### *Health New Zealand | Te Whatu Ora – breach*

36. As a healthcare provider, Health NZ has a responsibility to ensure that it provides care in accordance with the Code of Health and Disability Services Consumers' Rights (the Code). Right 4(1) of the Code states: 'Every consumer has the right to have services provided with reasonable care and skill.' After carefully reviewing all the information on file, including the

---

<sup>16</sup> This is a volunteer-led charity that delivers free meals to families with babies and young children who are without a support network.

clinical notes, the parties' responses, and Health NZ's comprehensive AER, I consider that Health NZ did not provide a reasonable standard of care to Mrs A.

37. The AER highlights a series of failures in Mrs A's care. This includes the staffing inadequacies, a lack of clear escalation pathways, a lack of consistent use of CTG interpretation stickers, failure to initiate immediate management or urgent delivery following the initial and second medical review, the practice of undertaking 'corridor conversations', inadequate bereavement support, and inadequate communication with the ambulance dispatch team. I have reviewed these findings in conjunction with the other information before me, and I agree with them. In my opinion, these deficiencies cumulatively resulted in Mrs A receiving a poor standard of care. As these deficiencies were a result of actions taken by multiple providers, I consider this to be a system failure. Accordingly, I find that Health NZ breached Right 4(1) of the Code. I note that Health NZ has apologised to the family for the care provided to Mrs A.
38. After review of the clinical notes, it is clear that urgent intervention was warranted when Dr D initially reviewed the CTG and, equally, when Dr H subsequently reviewed it. I am concerned that neither of the registrars recognised the serious fetal distress they were observing on the CTG trace or responded accordingly.
39. In my opinion, the main issue is the delay that led to Baby A being born in a critical condition, rather than the care that he received after delivery. I agree with the AER that the decision-making around Baby A's care after delivery was sound. Therefore, I am not critical of the care provided to Baby A.

*RM C – adverse comment*

40. RM C was the LMC caring for Mrs A when she initially presented to Tauranga Hospital on Day 2 April 2022. RM C initiated CTG monitoring when Mrs A told her that she felt there had been reduced fetal movements. RM C recognised the abnormal CTG trace and appropriately escalated this to the obstetrics and gynaecology registrar, Dr D, who reviewed Mrs A and suggested monitoring for 30 minutes and a further medical review after this. The key issue to be determined is whether RM C took reasonable steps to escalate Mrs A's care when Dr D did not return to re-review her after the planned 30 minutes.
41. I note that RM C left Mrs A's room many times to seek medical assistance and, when she was unsuccessful, escalated Mrs A's care to Health NZ midwife RM F, who advised RM C to call Dr D. RM C expresses regret over not calling Dr D; however, she noted that the CTG trace had not changed and that Dr D was attending an emergency. I also note that, at this time, RM C was unable to locate the midwifery coordinator, who had the responsibility of overseeing the care in the maternity unit.
42. In my opinion, this was a situationally challenging context. Although the responsibility to complete the medical review lay with Dr D, it was also RM C's responsibility to ensure that this plan was followed through. I am critical that RM C did not follow RM F's advice to call Dr D.

---

*Names have been removed (except Health New Zealand Hauora a Toi Bay of Plenty, Waikato Hospital, Tauranga Hospital and the clinical advisor on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.*

43. However, in mitigation, I also accept RM Emerson's advice that RM C was aware that Dr D was attending another emergency. Under these circumstances, it is essential that there is a clear escalation pathway, which was Health NZ's responsibility to implement, as discussed above. In addition, I note that Dr D does not appear to have sought the support of her colleagues to follow up with Mrs A when she was attending another emergency and was unable to attend Mrs A herself after the planned 30 minutes.

