Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

A Decision by the Deputy Health and Disability Commissioner

(Case 20HDC01761)

Introduction

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

2. The report discusses the care provided by Registered Midwife (RM) B to Ms A during her labour and following the tragic death of her baby. My sincere condolences go to Ms A and her partner for the loss of their baby.

3. This case was first raised with the Midwifery Council of New Zealand (the Midwifery Council) regarding concerns about RM B's competence in the care she provided to Ms A and her baby during Ms A's labour. The Midwifery Council then referred the complaint to this Office.

4. The Coroner completed an inquiry into the death of Baby A. The Coroner's report determined that the cause of Baby A's death was intrapartum death at term as a result of a prolonged first and second stage of labour complicated by shoulder dystocia. The Coroner assessed the midwifery care and postpartum medical care provided to Ms A and Baby A and identified various failings during Ms A's labour and birth. The Coroner obtained advice from a registered midwife and an obstetric consultant to assist in the review of the care provided to Ms A and Baby A.

Names have been removed to protect privacy (except Health NZ and the advisor). Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

5. The following issue was identified for investigation:

- *Whether RM B provided Ms A with an appropriate standard of care.*

6. The parties directly involved in the investigation were:

Ms A	Consumer
RM B	Registered midwife (locum midwife)

7. Further information was received from:

The Coronial Services office	
RM C	Registered midwife (lead maternity carer (LMC))
Hospital 2	Public hospital
Dr D	Senior medical practitioner
Dr E	Medical practitioner
RN F	Registered nurse (RN)
Nurse G	Nurse

8. RN H is also mentioned in the report.

9. I obtained independent midwifery advice from RM Isabelle Eadie (Appendix A).

Information gathered

Progression of labour

10. Ms A had experienced an uncomplicated pregnancy and had been under the care of her LMC, RM C, for the duration of her pregnancy.[1] Ms A is a Jehovah's witness and had signed an advance directive form antenatally to indicate that she did not wish to receive any blood products over the course of her pregnancy or during her labour and birth process due to her faith.

11. Ms A attended all her antenatal appointments and appeared to be healthy throughout her pregnancy, with no risk factors noted. On Day 1[2], RM C was on annual leave, and had handed over her caseload to a locum midwife, RM B, who was the only other registered midwife working independently in the rural community at the time.

12. At around 1am on Day 1, Ms A went into labour, with contractions three minutes apart. She telephoned RM B, who advised her that because of the length of time between contractions, she should wait a little longer before going to the local hospital (Hospital 1, where she planned to birth). RM B said that she received a second telephone call at around 3.30am, and Ms A reported that the contractions were stronger and she wanted to go to the birthing

[1] Some of the information in this section has been provided from the Coroner's final report.
[2] Relevant dates are referred to as Days 1-2 to protect privacy.

unit.[3] The contemporaneous clinical records note that at 4.15am, Ms A and her partner arrived at the birthing unit and were met by RM B.

13. On admission, Ms A's observations were taken by RM B, and her cervix was found to be around 5cm dilated. Initially, at 5.30am, the clinical notes record that Ms A's contractions were irregular, but from 5.56am her contractions were observed to be increasing in regularity. RM B noted that Ms A continued to mobilise well and 'exhibited maternal and foetal wellbeing', showing no reason for concern.

14. Labour progressed slowly over the next few hours, although RM B documented that Ms A was 'labouring well' and had 'great progress'. During this time, the clinical notes record that a vaginal examination showed that Ms A was 8cm dilated with baby in 'LOA position[4]' at 10.55am. No further signs of dilation were recorded subsequently.

15. Dr E, a medical officer in rural medicine at Hospital 1 who was working the emergency medicine shift on Day 1, told the Coroner that in the 'early afternoon', he asked RM B how Ms A's labour was progressing, and RM B told him that the labour was slow, but the baby was perfect, with a heart rate of 154 beats per minute (bpm). Dr E stated:

> 'I was inclined to make this enquiry as there had been some concern raised by multiple independent staff about the labour. Due to this I approached the senior nurse in charge [RN H] and let him know that concerns had been raised. He determined to make further enquiries which I understand he did on two occasions.[5]'

16. RM C outlined in her statement to the Coroner that she received a message from RM B at 2.26pm requesting that she contact her. RM B said that she also contacted another midwifery colleague at 2.30pm to discuss the clinical picture. RM B said that the contractions seemed to be becoming uncoordinated, and so she discussed a care plan, which included rest and IV fluids.

17. RM C said that she noticed RM B's message at 4.30pm and returned the telephone call and discussed Ms A's clinical picture with RM B. They decided that RM C would come in to relieve RM B while she rested.

18. RM C arrived at the birthing unit at 5.18pm, and handover was given by RM B. At this point, Ms A had been labouring for 16.5 hours, and it had been 6.5 hours since she had been recorded as 8cm dilated. At 5.41pm RM C recorded in the clinical notes: '[Fetal heart rate (FHR)] 135bpm over 30 seconds, no [decelerations] noted.' At 6.19pm RM C recorded: '[FHR] 135bpm over 30seconds. no [decelerations] heard. good variability.' During this period of cover, RM C did not arrange medical review or make any change to the management plan.

[3] In her statement to the Coroner. Neither of these telephone calls were documented in the clinical notes.
[4] LOA (left occiput anterior) position is where the baby is lying in the womb on the left side.
[5] It appears that Dr E's concern was related to Ms A's prolonged labour.

19. According to Health NZ's internal review of these events, at approximately 6pm,[6] senior nurse RN H reportedly discussed Ms A's progress with RM B and requested an update, to which he was told that Ms A was 'almost fully dilated and the contractions are slowly happening but not [as] strong as she wanted'.[7] The internal review records that RN H raised concerns regarding the inadequate contractions and suggested that Ms A be transferred to Hospital 2 for tertiary-level care. However, Ms A remained at Hospital 1 for the remainder of her labour and birth. The review further notes that RN H also raised the same concerns with RM C while she was there to give RM B a break, but reportedly RM C was also happy with progress.

20. RM B resumed care of Ms A at 6.41pm, essentially an hour and a half after she had handed over care to RM C. RM B noted that Ms A was continuing to make slow but steady progress with her labour. RM B told HDC:

> 'Because [Ms A's] contractions were in-coordinate for a few hours, and after assessing that both mother and baby were well, I did consult with two other registered midwives who had previously worked in my remote rural area. A plan of care was implemented to use IV fluids and rest and reassess the situation in a couple of hours. Had there been no progress I would have actioned a consultation for transfer with the Obstetric team.'

21. The contemporaneous clinical notes state that at 9.01pm, a vaginal examination undertaken on Ms A revealed an anterior lip[8] and that the baby was 'vertex presenting[9]', and the baby's head was at station '0 [to] +1' (meaning the baby's head was at or descending beyond the level of the ischial spines). This was the first vaginal examination since 10.55am when Ms A had been noted to be 8cm dilated, and it showed that after a further 10 hours, Ms A was almost but still not fully dilated. However, RM B noted that she did not want to rush this stage of labour, as she did not have concerns about Ms A or her baby. RM B told HDC:

> 'After a couple of hours, as per the plan, reassessment showed the contractions had increased in strength and regularity. Dilation and descent of the presenting part occurred. When [Ms A] was effectively pushing at [10.12pm], she progressed just within the expected 2 hours.'

22. RM B did not arrange medical or obstetric review at any point during the first stage of labour. She told HDC that it is her usual practice to consult with the obstetric and medical teams as required during a woman's birth, and, notwithstanding her earlier remarks about not wanting to rush this stage of labour and having no concerns about Ms A or her baby, she does not understand why this did not occur. RM B told HDC that she takes full ownership of her lapse in clinical judgement by not providing four-hourly maternal observations during

[6] It appears that this time is incorrect, because as noted in paragraph 18, RM B was taking a break from approximately 5.18pm onwards.
[7] As outlined in Health NZ's internal review report.
[8] An anterior lip occurs when the top of the cervix swells, but the rest of the cervix has dilated completely. This causes the anterior portion of the cervix to come in front of the baby's head.
[9] Vertex presenting means the fetus is in a headfirst, head-down position with the chin tucked towards the chest, facing the mother's spine.

labour and birth. She accepted that with the benefit of hindsight, this contributed towards her inability to build a developing clinical picture of Ms A's case.

23. The clinical records show that RM B recorded the FHR regularly from 4.41am on Day 1 until the time of Baby A's birth. However, there were periods where the gap between FHR recordings was longer than 30 minutes.[10] In addition, RM B did not record the maternal heart rate alongside the FHR.

24. Nurse G, who was also working at Hospital 1 during the course of Ms A's labour, started the night shift at 11pm.[11] Nurse G told HDC that she approached RM B and asked why Ms A was still at the hospital and requested a verbal update on her progress. Nurse G stated that RM B 'was confident and reassured [her] that all was well'. Following handover, Nurse G expressed concerns to her coordinator[12] as to why Ms A was still at the hospital and had not delivered her baby. Nurse G told HDC that she and her coordinator talked about 'mentally preparing for a difficult delivery/flat baby scenario and checked through resus equipment which was in the room'.

Birth of Baby A

25. Typed clinical progress notes indicate that Baby A's head was born at around 12.30am on Day 2. However, RM B's retrospective handwritten progress notes state that the baby's head was born at 12.43am. RM B noted that although it is her recollection that the baby's head was born at 12.43am, she cannot be certain, as her focus at this time was on Ms A and completing the birth of Baby A.

26. Ms A's sister[13] stated that she does not know what time the head was born, but she recalls discussions being had as to what date Baby A would be born on, suggesting that the discussion occurred prior to midnight. This is consistent with the progress notes at 10.12pm stating, '[p]eeps of head slowly advancing now', and further references to this up to 11.35pm. Further supporting this, Ms A's mother noted in her statement to the Coroner that after Baby A's head was born, she felt that more should have been done, and that his head had been out for 'way too long' with 'no progress'.

27. RM C's statement to the Coroner said that when handover took place, she told RM B that she would be in Hospital 1 overnight and, if RM B needed her, she should phone and she would attend.

28. According to the Coroner's report, at 12.38am RM B asked Ms A's partner to push the emergency call bell to request assistance.[14] Nurse G responded to the emergency call bell

[10] Gaps in the recording of the FHR occurred between 4.41am and 5.30am, 9.11am and 10.17am, 1.13pm and 2.05pm, 2.19pm and 3.18pm, 4.08pm and 4.40pm, 4.40pm and 5.41pm, 5.41pm and 6.19pm, 6.19pm and 7.08pm, 7.55pm and 9.01pm, 10.12pm and 10.51pm, and 11.35pm and 12.43am.
[11] According to the internal review report.
[12] Senior nurse.
[13] Present during the birth of Baby A.
[14] However, Ms A's mother disputes this fact and in response to the provisional opinion stated: 'The only time he was asked to push the emergency button was when RM C asked him to after she had come in and assessed

and was asked to telephone RM C for assistance. Nurse G noted that at this point, she was unaware that there was any difficulty with the birth, as no information was given to her by RM B.

29. In response to my provisional opinion, Ms A's mother stated:

> 'We had no idea what was going on. There was no communication that something was not right. I could see by the nurses face that she was unaware of what was happening either.'

30. The Coroner's report records that RM C arrived at 12.43am and asked RM B what help she needed. RM C stated: '[RM B] said she needed help to deliver the baby. She did not say why she needed help, I just assumed the role of lead midwife.' When RM C examined Ms A, she discovered that Baby A was suffering severe shoulder dystocia and was trapped by Ms A's pubic bone.

31. RM C then asked RM B to 'put [Ms A's] legs into the McRoberts manoeuvre[15]', but this failed to release the baby's shoulder. At this point, RM C asked Ms A's partner to push the emergency call bell again for further assistance. RM C then successfully released Baby A's shoulder through internal rotation manoeuvres, and Baby A was born at 12.53am showing no signs of life.

32. The Coroner's report states:

> 'All of this [information] suggests that there was a significant passage of time between the birth of [Baby A's] head and when the call was made to [RM C] at 12.38am. I am satisfied that it is likely the head was born around 12.30am, as recorded in the typed progress notes, as this is more consistent with the evidence. There does not appear to be any discrepancy as to the time when [Baby A] was fully delivered, recorded as being 12.53am.'

33. RM B told HDC that she believes there was no delay in identifying the shoulder dystocia and requesting multidisciplinary assistance. Further, she stated that there was no delay in requesting multidisciplinary assistance with the neonatal resuscitation.

34. RM B recorded that at 1.19am, the placenta was delivered physiologically and appeared to be complete.

Resuscitation attempts

35. Baby A was rubbed with a warm towel and the umbilical cord clamped as soon as he was born. Resuscitation[16] was started immediately, and Baby A was administered eight doses of

---

the situation with Baby A. RM B did not ask him to ring the bell.' Ms A's mother said that RM C had left the room and returned with Nurse G.

[15] The McRoberts manoeuvre is an obstetrical manoeuvre used to assist in childbirth. It is employed in case of shoulder dystocia during childbirth and involves hyperflexing the mother's legs tightly to her abdomen.

[16] Resuscitation efforts included cardiopulmonary resuscitation, the insertion of an IV umbilical catheter by Dr D, and the administration of multiple doses of adrenaline.

adrenaline in an attempt to re-start his heart. After each administration, his heart rate spiked but diminished quickly and was not sustained.

36. Senior Medical Officer (SMO) Dr D had been called to provide assistance with the resuscitation of Baby A at 12.50am, and she arrived at 1am.[17] Dr E was then called at 1.15am and arrived approximately three minutes later to provide further urgent assistance. Both medical officers were called to assist as there is no obstetric-paediatric secondary team based at Hospital 1.

37. When Dr E arrived, no heartbeat was palpable or audible via a stethoscope, and over the next 30 minutes there was no return of spontaneous circulation or breathing.

38. After 50 minutes of resuscitation, Dr E called Hospital 2 and was advised that given the length of time with no spontaneous breathing or circulation, it was considered that any further resuscitation efforts were futile. Resuscitation was then discontinued after 54 minutes and 50 seconds and, sadly, Baby A was pronounced dead at 1.47am.

39. A post-mortem examination confirmed that the cause of death was intrapartum death at term, and death occurred in the context of a prolonged first and second stage of labour, complicated by shoulder dystocia, which delayed the birthing process and resulted in asphyxiation.

