General Practitioner, Dr B
Medical Centre

A Report by the
Health and Disability Commissioner

(Case 20HDC00477)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

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Executive summary

1. This report concerns the care a woman received from a general practitioner (GP), and highlights the importance of robust primary care management of women in early pregnancy to ensure timely detection of ectopic pregnancy.

Findings

2. The Commissioner found several deficiencies in the care provided by the GP, specifically:

- Not documenting or considering the woman's reported history of abdominal pain, or asking specifically about a history of abdominal pain;
- Not recording the woman's pulse and blood pressure or examining her abdomen to exclude obvious signs of ectopic pregnancy;
- Not interpreting the hCG results appropriately; and
- Not providing or documenting appropriate safety-netting advice.

3. The Commissioner considered that, cumulatively, these failures amounted to a breach of Right 4(1) of the Code.

Recommendations

4. The Commissioner recommended that the GP attend the Medical Protection Society's workshop "Mastering your risk".

5. The Commissioner recommended that the medical centre undertake a review of all patients who have experienced PV bleeding in early pregnancy over the three months preceding the date of this report, to assess whether its staff have interpreted hCG results accurately, have actively questioned the woman about abdominal pain and documented this, and have conducted appropriate examinations.

Complaint and investigation

6. The Health and Disability Commissioner (HDC) received a complaint from Ms A about the services provided to her by Dr B at a medical centre. The following issues were identified for investigation:

- *Whether Dr B provided Ms A with an appropriate standard of care in February 2020.*
- *Whether the medical centre provided Ms A with an appropriate standard of care in February 2020.*

7. This report is the opinion of the Commissioner.

8. The parties directly involved in the investigation were:

Ms A	Complainant/consumer
Dr B	GP
Medical centre	Group provider

9. Further information was received from:

District health board	
Dr C	GP

10. In-house clinical advice was obtained from GP Dr David Maplesden (Appendix A).

Information gathered during investigation

Background

11. This report concerns the care provided by GP Dr B[1] to Ms A (aged in her twenties), who was five weeks pregnant at the time of these events, prior to the discovery of an ectopic pregnancy.

12. On 17 January 2020, Ms A received a positive pregnancy test result.

13. On 22 January 2020, Ms A went to see a GP, Dr C, at the medical centre, to confirm her pregnancy. Ms A reported spotting (bleeding). Dr C recorded in the notes that it was "ok to have spotting at this stage". Ms A's hormone test[2] on this date was within the normal range.[3] Dr C told HDC that she did not consider ectopic pregnancy because the abdominal examination was unremarkable. She stated that she made a plan for Ms A to contact the medical centre in three days' time for a repeat hormone test if the bleeding continued, and this was documented in the notes.

14. Between 23 January and 2 February, Ms A continued to bleed. She told HDC that she experienced significant pain, so she made a further appointment at the medical centre.

Appointment with Dr B

15. On 3 February 2020, Ms A saw Dr B at the medical centre. Ms A's pregnancy was calculated to be five weeks. What was discussed at this appointment is disputed between Dr B and Ms A.

[1] Dr B was employed as a locum GP/independent contractor.
[2] Blood tests measuring levels of hCG (a hormone produced in pregnancy) are used to check how well a pregnancy is progressing.
[3] Her β-hCG level was 2200.

Pain

16. The medical notes contain no history of Ms A experiencing any pain.

17. Ms A told HDC that she told Dr B that she had been doubled over in pain, felt immense pressure, was experiencing pain when urinating, and that the pain was very different to when she had experienced her last miscarriage. In response to the provisional opinion, Ms A told HDC that she explained to Dr B that she had experienced pain prior to the appointment, and that when she said this, she had her hand on her stomach and Dr B was looking at the computer screen.

18. In contrast, Dr B told HDC that she has no recollection of Ms A raising the subject of abdominal pain, and they did not discuss this. Dr B said that if they had done so, she would have recorded the details of the conversation, considered ectopic pregnancy, and taken additional investigatory steps, including examining Ms A's abdomen and pelvis for tenderness. Dr B told HDC that she was not aware that Ms A was in any pain, so ectopic pregnancy was not something that she was "even suspecting".

19. Dr B stated that she knows that ectopic pregnancy should always be considered in early pregnancy. She is aware that initially it may not cause any signs or symptoms, and that when symptoms develop, they are abdominal pain and PV[4] bleeding. She said that her standard practice when dealing with a woman presenting with bleeding in pregnancy is to consider the gestational age of the pregnancy, the degree of blood loss, and any pain symptoms.

