Midwife, Ms A

A Report by the

Health and Disability Commissioner

(Case 11HDC00957)

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Executive summary

1. Mrs B (aged 25 years) first consulted independent midwife Ms A in mid 2010 regarding care during her first pregnancy. The antenatal care provided was generally adequate.

2. During the pregnancy Ms A failed to discuss the administration of Vitamin K to the baby after birth.

3. On a Thursday in late 2010, Baby B was born, weighing 3830 grams. Mrs B had a rapid delivery, following which she required the manual removal of a retained placenta and suturing of tears under anaesthetic.

4. Ms A asked Mr B whether he agreed to Baby B being given Vitamin K. Mr B was unsure and asked to defer the decision until his wife returned. Ms A did not discuss the administration of Vitamin K again while Mrs B and her baby were in hospital.

5. Mrs B was discharged on Saturday. Ms A visited the family at home on Sunday and Monday. During each visit, Mrs B asked about the Vitamin K. On the Sunday, Ms A said she would get the Vitamin K from the public hospital and, on the Monday, she said she would pick it up and bring it the next day.

6. Baby B became mildly jaundiced on Sunday. By Monday Baby B was "a bit yellow", and by that night/the following morning she was not feeding at all. Mrs B contacted Ms A by text message on Tuesday morning, and Ms A came to the house. By that stage, Baby B was lethargic, not feeding, had "bright yellow jaundice", and had had a 10% weight loss since birth. Ms A called the public hospital. On Tuesday, Ms A performed a Guthrie test (PKU test)[1] and gave the blood spot samples to Mrs B to take to the public hospital.

7. On Tuesday, Baby B was admitted to the public hospital with neonatal jaundice. Baby B was also anaemic and had high sodium levels. It was found that Baby B had suffered a large right cerebral haemorrhage and, on Tuesday evening, she was transferred to a paediatric intensive care unit.

8. Baby B required an urgent craniotomy and evacuation of a subdural haematoma.

Findings

9. Ms A's care planning and documentation were not in accordance with professional standards and, accordingly, she breached Right 4(2)[2] of the Code.

[1] A screening test using blood spots obtained by heel prick on newborn infants to detect a number of conditions including phenylketonuria (a disorder of amino acid metabolism), congenital hypothyroidism, sickle-cell disease, cystic fibrosis, and Medium Chain Acyl CoA Dehydrogenase Deficiency (MCADD) (a disorder of fatty acid oxidation). It is recommended that this test is performed within 48 hours of feeding or as soon as possible after this.

[2] Right 4(2) states: "Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards."

10. Ms A's lack of discussion with Mr and Mrs B about Vitamin K administration during the antenatal period was a failure to provide an explanation of the options available including an assessment of the risks, side effects, and benefits of each option. Accordingly, Ms A breached Right 6(1)(b)[3] of the Code.

11. The failures to perform a PKU test within an appropriate period after birth, respond to Baby B's deterioration appropriately, and ensure that Baby B received Vitamin K were together a serious departure from expected standards. Ms A failed to provide services to Baby B with reasonable care and skill and, accordingly, breached Right 4(1)[4] of the Code.

12. Ms A will be referred to the Director of Proceedings for the purpose of deciding whether any proceedings should be taken.

Complaint and investigation

13. Mrs B complained to the Commissioner about the services provided by midwife Ms A. On 17 April 2012 an investigation was commenced into the following issues:

- *Whether midwife Ms A provided an appropriate standard of care to Mrs B*
- *Whether midwife Ms A provided an appropriate standard of care to Baby B*
- *Whether midwife Ms A provided adequate information to Mrs B*

14. Information was obtained from:

Ms A	Midwife
Mrs B	Consumer/complainant
Mr B	Complainant
ACC	
Midwifery Council of New Zealand	

15. Independent expert advice was obtained from registered midwife Robyn Maude and is set out in **Appendix A**.

[3] Right 6(1)(b) states: "Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive, including —
… (b) An explanation of the options available, including an assessment of the expected risks, side effects, benefits, and costs of each option;"
[4] Right 4(1) states: "Every consumer has the right to have services provided with reasonable care and skill."

Information gathered during investigation

16. In mid 2010, when she was 14 weeks' gestation, Mrs B engaged Ms A as her Lead Maternity Carer (LMC). Subsequently, Mrs B received nine antenatal visits. Her husband, Mr B, was present at most of the visits. Mrs B had appropriate blood tests, scans and treatments, and was booked into and attended antenatal classes.

17. At the time of these events, Ms A was a self-employed independent midwife working collectively with other midwives in a practice. Each midwife practised independently but they provided cover for one another.

18. Ms A graduated in 2008. Following graduation she worked in the new graduate programme at the public hospital, and completed three five-month rotations — in a primary unit, the delivery area, and the maternity ward.

19. In 2010, Ms A became an independent midwife.

Vitamin K deficiency

20. Vitamin K deficiency bleeding in infants is an uncommon but potentially fatal disorder which presents with spontaneous bleeding or bruising. Internal haemorrhage, including intracranial bleeding, may occur. Vitamin K is usually given at birth by intramuscular injection, or orally, to prevent deficiency.

21. A consensus statement issued by MedSafe[5] recommends that it is the responsibility of the LMC to discuss Vitamin K prophylaxis and ensure that parents are aware of the recommendation that all babies receive Vitamin K. MedSafe also recommends that a record of the date, dose and method of administration of Vitamin K be kept in the baby's Child Health Record Book.

Care plan

22. The LMC is required to commence a care plan in early pregnancy and add to it as appropriate until discharge from care. A care plan checklist, which is a section in the region's Midwifery Services notes, is commenced at the booking visit and added to over the course of the pregnancy.

23. The care plan checklist provides prompts to the woman and the LMC about areas for discussion and the provision of information.[6] It has a section referring to Vitamin K and provides for the date it is discussed and the plan preferences. Under the plan preferences heading the options are: "consent .. intra muscular .. oral .." This section of the care plan has not been completed.