Identification of sepsis

40. At 1.40am, following the birth of Baby A, Nurse G took Ms A's initial postnatal observations. Nurse G said that she reported these to RM B immediately. Health NZ's internal review into the events (see further at paragraph 50 below) notes that these vital signs were significantly outside normal limits,[18] but Ms A's vital signs were not repeated by RM B before she handed over care at 4.30am, and they were not escalated until later that morning.

41. RM B documented retrospectively (at 4.30pm that day): '0144 IV fluids. Normal Saline 1L up and stat.' She also recorded Ms A's observations (referred to above) and wrote: '[O]bservations to be taken again and let RM know.' The internal review states that at 4.30am RM B handed over care to the nurse and verbal instructions were that RM B was going home and would write up her notes later.

42. Approximately six hours after Ms A's initial postnatal observations were completed, they were repeated at 7.25am, and the Maternal Early Warning score (MEWs)[19] chart was used for the first time by RN F. The chart indicated an initial score of 2, and this then rose to 4[20]

[17] Resuscitation was assisted by two nurses.

[18] Clinical notes record her BP as 69/55mmHg, heart rate of 144bpm, and temperature of 38.5°C.

[19] MEWs (Modified Early Warning score) is a bedside scoring index that evaluates the patient's physiological state based on six vital parameters — heart rate, blood pressure, respiratory rate, core body temperature, mental status, and urine output.

[20] The maternity escalation pathway used by Health NZ states that a MEWs of 2 requires contact with the LMC, and to discuss increasing the patient's observation frequency. For a MEWs of 4, observations must be completed every 30 minutes, and there is to be discussion with an associate clinical midwife manager (ACMM), senior house officer (SHO), or registrar and a plan for transfer of the patient to a secondary/tertiary service.

at 7.45am and 8am. The internal review states[21] that RN F called RM B three times but was unable to make contact. After several further attempts, RM B was contacted and informed of Ms A's MEWs. RM B requested further IV fluids to be administered and advised that she would attend.

43. The progress notes at 8am state: '[V]erbal order given to run 1L IV fluids over an hour.'

44. RM B told HDC:

> 'Following birth, the wom[a]n's observations were noted to be indicative of either hypovolemia[22] or sepsis.[23] As this was just following the birth of the placenta and with blood loss, the first line of treatment; IV fluids and repeating observations, was appropriate and effective. The two Medical Officers were present in the room when this observation was reported. The woman did not have sepsis at this point, as the documentation demonstrates that her regular observations showed a [MEWs] of 2 at [7.25am]. The woman gave birth at [12.38am]. As advised on the [MEWs] template … [a MEWs] of three or more should have the clinician considering sepsis.'

45. RM B arrived back at Hospital 1 at 8.55am after 2.5 hours of rest and was informed by RN F that Ms A had a MEWs of 6.[24] RM B asked for Ms A's observations to be checked in 30 minutes' time, then every four hours, and she discussed with RN F the 'Mandatory escalation pathway — maternity' and what actions were required. RM B said that an SMO was also consulted without delay, but this is not documented.

46. The contemporaneous clinical notes written by RM B record that at 9.30am Ms A's MEWs was 7. The notes state: '[O]bservations taken -> initiated [MEWs] protocol. Plan: 30 mins observations as per [MEWs] protocol.'

47. Dr D told HDC that she began her on-duty shift as inpatient SMO at 10am, and on arrival was approached by RN F about serious concerns she had about Ms A, and RN F requested an urgent review. Dr D documented that she had been called for review for a MEWs of 7, and after examination she suspected post-partum sepsis, so she contacted the retrieval team at Hospital 2 for urgent transfer.

48. The clinical notes at 10am state: 'Post partum sepsis initiated as per protocol (Adult sepsis screening tool[).] Awaiting communications with [Hospital 2].' RM B said that the SMO then led the sepsis emergency procedures.

[21] The internal review states that at 8.05am '[RN F] made three phone calls to the LMC but all went straight to the answerphone. Also sent a text. She then tried the on-call midwife, but the LMC answered the phone.' I note that it is unclear where the 8.05am time stamp has come from.
[22] Low levels of blood or fluids in the body. This can lead to shock (a life-threatening condition in which the organs are not receiving enough blood or oxygen).
[23] A serious condition in which the body's immune system responds improperly to an infection.
[24] According to the 'Adult Sepsis Screening and Action Tool' used by Health NZ, a MEWs score of 3 or more warrants consideration of a diagnosis of sepsis.

49. At 11.30am Ms A was transferred to the resuscitation room for ongoing monitoring and to prepare for transfer to Hospital 2. At 12.10pm Ms A's observations indicated a MEWs score of 7, and she was picked up by the retrieval team at 1.10pm. Ms A and her whānau arrived at Hospital 2 at 2.20pm. Ms A received treatment for sepsis in the Intensive Care Unit and then the High Dependency Unit. She improved gradually over the next three days and was discharged home.

Internal review completed by Health NZ

50. Health NZ completed a review of the events that occurred during Ms A's labour and following delivery of Baby A.

51. The review notes that LMCs provide care to women within a maternity facility under a generic access agreement. Hospital 1 does not provide core midwifery services, but it does provide a level of service to assist birthing, along with a level of support to the LMCs (nursing staff and an on-call LMC midwife).

52. The review identifies five key issues with the care provided. The first issue discussed was the escalation of care in the event of prolonged first stage of labour. The review report noted that the core nursing staff on duty at the time acted appropriately by raising their concerns with the primary LMC (RM B) and the on-call midwife (RM C). Health NZ sought advice from the New Zealand College of Midwives (NZCOM) on the appropriate next step for escalation in this circumstance. NZCOM advised that the appropriate course of action in this case was for the nursing staff to elevate their concerns to the midwifery manager. However, Hospital 1 had no provision for the midwifery manager to be on call on the weekend, although it was noted that after-hours support should have been available to the nursing staff via a telephone call to the Duty Nurse Manager based at Hospital 2.

53. The second issue examined in the review was adherence to the 'Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines)'. The review found that Ms A's labour progress met the criteria for obstetric consultation, and she should have been informed that consultation was recommended, but this was not done. Further, concerns raised by nursing staff to both the primary LMC (RM B), and the facility on-call midwife (RM C) were dismissed as unfounded.

54. The third issue related to RM B's delay in seeking assistance. The review found that Baby A's head had been born for approximately 13 minutes before RM B asked for a nurse to contact RM C. In addition, hospital staff (the multi-disciplinary team) were not notified of the shoulder dystocia, and not asked to provide assistance or told the reason for contacting RM C. The review report states that shoulder dystocia is considered an emergency and requires urgent support and intervention. The relevant guidelines stipulate that there must be a transfer of clinical responsibility to the most appropriate practitioner available in the event of shoulder dystocia. Furthermore, had the nursing staff been alerted to this situation, the assistance of the medical officer and the SMO who were on site could have been sought.

55. The fourth issue related to the lack of recognition of potential signs of sepsis in Ms A, the unclear delegation and planning, and the lack of documented clinical handover. The review

report identified that Ms A's vital signs were checked and found to be grossly abnormal, and the concerning results were reported to RM B both verbally and in writing at 1.40am, but Ms A's observations were not repeated until 7.25am.

56. The last issue related to the lack of documented clinical handover and the lack of a care plan in place for Ms A. It was noted that RM B provided a verbal handover to the nursing staff at 4.30am, but she did not provide a care plan for Ms A. At Hospital 1, the LMC has responsibility for managing labour and postnatal requirements according to the 'Lead Maternity Carer Responsibility when Accessing Rural Birthing Units' Protocol [25]'. After the birth of the baby, the LMC is required to complete an updated care plan to hand over the care to the allocated nurse (who is employed by Hospital 1 and will provide the remainder of the postnatal care). The review report states that during Ms A's labour and birth, 'facility staff made every effort to keep informed of progress and offer assistance'. It noted that there was no documented handover, and no care plan or three-way conversation recorded by RM B postnatally.

Information from Coroner

57. The Coroner provided HDC with a copy of the findings from the inquiry into Baby A's death. As part of the inquiry, the Coroner obtained a midwifery review of the care provided. The key findings of the review were that RM B did not follow recommended midwifery practice during intrapartum care. In particular, the review noted the following:

- Fetal heart rate monitoring did not meet required standards and there were no documented maternal pulse recordings.
- Maternal monitoring did not follow recommended practice.
- Monitoring of labour progress should have been performed four-hourly by assessment of cervical dilation.
- There was a failure to diagnose shoulder dystocia and a failure to implement timely shoulder dystocia manoeuvres.
- There was a failure to anticipate and prepare to manage shoulder dystocia.

Further information

58. RM B stated:

> 'To [Mr & Mrs A] and their families, I offer my deepest apologies and sincere remorse for the loss of your baby, the deep grief and trauma of the loss of family memories. I have acknowledged fault for my role in your labour and birth. I am deeply and sincerely remorseful.'

[25] Lead Maternity Carer Responsibility to Clients in the Maternity Facility.

Responses to provisional opinion

Ms A and her whānau

59. Ms A was provided with the 'Information gathered' section of the provisional report and offered an opportunity to comment. Ms A said she feels that Baby A deserved much better care than was provided.

60. Ms A clarified that throughout her pregnancy, she was 'hoping to birth [Baby A] at [a] birth centre so that [she] could be closer to [Hospital 2] in the case of an emergency'. She stated: '[RM C] made me believe that [Hospital 1] was a safe place to birth. This is a decision I regret every day.' Ms A's mother also commented about this and stated that Ms A did not feel supported in the other birthing options she presented to RM C.

61. Ms A's mother told HDC:

> '[M]y daughter [Ms A] and my moko [Baby A] did not get the care they deserved. Because of this we lost our moko and almost lost our daughter too. In this day and age a healthy mum with a healthy baby should have the best care and our moko should not have died.'

62. Ms A's parents-in-law stated:

> 'The loss of our grandson [Baby A] has shattered our family in ways words cannot fully express. A life anticipated robbed by loss. Our grandson's life was precious, his loss screaming out the critical importance of diligent, compassionate, and timely medical care. We believe systemic changes need to happen to ensure all families receive the highest standard of care. Improved training, better communication, and timely escalation of care are essential to prevent families from experiencing the same preventable loss.'

RM B

63. RM B was provided with a copy of my provisional report for comment. RM B told HDC that she 'has been utterly devastated by this terrible outcome for [Ms A] and her whānau' and 'has never experienced anything like this outcome in her long professional career'.

64. RM B acknowledged her shortcomings in the care provided to Ms A and Baby A, and said that 'she should have done better in certain areas', and there are aspects of her documentation that could have been more detailed and completed to a higher standard. RM B accepted that these matters warrant critcism and amount to a breach of the Code, and she accepted the proposed recommendations. RM B's additional comments have been incorporated into this report where relevant.

RM C

65. RM C was provided with a copy of my provisional report, as it related to her, for comment. RM C accepted the adverse comments made about the care she provided.

Health NZ

66. Health NZ was provided with a copy of my provisional report as it related to the care it provided to Ms A. Health NZ advised that it accepted the conclusions, and its comments have been incorporated into this report where relevant.

Opinion: Introduction

67. Before proceeding with my decision, again I extend my heartfelt condolences to Ms A and her whānau for the distressing set of circumstances that led to the loss of Baby A. This is an extremely tragic case in which clearly there were several serious failings in the care RM B provided to Ms A during the labour and birth of Baby A and postnatally.

68. RM B has a responsibility to provide her patients with midwifery services in accordance with the Code of Health and Disability Services Consumers' Rights (the Code). I have carefully considered all the information gathered over the course of this investigation, and I set out my decision and the reasons for it below. I sought independent midwifery advice from RM Isabelle Eadie, and I have incorporated her advice in relevant sections of my opinion. I have also taken careful note of the earlier feedback supplied by the Coroner's clinical advisors.

69. As indicated in paragraph 4, the Coroner obtained advice from a registered midwife and an obstetric consultant while completing the inquiry into the death of Baby A. Although primarily I have relied on RM Eadie's advice, it is reassuring that the conclusions reached by the Coroner's advisors align with the conclusions reached by RM Eadie. The advisors noted that RM B did not follow recommended midwifery care in relation to FHR monitoring, maternal monitoring, monitoring of labour progress, and the diagnosis and management of shoulder dystocia.

Opinion: RM B — breach

Standard of care issues and provision of information — breach

Introduction

70. I have several concerns about the care RM B provided to Ms A during her labour and the birth of her baby. Specifically, I am concerned that RM B did not recognise, and therefore did not respond appropriately to, Ms A's prolonged first stage of labour, including that RM B did not tell Ms A that an obstetric consultation was warranted; did not undertake appropriate maternal or fetal monitoring in some respects; did not recognise the shoulder dystocia and therefore did not seek assistance in a timely manner; and did not recognise, and therefore did not respond appropriately to, the signs that Ms A was developing sepsis. I discuss these concerns in more detail below.

Prolonged 1st stage of labour

71. Ms A's labour commenced at approximately 1am on Day 1, and she was 8cm dilated at 10.55am. She did not become fully dilated until after 10.12pm. Over this close to 12-hour timeframe, RM B did not arrange obstetric or medical review of Ms A for the slow progress of labour, as recommended in the Referral Guidelines. This lack of timely consultation is particularly salient given that Ms A was labouring in a primary birthing unit and not in a

tertiary centre (Hospital 2) where a full assessment and possible intervention by the specialist obstetric team could be undertaken.

72. RM Eadie advised that RM B's management of Ms A's labour exceeded recommended time frames and should have warranted RM B recommending to Ms A that she consult with obstetric services at Hospital 2. RM Eadie is concerned that RM B believed that Ms A's progress was acceptable. RM Eadie noted that Ms A laboured for 11 hours to progress 2cm, from 8cm dilation to reach full dilation, when the expectation is that a woman in these circumstances would progress 2cm in four hours.

73. RM B told HDC that she did recognise that Ms A's contractions decreased in frequency and strength, and she sought advice from her peers, and in response she gave Ms A IV fluids at 3.18pm. RM B said that Ms A's contractions increased following this administration, suggesting that the IV fluids had been successful. However, as RM Eadie notes, another round of IV fluids was administered to Ms A at 5pm, and nothing is documented to suggest that there was a significant change in Ms A's contractions. RM Eadie stated that 'arguably there had not been any "acceptable" progress'. I accept this advice.

74. Furthermore, RM Eadie stated that it is unclear what RM B considers as 'progress', and whether a mere increase of contraction is how she was measuring this. RM Eadie advised that midwifery peers would assess prolonged/delayed labour by undertaking a vaginal examination, but this did not occur.