20. Dr B told HDC that her usual practice is to type at the same time as a patient presents their issues and concerns, which helps her to document the words used by the patient and to capture as much of what is being said as possible. In response to the provisional decision, Dr B told HDC that if Ms A had described pain that could have been material, she would have included it in the notes.

21. Dr B accepts that she failed to document "important negatives" such as the absence of pelvic pain. She acknowledged that when there is bleeding in early pregnancy, the documentation of the presence or absence of pain is of utmost importance. In response to the provisional decision, Dr B told HDC that she now always proactively asks about pain in presentations of early pregnancy.

Blood loss

22. Ms A told HDC that she told Dr B that she had had "gushes of blood" and "a gush, it came out fast and filled a panty liner". Ms A feels that this description indicated that it was a lot of blood.

23. Dr B confirmed to HDC that Ms A reported to her that her vaginal bleeding[5] had settled after seeing Dr C, but had started up again. Dr B said that the blood loss described by Ms A

[4] "Per vaginam" (through the vagina).
[5] PV bleeding.

was a "mini gush" and a "gush enough to soak a panty liner". She documented in Ms A's medical notes:

> "[H]ad some spotting so saw [Dr C]. The bleeding settled but then has come back again with a 'gush' soaking a panty liner … Yesterday had another 'mini gush' of blood PV."

24. Dr B stated that this implied to her that it was only a very small amount of blood, and as the blood had not resumed or continued, she assumed that it was not enough to cause any issues with Ms A's blood flow.[6] Dr B said that if the blood loss had been a large amount, she would have taken a pulse and blood pressure reading. However, she also accepts that recording a baseline blood pressure in early pregnancy is good practice, and told HDC that this was an omission on her part.

Examinations

25. Dr B did not examine Ms A physically.

26. Dr B explained that she did not undertake a vaginal examination because it was her understanding that it does not improve diagnostic accuracy in cases of bleeding in early pregnancy.

27. Dr B told HDC that she did not examine Ms A's abdomen because there was no mention of pain other than discomfort when passing urine a week prior to the consultation, and this had eased. Dr B stated that had she known that Ms A was in pain, she would have examined her abdomen.

Ultrasound discussion and investigations

28. Dr B explained to HDC that it was her understanding that "expectant management"[7] is usual practice in women with a pregnancy of less than six weeks' gestation who are bleeding but not in pain. She said that this is based on the knowledge that a fetal pole[8] or heartbeat is not detected until five and a half or six and a half weeks' gestation. Dr B said that if Ms A had been a few days further into her pregnancy, she would have referred her to the early pregnancy clinic for an ultrasound scan and subsequent management.

29. Dr B documented that she discussed an ultrasound scan with Ms A, but that it was "quite early" for a scan to be meaningful. Dr B explained to HDC that she did not refer Ms A for an ultrasound scan as she was not aware that Ms A was in pain, and because pelvic ultrasound scans are performed before six weeks they are not useful to assess pregnancy viability. Ms A told HDC that Dr B mentioned an ultrasound scan but told her that there was a month's waiting list. Dr B noted that Ms A had experienced symptoms of a urinary tract infection (UTI) a week earlier, and arranged testing for UTI, sexually transmitted infections (STIs), and rising hormone levels (hCG).

[6] "Haemodynamic instability".
[7] Allowing the pregnancy to progress to a future gestational age.
[8] The first visible sign of a developing embryo.

Safety-netting advice

30. Ms A told HDC that she left Dr B feeling frustrated about what she should do if her symptoms or pain got worse.

31. Dr B told HDC that she did not record any safety-netting advice for ongoing bleeding or the development of pelvic pain, and she did not document the plan to refer Ms A for an ultrasound scan when she was approximately six weeks pregnant. Dr B said that she did not document in Ms A's notes that she would follow up and act upon any abnormal results from the tests. However, she explained that she would have acted on the results had they been abnormal. Dr B accepts that her note-taking of safety-netting advice and written confirmation of her follow-up plans were failures on her behalf. In response to the provisional decision, Dr B told HDC that her practice is to always follow up on her own results, and to act on these if indicated. Dr B said that this case is a solemn reminder of the importance of providing safety-netting advice to all patients to ensure that they understand symptoms that may warrant concern, and what to do if symptoms develop.

Subsequent events

Test results

32. On 3 February 2020 (after the appointment with Ms A), Dr B received the results of the hormone test, which showed that it had risen from 2200IU/L (on 22 January) to 8500IU/L[9] (2200µg). Dr B annotated the result and wrote "rising nicely". A nurse made an entry in the medical records that she had telephoned Ms A and left a voicemail regarding the hCG level.