### Changes made

#### *Health NZ*

44. Health NZ apologised to the family for the care it provided. It has made the following changes to improve its practice since these events:
- a) A 'fresh eyes review' was introduced in June 2022. This requires a practitioner caring for a patient to seek a colleague's review of the CTG trace, along with the patient's full clinical picture every hour to decide on the appropriate management plan.
  - b) A maternity forum centred around Mr and Mrs A's experience was held in November 2022. This forum was used to help staff understand the impact of grief, bereavement, and adverse event support.
  - c) Staff were reminded to provide details around configuration requirements when dispatching ambulances.
  - d) The CTG from this incident was reviewed during the weekly CTG education session and discussed at the perinatal morbidity and mortality meeting.
  - e) The use of the CTG sticker was reviewed.
  - f) The maternity leadership team now holds a bi-monthly meeting with LMCs to discuss concerns and provide other updates.
  - g) Adverse event escalation pathways have been discussed with LMCs.
  - h) Discussions have been held between maternity coordinators and LMCs to address concerns regarding corridor conversations and advice being sought without understanding the patient's full clinical picture.
  - i) Education requirements of staff have been reviewed. Following this review, Health NZ has reimplemented weekly CTG education sessions, and LMCs were invited to attend these.
  - j) A computerised CTG analysis was introduced and made available to obstetricians under specific circumstances, and Health NZ intends to purchase more replacement CTG machines that include this feature.

- k) BadgerNet (an electronic clinical record system) has been implemented so that clinicians can view CTGs from a phone or computer. As part of this, the use of CTG stickers has been discontinued.
- l) A recommendation has been made to the obstetric team that a department-wide flowchart be developed to show a clear process for LMCs and midwives to follow when staff are attending multiple emergency events.
- m) An additional obstetrician is being recruited.
- n) LMCs and midwives now update the maternity unit whiteboard with patient information and progress updates hourly.
- o) The Maternity National Clinical Network is progressing the implementation of mandatory multi-disciplinary fetal surveillance training, and the associated regulatory requirements are being actively reviewed to ensure accountability and consistency across New Zealand.

#### *RM C*

- 45. The Midwifery Council of New Zealand completed a competence review in relation to RM C and deemed that she was practising midwifery to the standard of competence reasonably expected of a midwife.
- 46. RM C expressed her sincerest condolences to the family and has made the following changes to her practice:
  - a) She has completed two fetal surveillance education programme workshops run by the Royal Australian and New Zealand College of Obstetricians and Gynaecologists.
  - b) She now escalates care to senior midwifery staff and obstetric colleagues if a CTG is abnormal.

#### **Recommendations**

##### *Health NZ Hauora a Toi Bay of Plenty*

- 47. In addition to the improvements outlined above, I recommend that Health New Zealand | Te Whatu Ora Hauora a Toi Bay of Plenty:
  - a) Report on the effectiveness of its implementation of electronically recorded CTGs via BadgerNet integration within three months of the date of this report;
  - b) Report on the effectiveness of its implementation of a computerised Dawes-Redman algorithm to aid with the interpretation of CTGs and to support obstetricians with clinical management under specific circumstances within three months of the date of this report;
  - c) provide an update on the development of the department-wide escalation flowchart within three months of the date of this report;

---

*Names have been removed (except Health New Zealand Hauora a Toi Bay of Plenty, Waikato Hospital, Tauranga Hospital and the clinical advisor on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.*

- d) provide an update on the staffing levels in the maternity ward and the obstetrics and gynaecology team, including whether any further recruitment is being undertaken, within three months of the date of this report;
- e) audit the percentage of Health NZ midwives and members of the obstetrics medical team attending the weekly CTG education sessions. A summary of the findings, with any corrective actions to be implemented, is to be provided to HDC within three months of the date of this report.