75. In addition, throughout the course of Ms A's first stage of labour, it is noted that three separate staff members working in Hospital 1 questioned RM B regarding Ms A's progress as they had concerns. However, after voicing their concerns to RM B, they were told that Ms A's contractions were slow, but Ms A was doing well and there was no need for concern.

76. I accept RM Eadie's advice that it is very concerning that RM B did not recognise the concerns about Ms A's first stage of labour, and further that she did not reconsider the events when various staff members raised their concerns. The internal review report stated that '[RN H] raised concerns with the LMC regarding inadequate contractions and suggested that the LMC transfer [Ms A] to [Hospital 2] for tertiary level care' at around 6pm on Day 1, but this recommendation was not actioned by RM B.

77. The internal review undertaken by Health NZ noted that Ms A's progress of labour met the criteria for obstetric consultation, as per the Referral Guidelines. The Referral Guidelines also stipulate that this consultation must be recommended to the woman by their midwife, and this did not occur.

78. RM B told HDC that it is her usual practice to consult with the obstetric and medical teams as required during a woman's birth, and she does not understand why this did not occur.

79. I accept RM Eadie's advice that RM B's failure to recognise such 'abnormal progress in labour' and not consult with the obstetric team, especially in light of being questioned by multiple staff members, was a significant departure from expected practice. I also recognise that by RM B's own admission there were shortcomings in her care. In addition, RM B should

have informed Ms A of the recommendation in the Referral Guidelines that her prolonged progress in labour meant that an obstetric consultation was warranted. I am critical that she failed to do so.

Maternal observations and fetal monitoring

80. During the first stage of labour, maternal observations and assessments, as well as fetal monitoring, also appear to have been lacking. RM Eadie noted the following:

- The only documented maternal observations during labour were those done when Ms A first arrived at the birthing unit. Four-hourly blood pressure and temperature checks, and hourly maternal pulse were not undertaken by RM B. RM Eadie noted that this was a very basic midwifery action and, given the length of labour, this was woefully inadequate.
- There was a gap in vaginal examinations from 10.55am until 9.01pm, and one should have been done at 3pm to assess the progress of labour. RM Eadie stated that RM B was correct in saying that progression in labour is 'not just about cervical dilatation but descent of the presenting part, [and] the positioning of the baby'. Furthermore, RM Eadie said that RM B is correct to state that progression of labour comes down to a number of variables. However, RM B did not do any abdominal palpations to see whether the baby was descending and rotating during this time, and she did not document the baby's station or position in earlier vaginal examinations.
- There were occasions of one-hour gaps where the FHR was not recorded, and, when it was recorded, it was done in different ways (single figure vs a range), and RM B did not record the maternal heart rate.
- A CTG was not started despite being recommended in the case of a prolonged labour.

81. RM Eadie advised that RM B did not adhere to the recommended practice in relation to the frequency of maternal observations. RM B has reflected on her practice in this regard and acknowledged that she did not provide four-hourly maternal observations during Ms A's labour and birth. I accept RM Eadie's advice and consider that RM B did not monitor Ms A adequately during the first stage of labour, and that more frequent observations should have been undertaken during this stage of labour to ensure that labour was progressing normally.

82. In relation to fetal monitoring, RM B recorded the FHR in the clinical notes, but nothing further is included until she noted '[p]eeps of head slowly advancing' and Baby A was almost born. RM Eadie advised:

> 'Recommended practice is to auscultate the fetal heart rate every 15–30 minutes during the 1st stage of labour, for at least 30–60 seconds, to record it as a single figure, and to simultaneously count the maternal heart rate in order to distinguish between the fetal and maternal heart rates because it is possible to accidentally listen to the mother's heart rate when you think you are listening to the fetal heart rate.'

83. As stated above in paragraph 23, the clinical records show that RM B recorded the fetal heart rate regularly from 4.41am on Day 1 until the time of Baby A's birth. However, there were periods where the gap between FHR recordings was longer than 30 minutes. In addition, because RM B did not check Ms A's pulse, there is no record that she distinguished the maternal heart rate from the FHR. I would expect while noting the tragic outcome, that it is possible that Baby A's heart rate would have shown increasing signs of distress as the labour progressed. However, because RM B did not record the FHR appropriately, it is impossible to know for certain.

84. RM B was asked to comment on the observations she took during Ms A's labour. However, RM B has not provided a direct response in relation to the fetal monitoring she undertook. RM Eadie advised:

> '[RM B's] approach to fetal monitoring by intermittent auscultation does not align with the expectations set out in the NZCOM (2020) Consensus statement with regards to frequency and the way in which we should count and record the fetal heart rate and the maternal heart rate (in order to differentiate between the two). However, at the time of [Ms A]'s labour this consensus may not have been published, albeit the RANZCOG (2019) Guideline does similarly provide recommendations regarding intermittent auscultation although it is not as detailed as NZCOM.'

85. Given that RM B has not commented on this aspect of care, I am inclined to accept RM Eadie's advice that the fetal monitoring undertaken by RM B was inadequate and is not in line with the expected standard of care. I acknowledge that at the time Ms A was in labour the NZCOM Consensus statement may not have been published, but I accept RM Eadie's statement that guidelines available at the time provide similar recommendations.

86. Overall, I am critical that RM B did not monitor the FHR adequately, and I encourage her to reflect on this aspect of her care.

Delay in seeking assistance during active labour and birth

87. I note that it is not clear exactly when Baby A's head was born. RM B's handwritten retrospective notes state that the baby's head was born at 12.43am, whereas the typed clinical notes state that the baby's head was born at 12.30am. While RM B recalled that the baby's head was born at 12.43am, she said that she cannot be certain because at the time, her focus was on Ms A and completion of the birth.

88. I also note that RM B asked Ms A's whānau to ring the emergency call bell at 12.38am (Nurse G responded and contacted RM C to attend). I have also considered RM B's statement that there was no delay in identifying the shoulder dystocia, inferring either that she discovered it, or it was not present before RM C attended to provide assistance.

89. In my opinion, the information indicates that at that time there was difficulty with birthing the rest of Baby A after his head had been born. With all this in mind, I consider it more likely than not that Baby A's head was born at approximately 12.30am, meaning that there was a delay of approximately 8 minutes before RM B called for help. It also appears that when RM B did call for help, nursing staff were not advised of any difficulty with the birth, or of the

shoulder dystocia, or told the reason for contacting RM C. No other actions appear to have been taken until RM C attended and examined Ms A, and then attempted manoeuvres and called for further assistance.

90. RM Eadie advised:

> 'It is difficult to ascertain with any certainty if [RM B] did or did not recognise the shoulder dystocia. If she did not, this is very worrying, and represents a significant deficit in knowledge. But if she did, this is arguably more concerning as she failed to undertake the most basic measures such as calling for help and this represents a significant departure from expected practice and I disagree with her comment that there "was no delay in … requesting multidisciplinary assistance".'

91. I accept this advice. After considering the clinical records and RM Eadie's advice, due to the delay in calling for assistance, the lack of information communicated to nursing staff or RM C, and the apparent lack of any other action in the interim, I consider it more likely than not that RM B did not identify the issue of shoulder dystocia, and therefore did not promptly and effectively manage the obstetric emergency.

92. Shoulder dystocia is considered an obstetric emergency that can lead to complications for both the woman and her baby if not handled appropriately. In the event that a baby is suffering from shoulder dystocia, it is pertinent that timely management is initiated by the midwife after promptly recognising the issue. I am extremely critical that RM B did not recognise the shoulder dystocia. It is concerning that it appears that it was RM C — who arrived at the birth with no information having been provided — who identified the shoulder dystocia and initiated the McRoberts manoeuvre, and then asked Ms A's partner to push the emergency call bell for additional support.

Identification of, and response to, sepsis

93. RM Eadie advised that the observations taken by Nurse G at 1.40am and reported to RM B immediately were grossly abnormal. In response to the abnormal observations, RM B gave Ms A further IV fluids. Observations were not repeated until approximately 7.30am (when RM B was at home), and Ms A's first MEWs chart was completed.

94. RM Eadie advised that RM B's responsibility as Ms A's primary midwife at the time of these events was to ensure that repeated observations were taken. In the circumstances, given the length of time RM B had been working, she delegated this to the hospital nursing staff. This is recorded in her retrospective note as 'observations to be taken again and let RM know'. Therefore, it was the hospital nurses' responsibility to ensure that Ms A's observations were repeated. However, while noting this, RM Eadie stated that RM B should have specified when and how often the observations were to be repeated. RM Eadie noted that the general handover undertaken by RM B was poor (as discussed further below). These factors may have contributed to the lack of repeated observations, and RM Eadie considers that RM B bears some responsibility for the poor postnatal care provided to Ms A. I agree with this advice.

95. RM Eadie considers that RM B's response shows a disregard for the abnormality in Ms A's postnatal observations. RM Eadie acknowledged that in cases of hypovolaemia or sepsis, administration of IV fluids would be an appropriate management strategy, as stated by RM B. However, RM Eadie noted that Ms A's observations at the time suggested that Ms A was extremely tachycardic[26] and acutely hypotensive,[27] both of which would indicate that significant blood loss was occurring. However, it is also noted that Ms A did not suffer postpartum haemorrhage. Further, Ms A's elevated temperature suggests that she was not experiencing bleeding alone. In light of this, RM Eadie considers that it would have been more appropriate for RM B to suspect that Ms A's symptoms were indicative of sepsis.

96. RM Eadie advised that regardless of whether Ms A was septic or hypovolaemic, RM B should have recognised that Ms A's symptoms were abnormal, and RM B should have asked Nurse G to undertake a full set of observations and record them on the MEWs chart in order to ascertain the MEWs at the time and any follow-up action required. RM Eadie advised that Ms A's heart rate and systolic blood pressure alone, if recorded on the MEWs chart, would have indicated an emergency transfer to Hospital 2, and 5–10-minute interval observations were necessary as they were so abnormal and fell within the 'blue zone[28]'. However, there is no evidence in RM B's response or in the clinical records that these observations were repeated every 5–10 minutes, which should have occurred according to the MEWs pathway. I am extremely concerned that this did not occur.

97. I accept that RM B was working in a challenging situation when the abnormal observations were first taken, due to the emergency resuscitation of Baby A occurring in parallel. I note that RM B has stated that the observations were verbalised in the presence of medical staff, and they did not seem concerned. However, I accept RM Eadie's advice and consider that given the emergency situation they were dealing with, they were not in a position to take note of the comments being made whilst carrying out resuscitation. I accept RM Eadie's advice that RM B overlooked the 'grossly abnormal observations, did not follow expected management protocols in terms of completing the [MEWs] chart and did not formally and effectively escalate to the medical staff'. RM Eadie considers that this represents 'a significant departure from expected practice'.

98. I am also concerned that there was a delay in RM B escalating Ms A's raised MEWs at 8.55am. While RM B has told HDC that an SMO was contacted without delay at this time, there is no documentation of this, and medical review did not occur until 10am, despite a further rising of Ms A's MEWs. It is also apparent from Dr D's statement that when she was the 'on call' SMO during this time, she was not contacted about Ms A, and it was only at 10am when she commenced her 'on duty' shift that she was asked to review Ms A urgently.

99. The maternity escalation pathway used by Health NZ states that a MEWs between 1–3 requires contact with the LMC, and discussion about increasing the patient's observation frequency. For a MEWs between 4–6, observations must be completed every 30 minutes,

[26] A higher than normal heart rate.
[27] An abnormally low blood pressure.
[28] Any parameter in the 'blue zone' indicates severe deterioration and should prompt an immediate rapid response call.

and there is to be discussion with an ACMM,[29] SHO, or registrar, and a plan made to transfer the patient to a secondary/tertiary service. I therefore consider it more likely than not that the raised MEWs was not escalated by RM B in a timely manner.

100. It is recorded in the clinical notes and the responses provided to HDC that Ms A's MEWs rose from 2 to 4 at 7.45am. In response to this increase, RN F called RM B to inform her of the score, and RM B instructed that IV fluids be administered until she arrived. RM B attended Ms A at 8.55am, but the sepsis protocol pathway was not initiated until 10am, when Dr D was consulted. RM Eadie considers that RM B's management of Ms A's MEWs score was 'sub-optimal'. RM B noted[30] that at the time of events, midwives in Hospital 1 had been given no training on the MEWs chart, and it was unfamiliar or previously unknown to the midwives and some nursing staff.

101. RM Eadie considers that RM B's lack of familiarity with the MEWs chart possibly contributed to a delayed response on her part, and her care reflected a mild to moderate departure from expected practice. Although I acknowledge that the MEWs chart was relatively new at the time these events took place, I accept RM Eadie's advice that regardless of this, RM B should have recognised that Ms A was deteriorating and that there was an urgent need to escalate her care. RM Eadie is concerned that despite staff not being made aware of Ms A's MEWs in a timely matter, there was also a time where Ms A's systolic blood pressure recordings prior to 9.30am were so low they were in the 'pink zone[31]' and, regardless of her MEWs, should have warranted urgent medical review, more frequent observations, and a plan for transfer to Hospital 2.

102. I accept this advice and consider that despite the mitigating factors relating to the relative newness of the MEWs chart, Ms A's abnormal results should have been recognised by RM B and acted on.

Standard of care issues and provision of information — conclusion

103. RM Eadie advised that overall, the care RM B provided to Ms A during labour, birth, and the early postnatal period reflected several significant departures from expected practice.

104. I note that the Coroner's midwifery advisor made similar criticisms about the care RM B provided to Ms A. The advisor noted that RM B did not follow recommended midwifery care in relation to fetal heart rate monitoring, maternal monitoring, monitoring of labour progress, and the diagnosis and management of shoulder dystocia. Overall, the advisor considered that Ms A's labour was prolonged, and the failure to diagnose shoulder dystocia was critical.

105. I agree with RM Eadie's assessment of the care RM B provided to Ms A. Several telling failures in the care provided had serious ramifications on the eventual outcome. After considering all the information discussed above, I find that RM B breached Right 4(1) of the

[29] Associate Clinical Midwife Manager.
[30] In her statement to the Coroner.
[31] Any parameter in the 'pink zone' indicates that the patient is likely to deteriorate rapidly and requires the response for a MEWs of 8–9 (even if the overall score is lower).

Code because of the deficiencies in care during Ms A's prolonged first stage of labour, the delay in seeking assistance during active labour, the failure to identify shoulder dystocia, and the delay in identifying that Ms A was suffering from sepsis and taking appropriate action.