33. Dr B told HDC that her usual practice for evaluating hormone results was to refer to a table from a telehealth service. She said that she was reassured by the rise, and that the levels were within the acceptable range for that stage of the pregnancy.

Emergency Department

34. On 5 February 2020, Ms A went to the Emergency Department (ED) at a public hospital with lower abdominal pain. The triaging nurse note stated: "[S]udden onset central lower [abdominal] pain. Constant. [Seen by] GP for similar episode ... [who queried] UTI. Not treated."

35. The ED notes at 3.59pm state:

> "Sudden onset Sunday [2 February 2020] and Tuesday [4 February 2020] evening while sitting on toilet of stabbing pain originating in her vagina and moving up into her pelvis. Pain improved by standing up and bending forward over bed. 10/10 at worst. [C]onstant but some waves of worse pain. [N]o PV blood loss. Some dysuria[10] and frequency but no haematuria[11] … Lower [abdominal] pain — [first] episode over weekend then started again overnight at 2am. Constant."

[9] International units per litre.
[10] Painful urination.
[11] Blood in the urine.

36. An ultrasound was carried out, with the findings "highly concerning [of] a ruptured ectopic pregnancy". Ms A was diagnosed with severe internal bleeding secondary to a ruptured ectopic pregnancy, and required emergency surgery to remove a fallopian tube.

Return to the medical centre on 7 February 2020

37. Ms A and her mother returned to the medical centre and asked to see Ms A's most recent consultation notes, and saw Dr C to discuss these. Among other things, the notes for this appointment state: "… Complaint about [Dr B]. Didn't listen. Nothing in [Dr B's consultation] note about pain which she complained of."

Further information

38. Ms A told HDC that she and her partner had been struggling to start a family, and having lost a fallopian tube, are now left with further challenges to their fertility.

39. Dr B clarified to HDC that her recollection of the appointment was that "[Ms A] did not raise and we did not discuss abdominal pain". However, Dr B concluded: "I do not recall any discussion of pain at the time of the appointment nor that she had experienced pain previously."

40. Dr B told HDC that she had always thought that the pain accompanying an ectopic pregnancy, once started, was constant and increasing in nature. She has since learnt that the pain can be intermittent. Dr B stated:

> "I apologise that this has caused more distress for [Ms A]. [Ms A] states that she did tell me at the time that she was in pain. I am very sorry for my role in the miscommunication that has occurred regarding the presence or history of pain, and in future I will ask directly about lower abdominal pain in women presenting with bleeding in early pregnancy."

Responses to provisional opinion

41. Ms A, Dr B, and the medical centre were given the opportunity to respond to relevant sections of the provisional opinion.

Medical centre

42. The medical centre responded that it had no further input to provide.

Ms A

43. Ms A told HDC that she was upset to learn that Dr B did not have much understanding regarding what to look for in a potential ectopic pregnancy, and wondered why Dr B did not ask for help from her colleagues.

44. Ms A also told HDC that she could still feel the pain she experienced and reported on 3 February 2020, and it had been "excruciating".

Dr B

45. Dr B stated: "I am sorry for the stress experienced by [Ms A] regarding her ectopic pregnancy as well as the disappointment she [felt] following on from our consultation on 3 February 2020."

46. Dr B told HDC that she had practised as a GP for many years, and she truly cares for her patients and wants the best for them, so was very affected by this complaint and is committed to improve her practice.

47. Dr B concluded: "Having regard to the knowledge I had at the relevant time, I accept aspects of my practice could have been better — but I do not think my conduct reaches a threshold that justifies a breach finding."

Opinion: Dr B — breach

48. This opinion concerns Dr B's failure to turn her mind to the possibility that Ms A was experiencing an ectopic pregnancy when Ms A saw her on 3 February 2020.

Abdominal pain

49. A common symptom of ectopic pregnancy is abdominal pain, and its presence alongside vaginal bleeding should raise a red flag for doctors to consider ectopic pregnancy.[12] There is a dispute on the evidence between Dr B and Ms A as to whether Ms A told Dr B that she was experiencing abdominal pain.

50. Dr B has stated to HDC that she does not recall Ms A raising abdominal pain, and they did not discuss it. In contrast, Ms A is certain that she told Dr B that she had experienced pain — describing being "doubled over". Ms A recalls that she had her hand on her stomach when she told Dr B of the pain she had experienced prior to the appointment, and that Dr B was looking at her computer at the time. Dr B did not document any mention of pain in her notes, which she says she records contemporaneously as the patient is speaking.