### **Follow-up actions**

- 48. A copy of the sections of this report that relate to RM C will be sent to the Midwifery Council of New Zealand.
- 49. A copy of this report with details identifying the parties removed, except Health New Zealand | Te Whatu Ora Hauora a Toi Bay of Plenty, Waikato Hospital, Tauranga Hospital, and the clinical advisor, will be sent to the Royal Australian and New Zealand College of Obstetricians and Gynaecologists and to the Perinatal and Maternal Mortality Review Committee and placed on the Health and Disability Commissioner website, [www.hdc.org.nz](http://www.hdc.org.nz), for educational purposes.
- 50. In early 2025, Health NZ established a Maternity National Clinical Network (the Network) to provide national leadership and oversee the strategic direction, strategic priorities, and programme of work for maternity services across Aotearoa, including the development of national standards and models of care. A copy of this report, with details identifying the parties removed, except Health New Zealand | Te Whatu Ora Hauora a Toi Bay of Plenty, Waikato Hospital, Tauranga Hospital, and the clinical advisor, will be sent to Health NZ's National Chief Midwife to further reinforce the importance of the Network progressing its strategic work programme as a priority.

Rose Wall

**Deputy Health and Disability Commissioner**

---

*Names have been removed (except Health New Zealand Hauora a Toi Bay of Plenty, Waikato Hospital, Tauranga Hospital and the clinical advisor on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.*

## Appendix A: In-house clinical advice to the Commissioner

The following in-house advice was obtained from RM Nicholette Emerson:

### **“CLINICAL ADVICE – MIDWIFERY**

**CONSUMER: [Baby A], baby of [Mrs A]**

**PROVIDER: RM [C], RM [B]**

**FILE NUMBER: C22HDC02290**

**DATE: 24 June 2025**

Thank you for the request that I provide clinical advice in relation to [Mrs A] regarding the care provided by RM [B] and RM [C]. In preparing the advice on this case, to the best of my knowledge I have no personal or professional conflict of interest. I agree to follow the Commissioner’s Guidelines for Independent Advisors.

### **I have reviewed the documentation on file:**

Complaint from [Mrs A] 13 September 2022

New submission from [Mrs A] 7 May 2022

Complaint response and clinical records from RM [B] 11 October 2022

Complaint response from RM [C] 6 June 2024

Te Whatu Ora Hauora a Toi Bay of Plenty response and clinical records, Adverse Event Investigation record [Day2] April 2022

### **Background:**

[Mrs A] was in her first pregnancy. She had a medical history of asthma and previous infertility, and this was an IVF pregnancy. [Mrs A] was under the care of LMC Midwife RM [B] and had presented twice previously for reduced fetal movements. Mrs [A] suffered from severe migraines later in her pregnancy. At 40 weeks and 2 days, Mrs [A] was assessed in hospital by back-up midwife RM [C]. The assessment CTG was abnormal, and obstetric review was sought. Scheduled obstetric re-evaluation after initial review did not occur as there were concurrent obstetric emergencies at the time. Mrs [A] was finally reviewed again two hours after initial review, and it was a further two hours before an emergency caesarean was performed. Baby [A] was born in poor condition, and his care was eventually directed to palliative. Sadly, [Baby A] died 22 hours after his birth. At the onset, the profound and tragic loss of precious Baby [A] is acknowledged. All notes and submissions have been carefully considered in evaluating the midwifery care provided for Mrs [A] and [Baby A].

---

*Names have been removed (except Health New Zealand Hauora a Toi Bay of Plenty, Waikato Hospital, Tauranga Hospital and the clinical advisor on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person’s actual name*

**Advice Request:**

*The current scope of investigation relates to the care provided to Mrs [A] and her late son [Baby A] by Health NZ and RM [C] [Day1-Day3] April 2022, specifically, but the events leading up to these admissions are also of course an important aspect to consider. The key concerns raised by the complainant (Mrs [A]) regards the lack of coordination and escalation of obstetrics care by Health NZ staff; however, Health NZ seems to indicate in its response that there was a failure by Mrs [A]'s LMC(s) to appropriately manage/escalate Mrs [A]'s case, but we do not have any further clinical advice/expertise on this matter. Accordingly, could I please request your midwifery advice, particularly regarding the care provided by RM [B] and RM [C]? Please advise on the level of departures (if any) from the accepted standard of midwifery care, specifically as it relates to the appropriate management and escalation of Mrs A's care in the events leading up to and including [...] [Day1–Day3] April 2022, and whether their failures (if any) contributed to the inadequate care received by Mrs [A]. Please also advise if there are any other matters that you believe warrant comment, including specific aspects that you believe require further information or expert obstetric advice.*