24. Mrs B's antenatal records contain no reference to Vitamin K discussion. Ms A advised HDC that at the relevant time, "it was not [her] practice to document in the clinical notes" that the parents wished their baby to have Vitamin K, but she would

[5] www.medsafe.govt.nz/profs/puarticles/vitk.htm.
[6] The "care plan" refers to the process by which the LMC and the woman develop a plan of care for the woman and her baby, and the documentation of this plan throughout the individual clinical notes (section 88 Primary Maternity Services Notice 2007 (available from www.health.govt.nz).

usually document that the question had been discussed. However, Ms A later said that if the parents reiterated at the next appointment that they agreed to the baby being given Vitamin K, "[she] would have dated it and that they have given consent. [She] even sometimes write[s] the date that [she gave] them the pamphlet". Ms A further advised that it is usual practice for midwives to ask again for consent just prior to administering the Vitamin K, in case the parents have changed their minds.

Antenatal discussion about Vitamin K

25. Mrs B stated that Ms A never discussed Vitamin K at any of her antenatal visits. Mrs B said that she was not given any pamphlets or written information about Vitamin K, and she and her husband did not tell Ms A that they consented to the administration of Vitamin K to the baby after birth, because the issue was never discussed.

26. Mrs B stated that she and her husband had received information about Vitamin K from the antenatal class they attended and, from that information, she decided that her baby would be given the Vitamin K injection, rather than the oral form.

27. Mr B said that the only time he heard about Vitamin K was when it was briefly mentioned at the antenatal class that he and Mrs B attended. He stated that Ms A never discussed Vitamin K at any of the antenatal visits he attended, and when she discussed the birth plan she mostly focused on who was going to be present in the room for the delivery. He stated that he neither received nor saw any pamphlets or written information about Vitamin K.

28. When asked whether she discussed the administration of Vitamin K with Mr and Mrs B, Ms A said: "Usually I discuss those kind of, what we consider kind of like the birth plan, usually around the 36 week mark." Ms A said that she would generally give the mother pamphlets about Vitamin K, and stated: "I would have said to her that the Vitamin K that we recommend for all babies to have it, and the reason for it is that babies are born with low levels of Vitamin K. When they are born they are at risk of having bleeds and by giving the Vitamin K we actually decrease the chance of babies having these bleeds."

29. Ms A cannot recall the details of a conversation with Mr and Mrs B about Vitamin K, although she is sure she would have discussed it. She said: "I remember just handing over the pamphlet and saying sort of, you know, to read the pamphlet as well." Ms A commented that she could not be 100% certain that prior to the birth she did talk about Vitamin K with Mr and Mrs B, both of whom would have been present.

Birth of Baby B

30. Baby B was born at 12.39pm weighing 3830gm. Mrs B had a rapid delivery, following which she required the manual removal of a retained placenta and suturing of tears under anaesthetic. Ms A took Mrs B to the operating theatre and then returned to the Delivery Suite to conduct the newborn examination of Baby B and the paperwork regarding the birth.

31. Ms A advised that after Baby B was born it was "incredibly busy", and there was no opportunity to discuss the Vitamin K issue with Mrs B. Ms A stated that her practice

was to give the Vitamin K within "the first few hours of birth". She said that she was not aware of the time limits within which Vitamin K could be administered.

Discussion with Mr B

32. Ms A advised that when she returned to the Delivery Suite to conduct the check on Baby B, Mr B and his sister were present in the room. Ms A stated that she asked Mr B, "Are you still happy for me to give the Vitamin K?" and he replied, "Aw, I don't know it. I can't remember if we've decided that or not."

33. In contrast, Mr B stated that when he was asked whether he wanted Baby B to be given Vitamin K he was unsure and said, "Just wait until my wife comes back." He advised that he thought his wife would be more knowledgeable about Vitamin K than him because she is a nurse and also because it was the first time Vitamin K had been mentioned and he did not really know much about it. He said that Vitamin K had been mentioned only briefly at the antenatal class and, "as a first time dad, [he] did not know its importance". Mr B stated that Ms A did not give him any information about Vitamin K at that stage, and just said that they would wait until later when Mrs B returned.

Transfer to maternity ward

34. Ms A advised that she did not take Mr B and Baby B to the maternity ward because the Delivery Suite was very busy and she was asked to stay and work for four hours as a hospital staff member. Ms A said she asked a nurse to take Mr B and Baby B to the ward.

Records

35. Under the section "Vitamin K consent Yes/No" of Mrs B's Immediate Postnatal History and Examination form, "No" has been ticked. The Labour and Delivery — baby (second stage) form has Vitamin K listed with the options of "none", "IM" or "oral" — "none" has been ticked. At 2.30pm on the day of Baby A's birth, Ms A recorded on Baby B's record: "No Vitamin K given as no consent gained."

36. The Infant Postnatal Discharge record prepared on Saturday states: "Vitamin K nil". This form is generated by the hospital staff and given to the mother on discharge. Ms A said that she does not check this form.

Follow-up visits

37. Ms A advised that after she finished her shift on Thursday evening she spent an hour with Mrs B. However, Ms A did not record the visit in Mrs B's notes, and Vitamin K was not discussed or administered at the time.

38. At 9.15am on Friday, Ms A visited Mrs B. Mrs B advised that the priority at that stage, and for the rest of her hospital stay, was to establish breastfeeding, and she did not think of the Vitamin K issue, and during the remainder of her time in hospital the issue was not raised by Ms A.

39. Similarly, Mr B said that the issue of Vitamin K was never raised again and so he did not realise its importance.

40. On Saturday, Ms A again visited Mrs B and noted that she was ready to be discharged home. On this visit, Baby B was noted to have a slight tinge of jaundice but again Vitamin K was not discussed.

Further discussion about Vitamin K

41. On Sunday at 11am Ms A visited Mrs B at home. The notes do not record any discussion of Vitamin K.

42. When Ms A visited Mrs B on Sunday, Ms A noted that Baby B had jaundice on her face and body. Ms A advised Mrs B to put Baby B in the sunlight for 20 minutes a few times a day. Ms A noted: "Mum wants to still give Vitamin K. Will bring tomorrow."

43. Both Mr and Mrs B are certain that during each of the visits on Sunday and Monday, Mrs B asked about the Vitamin K. Mrs B said that on the Sunday, Ms A said she would get the Vitamin K from the public hospital, and on the Monday she said she would pick it up and bring it the next day.