51. I note that the clinical record from the ED on 5 February records that Ms A described the sudden onset of pain on Sunday (the day before her consultation with Dr B). The ED notes further state that Ms A was seen by a GP for a "similar episode" to that which she was presenting to the ED for (that is, lower abdominal pain), and that the GP had queried a urinary tract infection. It is also recorded in the medical centre's consultation notes on 7 February (when Ms A returned to the GP clinic to request Dr B's notes and to make a complaint) that Ms A was very upset. It is recorded that Ms A had not felt listened to, and was concerned that there was nothing in Dr B's notes about the pain she had complained of.

[12] Regional HealthPathways, attached as Appendix B.

52. In order to make a factual finding, I must be satisfied that the fact or event at issue was more likely than not to have occurred. I have considered the evidence carefully. I note in particular that the ED clinical notes made after Ms A's presentation to Dr B support the conclusion that Ms A had experienced pain the day before her GP consultation, and that she had presented to Dr B for that pain (as well as bleeding). The ED clinical notes, and the medical centre notes made on 7 February (as outlined in the foregoing paragraph) are also consistent with Ms A's emphatic statement that she told Dr B about the pain.

53. The context is also relevant. Ms A was a woman who had had at least one previous miscarriage, and was trying to get pregnant. It is clear that she was concerned about the viability of her pregnancy, and that she was actively seeking medical assistance in that respect. I find it difficult to believe that, having experienced pain (which she has described to HDC as "excruciating" pain) the day before her doctor's appointment, she would not have mentioned it — either voluntarily or on questioning. By contrast, in Dr B's first response to Ms A (her most proximate response to the complaint given about ten days after the consultation), Dr B stated that she did not recall nor document the pain being raised, and was not aware of the pain.

54. Taking all the evidence into account, I am satisfied that it is it more likely than not that Ms A reported abdominal pain to Dr B at the consultation on 3 February 2020.

55. Given Dr B's evidence, I allow for the possibility that Ms A's history of abdominal pain was not heard, or fully appreciated by Dr B at the time.

56. My in-house clinical adviser, Dr David Maplesden, advised that he is at least moderately critical if a history of abdominal pain was obtained (either volunteered or noted on specific questioning) from Ms A and the history was not documented or given adequate account in subsequent decisions. I accept this advice.

57. I note further that even in the event that Ms A had not reported abdominal pain to Dr B, Dr Maplesden would still be mildly to moderately critical if Dr B did not ask specifically about abdominal pain in a patient with PV bleeding during early pregnancy. I do not accept that it was Ms A's responsibility to volunteer this information. As Dr Maplesden advised:

> "Direct questioning regarding important symptoms I believe is as important as the initial open-ended questioning we are trained to use and may have elicited a more accurate history from [Ms A]."

58. I also accept this advice. Independently of Ms A telling Dr B about the pain she experienced, it is clear that Dr B should have questioned Ms A specifically about abdominal pain and documented her answer, including if Ms A said that she was not experiencing pain. Dr B says that it is her standard practice to consider pain symptoms, that she is aware that ectopic pregnancies should be considered when there is bleeding in early pregnancy, and that the primary symptoms of ectopic pregnancy are PV bleeding and pain. Notwithstanding that, she made no enquiries about whether Ms A was in pain, and said that she did not even suspect an ectopic pregnancy. I note that had Dr B made enquiries

about pain, Ms A's pain experienced the previous day would more likely than not have been elicited from her.[13]

59. In the context of my finding that Ms A reported her pain, and allowing the possibility that Dr B did not hear Ms A (or fully appreciate the information given), Dr B's failure to enquire about the pain directly impacted the course of Ms A's subsequent management.

60. I agree with Dr Maplesden that Dr B's failure to ask Ms A specifically whether she was experiencing any pain, and the failure to record Ms A's pain history was a departure from accepted practice.

Management

61. Dr Maplesden advised that Dr B's management was deficient in three respects.

62. First, Dr B did not examine Ms A's abdomen to exclude any obvious signs of ectopic pregnancy. Dr Maplesden advised that Dr B should have examined Ms A's abdomen regardless of whether Ms A had reported abdominal pain.

63. Secondly, there is no evidence that Dr B gave Ms A appropriate follow-up instructions (safety-netting advice), including the need for Ms A to seek medical attention promptly if abdominal pain developed (or recurred) or if there was a persistent increase in vaginal bleeding.