**Escalation of care**

From 35 weeks' gestation onwards, Mrs [A] suffered from debilitating migraines. A diagnostic MRI returned a normal result. On [Day1] April at 40 weeks and 1 day gestation, Mrs [A] was seen in the emergency Department (ED) for a migraine. During the doctor's assessment, Mrs [A] requested an induction of labour; however, the ED doctor stated that booking an induction of labour was out of his jurisdiction, according to Mrs [A]. Mrs [A]'s LMC [RM B] phoned the hospital and requested that a ward midwife go to ED and check on fetal wellbeing (as documented in contemporaneous hospital clinical notes). This did not happen. Mrs [A] was given ibuprofen and, on questioning this medication in pregnancy, was told this was ok (as documented in contemporaneous hospital clinical notes). Mrs [A] was discharged home. The following day, Mrs [A] was again suffering from a migraine. This caused severe vomiting and dizziness in the evening. RM [B] came to check maternal and fetal vital signs at 6pm. Mrs [A] reports that she slept from 7pm to 9pm. Mrs [A] was having mild contractions so decided to go to bed and sleep in case she was in early labour. She woke at 12am and 2am. The last time she felt [Baby A] move was at 12am.

On [Day2] April, Mrs [A] woke for the day at 6.30 am. She no longer had a migraine. She was now 40 weeks and 2 days' gestation. [Baby A] did not move. Mrs [A] phoned RM [B] at 8am to report reduced movements from midnight. RM [B] was in clinic and phoned back at 8.35am. RM [B]'s back-up midwife, RM [C], agreed to meet Mrs [A] in hospital at 9am. Maternal observations were taken and were documented as in the normal range. Mrs [A] reports feeling a sharp pain in the shower before leaving home which she states she reported to both RM [C] and the obstetric registrar.

In hospital, a CTG was attached at 9.26am. RM [C] became concerned regarding [Baby A]'s lack of heart rate variability on the CTG and the reported reduced fetal movements.

Concerns are documented in contemporaneous clinical notes. RM [C]'s concerns were compounded by the palpation of [Mrs A]'s hard abdomen, as documented.

At 9.40am, RM [C] performed a vaginal examination with [Mrs A]'s consent. The cervix was posterior, high, and closed (not in labour). RM [C] reports that she asked [Mrs A] to lie on her side to improve the CTG. RM [C] sent a photo of the CTG to RM [B], discussed her concerns with [Mrs A], and said she would be requesting an obstetric review. It is noted that [Mrs A] had previously presented twice in hospital for reduced fetal movements in this pregnancy. [Mrs A] had presented [...] for reduced movements at 30 weeks and 1 day gestation and [...] at 36 weeks and 5 days' gestation. [Mrs A] was discharged home following midwifery clinical assessment on both occasions. This is in keeping with accepted midwifery practice and does not depart.

These actions are confirmed in Te Whatu Ora Hauora a Toi Bay of Plenty report 15 November 2022. *For women who represent with decreased fetal movements (DFM) on a second or subsequent occasion, manage as per initial presentation and individualise care.* [https://stillbirthcre.org.au/wp-content/uploads/2021/03/Element-3\\_DFM-Clinical-Practice-Guideline-1.pdf](https://stillbirthcre.org.au/wp-content/uploads/2021/03/Element-3_DFM-Clinical-Practice-Guideline-1.pdf) *CTG should be performed to exclude fetal compromise, and an urgent medical review should be undertaken where findings are abnormal. c. No further investigations are required for women if: (1) CTG and clinical assessment is normal; (2) no risk factors for stillbirth are identified; (3) it is the woman's first presentation for DFM and (4) there are no maternal concerns of DFM at time of assessment. A larger retrospective cohort study in the UK, involving 1234 women reporting DFM beyond 36 weeks' gestation, found that 16.6% of these had more than one presentation for DFM. Of women with repeated DFM episodes, 44% birthed a Small for Gestational age (SGA) baby, and they were also more likely to have had high second-trimester uterine artery Doppler resistance indices. This study concluded that women presenting with repeated DFM episodes should be considered at high risk for placental dysfunction, irrespective of antenatal ultrasound or Doppler assessment results. Although research is limited, with the potential for increased risk, closer surveillance should be considered for women with ongoing concerns of DFM. Any management strategy for DFM needs to consider the presence of other risk factors and the gestational age (page 16).*