44. Mrs B advised that, even at that stage, Ms A did not give them any information or enter into any discussion about Vitamin K, and Mrs B was relying on her knowledge from the antenatal class to initiate the issue. Ms A stated that her recollection is that the discussion occurred on Monday, and that she advised she would administer the Vitamin K on Tuesday.

45. Ms A advised that because she is so used to giving Vitamin K at the time of birth, she would "barely think twice about it again actually afterwards". Ms A said that she did not think there was any urgent need for the Vitamin K by the Monday because the reason it is given close to the birth is that any trauma would have occurred then. She said it was only later (after these events) that she heard that it can be given for up to five days after birth.

Deterioration

46. Mrs B advised that Baby B became mildly jaundiced on the Sunday, and by Monday she was "a bit yellow".

47. Ms A stated that she recalls that Baby B had a good urine output, was waking to feed, and "wasn't behaving like a baby that was very symptomatic of the jaundice so I think in my mind I was just saying well it's, it's physiological jaundice". Ms A also stated: "Because the birth had been normal, the pregnancy had been normal, then obviously not having the Vitamin K there wasn't anything else sort of jumping out of me saying you know alarm bells, alarm bells."

48. Mrs B advised that by Monday night/Tuesday morning, Baby B was not feeding at all. Mrs B contacted Ms A by text message on Tuesday morning and Ms A came to the house and then called the public hospital. By that stage, Baby B was lethargic, not feeding, had "bright yellow jaundice", and had had a 10% weight loss since birth.

49. Ms A performed a Guthrie test (PKU test) on Tuesday and gave the blood spot samples to Mrs B to take to the public hospital.

Admission to hospital

50. On Tuesday, Baby B was admitted to the public hospital with hyperbilirubinaemia.[7] Baby B was also anaemic and had high sodium levels. It was found that Baby B had suffered a large right cerebral haemorrhage and in the evening she was transferred to a paediatric intensive care unit. She required an urgent craniotomy[8] and evacuation of a subdural haematoma.[9]

Baby B's progress

51. Mrs B advised HDC that Baby B recovered very well and is thriving apart from a "lazy eye", as the bleed was close to her right optic nerve. On 29 April 2013, Mrs B advised that Baby B is a "thriving, happy young girl".

Midwifery Council of New Zealand

52. HDC referred this matter to the Midwifery Council of New Zealand. The Council carried out a formal competency review of Ms A's practice. In October 2012, the Midwifery Council advised HDC that the review was complete, that Ms A was competent to practise and no further action would be taken.

Ms A

53. Ms A advised that as a result of this case she ceased practising as a self-employed midwife and now works as a hospital staff midwife. She also advised that she has changed her practice and now always documents in the birth plan whether the parents consent or refuse consent to Vitamin K administration. She also said that she puts a sticker on the front of the file to remind her if the parents have not made a decision by the time of birth. Ms A stated: "This case affected me profoundly and I have continued to reflect daily in my practice on the need for good communication and documentation."

Relevant standards

54. The New Zealand College of Midwives Standards for Practice (2010) provide:

> "Standard 4: The midwife maintains purposeful, ongoing, updated records and makes them available to the woman and other relevant persons.
>
> Standard 5: Midwifery care is planned with the woman

[7] Neonatal jaundice.
[8] A surgical operation in which a bone flap is temporarily removed from the skull to access the brain.
[9] A collection of blood on the surface of the brain.

Standard 6: Midwifery actions are prioritised and implemented appropriately with no midwifery action or omission placing the woman at risk.

Standard 7: Criteria: the midwife:

- Recognises that she is an autonomous practitioner, regardless of setting, and is accountable for her practice.
- Clearly documents her decisions and professional actions.
- Records her practice outcomes and makes them freely available.
- Ensures relevant information is available to the woman.

In situations where another dimension of care is needed, ensures negotiations take place with other care providers to clarify who has the responsibility for the care …"

Opinion: Breach — Ms A

55. This case relates to the failure of midwife Ms A to provide appropriate care to Mrs B and her baby.

Mrs B's care

56. Ms A failed to provide services of an appropriate standard to Mrs B as follows.

Documentation

57. My expert advisor, registered midwife Robyn Maude, advised that the antenatal care provided by Ms A to Mrs B was generally of an appropriate standard, apart from inadequacies in Ms A's care planning and documentation. The inadequacies are as follows.

Care plan checklist

58. The care plan checklist was not completed. Ms Maude advised that there was an absence of running records to accompany the checklist and the clinical details of visits.

59. Ms Maude advised:

> "[I]t is important to ensure the Care Plan and/or Care Plan checklist are fully completed. Clear documentation of discussions and information provides evidence of decision-making and is therefore a vitally important aspect of midwifery care. It also serves to remind the LMC of areas that have been covered already and those that still need attention, making it less likely those important decisions, such as choice for administration of Vitamin K, are not missed."

Visit following birth

60. Following the birth, Ms A worked in the hospital for four hours, after which, at around 8pm, she visited Mrs B on the ward. However, there is no record of that visit.

Vitamin K

61. The immediate history and examination form has "No" ticked with regard to consent to Vitamin K administration. Ms A recorded on Baby B's record at 2.30pm on Thursday: "No Vitamin K given as no consent gained." This record is ambiguous as it does not make it clear that it refers to Ms A not having sought consent from Mrs B, and infers that the reason why Vitamin K was not given was because consent was not obtained.

62. Ms A advised HDC that at the relevant time it was not her practice to document in the clinical notes that the parents wished their baby to have Vitamin K, but that she would usually document that the question had been discussed. Ms Maude advised me that "this is peculiar and inappropriate given that the Care Plan checklist in [Mrs B's] notes provides a space for noting the date when the discussion took place as well as a space to record the parental consent and choice of route of administration".

Conclusion

63. Overall, I find that Ms A's care planning and clinical documentation was suboptimal. I am advised that these departures would be viewed with moderate disapproval by Ms A's peers.