106. In addition, I have found that RM B did not inform Ms A that an obstetric consultation was recommended because of the prolonged first stage of labour, as set out in the Referral Guidelines. By not providing Ms A with this information, RM B failed to provide her with information that a reasonable consumer, in Ms A's circumstances, would expect to receive, and therefore I find that RM B breached Right 6(1) of the Code.

107. In coming to these conclusions, I have considered the challenging environment in which RM B was working. Not only had she been working for 24 hours with a break of only a little over one hour during the labour and birth, and a break of less than four hours before returning to the hospital to provide further postnatal care, I acknowledge that these events occurred in a rural New Zealand town, where the shortage of midwives is particularly evident. I also acknowledge that Hospital 1 had limited immediate access to the specialist resources available at other secondary and tertiary hospitals.

108. However, I note the presence of other hospital staff throughout Ms A's labour, and several staff members raised their concerns directly with RM B, including a suggestion to transfer Ms A to Hospital 2. It appears that support and advice was offered to RM B, but she elected not to follow it. I therefore do not consider that her work environment excuses the deficiencies in care that Ms A experienced in this circumstance.

Documentation — breach

109. RM Eadie advised that as noted above, maternal observations were not taken and documented, findings from vaginal examinations were incomplete, and documentation of the fetal heart monitoring did not align with recommended practice consistently. She noted minimal documentation during the second stage of labour and specifically few references to the fetal heart, so she was unable to ascertain how frequently RM B listened to the fetal heart during this time.

110. RM Eadie also noted an absence of documented discussions and 'plans' made with Ms A about progress and options for ongoing management. RM Eadie advised that consequently, RM B's interpretation of the labour was not apparent, and nor was Ms A's involvement in any decision-making. RM Eadie considers that RM B's documentation of the labour was inadequate, and that this, especially in the context of the prolonged labour, represents a moderate departure from expected practice. I accept these findings.

111. The Midwifery Council's standards for documentation and record-keeping include the following:

'• Detailed assessments and clinical findings.

- Discussions of care and information provided with the woman.
- Discussions and consultations with health professionals, including care plans.

- Evidence of informed choice and consent.
- Care decisions with rationale.
- Any medication or treatment prescribed.
- All administrative requirements eg dates, time, identifying information.
- Name and designation of health professionals consulted and/or referred to.
- Any referrals.'

112. I am very critical of RM B's standard of documentation in relation to her care of Ms A. There is a woeful lack of detail. A clear and comprehensive record of the care provided, discussions had, and decisions made are all highly important aspects in the provision of care. RM B's failure to document plans with Ms A throughout the process of labour and in relation to ongoing management not only impacted the overall coordination of care, but also possibly Ms A's expectations and understanding of what was going to happen.

113. I also am critical of the documented clinical handover by RM B and the care plan put in place for Ms A. As stated above in paragraph 56, RM B, as the primary midwife, had responsibility to complete an updated care plan after the birth of Baby A to hand over the care to the allocated nurse who was employed by Hospital 1 and would provide the remaining postnatal care to Ms A. After the birth of Baby A and the tragic events that unfolded, verbal handover occurred between RM B and the nursing staff, but a care plan for Ms A was not provided. I am critical that this did not occur to ensure that Ms A received the best possible wraparound care between different departments, especially considering that eventually she was transferred and treated for sepsis.

114. I consider that the deficiencies in documentation represent a significant failure to comply with the Midwifery Council's documentation standards, as set out above, and therefore that RM B failed to meet professional standards. Accordingly, I find that RM B breached Right 4(2) of the Code.

Third stage of labour — educational comment

115. RM B managed Ms A's third stage of labour (delivery of the placenta) physiologically (naturally, or without the use of medication). RM B did administer a uterotonic,[32] although, as RM Eadie noted, this was in response to bleeding after the placenta had been delivered.

116. RM Eadie advised that postpartum haemorrhage (PPH) is a recognised risk factor associated with shoulder dystocia[33] and, as such, she would have expected RM B to administer a uterotonic sooner and to manage the third stage of labour actively. In RM Eadie's view, this reflects a 'lack of critical thinking and clinical judgement'. However, RM Eadie acknowledged some inconsistencies in guidance as to the risk of PPH in the context of shoulder dystocia:

[32] A medication used to induce contractions and to reduce postpartum haemorrhage.
[33] RCOG (2012) Shoulder Dystocia. Green-top Guideline No.42 (2nd edition):https://www.rcog.org.uk/globalassets/documents/guidelines/gtg_42.pdf

> 'Postpartum haemorrhage guidelines generally do not list "shoulder dystocia" as a risk factor for PPH, possibly because the contribution of PPH following shoulder dystocia may be far less than the contribution made by other risk factors, and guidelines may focus on the most common risk factors. But, guidelines pertaining to shoulder dystocia that specifically discuss the maternal complications associated with shoulder dystocia do cite PPH.'

117. RM Eadie advised that another reason for RM B to have managed the third stage of labour actively related to Ms A being a Jehovah's witness and declining the use of blood products antenatally. RM Eadie explained:

> 'This is not because [people who are Jehovah's witnesses] are more likely to bleed, but because if they do bleed, they are more likely to become compromised since blood transfusion is a treatment for PPH … Consequently, the aim when caring for people who are Jehovah's witness is to minimise their likelihood of bleeding and this would include the use of active management of their third stage of labour.'

118. However, RM Eadie also acknowledged:

> '[T]he care of maternity patients who are Jehovah's witness receives negligible attention in midwifery practice in New Zealand. [Hospital 2] acknowledged that they did not have a guideline regarding how best to manage this group of birthing people. Consequently, I would **not** expect all midwives to consider this when managing the third stage of labour and I would be reluctant to criticise [RM B] for not administering the uterotonic specifically for this reason.'

119. In light of the conflicting guidance about the risk of PPH associated with shoulder dystocia, and the lack of midwifery guidance relating to the provision of care to women who are Jehovah's witnesses, and in particular with respect to the management of the third stage of labour, I am not critical of RM B's care in this respect. However, I encourage her to reflect on RM Eadie's comments.

Place of birth — other comment

120. Finally, RM Eadie raised concern about the appropriateness of Ms A giving birth in a primary unit, as 'some literature suggests women who are Jehovah's witness should be advised to birth in secondary/tertiary units'.

121. However, as noted in the discussion above, there was no local guidance on how best to manage pregnant/birthing women who are Jehovah's witnesses. In addition, RM Eadie noted that neither the previous (2012) nor current (2023) version of the Referral Guidelines included a woman being a Jehovah's witness as a risk factor that required an LMC to recommend consulting or transferring care to secondary services.

122. As such, I am unable to form a view as to whether it was appropriate for Ms A to birth at Hospital 1 (a rural as opposed to a tertiary hospital) and therefore I am not critical of this aspect of RM B's care. However, I intend to raise this with the Ministry of Health to consider

whether national guidance on the care of pregnant and birthing women who are Jehovah's witnesses is needed.

Opinion: RM C — adverse comment

123. While I acknowledge that RM C was on annual leave at the time Ms A went into labour, and therefore RM B was the primary midwife providing care to Ms A, I have also considered RM C's involvement in the care and events that occurred.

124. I note that RM C was Ms A's LMC, but she was 'off call' when Ms A went into labour, so RM B assumed the position of the midwife handling her care. Despite being 'off call' as Ms A's LMC when Ms A went into labour, RM C was working as the 'on call' midwife for Hospital 1 and was called by RM B to assist and provide relief when she took her break between 5.18pm and 6.43pm.

125. RM C stated to the Coroner that when she attended the hospital to provide relief, 'a full handover was given to [her] by [RM B]'. It is unclear why RM C did not question RM B's management of care given that at that point, Ms A had been 8cm dilated with no change for at least six hours.

126. RM Eadie noted that as RM C had been Ms A's LMC, RM C had the advantage of being able to discuss alternative plans and recommendations for consultation and transfer. However, RM Eadie noted that RM C did not question RM B's plan of care and decision-making, or offer any advice, either because she did not identify the abnormal progress herself, or she chose not to 'interfere' and considered that it was not her responsibility to question the management. RM Eadie advised:

> 'Ultimately, [RM C] was accountable for the care she provided to [Ms A] and I find her practice represents a mild to moderate departure from expected practice, because she failed to meet midwifery council competency 2.6 that states that the midwife "identifies factors in the woman/wahine or her baby/tamaiti during labour and birth which indicate the necessity for consultation with, or referral to, another midwife or a specialist medical practitioner".'

127. I accept this advice. I consider that when RM B was providing a full handover to RM C, it would have been appropriate for RM C to question the plan of care and the length of time Ms A had been in labour, and to take relevant action.

128. For completeness, RM Eadie advised that in relation to the delivery of Baby A, 'when [RM C] attended for the birth, her actions and management of the shoulder dystocia and instigation and support with neonatal resuscitation of [Baby A] were very promptly and efficiently and successfully executed'. I accept this advice.

Opinion: Health NZ — adverse comment

129. Although I acknowledge that the majority of Ms A's care was provided by RM B and RM C, I wish to comment on the involvement of other hospital staff in various stages of Ms A's labour, delivery, and post-birth care.

130. I acknowledge that Hospital 1 is a rural hospital, and that in its internal review of these events, Health NZ stated that Hospital 1 'does **not** provide a core midwifery service'. Furthermore, the review report states that 'there are no DHB midwifery staff employed to the unit, though there is a lead maternity care midwife on-call who holds a DHB contract to provide 24/7 urgent midwifery care'. In this case, the on-call midwife for the area was RM C.

131. The 'Lead Maternity Carer Responsibility when Accessing Rural Birthing Units' Protocol details the expectations placed on LMCs during the patient's labour and postnatal period, including for the LMC to keep facility staff informed about labour progress so that they can assist where needed, and that nursing staff will provide postnatal care to the patient only after a care plan has been completed by the LMC and handover has occurred.

132. Health NZ's internal review noted that '[d]uring [Ms A's] labour and birth, facility staff made every effort to keep informed of progress and offer assistance'.

133. The Referral Guidelines contain criteria for when referrals and consultations should be made at different stages. Although under the Referral Guidelines, the responsibility for initiating consultation and/or transfer generally rests on the LMC, I am concerned that it appears that there was no effective pathway for nursing staff at Hospital 1 to raise their concerns about Ms A's prolonged labour and overall management by her LMC.

134. The internal review report stated that nurses elevated their concerns about Ms A's prolonged labour to the LMC and the on-call midwife, but their concerns were 'dismissed as unfounded'.

135. I am concerned that the relevant staff members who raised concerns did not exercise their own clinical judgement and escalate their concerns to the consultant directly, or to their direct manager, when they felt that their concerns were dismissed. In response to my provisional opinion, Health NZ told HDC that 'escalation for obstetric emergencies 24/7 is always to the Clinical Midwife Manager/Clinical Coordinator of Delivery Suite at [Hospital 2]. This is a well-established protocol which should be known to all rural medical staff.' However, Health NZ stated that it intends to update the 'Lead Maternity Carer Responsibility when Accessing Rural Birthing Units' Protocol to state that 'all maternity facility staff and LMCs are empowered to "Speak up for Safety" and if concerns remain unmet, directly contact the manager of the facility or call through to Delivery Suite.'

136. This case highlights a wider set of issues relating to the role of a registered nurse in a childbirth setting, and the ease with which a nurse can escalate concerns when they are not the registered midwife supporting the birthing mother.

137. There is an increasing prevalence of registered nurses working in childbirth because of the midwifery workforce shortages that currently exist in many parts of New Zealand. While registered nurses are highly trained health professionals and offer a wealth of clinical knowledge and expertise, the majority do not hold the more applied skills a registered midwife would bring to the childbirth setting. There may be situations where this more limited skill base will compromise a birthing person's clinical safety. It brings into question whether further targeted support or training for registered nurses who work in childbirth areas is called for in the future.

138. Furthermore, acknowledging the difficulties a nurse may face when escalating their clinical concerns if they believe they may be dismissed, I consider that there needs to be further discussion regarding duty of care and a clinical pathway in this type of situation so that any staff member is able to raise issues, regardless of whether or not they are the midwife. In this respect, I encourage the staff members who were involved in these tragic events to reflect on this case and RM Eadie's recommendation for empowering core staff to 'speak up'.

139. I now comment on the care provided by Nurse G in relation to taking Ms A's initial observations. As stated above, initial post-birth observations were taken by Nurse G at 1.40am. The clinical notes at this time state: '[O]bservations to be taken again and let RM know.' However, the next recorded mention of observations being taken was at 7.25am. RM Eadie advised that it is the LMC's responsibility to ensure that patient observations are repeated. However, I note that an order had been made by the LMC for these observations to be repeated. Therefore, in this case, ultimate responsibility for repeated observations lay with Nurse G, as this had been delegated by the LMC. Despite this, I acknowledge the poor handover provided by the LMC, including the lack of specification as to when and how often the observations should be repeated, which mitigated the responsibility Nurse G was then holding. I encourage Nurse G to reflect on this aspect of the care provided, for future practice.

140. It is recorded in the clinical notes and the responses provided to HDC that Ms A's MEWs rose from 2 to 4 at 7.45am. In response, RN F called RM B to inform her of the score, and RM B instructed that IV fluids be administered until she arrived. Although I acknowledge that RN F called RM B to escalate Ms A's increase in MEWs, I consider that it would have been appropriate to escalate the concerns to an ACMM, SHO, or registrar, or, if none were available, to consider raising the issue with a consultant. Again, I encourage staff to exercise their clinical judgement in such situations, and to escalate concerns if the LMC has not actioned them in a timely manner.

141. Furthermore, RM Eadie advised that there is 'very poor documentation around the care undertaken to manage the sepsis'. I accept this advice. I consider that incomplete sepsis pathway sheets and no clear indication in the clinical notes of the administration of IV antibiotics is a departure from the standard of care expected in the circumstances. RM Eadie stated that the sepsis pathway 'clearly outlines recommendations for early administration of IV antibiotics', and I am therefore critical that this was not recorded accurately in the clinical notes, given the several occasions on which Ms A received IV fluids.