### **CTG**

It is important to distinguish that different parameters determine a normal antenatal CTG from a normal intrapartum (in labour) CTG. The CTG on [Day2] April was attached when [Mrs A] was not in labour and is therefore categorised as an antenatal CTG. The antenatal CTG should have the following features: a baseline of 110–160 beats per minute (bpm), baseline fetal heart rate (FHR) variability of 6–25bpm, the presence of accelerations (transient increases in FHR of 15bpm above the baseline and lasting 15 seconds at the baseline), and no fetal heart rate decelerations – (transient decreases in the FHR below baseline lasting at least 15 seconds) <https://www.tewhatauora.govt.nz/assets/Publications/Womens-health/Guidelines-and-policies-for-womens-health-in-Auckland/Antenatal-Fetal-Heart-Rate-FHR-Monitoring.pdf>. *The final clinical*

*judgement should be based on the entire clinical assessment, with CTG forming a part of this holistic approach to pregnancy management. Role of the midwife: The midwife is responsible for:*

- *Acting as an effective advocate for the woman.*
- *Providing evidence-based information about fetal wellbeing assessment to the woman and her family.*
- *Checking that the chosen method for fetal heart rate monitoring is appropriate for gestation and there is a documented action plan to follow.*
- *Responding and attending in a timely manner when requested to provide a fresh eyes review for a colleague.*
- *Ensuring that any clinical concerns about fetal wellbeing are appropriately escalated until a comprehensive review with appropriate action plan and follow-up plan is completed and clearly documented. Indications for performing an antenatal CTG includes decreased fetal movements.*

[Mrs A]'s CTG had a baseline fetal heart rate variability documented at <5bpm with no accelerations; it was therefore abnormal. These abnormalities, along with absent fetal movements were rightly concerning to RM [C]. The addition of a hard (in RM [C]'s opinion) maternal abdomen caused further concern. RM [C] arranged obstetric review at 10am. RM [C] states that she explained [Mrs A]'s history, including the events of the previous week, including the ED admissions for migraines and the scheduled induction of labour booked for the following day. RM [C] states that she further explained that [Mrs A]'s abdomen was tight, so she was unable to palpate [Baby A]'s position.

The registrar, Dr [D], entered the room at 10.20 and palpated [Mrs A]'s abdomen. According to RM [C], a plan was made to monitor the CTG for a further 30 minutes to see if the CTG variability improved. The possibility of moving the induction of labour forward was mentioned. This is supported by contemporaneous midwifery documentation. Dr [D] has not documented in the contemporaneous clinical notes but has documented retrospectively. [Mrs A] remembers telling the registrar that she hadn't felt [Baby A] move since the previous night. Retrospective notes documented by Dr [D] record [Mrs A]'s abdomen as soft non-tender. The recorded plan was to discuss with Obstetric Consultant [E] and to review CTG in 30 minutes' time.

According to Te Whatu Ora Hauora a Toi, Dr [D] was called to another emergency at 11am and did not re-review the CTG. At 11am, RM [C] states that she left the room to find Dr [D] as the CTG continued to be non-reassuring with continued reduced variability and no accelerations. At the time, RM [C] could not find Dr [D] or the Midwifery Coordinator. She spoke to RM [F] (staff midwife), who informed her the Midwifery Coordinator and Dr [D] were attending to an obstetric emergency. The exchange with RM [F] is supported by RM [F]'s retrospective notes (Day3 April 10.55). RM [F] states that she also attended the ongoing emergency at 11.30am. RM [C] showed RM [F] a picture of the CTG, [and she] suggested that [Mrs A] be moved to an antenatal room, start some IV fluids, and likely she would be staying as an inpatient.