64. The Standards of Midwifery Practice require a midwife to document her decisions and professional actions. I find that Ms A's care planning and documentation were not in accordance with professional standards and, accordingly, she breached Right 4(2) of the Code.

Antenatal discussion about Vitamin K

65. Ms Maude advised:

> "It is usual for the LMC to discuss Vitamin K administration after the birth of the baby and to gain consent (or not) during the antenatal period and to document both the discussion and consent in the woman's note and care plan … It is appropriate for the LMC, or her back-up/core midwife colleagues to re-confirm the decisions around Vitamin K with the parents again immediately prior to administration of Vitamin K … this would be considered best practice."

66. During the antenatal period Ms A should have discussed with Mr and Mrs B the issue of the administration of Vitamin K to their baby. The parents should have been given sufficient information to enable them to make an informed decision about whether they wished their baby to receive this treatment.

67. Mr and Mrs B are adamant that Ms A did not discuss Vitamin K administration during the antenatal visits, nor did she provide any pamphlets or written information about Vitamin K. They both stated that any information they knew about the administration of Vitamin K was provided at their antenatal classes. Mrs B said that,

on the basis of that information, she had decided that her baby would be given the Vitamin K injection rather than the oral form.

68. In contrast, Ms A said her usual practice was to discuss Vitamin K administration and give pamphlets about Vitamin K at around the 36-week mark, and to obtain parental consent at the following visit. Ms A cannot recall a conversation with Mr and Mrs B about Vitamin K but said she can recall handing them the pamphlet. Ms A said that her practice was to record that the matter had been discussed, but not the parents' wish for their baby to be given Vitamin K.

69. The section in the care plan checklist referring to Vitamin K has not been completed, and the antenatal records do not refer to Vitamin K. I consider that it is more likely than not that the administration of Vitamin K was not discussed with Mr and Mrs B prior to the birth.

70. Ms Maude advised that the failure to discuss Vitamin K administration with the parents during the antenatal period would be viewed with moderate disapproval by Ms A's peers. In my view, this was suboptimal care and amounted to a failure to provide an explanation of the options available, including an assessment of the risks, side effects and benefits of each option. Accordingly, I find that Ms A breached Right 6(1)(b) of the Code.

Baby B

71. Ms A failed to provide services of an appropriate standard to Baby B as follows.

PKU heel prick test

72. Baby B did not receive her PKU heel prick test until five days after her birth. The PKU test should have been done 48 hours after Baby B first fed, or as soon as possible after that.[10]

73. I am advised that the delay in conducting this test was an oversight by both the hospital staff and the LMC. Despite this, in my view, primary responsibility rested with Ms A. As noted in section 88 of the Primary Maternity Services Notice 2007, the LMC remains responsible for the overall care of the woman and baby.

Deterioration

74. Baby B developed jaundice, and the progression of this was noted by Ms A during her visits on Sunday and Monday. Ms A noted progression of jaundice from Baby B's face to some of her body on Monday. Ms A advised that Baby B "wasn't behaving like a baby that was very symptomatic of the jaundice", and she considered that Baby B was suffering "physiological jaundice". Ms A also stated that there were no "alarm bells" at that time. Her advice to Mrs B was to "put the baby in sunlight for 20 [minutes, a] few times a day". Ms Maude stated:

> "Advising sunlight exposure for the treatment of jaundice would be considered appropriate in the context of common practice at this time, but must sit alongside

[10] http://www.nsu.govt.nz/files/ANNB/Your_newborn_babys_blood_test.pdf

thorough observation and assessment of factors contributing to jaundice and advice to the mother about signs of deterioration in the baby."

75. Ms Maude noted that there were signs that could have prompted Ms A to make "a firmer plan" for Baby B's ongoing management. In particular, Baby B was generally unsettled and had poor feeding patterns. Ms Maude said that there should have been a written breastfeeding plan, and noted that Baby B was found to have lost around 10% of her birth weight when she was admitted to hospital. Ms Maude advised that Ms A:

> "… appears to lack some critical insights of the subtle signs of deterioration. A lack of care planning for the next 24 hours and advice to the mother about when she should call the midwife when things were not going well, ie, breast feeding, contributed to the worsening situation".

Vitamin K

76. Ms Maude advised that the failure to ensure that Vitamin K was administered sits both with Ms A and the hospital ward staff. However, I note that the misleading documentation could have led the ward staff to believe that Mr and Mrs B had refused consent to administration of Vitamin K to their baby. It is clear from the records that Vitamin K had not been given but, as stated, the record "No Vitamin K given as no consent gained" is ambiguous. In my view, the primary responsibility for the failure to administer Vitamin K rests with Ms A because, as noted above, the LMC remains responsible for the overall care of the woman and baby.

77. Immediately following Baby B's birth, Ms A was unable to speak to Mrs B about Vitamin K administration because she had been taken to the operating theatre for a manual removal of retained placenta and suturing of tears. Ms A asked Mr B whether he consented to the administration of Vitamin K to Baby B. Mr B responded that he was unsure and wanted to wait until his wife returned. Mr B thought that his wife would be more knowledgeable about Vitamin K because she is a nurse, and also because it was the first time Ms A had mentioned Vitamin K. He stated that it had been mentioned only briefly at the antenatal class, and that as a "first-time dad", he did not know about its importance.

78. Ms Maude advised me that it was a reasonable decision for Ms A to wait for confirmation from Mrs B before administering the Vitamin K. However, it was Ms A's responsibility to ensure that she followed up this matter. Ms A said that she forgot to do so. Mrs B stated that the administration of Vitamin K was not discussed with them while Mrs B and Baby B were in hospital. I am advised by Ms Maude that the failure to conduct the PKU test and administer the Vitamin K while Baby B was in hospital would be viewed with moderate disapproval by Ms A's peers.

79. Both Mr and Mrs B are certain that during each of Ms A's visits to their home on Sunday and Monday Mrs B asked Ms A about the Vitamin K, and Ms A said that she would collect it from the public hospital.

80. In contrast, Ms A's recollection is that the discussion occurred when she visited on Monday, and she said that she intended to administer the Vitamin K the following

day, Tuesday. The records for Monday record: "Mum wants to still give Vitamin K. Will bring tomorrow."