64. Thirdly, Dr Maplesden noted that Dr B also did not assess Ms A's clinical stability by way of recording her pulse and blood pressure. However, Dr Maplesden advised that Dr B's failure to take those recordings would be mitigated if Ms A reported only a modest amount of PV bleeding, as this meant that a concealed intra-abdominal haemorrhage was unlikely. Ms A told Dr B that she had had a gush that soaked a panty liner, and other "mini gushes". Dr B interpreted that to mean an amount of blood not large enough to cause haemodynamic instability, whereas Ms A intended her description to mean that it was "a lot" of blood. I accept that Ms A's description may be reasonably open to interpretation.

65. If Dr B did not appreciate the significance of Ms A's voluntary report of pain, Dr Maplesden's advice is that these failures were a moderate departure from accepted practice. I note that if no history of abdominal pain was obtained from Ms A, Dr Maplesden would still be mildly critical.

hCG levels

66. On 3 February, Dr B organised and received the results of a further hCG test. It showed that Ms A's hormone level had risen from 2200IU/L (on 22 January) to 8500IU/L. Dr B annotated on the results, "rising nicely".

67. The region's HealthPathways[14] states: "Expect an approximate doubling of level every 48 hours up to six weeks gestation for an ongoing intrauterine pregnancy."

[13] I infer this from the fact that Ms A is clear that she did communicate her pain (and therefore would likely have reported that history if asked), and that she gave a detailed history in other respects.

68. Dr Maplesden advised that the hormone test result showing a level of 8500 IU/L (on 3 February 2020) was not reassuring of a normally progressing pregnancy. He explained that the result of the hCG test should have led Dr B to consider an early pregnancy scan to assess viability (whether or not Ms A continued to experience ongoing bleeding). Dr Maplesden was critical that Dr B concluded that the change in hCG levels was reassuring and believed it to represent a viable intrauterine pregnancy.

69. Dr B referenced a resource she used to assess the adequacy of hCG levels in early pregnancy. Dr Maplesden noted that the reference ranges in that resource are wide, and do not take into account sequential rises in hCG as outlined by the HealthPathways. Dr Maplesden further stated:

> "If [Ms A] did present a history of abdominal pain I would be moderately critical that [Dr B] did not take additional steps to ensure the rise in hCG was reassuring, and note urgent ultrasound would have been indicated in any case to confirm the site of the pregnancy as per previously cited HealthPathways guidance."

70. I accept this advice. Dr B appears to have misinterpreted the hCG result of 3 February 2020 as being reassuring, and took no further action on it. I accept Dr Maplesden's advice that the HealthPathways would have been a more appropriate resource for Dr B to refer to when reviewing hCG results. The omission to respond to Ms A's hCG results appropriately was yet another missed opportunity to investigate Ms A's presenting concerns further.

Conclusion

71. Ms A had a history of miscarriage, and presented with PV bleeding twice in two weeks. In such circumstances, it was imperative that Dr B consider the possibility of ectopic pregnancy and explicitly enquire about the presence and history of abdominal pain to inform the appropriate pathway of care. Irrespective of whether Ms A volunteered information to Dr B about having experienced abdominal pain, it concerns me that Dr B did not turn her mind to a possible ectopic pregnancy, and ask the right questions, undertake the necessary assessments to confirm or exclude it, advise Ms A of what she should do if her symptoms changed or worsened, and correctly interpret the results of tests.

72. I consider that Dr B failed to provide services to Ms A with reasonable care and skill by failing to:

a) Document and consider Ms A's reported history of abdominal pain or ask specifically about a history of abdominal pain;

b) Assess Ms A's clinical stability by recording pulse and blood pressure;

c) Examine Ms A's abdomen to exclude obvious signs of ectopic pregnancy;

d) Interpret the hCG results appropriately; and

e) Provide or document the provision of appropriate safety-netting advice.

[14] An assessment, management, and referral information website for clinicians working in the district.

73. I acknowledge that Dr B considers that the above failures do not meet the threshold for a breach of the Code of Health and Disability Services Consumers' Rights (the Code). However, I consider that cumulatively the failures are a departure from a reasonable standard of care and skill, and amount to a breach of Right 4(1)[15] of the Code.

Opinion: Medical centre — no breach

74. As a healthcare provider, the medical centre is responsible for providing services in accordance with the Code. As set out above, I have found that Dr B breached Right 4(1) of the Code.

75. Dr B was a locum GP/independent contractor to the medical centre at the time when the breach occurred, and was thus an agent for the medical centre. I am of the opinion that Dr B had an appropriate level of clinical experience and expertise, and that the medical centre was entitled to rely on Dr B to provide appropriate medical care to Ms A. I also note Dr Maplesden's advice that the HealthPathways relating to the management of ectopic pregnancies were readily available to Dr B.