RM [C] states that she left the room multiple times to find the registrar and the midwifery coordinator. They were still in the emergency, which had now moved from a room to the operating theatre. Whilst RM [C] has not documented each occasion that she has left the room, [Mrs A] agrees in her complaint that this occurred.

At 11.30am, RM [C] moved [Mrs A] to the antenatal room, and the CTG remained non reassuring. Contemporaneous clinical documentation records that the registrar was dealing with another emergency. At 11.40am, RM [C] was able to send bloods but unable to site an IV, so she requested the help of another staff midwife (...) who sited the IV, and fluids were commenced. Dr [D] was still in theatre. RM [C] then explained to staff midwife [RM G] that she was handing (11.50am) over as she was awaiting the Obstetric registrar and RM [C] was unable to find the shift coordinator. Whilst in the corridor, RM [C] saw RM [B], who had left her clinic due to [Mrs A]'s abnormal CTG. 11.50am documentation by RM [B] states that she immediately took the CTG for review to another Registrar (Dr [H]) in the office. This is verified by the Te Whatu Ora Hauora a Toi response.

Dr [H] brought the scanner into the room and noted possible meconium. He then discussed with the Obstetric Consultant by phone and planned a category 2 caesarean. At 12.30pm, [Mrs A] was prepared for theatre to undergo a caesarean. At 1pm, clinical documentation records that the Obstetrics and Gynaecology Registrar (O&G Reg Dr [H]) was present and aware of the CTG.

Awaiting operating theatre (OT). 1.20pm: documentation records that core staff are informed of variability and abnormal CTG. [Mrs A] is documented to have a severe migraine, and IV paracetamol and Plasmalyte is running. The CMA is present. 1.30pm: Maternal heart rate 83bpm and oxygen saturation 98%. 1.55pm: [Mrs A] was taken to theatre. 2pm: Bloody show present after [Mrs A] went to the toilet. 2.05pm: The paediatricians were made aware and asked to attend. Spinal anaesthetic being sited. 2.13pm: Spinal sited. 2.15pm: Indwelling catheter sited. Fetal heart rate post-epidural 116bpm. 2.25pm: Knife to skin. 2.35pm: [Baby A] born with poor tone and poor oxygenation but normal heart rate. Initially, [Baby A] was on a pathway to transfer to Waikato or Starship hospital; however, sadly, his care was later redirected to palliative care, and he died 22 hours later.

**Advice request** *The key concerns raised by the complainant ([Mrs A]) regards the lack of coordination and escalation of obstetrics care by Health NZ staff; however, Health NZ seems to indicate in its response that there was a failure by [Mrs A]'s LMC(s) to appropriately manage/escalate [Mrs A]'s case, but we do not have any further clinical advice/expertise on this matter.*

The Te Whatu Ora Hauora a Toi response from 15 November 2022 states that they have not been advised of difficulties in obtaining support from LMC [RM C] or LMC [RM B]. They acknowledge that obstetric review of the CTG (post 30 minutes) was not completed as per the management plan as Dr [D] was attending another emergency. The duty Obstetric Consultant, Registrar, and House Officer carry mobile phones for

staff to escalate concerns. A Clinical Midwifery Coordinator is onsite 24/7. An emergency bell and 777 activations can always be actioned and would be attended by available staff and additional teams outside the unit. During the investigation into the adverse event, no phone calls or escalation of ongoing concern or whiteboard update was made by the LMC. In addition, Te Whatu Ora Hauora a Toi acknowledges that there were three separate emergencies on the unit that morning. All emergencies were attended by the relevant patient's midwife, duty obstetric team and at times the midwifery coordinator.