81. In my view, the use of the word "still" in this record suggests that Ms A had a conversation with Mrs B about the Vitamin K before Monday. Accordingly, in my view it is more likely than not that Mr and Mrs B's account is correct, and that Vitamin K administration was discussed on both Sunday and Monday.

82. Ms Maude advised me that the delay in administering Vitamin K to Baby B is a significant departure from accepted practice and would be regarded with severe disapproval by Ms A's midwifery peers.

Conclusion

83. Baby B was entitled to receive services from Ms A with reasonable care and skill. In my view, the combined failures to perform the PKU test in a timely manner, respond to Baby B's deterioration appropriately, and ensure that Baby B was administered Vitamin K amount to a serious departure from expected standards. I find that Ms A failed to provide services to Baby B with reasonable care and skill and, accordingly, breached Right 4(1) of the Code.

Recommendations

84. I recommend that Ms A:

- provide a written apology to Mr and Mrs B and a separate apology to Baby B, suitable for her to read when she is sufficiently mature to do so, apologising for Ms A's breaches of the Code. The apology is to be provided to HDC for forwarding by **24 June 2013**;

- organise a special Midwifery Standards review through NZCOM, particularly focused on her documentation, and update HDC by **22 July 2013** on when this will occur. Once the review is complete, report back to HDC on what she has learnt from the review and any changes made to her documentation;

- reflect on her failings in this case and provide a written report to HDC on her reflections and the changes to her practice she has instigated as a result of this case, by **22 July 2013**; and

- undertake further training with regard to Vitamin K administration and PKU testing, and provide evidence to HDC of this training by **22 July 2013**.

Follow-up actions

- Ms A 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.

- A copy of the final report with details identifying the parties removed, except the expert who advised on this case, will be sent to the New Zealand Midwifery Council, the New Zealand College of Midwives, and the District Health Board, and they will be advised of Ms A's name.

- A copy of the final report with details identifying the parties removed, except the expert who advised on this case, will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A — Independent Midwifery Advice to the Commissioner

The following expert advice was obtained from Robyn Maude:

"Complaint: [Mrs B and Baby B] / [Ms A] Ref: 11/00957

My name is Robyn Maude. I am a registered midwife (RM) with 36 years' experience in diverse settings and roles. I trained as a nurse in Adelaide, South Australia from Sept 1971–Jan 1975 and completed midwifery training in April 1976, also in Adelaide.

I have a Bachelor of Nursing for Registered Nurses from Wellington Polytechnic in 1996 and Master of Arts (Applied) Midwifery from Victoria University of Wellington in 2003. My master's thesis was a narrative inquiry into women's experience of using water for labour and birth. I completed a PhD in Midwifery at Victoria University of Wellington in October 2012. My research interest is in fetal heart rate monitoring.

I am employed at Capital and Coast District Health Board (CCDHB) as Associate Director of Midwifery and seconded to the Graduate School of Nursing Midwifery and Health, Victoria University of Wellington as a lecturer. I coordinate the Post-Graduate Certificate in Midwifery (Complex Care) and supervise midwifery research students. I provide LMC care to a small caseload of women.

I have been asked to provide expert advice to the Health and Disability Commissioner on case number C11HDC00957. I have read and agree to follow the Commissioner's guidelines for Independent Advisors. I confirm that I do not have any personal or professional conflict of interest in this case and I have thoroughly read all the material provided to me.

The purpose of this advice is to provide independent expert advice about whether [Ms A] provided an appropriate standard of midwifery care to [Mrs B] and [Baby B] in regard to the following questions:

1. The standard of antenatal and postnatal midwifery care given to [Mrs B].

2. The standard of [Ms A's] clinical documentation.

3. The appropriateness of the information given to [Mr and Mrs B] about Vitamin K in the consent process.

4. Whether [Ms A's] management decisions around the provision of Vitamin K to [Baby B] were reasonable in the circumstances?

5. The appropriateness of [Ms A's] approach to [Baby B's] jaundice.

6. The appropriateness of [Ms A's] usual process of gaining consent for Vitamin K administration.

7. The appropriateness of [Ms A's] usual practice around the procedure of administering Vitamin K.

8. The appropriateness of changes made to [Ms A's] practice since this incident.

Summary of Events

[Mrs B], a primigravida with an EDD of [late 2010] (scan date), had an uncomplicated pregnancy under the care of LMC midwife [Ms A]. [Baby B] was delivered at 38 weeks and 6 days gestation (spontaneous normal vaginal delivery) on [Thursday] at 12:39pm followed by a manual removal of retained placenta in the operating theatre (OT).

LMC midwife [Ms A] conducted a newborn examination on [Baby B] whilst her mother [Mrs B] was in the OT and sought consent for the administration of Vitamin K from the baby's father. [Mr B] did not feel able to consent to [Baby B] receiving Vitamin K and the LMC noted in the baby's clinical record, 'no vitamin K given as no consent'. Her intention was to discuss this with [Mrs B] on her return from theatre. In the interim, [Ms A] remained on delivery suite to perform a four hour shift as a hospital midwife, while [Mr B] and [Baby B] went up to the postnatal ward.

[Mrs B] was admitted to the postnatal ward at 5:00pm, [Thursday]. [Mrs B] received routine post-birth/post-op care and assistance with breastfeeding. There is no documentation of a discussion about Vitamin K during the postnatal stay and PKU test was not performed during the admission (recommended to be done from 48hrs of feeding). Mother and baby were discharged home on [Saturday] (day 3) at 11:45am. The LMC provided postnatal home visits daily for the next 3 days.

On [Sunday] (day 4), [Baby B] is noted to have "slight jaundice" on her face, she was unsettled and her feeding pattern had been around every hour overnight.

On [Monday] (day 5) [Baby B] was noted to have jaundice on her 'face and some [on] body', her feeding was frequent and her output normal. Exposure to sunlight for 20 minutes a few times a day was recommended. Both parties agree that Vitamin K administration was requested be given to [Baby B] at this visit. [Ms A] documented 'Mum still wants to give Vitamin K. Will bring tomorrow.'