76. In this case, I consider that the errors that occurred did not indicate broader systems or organisational issues at the medical centre, and that the medical centre could not have taken steps to prevent Dr B's breach of the Code. Therefore, I consider that the medical centre did not breach the Code.

Changes made since events

77. Dr B told HDC that she has taken the outcome and complaint very seriously and has spent considerable time reviewing her care and looking to improve her practice. She has had discussions with her GP colleagues and peers, and taken time to review the guidelines around bleeding in early pregnancy and the presentation of ectopic pregnancy, and has contemplated how she can increase safety around future presentations of bleeding in early pregnancy.

78. Dr B also advised that she was not aware that the rate of rise in hCG was insufficient, and this has highlighted a learning need for her. In response to the provisional decision, Dr B told HDC that her learning around ectopic pregnancy since this event has enabled her to understand that although less common, ectopic pregnancies may present with a variety of symptoms other than the usual presentation of pain and bleeding, including urinary symptoms and rectal pressure.

[15] Right 4(1) states: "Every consumer has the right to have services provided with reasonable care and skill."

79. Dr B told HDC that her skill in dealing with women who present with bleeding in early pregnancy will be much changed, and she will now:

a) Always examine the abdomen of any woman who presents with bleeding in early pregnancy, even if pain is not present;

b) Actively ask about the presence of pain, and document its presence or absence;

c) Provide improved safety-netting, including discussing and documenting the signs or symptoms that would warrant concern (eg, the development of pain, or increase in bleeding); and

d) Consider referring all future cases of bleeding in early pregnancy either for an ultrasound scan or to the early pregnancy clinic.

80. Dr B told HDC that she often accesses HealthPathways for guidance. Dr B explained that at the time of Ms A's consultation, she was not aware that HealthPathways contained a pathway on miscarriage and ectopic pregnancy. Dr B said that she has now found the pathway and has sent feedback to HealthPathways asking them to consider moving the guidance from the "Gynaecology" section into the "Pregnancy" section, where it would be more easily found for doctors dealing with pregnant patients experiencing possible miscarriage or ectopic pregnancy.

81. I acknowledge Dr B's frank and constructive response to Ms A's complaint and this opinion.

82. The medical centre told HDC that it has not made any formal changes since the incident. However, the doctors and nurses are far more aware of the need to ask questions to rule out ectopic pregnancy. The medical centre explained that Dr B had conversations with Dr C, and discussions with her peer group about the incident. The medical centre stated that other doctors in the clinic also had the opportunity to discuss, debrief, and learn from this incident.

Recommendations

83. I recommend that the medical centre undertake a review of all patients who have experienced PV bleeding in early pregnancy over the three months preceding the date of this report, to assess whether its staff have:

a) Interpreted hCG results accurately;

b) Actively questioned the woman about abdominal pain and documented this; and

c) Conducted appropriate examinations.

The results of the review and any further remedial actions taken are to be reported to HDC within four months of the date of this report.

84. I recommend that Dr B attend the Medical Protection Society's workshop "Mastering your risk". Dr B is to report back to HDC within ten months of the date of this report, with details of the content of the training and evidence of having attended.

Follow-up actions

85. A copy of this report with details identifying the parties removed, except the expert who advised on this case, will be sent to the Medical Council of New Zealand and the Royal New Zealand College of General Practitioners, and they will be advised of Dr B's name.

86. A copy of this report with details identifying the parties removed, except the expert who advised on this case, will be sent to the district health board for educational purposes.

87. A copy of this 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: In-house clinical advice to the Commissioner

The following expert advice was obtained from Dr David Maplesden:

"1. Thank you for the request that I provide clinical advice in relation to the complaint from [Ms A] about the care provided to her by [Dr B] of the medical centre. 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 following information:

- Complaint from [Ms A] per [Nationwide Health and Disability Advocacy Service]
- Responses from [Dr B] and [Dr C]
- GP notes [the medical centre]
- Clinical notes [the DHB]

2. [Ms A] complains about management of her early pregnancy by [Dr B]. She states she presented to [Dr C] at [the medical centre] towards the end of January 2020 having had a positive pregnancy test. She had some vaginal bleeding (PV) just prior to the appointment. She was examined by [Dr C] and a 'wait and see' approach advised. Over the next few days she had more PV bleeding and intermittent abdominal pain and she saw [Dr B] on 3 February 2020 in relation to the symptoms. [Ms A] states a possible scan was discussed and then discounted by [Dr B] and instead blood, urine and STI tests were undertaken. [Ms A] states there was no physical examination performed and she was not given any advice on what to do if her symptoms worsened. [Ms A] had previously suffered a miscarriage and informed [Dr B] the current symptoms felt different to a miscarriage. The symptoms worsened and resulted in [Ms A] attending [the] ED around 0200hrs on 5 February 2020. Here she was diagnosed with severe internal bleeding secondary to a ruptured ectopic pregnancy and she required emergency surgery with removal of a fallopian tube.