142. I acknowledge that it is unclear whether Ms A was administered IV antibiotics, but if they were administered, it should have been documented in the patient's medication chart. RM Eadie noted that the responsibility for documenting antibiotics on the patient's medication chart falls on the person who administers the medication. In this case, it is unclear who administered the medication, although RM B said that the SMO led the sepsis treatment pathway and therefore was the most senior clinician from this point onwards. I accept RM Eadie's advice that the responsibility for documenting this 'could have been [RM B] or the [Health NZ] staff at the unit, depending upon who gave [the medication] to [Ms A]'.

143. I acknowledge RM Eadie's comments that although the person administering the medication has the responsibility to document it in the patient's medication chart, in practice this does not always occur. RM Eadie advised that sometimes the medical officer leading the sepsis treatment pathway administers the medication and gives a verbal order to a midwife or nurse, and this gets missed or forgotten, especially if staff are prioritising treatment, which could have been the case with Ms A, given the events that occurred. RM Eadie also stated that in emergency situations there are instances where one staff member takes the responsibility for administering the medication and assumes that the other has documented in the notes, without actually checking.

144. I remind staff members to be vigilant with recording medication administration, even in emergency situations. This may require a review of the clinical records and identification of any information omitted, after the emergency has been managed. In response to my provisional opinion, Health NZ agreed with this statement and said that 'medication must be checked frequently and at least at handover and emergency debrief'.

Changes made since events

145. RM B told HDC that she has built confidence in her relationship with RM C since these events. RM B recognised that they are the only two registered midwives in this rural area, and that a strengthened relationship will help to ensure that they can provide adequate midwifery care to the community.

146. In response to the provisional opinion, Health NZ confirmed that midwifery educators organise obstetric emergency training at all rural sites and told HDC that the issues stated above (at paragraphs 137–138) have been discussed with the Chief Nursing and Midwifery Officer, and it is 'considering how best to support rural RN staff to be more confident in assisting maternity colleagues. This can be provided by sessions with the Midwifery Clinical Coaches and scenario practise as with all emergency planning.'

147. In response to my provisional opinion, Health NZ also confirmed the following:

> 'All RNs are trained on Maternity Early Warning Score (MEWS). There is a requirement to use MEWS in the ED for any woman presenting who is 20+ weeks pregnant, as well as when supporting any patients in the birthing unit. Consideration will be given to the exposure of staff to maternity patients as there are relatively few pregnant women

through the birthing unit during the year who require care by a RN or instances where a LMC requires specific support.'

Competence review

148. I acknowledge that at the time HDC was informed of these events, the Midwifery Council of New Zealand was undertaking its own investigation into RM B's competence. The Midwifery Council determined that RM B's practice posed a risk of serious harm to the public, and an order was made under section 69A(2) of the Health Practitioners Competence Assurance Act 2003 and her practising certificate was suspended immediately. However, a competence review found that RM B was competent to practice. The suspension was lifted, and RM B returned to practice.

Recommendations

RM B

149. I recommend that RM B:

a) Provide a written apology to Ms A for the breaches of the Code found in this report. The apology should be sent to HDC within three weeks of the date of this report, for forwarding to Ms A.

b) Undertake further training/education on MEWs charts and scoring in the space of identifying sepsis, and further training/education on the management pathway of shoulder dystocia in the context of a prolonged labour. The education should be in conjunction with, or endorsed by, the New Zealand College of Midwives. Evidence of attendance at this training/education and a written reflection on the learnings and how these will be applied in practice should be sent to HDC within three months of the date of this report.

Midwifery Council of New Zealand

150. I recommend that the Midwifery Council of New Zealand consider whether a further review of RM B's competence is warranted, in light of the findings of this report.

Follow-up actions

151. RM B will be referred to the Director of Proceedings in accordance with section 45(2)(f) of the Health and Disability Commissioner Act 1994 for the purpose of deciding whether any proceedings should be taken.

152. A copy of this report will be sent to the Coroner.

153. A copy of this report with details identifying the parties removed, except Health NZ and the advisor on this case, will be sent to the Midwifery Council of New Zealand, and the New Zealand College of Midwives, and they will be advised of RM B's name.

154. A copy of this report with details identifying the parties removed, except Health NZ and the advisor on this case, will be sent to the Health Quality and Safety Commission, the Ministry

of Health, and the Royal Australian and New Zealand College of Obstetricians and Gynaecologists, and will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

155. As discussed in paragraphs 121–122 above, there is a lack of guidance for clinicians who provide care to pregnant and birthing woman who decline the use of blood products. I intend to send an anonymised copy of this report to the Ministry of Health and ask it to consider whether national guidance on the care of pregnant and birthing women who decline the use of blood products is needed.

156. As discussed in paragraph 137 above, there is an increasing prevalence of registered nurses working in childbirth because of the current midwifery workforce shortages in many parts of New Zealand. While registered nurses are highly trained health professionals and offer a wealth of clinical knowledge and expertise, the majority would not have the more applied skills a registered midwife would bring to the childbirth setting. There may be situations where this more limited expertise could compromise a birthing person's clinical safety. I intend to send an anonymised copy of this report to Health NZ and ask that it consider whether further targeted support or training is needed for registered nurses who work in childbirth areas.

Addendum

157. The Director of Proceedings decided to take no further action.

Appendix A: Independent clinical advice to Commissioner

The following independent advice was obtained from RM Isabelle Eadie:

'**Steer 20HDC01761**

[Ms A]

Overview

[Ms A] was having her first baby and arrived at [Hospital 1] at 0415 hours on [Day 1]. She had had a normal pregnancy. Labour care was provided by her LMC's "back up" midwife [RM B]. She had been contracting three minutely since 01.00 hours. A vaginal examination at 0441 hours, shortly after she arrived at [Hospital 1] found that her cervix was 5cm dilated — [Ms A] was in established labour. [Ms A] was not fully dilated until 2212 hours — almost 18 hours later. The baby's head was delivered at 00.30 hours and a shoulder dystocia was diagnosed. [Baby A] was born at 0053 hours on [Day 2] with no signs of life. Neonatal resuscitation was commenced but withdrawn at 0152 hours. In the immediate postnatal period, [Ms A's] observations were recorded at 0140 hours — her blood pressure was 69/55, heart rate 144, temperature 38.5 degrees Celsius but very minimal action was taken at this time. Later that morning, at approximately 0930 hours, [Ms A's] observations were taken and on this occasion did trigger initiation of the sepsis pathway, escalation to medical staff and transfer to [Hospital 2] for on-going management. At [Hospital 2], [Ms A] was admitted to the intensive care unit for management of postpartum sepsis, requiring inotropic support. She was discharged to maternity … care the following day.

In my review, I will comment upon the midwifery care during the 1st, 2nd, 3rd stages of labour, the immediate postnatal period and later postnatal time focusing upon the adequacy of:- maternal observations, fetal heart monitoring, progress in labour, obstetric consultation for prolonged labour, management of emergencies, response to abnormal maternal observations and use of the MEWS chart/sepsis tool.

1st stage of labour (5cm to full dilatation)

Maternal observations
From the clinical notes the *only* documented maternal observations during labour were those done when [Ms A] first arrived at the birthing unit. The NICE (2014) guideline recommends four hourly blood pressure and temperature checks and hourly maternal pulse during the first stage of labour. In her response, [RM B] acknowledges that she failed to undertake this very basic midwifery action and given the length of time that [Ms A] was in labour, this is woefully inadequate and represents a moderate to severe departure from care.

Fetal heart monitoring
Recommended practice is to auscultate the fetal heart rate every 15–30 minutes during the 1st stage of labour, for at least 30–60 seconds, to record it as a single figure, and to simultaneously count the maternal heart rate in order to distinguish between the fetal

and maternal heart rates because it is possible to accidentally listen to the mother's heart rate when you think you are listening to the fetal heart rate (NZCOM 2020, RANZCOG 2019, NICE 2014).

Mostly, [RM B] auscultated the fetal heart at least half hourly in the 1st stage of labour, though there were occasions when there are one hour gaps in the clinical notes, so it is not known if there were fetal heart checks during this time. [RM B] varied in the way in which she recorded the fetal heart — on some occasions she recorded a single figure, other times she documented the fetal heart in a range. [RM B] never recorded the maternal heart rate, only the fetal. From the documentation, there is nothing to suggest there were signs of fetal compromise. In low risk women in spontaneous labour it is appropriate to use intermittent auscultation to monitor the fetal heart rate, but it is recommended to change to continuous monitoring by CTG in cases of prolonged labour (RANZCOG 2019), but this did not occur.

Progress in 1st stage of labour

[Ms A] was 5cm dilated upon arrival at [Hospital 1] at 0441 hours. [RM B] undertook a second vaginal examination at 1055 hours and documented that [Ms A] was 8cm dilated. [Ms A's] expected progress would be 2cm every 4 hours (NICE 2014, WHO 2018). Up to this point, I find [Ms A's] progress in labour was acceptable, and her management by [RM B] appropriate.

I would have expected [RM B] to have offered a third vaginal examination by 1500 hours (4 hours after the last vaginal examination) to see if [Ms A] was fully dilated (10cm), however this did not occur and there is no rationale documented in the notes as to why [RM B] chose not do to this, or if she offered it to [Ms A] and it was declined. However, at 1518 hours, it is recorded that [RM B] commenced IV fluids because the contractions had become uncoordinated. In her response [RM B] says that she consulted with two midwifery colleagues regarding on-going management and their advice had been to give [Ms A] the IV fluids. This is common practice — the rationale is that the contractions may reduce if the woman is dehydrated, therefore rehydration with fluids may increase the contractions and lead to progression in labour (NICE 2014). Given that [RM B] recognised that the contractions had decreased, this would likely have provided more impetus to assess [Ms A's] progress in labour with a vaginal examination.

[RM B] did not do another vaginal examination to assess progress until 2101 hours, at which point [Ms A] had an anterior lip (a bit more than 9cm dilated), consequently her cervix had changed a little over 1cm in 10 hours. This represents very poor progress, is very concerning and would absolutely warrant consultation with the obstetric team, as per the "Referral guidelines" (MOH 2012). In her response, [RM B] does say that progress in labour is not solely based upon cervical dilatation; rotation and descent of the baby's head is also a factor (NICE 2014), however [RM B] did not do any abdominal palpations or vaginal examinations to ascertain if the baby was descending and rotating for 10 hours. Furthermore the station and position of the baby were not documented in [RM B's] description of her earlier vaginal examinations which leads me to question

how she can assess this aspect of labour progress when the baby's initial position and station were not defined.

[RM B] feels able to justify her management of [Ms A's] labour because she was monitoring fetal wellbeing and had no concerns with the baby and that [Ms A] was managing well but she has failed to appreciate that [Ms A's] progress in labour had deviated hugely from expected timeframes and was beyond the realm of "normal labour".

The WHO (2018) suggests women in established labour, birth would normally occur within 12 hours, this would suggest that [Ms A] should have delivered her baby by 1700, instead he was not born until almost 0100 hours the following day. The delay during labour should have been discussed with [Ms A] and her whānau and recommendations made to consult with the obstetric team/transfer to [Hospital 2] for obstetric review (MOH 2012, NICE 2014). [RM B] states that she did share information about labour progress with [Ms A], but there is nothing documented in her clinical notes to suggest that any such discussions occurred, or crucially, that she was concerned herself.

Following the vaginal examination at 2101 hours, [Ms A's] labour did then progress appropriately as she was fully dilated and pushing and a little of the baby's head could be seen 1 hour later. Regardless of the progress [Ms A] did eventually make, failure to accurately assess progress in labour and to recognise very delayed/prolonged labour (1cm in 10 hours) and to consult with obstetric services reflects a moderate to severe departure from care.

Obstetric consultation

[RM B] did not consult with the obstetric team during [Ms A's] 1st stage of labour, this may be because she did not recognise herself that there was a problem, rather than she chose not to consult *per se*. Based upon expected timeframes in labour, I would have expected a vaginal examination to have been done, or at least offered/ recommended to [Ms A] at 1500 hours and based upon these findings, a plan to consult with the obstetric team at that time. Given that [Ms A] was labouring in a primary unit, this would then have required transferring [Ms A] to [Hospital 2] in order that a full assessment could be made by the obstetric team.

2nd stage of labour/Delivery of baby

Progress in the 2nd stage of labour

[Ms A] was fully dilated (the 2nd stage of labour) and actively pushing at 2212 hours and delivered [Baby A] at 0053 hours. Birth did occur within the recommended three hour timeframe (NICE 2014, WHO 2018).

Fetal heart monitoring

During the 2nd stage of labour, it is recommended to auscultate the fetal heart every 5 minutes/or after every contraction (RANZCOG 2019, NZCOM 2020). There was very minimal documentation during the time that [Ms A] was pushing and specifically few

references to the fetal heart so I am unable to ascertain how frequently [RM B] listened to the fetal heart during this time.

Management of shoulder dystocia and neonatal resuscitation

The baby's head was born at 0030 hours, but the rest of the baby failed to deliver due to shoulder dystocia which is when the baby's anterior shoulder is impacted against the mother's symphysis pubic bone.

Shoulder dystocia is an obstetric emergency occurring in approximately 0.5–1% of pregnancies and often cannot be predicted, although prolonged labour (as occurred here) is a risk factor (RCOG 2012). [RM B] states that she called for assistance just prior to the delivery of baby's head and one of the nursing staff attended. When the head delivered, [RM B] identified a shoulder dystocia and requested the attending nurse to call [RM C] immediately. [RM C] arrived at 0043 hours and undertook manoeuvres which freed the impacted shoulder and facilitated delivery of the baby at 0053 hours. Tragically, [Baby A] was born without any signs of life.

Whilst [RM B] identified the shoulder dystocia promptly and asked for a midwifery colleague to be called, she did not use the emergency buzzer to summon additional help, and specifically medical assistance in anticipation of the baby requiring resuscitation. [RM C's] notes state that the emergency buzzer was not called until she initiated it when she arrived. Similarly, manoeuvres to try and free the impacted shoulder did not commence until [RM C] arrived when she flattened the bed and put [Ms A] into the McRobert's position. It is not clear what actions [RM B] undertook during the 13 minutes from baby's head delivering and [RM C] arriving. The McRobert's position is a key manoeuvre in the management of shoulder dystocia and one which [RM B] should have initiated. Failure to call for additional help, (not just [RM C]) and to commence relatively basic shoulder dystocia manoeuvres (McRobert's position) reflects a moderate to severe departure from expected practice.