On [Tuesday] (day 6) [Baby B] was not feeding and lethargic, with 'bright yellow jaundice'. [Ms A] referred her acutely to the on-call neonatal registrar at [the public hospital].

On admission to [the public hospital], [Baby B] was noted to have a very high serum bilirubin rate (SBR) (456), 10% weight loss, lethargy and abnormal posturing and tone. She received phototherapy and was diagnosed with a brain haemorrhage secondary to Vitamin K deficiency bleeding. She was given Vitamin K on the neonatal unit and transferred to [paediatric] neurosurgery for urgent craniotomy and evacuation of subdural haematoma.

[A few days later] [Ms A's] LMC care was terminated by [Mrs B].

Responses

1. The standard of antenatal and postnatal midwifery care given to [Mrs B].

Using section 88 and the NZCOM Midwives Handbook for Practice (2010) as a guide to the standard of care expected, it appears that midwife [Ms A] has complied with the bulk of the requirements for antenatal care for [Mrs B]. The maternity record reviewed reveals that [Mrs B] booked for LMC care with midwife [Ms A] at 14 weeks gestation and received nine antenatal visits. She also had appropriate blood tests, scans and treatments. She was booked and attended antenatal classes. The care plan checklist, a section in the [region's] Midwifery Services note initiated for [Mrs B], was commenced at the booking visit and added to over the course of the pregnancy.

However, the care plan checklist is incomplete. In the context of this report, the entry for Vitamin K is not dated and the plan/preferences were not completed. In reviewing the notes I have before me, there is an absence of running records[11] to accompany the checklist and clinical detail of visits. As there are no records of any discussion or consent for the administration of Vitamin K for the baby post-birth, it is not possible to conclude that this discussion took place or that [Mrs B] received any written information about Vitamin K administration from LMC [Ms A] during pregnancy.

The care plan[12] is required to be commenced in early pregnancy and added as appropriate throughout care until discharge. The care plan checklist provides prompts to the woman and LMC around areas for discussion and the provision of information. Therefore it is important to ensure the care plan and/or care plan checklist are fully completed. Clear documentation of discussions and information provides evidence of decision-making and is therefore a vitally important aspect of midwifery care. It also serves to remind the LMC of areas that have been covered already and those that still need attention, making it less likely those important decisions, such as choice for administration of Vitamin K, are not missed.

While I am satisfied that the antenatal care provided to [Mrs B] by midwife [Ms A] was of an appropriate standard, the level of documentation, in particular the care plan checklist, was not.

In relation to the provision of postnatal care given to [Mrs B] by midwife [Ms A], there are a few aspects, not included in the list of questions that follow that warrant comment; LMC providing cover for the busy birth unit, handover to core ward staff, and the PKU test.

Following a rapid birth, [Mrs B] needed to go to the operating theatre for a manual removal of a retained placenta. Midwife [Ms A] took [Mrs B] to the theatre then returned to the delivery suite and conducted the newborn examination and paperwork for the birth. According to midwife [Ms A], the delivery suite was very busy and short

[11] Running records refers to the section of most maternity records where the LMC and the woman are able to provide a more detailed description of the content of discussions and plans in narrative format.
[12] Care plan means the process by which the LMC and the woman develop a plan of care for the woman and her baby and the documentation of this plan throughout the individual clinical notes pertaining to this woman (s88, p. 1041)

staffed and she offered to provide some cover (4 hours). Midwife [Ms A] reports that she had already handed over to staff prior to doing the newborn check and afterwards had asked a registered nurse to take [Mr B] and the baby to the ward. The discussion and decisions around the administration of Vitamin K will be covered below, but it is my opinion that the decision made by midwife [Ms A] to change from an LMC focus of care to covering the busy delivery unit as a core staff member, contributed to Vitamin K administration being missed/forgotten. It is not the brief of this report to debate this aspect; rather my intention is to highlight it as a contributing factor to outcome. And I hasten to say that in the circumstances, midwife [Ms A's] assistance to the delivery suite staff would have been most gratefully received and appreciated. What it does highlight is the importance of clear and concise documentation and communication.

Midwife [Ms A] visited [Mrs B] in the postnatal ward at the end of her shift as a core midwife. She noted that the baby had not fed since delivery and provided appropriate assistance. It is clear that she did not remember to discuss with [Mrs B] about the administration of Vitamin K at this visit. There were no entries in the mother or baby notes of this visit. Midwife [Ms A] visited again in the morning of the next day ([Friday]) and again provided assistance with breastfeeding, but did not discuss the administration of Vitamin K. On [Saturday], midwife [Ms A] visited [Mrs B] in hospital and noted she was ready for discharge home. On this visit the baby was noted to have a slight tinge of jaundice. Vitamin K was not discussed.

It must be noted that the failure to discuss and administer Vitamin K during [Mrs B's] hospital postnatal stay sits both with midwife [Ms A] and the hospital ward staff. It is standard procedure in most maternity units for this information to be clearly documented on the patient information system and the paper records that this system produces (all in [Mrs B's] notes) and handed over verbally. Hospital maternity staff has a responsibility to check the baby's notes and medication chart to affirm whether Vitamin K was given or whether the family had declined. This is a double checking system to safeguard against things being missed. Both the immediate postnatal history and examination record (page 85 of the bundle) and the labour and delivery — baby (2nd stage) (page 87 of the bundle) clearly indicate (the No/None box is ticked) that Vitamin K was not given. It is also stated on both the maternal and infant discharge records that Vitamin K was not given. These entries should have alerted the maternity staff to follow-up with the mother and LMC midwife. I note in the maternal and infant hospital records that maternity ward staff members were mainly registered nurses. As maternity care is outside their usual scope of practice, it is possible that the significance of the administration of Vitamin K was not appreciated.

Midwife [Ms A] made three postnatal home visits ([Sunday, Monday, Tuesday]) and two visits to [Mrs B] at [the paediatric intensive care unit] ([Wednesday and Friday]). There were a number of text messages between midwife [Ms A] and [Mrs B] over [several days]. [Mrs B] requested transfer of care to the hospital midwives from [11 days following the birth]. Whilst the postnatal care documented by midwife [Ms A] was by and large adequate, there are some gaps in her postnatal documentation in the initial phases of [Mrs B's] time in the ward, in particular the follow-up of the Vitamin K administration.