3. Based on the provider response and contemporaneous clinical notes I believe [Ms A's] management by [Dr C] was consistent with accepted practice. [Ms A] was experiencing scant PV bleeding at around 4/40 gestation. There was no record of associated pain. Presentation was consistent with implantation bleed. There were no 'red flags' on abdominal examination. Best practice might have been to check a baseline blood pressure if this was regarded as a 'first antenatal' assessment. Appropriate early pregnancy interventions were discussed and documented, and serum hCG level arranged given conflicting urine hCG results. Repeat hCG was advised in three days if bleeding persisted or worsened but it evidently settled. Serum hCG result of 2200 IU/L on 22 January 2020 was consistent with an early pregnancy. There was no indication for ultrasound scan at this stage, nor is it likely to have been useful at this stage in pregnancy. Gestational sac should be visible by 5.1–5.5 weeks after the

last period and possibly visible from 4.3 to 5.0 weeks[1]. The consultation was well documented.

4. There were some deficiencies in the care provided by [Dr B] to [Ms A] on 3 February 2020 (Monday) and [Dr B] has acknowledged these in her frank and reflective response. A critical issue in terms of degree of departure from accepted practice is whether [Ms A] gave a history of abdominal pain. ED notes dated 5 February 2020 (0359hrs) include: *Sudden onset Sunday* [2 February 2020] and *Tuesday evening while sitting on toilet of stabbing pain originating in her vagina and moving up into her pelvis, pain improved by standing up and bending forward over bed, 10/10 at worst, constant but some waves of worse pain, no pv blood loss, some dysuria and frequency but no haematuria …* [Dr B] does not recall [Ms A] recounting a history of abdominal pain but she did not specifically question [Ms A] in this regard. It appears [Ms A] did not have abdominal pain at the time she was seen by [Dr B], but appropriate questioning is likely to have revealed the history of pain the previous evening which had since settled. Noting three possible scenarios:

- I am mildly to moderately critical that [Dr B] did not ask specifically about history of abdominal pain in a patient with PV bleeding in early pregnancy, but I accept [Ms A] may not have volunteered this history if there was no pain present at the time. However, I note [Ms A's] assertion she did provide a history of abdominal pain and was 'doubled over' with pain at the time of the assessment.
- I am at least moderately critical if a history of abdominal pain was obtained from [Ms A] (either volunteered or noted on specific questioning) and this history was not documented or given adequate account in subsequent management decisions (see below). However, I note [Dr B] maintains there was no presentation of abdominal pain as a symptom and had such history been presented, she would have documented this and proceeded with an abdominal examination

5. If the assumption is made that there was no history of abdominal pain obtained from [Ms A], I am mildly critical of the following aspects of [Ms A's] care by [Dr B], using the [region's] HealthPathways section on 'Miscarriage and Ectopic pregnancy' as a representation of accepted practice:

- Failure to assess clinical stability by way of recording pulse and blood pressure. A mitigating factor is the modest amount of PV bleeding recorded ([Ms A] states this as a gush of blood sufficient to fill a panty liner), and apparent absence of abdominal pain making concealed intra-abdominal haemorrhage unlikely
- Failure to examine [Ms A's] abdomen to exclude any obvious signs of ectopic pregnancy despite the absence of current pain history (although it is quite possible abdominal examination would not have revealed any abnormality at this time)
- Failure to provide (or document provision of) appropriate safety-netting advice. Such advice might include to seek medical attention promptly if abdominal pain developed/recurred or there was persistent increase in vaginal bleeding.

[1] https://radiopaedia.org/articles/early-pregnancy?lang=gb Accessed 1 July 2020

Had a history of very recent or current abdominal pain been obtained, I would be moderately critical of these omissions. I think some of my colleagues would have considered referring [Ms A] for an urgent early pregnancy trans-vaginal scan (if available) at this time noting her anxiety regarding pregnancy viability (two previous miscarriages) and, by my reckoning, current gestational age of 5 $^{+4}$/40 if she had a 28-day cycle. However, I acknowledge a scan at this time can be non-confirmatory and this was apparently discussed with [Ms A]. [Dr B] was conscientious in organising further serum hCG, STI and MSU testing.