Following investigation, it is acknowledged that the CTG interpretation on presentation should have actioned immediate management or urgent delivery. In consideration of the above, the CTG was attached by RM [C] at 9.26am. There was reduced variability, no accelerations, no fetal movements, and [Mrs A] had a documented hard maternal abdomen. RM [C] requested review, and Dr [D] reviewed [Mrs A] and the CTG at 10.20am. Dr [D]'s retrospective notes document [Mrs A]'s abdomen as soft and non-tender. After discussion with the obstetric consultant, the plan was for the CTG to be reviewed in 30 minutes. RM [C] states (not documented) that she left the room at 11am, was not able to find the Registrar or Midwifery Coordinator and was informed they were in an emergency.

Staff midwife [F] viewed the CTG and advised transfer to an antenatal room + IV fluids. 11.30am: RM [C] transferred [Mrs A] to an antenatal room, took bloods, and sited IV fluids. She states that she left the room several times to escalate care; this is not documented but collaborated by [Mrs A]. At 11.50am, RM [B] took over and immediately removed the CTG and showed it to Dr [H], who was now in the office. It was 2 hours and 15 minutes following this escalation before [Baby A] was born by caesarean. Outline of timeline documented above.

RM [C] states in her complaint response, *I interpreted the CTG when [Mrs A] was admitted as abnormal, which is why I sought obstetric review. Looking back, I wish I had not accepted the Registrar's plan of checking back in 30 minutes. I acknowledge that I should have called the registrar when she did not show up after 30 minutes, and when she was in theatre, to reiterate that the CTG had remained unchanged and was still abnormal. My belief at the time was that I would be dismissed or would be interrupting another medical emergency (as at the time the registrar was dealing with an emergency in another room, which continued in the operating theatre). Because the CTG had not deteriorated (it had remained consistent since admission) and the registrar had seen a good 40–50 minutes of this CTG when she came to review it, I decided not to interrupt the other emergency. However, I did take what steps I could to escalate my concerns. I left the room and the [...] family multiple times to try and find the registrar or Midwifery Coordinator to get another pair of eyes on the CTG and to make a plan, including discussing the situation with RM [F] as described above.*

RM [C] acknowledges that she should have phoned Dr [D] when she did not return, to inform her that the CTG had remained concerning. She has apologised to [Mrs A] for this. It would be normal to consider this a moderate departure from accepted midwifery

practice; however, it is not clear what the alternative avenue for escalation was, and whether RM [C] was aware of it. There were three emergencies that morning, and Dr [D] had moved from a room to the theatre. *According to the Te Whatu Ora Hauora a Toi response 24 April 2024, between the hours of 11am and 1pm, the Obstetric SMO (consultant) and RMO (registrar) were called to attend three obstetric emergency events. The SMO was in theatre 11.44am–12.06pm. The RMO was called to assist in the delivery suite just after 10am and was the lead clinician for the obstetric emergency. The RMO completed an instrumental delivery (11.25am) and provided management of a significant post-partum haemorrhage requiring surgical intervention by both RMO and SMO between the hours of 12.36pm and 1.06pm. Another registrar was called in to help. Dr [D] describes carrying two phones and having an incredibly busy shift that day (Day3 April 2024). The Clinical Charge Midwife was also attending to the emergency.*

It appears reasonable that RM [C] considered that escalating an unchanged CTG that had been previously reviewed may take critical care from the emergency already being attended. Whilst critical that RM [C] did not contact Dr [D] and provide an opportunity for her response, I acknowledge that this was a contextually complicated situation without a clear pathway to escalate. This situation highlights the importance of clear formal handover from primary care to secondary to establish who is holding clinical responsibility. *Guidelines for Consultation with Obstetric and Related Medical Services (2012–March 2023), Process map 3 page 13, requires three-way communication between the woman/birthing person, specialist, and LMC regarding the diagnosis, treatment, and care plan. The ongoing role of the LMC is discussed and clearly documented.*

It is noted that a formal handover sticker has been developed by Te Whatu Ora Hauora a Toi after this case. The Te Whatu Ora Hauora a Toi review team states that the CTG should have been recognised as *Likely to be associated with fetal compromise* with a Category 1 caesarean. The review outcome has identified that the formal use of a CTG sticker would have identified immediately that immediate action was required regarding the CTG.