<u>3rd stage of labour (delivery of the placenta)</u>

Postpartum haemorrhage is a recognised risk factor associated with shoulder dystocia (RCOG 2012), despite this, [RM B] managed the 3rd stage of labour physiologically. In this context I would have expected [RM B] to use a uterotonic and actively manage the 3rd stage of labour (NZCOM 2013). I believe this reflects a lack of critical thinking and clinical judgement on [RM B's] behalf, although she did ultimately give [Ms A] 10 units IM syntocinon (a uterotonic) after the placenta was delivered because there were concerns about [Ms A's] bleeding.

<u>Immediate postnatal period</u>

[Ms A's] postnatal observations were taken at 0140 hours. Her blood pressure was 69/55, heart rate 144 and temperature 38.5 degrees Celsius. The only actions that were planned/implemented were to repeat the observations and give [Ms A] a litre of IV fluids. The MEWS chart was not used at this time. There is no documentation in the clinical notes regarding the subsequent observations or when they were taken.

Observations so critically abnormal should have triggered undertaking a *full* set of observations and documenting these on the MEWS chart — the blood pressure and heart rate would have triggered a "rapid response call" (HQSC 2019). During this time, the two medical officers were present in the room undertaking neonatal resuscitation and it is not apparent if they were actually informed of these abnormal maternal observations or consulted about on-going management. In her response, [RM B] stated that these observations were likely indicative of either sepsis or a postpartum haemorrhage, and whilst IV fluid administration is appropriate management for both, it is not exclusive management.

I can appreciate that this would have been a very difficult time for all the practitioners involved in the care of [Ms A] and [her baby]; it would have been a very stressful and challenging environment whilst the team continued with their neonatal resuscitation efforts, but the clinical notes suggest that [Ms A's] very abnormal observations were mostly ignored by [RM B] and consequently [Ms A] did not receive the expected care and attention. This reflects a severe departure from expected practice.

Later postnatal period

Recognition and management of sepsis

[RM B] was informed about [Ms A's] high heart rate (116) at 0800 hours and was called in to assess her. [RM B] arrived at 0900 hours and in the interim she had requested that IV fluids be commenced which is appropriate. On her arrival, [RM B] assessed [Ms A], specifically to ascertain any signs pointing towards a postpartum haemorrhage and repeated the observations. These were documented on the MEWS chart and a plan was documented in the clinical notes to repeat the observations in line with the MEWS guidance. At 0930, [Ms A's] MEWS score was 7. At 1000 hours [RM B] commenced the sepsis pathway and escalated care to the medical officer. [RM B's] management of sepsis during this time was appropriate and timely.

Adherence to Sepsis tool and documentation

There is very poor documentation around the care undertaken to manage the sepsis. The sepsis pathway sheet has not been completed. In the clinical notes it is written that bloods, blood cultures and a vaginal swab were all taken. It is not stated in either the clinical notes or the medication chart if [Ms A] was given IV antibiotics. The sepsis pathway clearly outlines recommendations for early administration of IV antibiotics. Given that [Ms A] received IV fluids on several occasions, these are not correctly documented, nor is there evidence of a fluid balance chart being used.

[RM B's] time management

[RM B] attended [Hospital 1] at approximately 0415 hours on [Day 1] and did not leave until 0400 hours on [Day 2] — she was working for 24 hours, with only a one hour break. At 0800 hours, [RM B] was called back to the birthing unit to assess [Ms A] postnatally. [RM B] needs to consider how better to manage her time in order to ensure she is well rested as fatigue can compromise patient care.

Documentation

Overall, I find [RM B's] labour documentation is inadequate. She does make frequent reference to how [Ms A] was coping with the labour, the support from her whānau and use of pain relief, but as noted above, maternal observations were not taken and documented, findings from vaginal examinations were incomplete and documentation of the fetal heart did not consistently align with recommended practice. There is also an absence of documented discussions and "plans" made with [Ms A] about progress, and options for on-going management.

Consequently, it is not apparent what [RM B's] interpretation of the labour was, or [Ms A's] involvement in any decision-making. A partogram which records maternal observations and progress in labour was not used. [RM B's] inadequate documentation, especially in the context of the prolonged labour represents a moderate departure from expected practice.

Summary

During the labour, [RM B] did not undertake regular maternal observations, she did not always follow recommended practice regarding fetal heart auscultation and monitoring and she did not assess the progress of [Ms A's] labour in an appropriate and timely manner. Consequently, [RM B's] practice did not comply with midwifery competency 2.5 that states that the midwife "attends, supports, and regularly assesses the woman/wahine and her baby/tamaiti and makes appropriate, timely midwifery interventions throughout labour and birth".

During the labour, [RM B] did not recognise that [Ms A's] labour was abnormally prolonged and consequently she did not consult with the obstetric team. In the immediate postnatal period, [RM B] failed to escalate to the medical doctors present, or obstetric staff at [Hospital 2] regarding [Ms A's] abnormal observations. Her practice did not meet the two competencies outlined by midwifery council that the midwife "identifies factors in the woman/wahine or her baby/tamaiti during labour and birth which indicate the necessity for consultation with, or referral to, another midwife or a specialist medical practitioner" (competency 2.6) and that the midwife "assesses the health and well-being of the woman/wahine and baby/tamaiti throughout the postnatal period and identifies factors which indicate the necessity for consultation with, or referral to, another midwife, medical practitioner, or other health practitioner" (competency 2.12).

Whilst [RM B] did identify the shoulder dystocia, and called for midwifery help, I found her actions sub-optimal; I would have expected her to appreciate the need for other, additional, medical staff to attend and use the emergency buzzer and that she would have initiated shoulder dystocia manoeuvres. This leads me to conclude that she failed to "recognise and respond to any indication of difficulty and any emergency situation with timely and appropriate intervention, referral, and resources" (midwifery competency 2.8).

[RM B's] documentation, particularly in labour with regards to decision making and planning in consultation with [Ms A] was inadequate, especially in the context of a labour that was not progressing normally. Midwifery competency 2.15 and 2.16 state that the midwife "shares decision making with the woman/wahine and documents those decisions" and "provides accurate and timely written progress notes and relevant documented evidence of all decisions made and midwifery care offered and provided". I find that [RM B's] practice did not meet this criteria.

Overall, I find that [RM B's] care during labour, birth and the immediate postnatal period represented a moderate to severe departure from expected standards. Ultimately, I am inclined to think that in her care of [Ms A], she "normalised the abnormal" and failed to recognise signs of deviation from the normal on several occasions. Based upon her response I am concerned that she has not fully appreciated the numerous examples whereby additional actions were required in order to safely manage [Ms A's] labour, birth and postnatal journey. However, I do find that she is very remorseful for what occurred and is not currently working as a midwife.

References

HQSC (2019). The New Zealand national maternity early warning system (MEWS). Maternity vital signs chart user guide. https://www.hqsc.govt.nz/assets/MEWS/PR/MVSC-user-guide-updated-September-2019.pdf accessed 15/2/21

Midwifery Council of New Zealand. (2007). Competencies for entry to the Register of Midwives. Wellington: Midwifery Council of New Zealand. https://www.midwiferycouncil.health.nz/sites/default/files/professional-standards/Competencies%20for%20Entry%20to%20the%20register%20of%20Midwives%202007%20new%20form.pdf

Ministry of Health (2012). Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines). Wellington: Ministry of Health. https://www.health.govt.nz/system/files/documents/publications/referral-glines-jan12.pdf accessed 24/9/20

National Institute for Clinical Excellence (2014). Intrapartum care for healthy women and babies Clinical guideline. https://www.nice.org.uk/guidance/cg190/resources/intrapartum-care-for-healthy-women-and-babies-pdf-35109866447557

NZCOM (2013). Consensus statement. Facilitating the birth of the placenta. https://www.midwife.org.nz/wp-content/uploads/2019/05/Facilitating-the-Birth-of-the-Placenta.pdf accessed 16/2/21

NZCOM (2020). Practice guidance document — Intermittent Auscultation for the Assessment of Intrapartum Fetal Wellbeing.

https://www.midwife.org.nz/wp-content/uploads/2020/10/Practice-guidance-I.A.pdf accessed 10/2/21

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. (2019). Intrapartum Fetal Surveillance. Clinical Guideline. Fourth Edition. Melbourne, Australia: The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. https://ranzcog.edu.au/RANZCOG_SITE/media/RANZCOG-MEDIA/Women%27s%20Health/Statement%20and%20guidelines/Clinical-Obstetrics/IFS-Guideline-4thEdition-2019.pdf?ext=.pdf

RCOG (2012) Shoulder Dystocia. Green-top Guideline No.42 (2nd edition) https://www.rcog.org.uk/globalassets/documents/guidelines/gtg_42.pdf accessed 16/2/21

World Health Organization (2018). WHO Recommendations: Intrapartum care for a positive childbirth experience. Geneva: World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/260178/9789241550215-eng.pdf;jsessionid=6C1A34F2B0B16588DA750A97830DDE48?sequence=1'

The following further advice was received from RM Eadie:

'***Steer Addendum***

C20HDC01761 [Ms A]

Subsequent to my steer (email dated 16/3/21) I have been thinking about the fact that [Ms A] was a Jehovah's Witness and feel I should raise this as a *possible* "red flag". The significance of [Ms A] being a Jehovah's Witness and specifically declining blood products is that based upon the few references I have accessed (see below), the following is recommended/expected:

Signing of an advanced directive antenatally — I see from the notes that [Ms A] signed an advanced directive regarding her view towards accepting/declining blood products [prior to the birth] and several notations in clinical notes implies that her status was well known.

Antenatal obstetric/anaesthetic review — I cannot ascertain from the antenatal notes whether there was a consultation with obstetric/anaesthetic staff with regards to both antenatal and intrapartum management — I am inclined to think there was not as it is not specifically mentioned.

Delivery in a secondary/tertiary hospital — Had [Ms A] laboured at [Hospital 2] (the referral hospital), I believe her outcome (and that of [Baby A]) would have been very different.

Active third stage management — In my original steer, I noted that [Ms A's] third stage of labour was not actively managed, and should have been due to her increased risk of postpartum haemorrhage associated with the shoulder dystocia, but she should also have been offered a uterotonic (part of third stage management) because she was a Jehovah's Witness.

Despite the guidance in these few references, it is worth noting that the MOH (2012) "Referral Guidelines" which lists the reasons that LMC midwives should consult/ transfer care to secondary services, do not include "Jehovah's Witness", implying that this is not a reason for the LMC midwife to consult.

I see that this case will be transferred to investigations — so I suggest this might be an area to review further/seek clarification, particularly in the New Zealand context (two of the references are Australian).

References

Hutt Valley DHB (2016). Management of Women who Decline Blood Products & Jehovah's Witness in Pregnancy Policy. http://www.huttmaternity.org.nz/content/72807868-b2cf-480a-b1e0-9aa72517f78f.cmr accessed 29/3/2021

Kidson-Gerber, G, Kerridge, I, Farmer, S, Stewart, C.L, Savoia, H & Challis, D. (2016). Caring for pregnant women for whom transfusion is not an option. A national review to assist in patient care. Australian and New Zealand Journal of Obstetrics & Gynaecology; 56: 127–136. https://obgyn.onlinelibrary.wiley.com/doi/pdf/10.1111/ajo.12420 accessed 29/3/21

Queensland Maternal and Perinatal Quality Council. Considerations in the management of pregnant women who refuse blood and blood products. https://www.health.qld.gov.au/__data/assets/pdf_file/0020/440156/qmpqc-guidance-refuse-blood.pdf accessed 29/3/21'

The following further advice was received from RM Eadie:

'**[Ms A] C20HDC01761**

Isabelle Eadie RM, external advisor

5th July 2023

2ND Addendum for purposes of formal Investigation.

Thank you for the request that I provide clinical advice in relation to the investigation regarding the midwifery care provided to [Ms A] and [Baby A]. In preparing the advice on this case to the best of my knowledge I have no personal or professional conflict of interest. I agree to follow the Commissioner's Guidelines for Independent Advisors. I have reviewed the additional material made available since I wrote my original steer

and 1st addendum. I feel the most useful way to present my findings is to consider the points I originally made, as these demonstrated my original concerns, and then to make clear whether my opinion remains unchanged, or whether my view is altered in the light of the additional information, or whether there are new concerns I had not previously noted.

1st stage of labour care

My opinion remains unchanged that [RM B] did not adhere to recommended practice regarding the frequency of taking maternal observations. This is a fundamental, basic midwifery practice and consequently represents a mild to moderate departure from expected practice. However, I note in her response to HDC, [RM B] acknowledged her lapse in care with regards to this and said "I do take ownership of my lapse in clinical judgement by not providing four hourly maternal observations during labour and birth. In hindsight I understand this contributed towards my inability to build a developing clinical picture and, as a result it significantly reduced my ability to make clear clinical decisions and action critical clinical pathways".

With regards to fetal monitoring, [RM B] has not commented upon this aspect of care, probably because she was not specifically asked to do so. My opinion remains unchanged that her approach to fetal monitoring by intermittent auscultation does not align with the expectations set out in the NZCOM Consensus statement with regards to frequency and the way in which we should count and record the fetal heart rate and the maternal heart rate (in order to differentiate between the two). However, at the time of [Ms A's] labour this consensus may not have been published, albeit the RANZCOG Guideline does similarly provide recommendations regarding intermittent auscultation although it is not as detailed as NZCOM.

Furthermore, having reviewed other examples of fetal monitoring by intermittent auscultation in my role as an HDC in-house advisor, I feel that [RM B] is not alone in her suboptimal approach to this, and this represents an area of midwifery care that would benefit from education (see later in "recommendations").

My opinion about [RM B's] management of the duration of [Ms A's] first stage of labour remains unchanged. [Ms A's] labour exceeded recommended "time frames" (NICE 2014, WHO 2018, ADHB 2020) and should have warranted [RM B] to recommend to [Ms A] and her whānau that a consultation with obstetric services (at [Hospital 2]) was indicated as per the "Referral Guidelines" (MOH 2012, Te Whatu Ora 2023). It is both very concerning and quite incredible that [RM B] believed that [Ms A's] progress was acceptable, given that [Ms A's] cervix was 8cm dilated at 1055hrs, but not fully dilated (10cm) until 2212 hours — essentially 11 hours to progress 2 cm — the expectation being that a primiparous person would progress 2 cm in four hours (NICE 2014, ADHB 2020). In her response to HDC, [RM B] wrote: "The woman was making progress as this was not just about cervical dilatation but descent of the presenting part, the positioning of the baby". [RM B] is correct, progress in labour does refer to a number of variables, but there is nothing in the clinical notes to suggest that [RM B] assessed whether there

was descent or rotation of the baby and this still does not obviate the fact that the rate of [Ms A's] cervical dilatation was so prolonged.