Another concern however, is that fact that [Baby B] did not receive her PKU heel prick test (Guthrie) until the [Tuesday] on day 5. This appears to be another oversight both by the hospital staff and the LMC. The PKU should be done at 48 hours old or as soon as possible after this.

(http://www.nsu.govt.nz/files/ANNB/Your_newborn_babys_blood_test.pdf).

In conclusion, the antenatal care was appropriate but the documentation and care planning were substandard, midwife [Ms A] states in her report (28/11/11) that it was not her practice previous to document in the parents notes their consent to administer Vitamin K, but that she would document that a discussion had taken place. One must therefore conclude, in the absence of documentation in this case, that a discussion between [Mrs B] and [Mr B], and midwife [Ms A] did not take place antenatally. This departure would be viewed moderate disapproval by midwife [Ms A's] peers.

Despite there being several opportunities during [Mrs B's] admission in the postnatal ward to discuss and administer Vitamin K, this did not happen. This is an oversight that should have been discovered by both the LMC and the hospital staff. The PKU test did not happen until day five. These departures from accepted postnatal care would be viewed with moderate disapproval by midwife [Ms A's] peers.

2. The standard of [Ms A's] clinical documentation.

The standard of the clinical documentation has been commented on in the previous section. Whilst the standard of documentation by and large is adequate, there are some gaps in midwife [Ms A's] documentation. The care planning and postnatal documentation are the major areas of concern. Documentation is a critically important aspect of maternity care because it demonstrates clinical reasoning and decision-making and serves to communicate to the clients and other caregivers important information and decisions. Whilst the departure from accepted documentation, on the face of it, is mild, the consequences of the departure was severe, in that the baby suffered a brain insult that might have been prevented if the Vitamin K was administered soon after birth. This would be considered a moderate to severe departure from the standard of care expected by her midwifery peers.

3. The appropriateness of the information given to [Mr and Mrs B] about Vitamin K in the consent process.

There is a discrepancy between the recollections of [Mrs B] and [Mr B] and midwife [Ms A] around the discussion of and information received around Vitamin K administration for the baby following birth.

[Mrs B] has stated in her interview with HDC on 23/8/12 that she had not received any information related to Vitamin K verbally or in written form from her LMC midwife [Ms A]. However, [Mrs B] does recall receiving information about Vitamin K from her antenatal classes. Both these recollections are confirmed by her husband [Mr B] on 22/8/12.

Midwife [Ms A] also stated in a letter dated 22/6/12 in section 2 that she provided a pamphlet[13] that is present in the bundle of notes (page 17). This pamphlet contains appropriate information for women and their families around the administration of Vitamin K. I believe the pamphlet in the bundle of notes was provided to HDC as an example of what midwife [Ms A] would 'normally' do in practice, but does not necessarily represent what she did do in this case.

In the absence of any documentation in [Mrs B's] notes that Vitamin K was discussed, it is impossible to say whether the information was appropriate or otherwise. I am not able to comment on the appropriateness of the information on Vitamin K provided during the antenatal classes attended by [Mrs B].

4. Whether [Ms A's] management decisions around the provision of Vitamin K to [Baby B] were reasonable in the circumstances?

This is covered below.

5. The appropriateness of [Ms A's] approach to [Baby B's] jaundice.

Jaundice can be classified as physiological (3–5 days) or pathological (onset < 24hrs) and may also be associated with dehydration and infection. Assessment for jaundice is a routine part of postnatal care of the newborn in the first week of life. In the community, assessment of jaundice is generally done by determining the spread of yellow colouration down the baby's body — the further down the body the yellow colour goes, the higher the serum bilirubin level (Pairmain et al, 2010). 'Daily assessment of skin colour, muscle tone, alertness, feeding patterns, urinary output and sleeping behaviours assist the midwife to determine whether an estimation of SBR (blood test) is required' (p. 628).

Midwife [Ms A] appears to have assessed the baby's feeding, sleeping, output and skin colour during her visits on Sunday and Monday. She notes a progression of jaundice from the face only the day before to the face and some of the body on the Monday. Her advice to [Mrs B] was 'to put the baby in sunlight for 20 min, few times a day'. It is not uncommon for midwives to advise sunlight for treatment of jaundice. Evidence supporting the effectiveness is mixed with some health professionals cautioning against that use of sunlight due to risks of sun exposure and the development of skin cancers. One study suggests 'sunlight may be considered an alternative phototherapy source for the treatment of neonatal jaundice, particularly in areas where conventional phototherapy units are unavailable' (Salih, 2001). There is one current registered clinical trial looking at the benefits of sunlight treatment for neonatal jaundice in the African context. Advising sunlight exposure for the treatment of jaundice would be considered appropriate in the context of common practice at this time, but must sit alongside thorough observation and assessment of factors contributing to jaundice and advice to the mother about signs of deterioration in the baby.

[13] Vitamin K for newborn babies. Information for pregnant women and whanau.

Reading the postnatal notes and with the benefit of hindsight, there are a couple of signs that might prompt the LMC to make a firmer plan for ongoing management and observation. The baby's feeding patterns from birth accompanied by its generally unsettled behaviour could indicate that there was inadequate milk transfer. Although midwife [Ms A] does comment on urine output, there is still meconium present on day four at a time when one would expect to see transitional stools if the baby was getting adequate milk feeds. There is no mention on day four of the adequacy of [Mrs B's] milk supply nor is there a written breastfeeding plan for the next 24hrs. This is relevant because the baby was found to have a weight loss of around 10% of its birthweight when she was admitted.

It is of concern that [Baby B] appears to have gone without a breastfeed for 17 hrs (entry in maternal notes [Tuesday] 1045, p. 90 of the bundle): 'Last breastfeed at 1730hs on [Monday]'. I am not sure what advice midwife [Ms A] had provided [Mrs B] with in respect to the circumstances in which she should call her about [Baby B's] condition nor why [Mrs B] did not call her LMC when [Baby B] stopped breastfeeding. This period of time without a breastfeed would lead to dehydration which would contribute to the worsening jaundice.