### **Use of CTG sticker**

Reduced variability and lack of accelerations had been noted by RM [C] when the CTG had been on for a period. It was thought baby was possibly in a sleep cycle. RM [C] offered maternal change of position and a vaginal examination to stimulate baby's head. She suggested oral hydration. These actions are in keeping with accepted midwifery practice with no departures identified. These actions did not improve the CTG, so Dr [D] was called to assess. RM [C] thought incorrectly that the CTG sticker was used at the end of the CTG and not for ongoing CTG.

<https://www.tewhatuora.govt.nz/assets/Publications/Womens-health/Guidelines-and-policies-for-womens-health-in-Auckland/Antenatal-Fetal-Heart-Rate-FHR-Monitoring.pdf> *For women having an antenatal CTG, a documented systematic assessment should take place when reviewing the trace. The CTG trace should be*

*classified as NORMAL or ABNORMAL. An abnormal CTG should be continued and immediate obstetric registrar review requested. The antenatal CTG interpretation sticker should be used to assist with assessment.*

*The CTG sticker will be completed:*

- *20 minutes after a CTG has initially been applied*
- *When the CTG is identified as abnormal*
- *On discontinuing the CTG*
- *More frequently if a change in the appearance from the previous review*
- *Hourly if continuous CTG requested*
- *The sticker will be completed contemporaneously and fixed into the woman's clinical records.*

*In all cases when the CTG trace is assessed as abnormal, the midwife and then the reviewing obstetric registrar must document a plan on a CTG sticker. The midwife must notify the abnormal CTG to a senior midwifery colleague (i.e., Clinical Charge Midwife [CCM], Charge Midwife [CM]) while waiting for obstetric registrar review. The Obstetric Registrar's written plan could include the following:*

- *Repeat CTG later – midwife to escalate to obstetric registrar if again abnormal*
- *Escalate to obstetric SMO*
- *Continue CTG with a time stated for next review by obstetric registrar.*

*The CTG trace will be initialled as evidence of the review. For women receiving continuous CTG, there should be consideration to transfer women to the Labour and Birth suite for one-on-one care. If this is not possible, then one-on-one care should be provided in an alternative setting. In situations where one-on-one care cannot be provided due to staffing levels and/or acuity, then the CTG must be reviewed every 20 minutes and an Antenatal CTG sticker completed and fixed into the woman's clinical records on each occasion. A Datix should be completed if one-on-one care is unable to be provided.*

On review of the above, RM [C] did correctly interpret the CTG even though this was not formally written on a sticker in the notes. RM [C] states that the purpose of a CTG sticker is to guide for further management. Had she used the sticker, she would have seen that immediate action was required and not allowed the Registrar to return in 30 minutes. However, it is noted that neither registrar has used a sticker or responded in the recommended time. At Tauranga Hospital, they now use an electronic system for all documentation. They are now routinely using the electronic system for all documentation every 30 minutes.

## **Summary**

RM [C] has recognised a concerning clinical picture and CTG. She has appropriately escalated and was given a plan requiring an obstetric review in 30 minutes' time. The scheduled review did not occur due to acuity at the time. RM [C] attempted to escalate

her concerns; however, this did not include re-contacting Dr [D], who was now involved in another emergency. A moderate departure from accepted midwifery practice is noted; however, it is also noted that there were ongoing obstetric emergencies and attempts were made to escalate without a clear pathway to do so. When Dr [H] was notified of the CTG by RM [B] at 11.50pm, there was a further 2+ hour delay before [Baby A] was born. This was an obstetric decision. No departures from accepted midwifery practice are noted in the care provided by RM [B]. Finally, I extend my heartfelt condolences to [Mr and Mrs A] for the loss of their precious son [Baby A]. I hope this report addresses some of their remaining questions.

Nicholette Emerson,

BHSc, PG Dip-Midwifery

**Midwifery Advisor Health and Disability Commissioner"**