[RM B] did recognise that [Ms A's] contractions did reduce in frequency and strength, and whilst this was not well documented in her clinical notes, as mentioned in her response to HDC, she did seek advice from peers and gave [Ms A] IV fluids which, as noted by [RM B] can help the uterus to contract. The IV fluids were administered at approximately 1518 hours, [RM B] wrote in the clinical notes and to HDC that her plan was to reassess the situation in a couple of hours. In her response to HDC, [RM B] wrote that the contractions had increased in strength and frequency, suggesting the IV fluids had been successful, although in the clinical notes at 1700 hours [Ms A] was being given a 2nd bag of IV fluids, and there is nothing documented at that time to suggest a significant change was noted in the contractions and clearly [Ms A] was not fully dilated and pushing at this time, so arguably there had not been any "acceptable" progress. [RM B] wrote to HDC "Had there been no progress I would have actioned a consultation for transfer with the Obstetric team", yet I do not understand what progress [RM B] believes had occurred in the couple of hours after giving the IV fluids, or perhaps [RM B] considers some increase in the contractions is sufficient "progress". I believe that [RM B's] midwifery peers would assess and determine progress in the context of this very prolonged/delayed labour by doing a vaginal examination and finding that [Ms A's] cervix was fully dilated and she was ready to commence active pushing (the 2nd stage of labour), but this did not occur.

Having read the responses to HDC and utilising the accounts included in the internal review of other staff working in [Hospital 1] during the time [Ms A] was in labour, both [Nurse G] and "RN3" (not named in the [Health NZ] internal review) both reported that they questioned [RM B] regarding [Ms A's] progress — clearly they had concerns. Furthermore, [Dr E] in his report to the coroner dated 29th August 2020 also stated that he enquired with [RM B] "in the early afternoon" regarding the progress of [Ms A's] labour. He wrote "I was inclined to make this enquiry as there had been some concern raised by multiple independent staff about the labour". These three staff members were all informed by [RM B] that the contractions/labour was slow, but that [Ms A] was doing well and there was no need for concern. Even if [RM B] had not recognised this very delayed 1st stage of labour herself, it might be expected that the concerns raised by other staff members might alert her to re-consider the events. The internal review notes that "RN3 raised concerns with the LMC regarding inadequate contractions and suggested that the LMC transfer [Ms A] to [Hospital 2] for tertiary level care", but even this very pointed recommendation was dismissed, or not deemed necessary by [RM B].

[RM B's] failure to recognise such abnormal progress in labour, and to undertake timely assessment and to recommend consultation with the obstetric team, and especially in the context of it being questioned by other staff members leads me to still believe that this represents a significant departure from expected practice. That said, perhaps [RM B] felt her management of [Ms A's] labour was appropriate because when [RM C] arrived to provide [RM B] with a break, she did not question the management, perhaps this led [RM B] to have faith in her management (see later note regarding [RM C]).

Management of the birth

As noted in my first steer, I assumed that [RM B] recognised that a shoulder dystocia occurred after the birth of [Baby A's] head at 0030 hours when she called the bell and asked the responding [Nurse G] to telephone [RM C] to attend. However, the clinical notes did not state the reason why [RM B] requested [RM C] to come, and nor was this crucial piece of information passed on to [Nurse G] who stated in her response to HDC that she was not asked to stay and assist and was not made aware of any problem. This may explain why [RM B] did not initiate any of the expected management which is a part of midwifery practice to resolve the shoulder dystocia, nor did she ask for extra help, or use the emergency bell. However, in her response to HDC, [RM B] said that there "was no delay in identifying the shoulder dystocia and requesting multidisciplinary assistance", however, based on the clinical notes and the accounts from both [Nurse G] and [RM C], I do not believe this statement is true. On the contrary, I am now inclined to suspect that [RM B] did not recognise there was a shoulder dystocia. [RM C] stated in her letter to the coroner that when she arrived, "[RM B] said she needed help to deliver the baby. She did not say why she needed help …", and consequently, it was [RM C] who requested [Ms A's] partner to press the emergency bell and commenced manoeuvres to release [Baby A's] stuck shoulder and only at this point did the other nursing and medical staff present in the unit attend to help with the emergency.

It is difficult to ascertain with any certainty if [RM B] did or did not recognise the shoulder dystocia. If she did not, this is very worrying, and represents a significant deficit in knowledge. But if she did, this is arguably more concerning as she failed to undertake the most basic measures such as calling for help and this represents a significant departure from expected practice and I disagree with her comment that there "was no delay in … requesting multidisciplinary assistance".

Response to immediate postnatal observations

In her response to HDC and the [Hospital 2] internal review, [Nurse G] says that she was the person who took [Ms A's] initial postnatal observations at 0140 hours and she reported these to [RM B] immediately. [RM B's] response was to give [Ms A] further IV fluids and repeat the observations. These were grossly abnormal observations that appear to have been largely disregarded by [RM B], both at the time and subsequently based upon her response to HDC.

In her response, [RM B] suggested that these observations would be indicative of hypovolaemia or sepsis and that considering that [Ms A's] later observations (at 0725 hours) gave a MEWS of two, then this means that the observations at 0140 hours could not have indicated sepsis. [RM B] provides no evidence to support the validity of this statement. I do not have sufficient knowledge pertaining to the physiology of sepsis to say whether she is correct or not, but I do have other comments to make.

Firstly, [RM B] argued that in both response to sepsis and hypovolaemia (which in this case could only be secondary to blood loss) that IV fluids would be appropriate

management, and this is correct. But, [Ms A's] observations (blood pressure 69/55, temperature 38.5 degrees Celsius and heart rate 144) suggest that [Ms A] was extremely tachycardic and acutely hypotensive, and in well, healthy women (as [Ms A] was), there would arguably need to be considerable blood loss to illicit such a physiological response (Auckland District Health Board 2019). And yet [Ms A] did not experience a postpartum haemorrhage. Furthermore, bleeding/hypovolaemia would not account for [Ms A's] fever either. It is more appropriate to suspect that [Ms A's] observations may have been indicative of sepsis.

Secondly, regardless of whether [Ms A] was septic or hypovolaemic, [RM B] should have immediately recognised that these were very abnormal observations and this should have prompted [RM B] to request that [Nurse G] undertake the full set of observations and record them on the MEWS chart in order to ascertain the MEWS score and then follow the appropriate action. Mews charts were available in the unit (one was later used by the morning shift nurse).

If [Ms A's] heart rate and systolic blood pressure were recorded on the MEWS chart, even in the absence of the other observations, this should have resulted in an "emergency call", and consultation for transfer to [Hospital 2] and 5–10 minute interval observations because they are so abnormal they are in the "blue zone". It is not noted in the clinical notes, or commented upon by [RM B] in her response, that these observations were ever repeated. On the contrary, [Nurse G] noted that when she received a verbal handover from [RM B] at 0430 hours when [RM B] was leaving the unit, [Nurse G] was specifically instructed to leave [Ms A] to sleep and there was no record of any maternal observations having been taken since those done at 0140 hours.

Thirdly, [RM B] feels that the observations were verbalised in the presence of the medical staff and her response implies that since they did not appear alarmed that there was no problem. At the time the observations were taken, the two medical staff (Dr D and Dr E) were involved in the advanced resuscitation of [Baby A]. The information was not relayed to them directly, and given the complex and mentally demanding task they were carrying out, it is highly unlikely they would be able to take notice of comments that were being voiced in the room. Indeed [Dr D] in her response to HDC stated that there "were 2 attending independent lead maternity midwives taking care of [Ms A] and they didn't express any concerns for [Ms A] requiring my urgent attention".

As noted in my initial steer, I do understand the very challenging environment in which [RM B] was working at the time the observations were taken; the neonatal resuscitation of [Baby A] was taking place in the room, observed by [Ms A] and her whānau. But, my interpretation was that [RM B] completely overlooked these grossly abnormal observations, did not follow expected management in terms of completing the MEWS chart and did not formally and effectively escalate them to the medical staff. This represents a significant departure from expected practice.

Later postnatal period

[RM B] was made aware of [Ms A's] raised MEWS results and the concern she might be bleeding and was asked to attend by [RN F] at 0800 hours and presented to the unit at 0900 hours. [RM B] assessed that [Ms A] was not bleeding and documented in the clinical notes for observations to be continued 4 hourly. At 0930, [RM B] recorded [Ms A's] observations in the clinical notes and the MEWS score of 7 and requested 30 minute observations.

There is the implication that [RM B] had limited understanding of the MEWS chart and associated processes as [RN F] said in her response to HDC that she educated [RM B] how to use the MEWS. Despite the outline of care noted in the MEWS chart, it is not clear when the medical staff were alerted to [Ms A's] condition. The clinical notes do not state that medical review was requested, the [Health NZ] internal review timeline states that the "SMO was contacted to attend" at 0855 hours. Whereas, in her statement to HDC, [Dr D] states that she was only made aware of [Ms A's] condition when she commenced her "on-duty" shift at 1000 hours when she was asked to urgently review [Ms A] by [RN F]. Prior to this time she had been the "on call" SMO and had not been contacted.

In my original steer, I felt that [RM B's] management of [Ms A's] MEWS score was appropriate and timely. But having reviewed the evidence again, and the responses from [RN F] and [Dr D] that were not available to me previously, I am inclined to believe that [RM B's] management was sub-optimal. [Ms A] had a MEWS of 6 at 0900 hours, yet seemingly medical staff were not consulted until 1000 hours. Furthermore, [RM B] requested 30 minute observations, whereas the MEWS chart states they should be increased to 15 minutely. In [RM B's] defence, the MEWS chart is arguably confusing in this respect as both 30 minute and 15 minute observations are written so it is not wholly clear which should be adhered to. Additionally, there were times when [Ms A's] systolic blood pressure recordings prior to 0930 hours were so low that they were in the "pink zone" — and regardless of the MEWS score, and as clearly noted on the MEWS chart, this should have initiated urgent medical review, more frequent observations and plans for transfer to [Hospital 1]. In conclusion, I find that [RM B] was unfamiliar with the MEWS chart, and possibly this lack of knowledge contributed to a delayed response on her behalf, but that her midwifery care reflected a mild to moderate departure from expected practice. However, [RN F] was also aware of [Ms A's] observations and could also have escalated care earlier (see later comment).

Conclusion of the care provided by [RM B]

In conclusion regarding the care provided to [Ms A] during her labour, birth and the early postnatal period, I find that [RM B's] care reflected several significant departures from expected practice. Arguably, had [RM B] acted more proactively towards [Ms A's] abnormal 1st stage of labour progress, responded appropriately to the shoulder dystocia and the abnormal immediate postnatal observations, made different decisions, recommended consultation and transfer to the obstetric team at [Hospital 2], then it is quite possible there would have been a different outcome for [Ms A], [Baby A] and their whānau.

But, there were times when other health professionals were also involved in the care of [Ms A], and they too could have been more proactive in their escalation (see later comment).

Care by [RM C]

In my original steer, the role of [RM C] was not explored. [RM C] was [Ms A's] actual LMC, however she was "off call" for LMC services at the time of [Ms A's] labour and birth, but she was still working as the "on-call midwife" for [Hospital 1] Birthing Unit. Consequently, she was called by [RM B] on the day of [Ms A's] labour and attended the unit to provide [RM B] with a break from approximately 1718 to 1843 hours. During this time she stated in her report to the coroner that fetal heart auscultation was normal and she surmised that [Ms A] was managing well. She stated that "a full handover was given to me by [RM B] …", so presumably she was made aware of [Ms A's] labour progress, notably, by this time [Ms A] had been 8cm for at least 6 hours. I do not know why [RM C] did not question [RM B's] plan of care and decision making, or offer any advice. Either she did not identify the abnormal progress herself, or she chose not to "interfere". She may have felt that since she was not working in the capacity of "LMC", and that she was only there to provide a break, that it was not her responsibility to question the management. Yet ironically, being well known to [Ms A], she had an advantageous position of being able to discuss with [Ms A] and her whānau, alternative plans and recommendations for consultation and transfer to the obstetric team at [Hospital 2].

Ultimately, [RM C] was accountable for the care she provided to [Ms A] and I find her practice represents a mild to moderate departure from expected practice, because she failed to meet midwifery council competency 2.6 that states that the midwife "identifies factors in the woman/wahine or her baby/tamaiti during labour and birth which indicate the necessity for consultation with, or referral to, another midwife or a specialist medical practitioner".

Irrespective of this aspect of her care, I do think that it should be recognised that when [RM C] attended for the birth, her actions and management of the shoulder dystocia and instigation and support with neonatal resuscitation of [Baby A] were very promptly and efficiently and successfully executed.

Care by nursing staff

Other health professionals were involved in varying degrees with [Ms A's] care. For example, nursing staff at [Hospital 1] raised concerns about [Ms A's] progress in labour to both [RM B] and [RM C]. On these occasions they were informed that everything was fine. It is a very difficult situation for these nursing staff because they had minimal contact with [Ms A] and there was no expectation that they had responsibility for her care; that clearly lay with the midwifery staff, who would also be considered the "experts" in labour and birth, compared with their nursing colleagues. However, I note that this was also raised in the [Hospital 2] internal review and processes have been

implemented regarding an escalation pathway for nurses to take when they have concerns about patients under the care of midwives at the unit.

Recommendations

1. Empowering "core staff" to "speak up"

There were two other notable occasions when nursing staff were more directly involved in [Ms A's] care — when [Nurse G] provided immediate postnatal support to [RM B] just after birth and then when [RN F] cared for [Ms A] on her morning shift of [Day 2]. These nurses were taking [Ms A's] observations, clearly recognised they were abnormal and concerning, but arguably felt unable to "speak up" and override [RM B's] instructions. It is not clear why [RN F] for example, did not escalate to the medical staff at 0745–0800 hours when [Ms A's] systolic blood pressure was in the "pink zone" on two occasions. Instead she made three phone calls to speak to [RM B]. Arguably, there is a culture, and this might be reinforced by the MEWS chart, since the first action is to "contact LMC" whereby, it is expected that the LMC will be the primary decision-maker and there may be the tendency for nursing staff to await the LMC review (as was the case here) and defer to their management, rather than implement their own decisions which risks delays in care.