Midwife [Ms A's] approach to assessment and treatment of [Baby B's] jaundice was appropriate, but she appears to lack some critical insights of the subtle signs of deterioration. A lack of care planning for the next 24hrs and advice to the mother about when she should call the midwife when things were not going well i.e. breastfeeding contributed to the worsening situation.

6. The appropriateness of [Ms A's] usual process of gaining consent for Vitamin K administration.

Midwife [Ms A] described her 'usual' practice around gaining consent for Vitamin K administration as having a discussion antenatally with the family and confirming consent just prior to the administration of the injection in the immediate postnatal period. She further reports that at the time of this incident, it was not her usual practice to document in the clinical notes that the parents wished to administer Vitamin K, but that she would document that Vitamin K had been discussed. This is peculiar and inappropriate given that the care plan checklist in [Mrs B's] notes provided space for noting the date when the discussion took place as well as space to record parental consent and choice of route of administration (ie, oral or intramuscular). The care plan acts as a prompt for antenatal discussions and informed decision-making around management options for mother and baby and when utilised fully are an effective tool. It also provides clarity of decision-making to any other care providers who may become involved in the woman's care.

It is usual for the LMC to discuss Vitamin K administration after the birth of the baby and to gain consent (or not) during the antenatal period and to document both the discussion and consent in the woman's note and care plan. The discussion is often supported by written information such as that provided in the bundle of notes. It is appropriate for the LMC, or her back-up/core midwife colleagues to re-confirm the

decisions around Vitamin K with the parents again immediately prior to administration of Vitamin K. Indeed, this would be considered best practice.

7. The appropriateness of [Ms A's] usual practice around the procedure of administering Vitamin K.

Midwife [Ms A] has confirmed in her reports to HDC that she understands that Vitamin K should be administered as soon after birth as possible and that this was her usual practice. The circumstances around the birth of [Baby B] meant that 'usual' practice was interrupted, in that [Mrs B] was in the operating theatre whilst midwife [Ms A] was conducting the newborn check, and [Mrs B's] husband did not wish to take responsibility for the decision/consent. This situation was further compounded by the lack of documentation around the antenatal decision-making and consent. It was a reasonable decision by midwife [Ms A] to wait for confirmation from [Mrs B] following her return from theatre.

However, the responsibility to ensure that this delayed administration of Vitamin K was followed through rested with midwife [Ms A], and it appears she became distracted by the busyness of the delivery suite and failed to provide an adequate handover to ward staff. These are serious departures from accepted practice. (As mentioned previously, the ward staff also had a responsibility the check that Vitamin K had been administered once [Mrs B] went to the ward.)

Midwife [Ms A] visited [Mrs B] in the maternity ward but again failed to follow-up the Vitamin K and consequently [Baby B] left hospital without receiving it. [Mrs B] has stated that she reminded midwife [Ms A] on the Sunday (day 4) and Monday (day 5) after her discharge from hospital about her wish for [Baby B] to have Vitamin K and that on both occasions midwife [Ms A] advised she would get some from the hospital and give it the following day. However, she failed to do so. It is not ideal to have waited this long[14] before giving [Baby B] her Vitamin K injection and midwife [Ms A] had a responsibility to act on the request immediately ie, obtained the Vitamin K from the hospital and administered the same day.

The delay in administering Vitamin K to [Baby B] is a significant departure from accepted practice and would be regarded with severe disapproval by midwife [Ms A's] midwifery peers.

8. The appropriateness of changes made to [Ms A's] practice since this incident.

Midwife [Ms A] has advised that her practice has changed around her documentation of consent for Vitamin K in the woman's maternity records and has also established an alert sticker to go on the front of the notes of women who were undecided at the time of birth. These are appropriate changes.

[14] In newborns, blood clotting is impaired in the first week post-partum while levels of Vitamin K dependent clotting factors are low. Vitamin K deficiency bleeding (VKDB) occurs in an early (< 48hrs), classic (2–7 days) or late (1 week to 6 months) form. Breastfed babies are more at risk of haemorrhagic disease, but it is difficult to predict which babies will develop VKDB, as babies without specific risk factors can develop classic VKDB. Because of these factors, prophylactic Vitamin K at birth is recommended to prevent VKDB (Pairman et al., 2010, p.603).

Midwife [Ms A] has reflected on the importance of good documentation and communication and undergone a competency review by the Midwifery Council of New Zealand in July 2012.

Midwife [Ms A] has indicated that she is no longer in self-employed practice and now works as an employed midwife in the hospital. Whilst she acknowledges that this change is beneficial to her practice as she is working with the supportive guidance of senior midwives, it is important for her to remember that as a legislated autonomous practitioner, she remains responsible and accountable for the care she provides regardless of where she works. It is just as important to think critically in the hospital setting surrounded by many colleagues as it is in the community where you may not have daily contact with your colleagues.

I personally do not think it was necessary for midwife [Ms A] to leave self-employed practice as a result of this incident, however, I understand the enormous pressure that is experienced by midwives following an adverse outcome and how this can damage their confidence. The important outcome is that midwife [Ms A] reflects on the root cause or the reason why this mistake was made and to determine how to prevent it happening again. Critical thinking and clinical reasoning develop further with years of experience and I would hope that in time she moves back out to the community to practise with a supportive group of midwives.

References

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Pairman, S., Tracy, S. Thorogood, C., & Pincombe, J. (2010). *Midwifery: Preparation for Practice* (2nd ed). Sydney: Elsevier

Documents Reviewed

HDC website complaint submission [date]
Letter from [Ms A] undated (fax dated 24/2/11)
Letter from Carla Humphrey dated 28/11/11
Response from [Ms A] 20/11/11
Unsigned and undated letter of support for [Ms A]
Letter from [Ms A] dated 22/6/12
[The] DHB Pamphlet Vitamin K for newborn babies, Information for pregnant women and whanau
Notes of interview with [Ms A] [HDC investigators]
Notes from phone call interview with [Mrs B] 23/8/12
Notes from phone call interview with [Mr B] 22/8/12
Maternity notes for [Mrs B]
[hospital] records mother and baby."