I recommend education regarding "speaking up" and the establishment of collaborative discussions amongst LMCs and staff working in facilities (whether they are midwives or nurses) to strengthen the role of practitioners directly involved in the woman's care, regardless of who is the LMC, so that *all* health professionals feel empowered to escalate care. I believe that the internal review also found that existing relationships and ways of working between LMC's and "core staff" also contributed to conflicts regarding escalation.

2. Fetal Heart Auscultation

As noted in my original steer, [RM B's] use of intermittent auscultation did not always align with expected practice, and as noted in this 2nd addendum, I do not feel that [RM B] is the only midwife in New Zealand whose use of intermittent auscultation is sub-optimal. To my understanding there is no national education focused upon correct application of intermittent auscultation.

I have been for the last 6 years part of the ACC working group (under the Neonatal Encephalopathy Taskforce) looking at designing and implementing a national fetal surveillance education programme which would include education specifically focused upon intermittent auscultation. Unfortunately, this working group (and the task force) have been discontinued, and the work unfinished, yet the members of the multi-disciplinary group were all agreed upon the importance of providing this education. Whilst in this case it is unknown whether suboptimal fetal monitoring made any contribution towards [Baby A's] death, this case does reflect an example of a need for intermittent auscultation education for midwives. Perhaps HDC could discuss this with NZCOM who do provide national education pertaining to other areas of midwifery practice.

3. Care of maternity patients who are Jehovah's Witness

In my 1st addendum, I noted the fact that [Ms A] is a Jehovah's Witness and that this had been clearly identified antenatally and she had signed forms to state that she did not wish to receive blood products. I raised the question whether it was appropriate for her to birth in a primary unit, as some literature suggests women who are Jehovah's witness should be advised to birth in secondary/tertiary units.

I note that this was mentioned in the [Hospital 2] internal review and it was reported that [Hospital 2] does not have any guidelines regarding the management of pregnant/birthing people who are Jehovah's witness. At the time of my 1st addendum, I observed that the "Referral Guidelines" (MOH 2012) also did not cover this "risk factor", and the revised "Referral Guidelines" (Te Whatu Ora 2023) also do not address this.

The result is that maternity practitioners, specifically LMC midwives are not provided with guidance regarding any referrals or management for this group of maternity patients. Perhaps HDC could progress this further with Te Whatu Ora/NZCOM/ RANZCOG to specifically look at this situation and provide a consensus statement/ guideline.

4. Working patterns for LMC midwives.

I noted this in my original steer. [RM B] was working for 24 hours, much of that time she was providing labour care to [Ms A], she then had less than four hours break, and was called back to see [Ms A]. I think that anyone's capacity to apply critical thinking and decision making and the attention to detail that is required when providing care to people in labour and acute situations, is surely compromised after working for so long. Again, in my other cases I was asked to comment upon during my time as in-house clinical advisor for HDC, this is not the only case where LMC midwives are working for very long periods of time, often with very minimal interaction and support from other colleagues.

To be honest, I am not really sure what HDC can do, and especially given the critical midwifery shortages in New Zealand and the additional challenges in rural communities to find midwifery support to take over care to allow LMC midwives sufficient rest. Again, perhaps there could be plans that LMC midwives hand over care to core midwifery staff either in primary facilities where this is possible, or secondary/tertiary hospitals. However, this would require transferring those birthing people to hospitals and I anticipate significant rejection of this suggestion from LMCs, NZCOM, core staff, and birthing people for numerous reasons which is beyond the scope of my commentary here to explore. But perhaps, the issue could be raised with MOH, Te Whatu Ora, NZCOM.

This concludes my advice. If you have further questions/need for clarification, please do not hesitate to get in touch.

Isabelle Eadie, RM, BHSc-Midwifery, MHSc, PGDipHSc, PGCertClinEd

References

Auckland District Health Board (2019). Postpartum Haemorrhage (PPH). Prevention and Management.
Postpartum Haemorrhage (PPH) Prevention and Management (adhb.govt.nz). accessed 2/7/23

Auckland District Health Board (2020). Intrapartum Care — Physiological Labour and Birth.
www.nationalwomenshealth.adhb.govt.nz/assets/Womens-health/Documents/Policies-and-guidelines/Intrapartum-Care-Normal-Labour-and-Birth-.pdf accessed 2/7/23

Midwifery Council of New Zealand. (2007). Competencies for entry to the Register of Midwives. Wellington: Midwifery Council of New Zealand.
https://www.midwiferycouncil.health.nz/sites/default/files/professional-standards/Competencies%20for%20Entry%20to%20the%20register%20of%20Midwives%202007%20new%20form.pdf

Ministry of Health (2012). Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines). Wellington: Ministry of Health.
https://www.health.govt.nz/system/files/documents/publications/referral-glines-jan12.pdf accessed 24/9/20

National Institute for Clinical Excellence (2014). Intrapartum care for healthy women and babies Clinical guideline.
https://www.nice.org.uk/guidance/cg190/resources/intrapartum-care-for-healthy-women-and-babies-pdf-35109866447557

NZCOM (2020). Practice guidance document — Intermittent Auscultation for the Assessment of Intrapartum Fetal Wellbeing.
https://www.midwife.org.nz/wp-content/uploads/2020/10/Practice-guidance-I.A.pdf accessed 10/2/21

Te Whatu Ora (2023) Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines). Wellington: Ministry of Health.
https://www.tewhatuora.govt.nz/publications/guidelines-for-consultation-with-obstetric-and-related-medical-services-referral-guidelines/ accessed 2/7/23

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. (2019). Intrapartum Fetal Surveillance. Clinical Guideline. Fourth Edition. Melbourne, Australia: The Royal Australian and New Zealand College of Obstetricians and Gynaecologists.
https://ranzcog.edu.au/RANZCOG_SITE/media/RANZCOG-MEDIA/Women%27s%20Health/Statement%20and%20guidelines/Clinical-Obstetrics/IFS-Guideline-4thEdition-2019.pdf?ext=.pdf

World Health Organization (2018). WHO Recommendations: Intrapartum care for a positive childbirth experience. Geneva: World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/260178/9789241550215-eng.pdf;jsessionid=6C1A34F2B0B16588DA750A97830DDE48?sequence=1'

The following further advice was received from RM Eadie:

'**[Ms A] C20HDC01761**

Isabelle Eadie RM, external advisor

18TH April 2024

Response to questions

I have been asked to respond to the following two questions:

1. **Please clarify why you consider that [Ms A] should have been offered a uterotonic (as part of third stage management) because she was Jehovah's Witness**

I cannot see that I have said either in my original steer, or my 2nd amendment (dated 5th July 2023) that [Ms A] should have been given a uterotonic as part of active third stage management because she was a Jehovah's Witness, though arguably this would be correct. I do believe though that her third stage of labour (from the time of the birth of the baby to the delivery of the placenta and membranes) should have been "actively managed" which means that a uterotonic is given, the cord is cut and clamped and the placenta is delivered by "controlled cord traction" (a method whereby the practitioner "pulls" the placenta out once signs of separation have been noted). This is opposed to "physiological management" of the third stage of labour which is when a uterotonic is not given, controlled cord traction is not applied and instead the placenta is delivered by maternal effort (the birthing person pushes out the placenta). [Ms A's] third stage of labour was managed physiologically, however, I did note that when she had some bleeding, [RM B] did administer the uterotonic which was appropriate.

Review of the literature and guidelines regarding postpartum haemorrhage (PPH) show that there is some variation in risk factors for a PPH. For example, Auckland Hospital (Te Whatu Ora 2023) and Gisborne Hospital (Hauora Tairāwhiti 2020) guidelines both specify that prolonged 1st stage of labour is a risk factor for PPH, but Christchurch Hospital (Waitaha Canterbury 2023) and RCOG (2012) do not. As argued in my previous reports, [Ms A's] 1st stage of labour was prolonged.

As per my original steer, my reason for suggesting that [RM B] administer (or recommend) a uterotonic was primarily due to the shoulder dystocia that [Ms A] experienced. Postpartum haemorrhage guidelines generally do not list "shoulder dystocia" as a risk factor for PPH, possibly because the contribution of PPH following shoulder dystocia may be far less than the contribution made by other risk factors, and guidelines may focus on the most common risk factors. But, guidelines pertaining to shoulder dystocia that specifically discuss the maternal complications associated with shoulder dystocia do cite PPH. Both the RCOG (2012) and Christchurch Hospital

(Waitaha Canterbury 2023) state that the risk of PPH following a shoulder dystocia is as high as 11%.

The literature regarding people who are Jehovah's witness and decline blood products states that they are at increased risk of morbidity and mortality from PPH. This is not because they are more likely to bleed, but because if they do bleed, they are more likely to become compromised since blood transfusion is a treatment for PPH (Van Wolfswinkel et al 2009, Berg et al 2022). Consequently, the aim when caring for people who are Jehovah's witness is to minimise their likelihood of bleeding and this would include the use of active management of their third stage of labour. Therefore, ideally, [Ms A] should have been administered a uterotonic because she was Jehovah's witness and declined blood products, as well as the fact that she had a shoulder dystocia.

However, because [Ms A] is Jehovah's witness, the recommendations in the *literature* are that she should have been birthing in a hospital, not a primary unit. Berg at el (2022) refer to UK and American guidelines that advocate that Jehovah's witnesses receive *"senior clinician-led care (in a unit experienced in managing such patients), optimisation of antenatal Hb, active management of third stage of labour and access to interventional radiology and cell salvage techniques"* (p. 26).

But, as stated in my 2nd amendment, the care of maternity patients who are Jehovah's witness receives negligible attention in midwifery practice in New Zealand. [Hospital 2] acknowledged that they did not have a guideline regarding how best to manage this group of birthing people. Consequently, I would **not** expect all midwives to consider this when managing the third stage of labour and I would be reluctant to criticise [RM B] for not administering the uterotonic specifically for this reason.

References

Berg et al (2022). Women who decline blood during labour: Review of findings and lessons learnt from 52 years of Confidential Enquiries into maternal mortality in the United Kingdom (1962–2019). European Journal of Obstetrics & Gynecology and Reproductive Biology 271, p20–26. https://doi.org/10.1016/j.ejogrb.2022.01.028 Accessed 18/4/24

Hauora Tairāwhiti (2020). Postpartum Haemorrhage (PPH) — prevention, prophylaxis and management. https://www.hauoratairawhiti.org.nz/assets/Uploads/PPH-prevention-prophylaxis-and-management3.pdf Accessed 18/4/24

RCOG (2012) Shoulder Dystocia. Green-top Guideline No.42 (2nd edition) https://www.rcog.org.uk/globalassets/documents/guidelines/gtg_42.pdf Accessed 18/4/24

Te Whatu Ora. Waitaha Canterbury (2023). Shoulder Dystocia. https://edu.cdhb.health.nz/Hospitals-Services/Health-Professionals/maternity-care-guidelines/Documents/GLM0011-Shoulder-Dystocia.pdf Accessed 18/4/24

Te Whatu Ora. Waitaha Canterbury (2023). Postpartum Haemorrhage. https://edu.cdhb.health.nz/Hospitals-Services/Health-Professionals/maternity-care-guidelines/Documents/GLM0021-Postpartum-Haemorrhage.pdf Accessed 18/4/24

Te Whatu Ora (2023). Postpartum Haemorrhage — Prevention and management. https://www.nationalwomenshealth.adhb.govt.nz/assets/Womens-health/Documents/Policies-and-guidelines/Postpartum-Haemorrhage-PPH-Prevention-and-Management.pdf Accessed 18/4/24

Van Wolfswinkel et al (2009). Maternal mortality and serious maternal morbidity in Jehovah's witnesses in the Netherlands. BJOG 2009;116:1103–1110. https://obgyn-onlinelibrary-wiley-com.ezproxy.aut.ac.nz/doi/pdfdirect/10.1111/j.1471-0528.2009.02191.x Accessed 18/4/24

2. Please clarify whether it would be [RM B's] responsibility to document the administration of IV antibiotics (if they were given) during the treatment of sepsis or whether this was the responsibility of TWO staff.

It would be the responsibility of the person prescribing the antibiotics for management of sepsis (which would be a doctor) to prescribe them on the medication chart. However, in practice sometimes the doctor (if they are physically unavailable) might give a verbal order to a midwife/nurse for the antibiotics. In this situation, I have seen two things occur, either the doctor comes and writes the prescription on the medication chart afterwards, or the midwife/nurse might complete the prescription on the doctor's behalf.

It is the responsibility of the person who administers the antibiotics to write on the medication chart that they were given, **so this could have been [RM B] or the [Health NZ] staff at the unit**, depending upon who gave them to [Ms A]. (I can't recall if they were given or not, or perhaps they were but it was not documented.)

However, it is possible, that if the doctor gave a verbal order, and the midwife/nurse did not transcribe the verbal order onto the medication chart then there would not be a relevant place to complete the documentation when it was administered and it might get missed or forgotten later. This is not good practice, but can happen, especially if staff prioritise treatment.

I recall that there was also a separate "sepsis chart" in use (a tick box chart), again, the person who administered the antibiotics could have documented it on there and in the clinical notes. But again, in practice, it might be that the person who administers medication might assume that another person was documenting. For example, in an emergency situation, one practitioner might assume the role of "documenter" whilst others carry out tasks such as taking observations, giving medications, that person is unlikely to then document themselves in the clinical notes, assuming their colleague has already done it.'

The following further advice was received from RM Eadie on 1 May 2024:

> 'To reiterate a full set should have been done and plotted on a mews chart and a "total score" is calculated. The mews chart actually tells you what action is required, including frequency of observations depending upon the total score and so the accepted standard of care would be to follow this unless there was a documented reason for doing something differently.
>
> Ultimately it would have required escalation to the medical team, because just the three observations recorded would have resulted in a high score.
>
> The medical team would then assume responsibility for ongoing management because this degree of morbidity would be beyond the midwife's scope of practice to manage herself. However, referral to the medical/obstetric team did not occur.
>
> It is acceptable for [RM B] to request that [Nurse G] repeat the observations because [RM B] would be handing over care at some point (to go home) to the nursing staff who will provide ongoing postnatal care to [Ms A] for the rest of the night. But [RM B] as the LMC (and in the absence of medical involvement) should specify when and how often the observations would be repeated, which did not occur.'

Later on 1 May 2024, further advice was received from RM Eadie:

> 'Not sure I made this [clear], but at the time it would be [RM B's] responsibility as the [LMC] to ensure observations were repeated, and this could be physically done by herself, or delegated (as she did — but not well) to the nurses.'