6. The hCG result of 8500 IU/L recorded on 3 February 2020 was not reassuring of a normally progressing intra-uterine pregnancy. The cited HealthPathways guidance states: *Expect an approximate doubling of level every 48 hours up to 6 weeks gestation for an ongoing intrauterine pregnancy.* Thus, a level of 35–70,000 IU/L might have been a more reasonable expectation by 3 February 2020 based on the 22 January 2020 result although there are always 'exceptions to the rule'. [Dr B] has annotated the result '*rising nicely*' and there is a nurse entry dated 3 February 2020: *phoned and left voicemail regarding HCG.* I presume a reassuring message was conveyed to [Ms A]. I believe the hCG result should have led to consideration of an early pregnancy scan to assess pregnancy viability whether or not [Ms A] continued to experience ongoing bleeding (with appropriate safety-netting advice while awaiting the scan), and certainly if [Ms A] reported abdominal pain, urgent scan in this context would have been mandatory. [Dr B] notes in her response a resource she used to assess adequacy of hCG levels in early pregnancy[2] and notes [Ms A's] result fell within the (wide) reference ranges quoted. However, the resource does not take into account the importance of sequential increase in hCG levels as discussed above. I regard [Dr B's] reference to the resource as a mitigating factor but note she now uses a more appropriate tool which takes into account sequential rise in hCG[3]. I am not sure how many of my colleagues who have not had post-graduate obstetric experience would recognise the importance of sequential change in hCG levels, but there is advice on this factor in the cited HealthPathways which were readily available to [Dr B]. In the absence of a history of abdominal pain, and taking into account the mitigating factor discussed, I am mildly critical that [Dr B] concluded the change in hCG levels was reassuring and most likely represented a viable intrauterine pregnancy. If [Ms A] did present a history of abdominal pain I would be moderately critical that [Dr B] did not take additional steps to ensure the rise in hCG was reassuring, and note urgent ultrasound would have been indicated in any case to confirm the site of the pregnancy as per previously cited HealthPathways guidance.

7. [Dr B] has reflected appropriately on her care of [Ms A] and she has provided a written explanation to [Ms A] of the rationale for her management decisions, although this stops short of an apology. I believe the remedial actions outlined by [Dr B] in her response, which centre primarily on self-education to address deficiencies in her knowledge, peer support and changes in clinical practice, are appropriate and should

[2] https://www.healthline.com/health/hcg-blood-test-quantitative#results
[3] http://perinatology.com/calculators/betahCG.htm

reduce the risk of a similar incident in the future. It is apparent there may have been some misperception by [Dr B] of [Ms A's] symptoms, particularly abdominal pain, and the reasons for this are unclear but it is understandably a source of frustration and concern for [Ms A]. Direct questioning regarding important symptoms I believe is as important as the initial open-ended questioning we are trained to use and may have elicited a more accurate history from [Ms A], and [Dr B] has stated her intention to ask specifically about abdominal pain in similar situations in the future. This episode has understandably caused significant distress for [Ms A] and while earlier investigation by way of ultrasound on 3 or 4 February 2020 would not necessarily have altered [Ms A's] final outcome (removal of fallopian tube required), I believe a written apology from [Dr B] to [Ms A] would be a reasonable further remedial action."

Appendix B: HealthPathways

"Assessment

1. Consider ectopic pregnancy which can present with a variety of symptoms and signs. Look for:
   - Common symptoms

     Common symptoms of ectopic pregnancy

     - Abdominal or pelvic pain
     - Amenorrhoea or missed period
     - Vaginal bleeding with or without clots

     Other symptoms may include:

     - Breast tenderness
     - Gastrointestinal symptoms
     - Dizziness, fainting, or syncope
     - Shoulder tip pain
     - Urinary symptoms
     - Passage of tissue
     - Rectal pressure or pain on defecation

   - Common signs

     Common signs of ectopic pregnancy

     - Pelvic tenderness
     - Adnexal tenderness
     - Abdominal tenderness

     Other signs may include:

     - Cervical motion tenderness
     - Rebound tenderness or peritoneal signs
     - Pelvic mass
     - Pallor
     - Abdominal distension
     - Enlarged uterus
     - Tachycardia (> 100 beats per minute) or hypotension (< 100/60 mmHg)
     - Shock or collapse
     - Orthostatic hypotension

2. Determine if the patient is clinically stable:
   - Take temperature, pulse, and blood pressure.
   - If tachycardia (> 100 beats per minute), or hypotension (less than 100/60), or orthostatic hypotension, patient may require urgent care. Request acute gynaecology assessment or emergency assessment.

- Examine the abdomen for tenderness, especially guarding and rebound. An acute abdomen requires urgent care — request acute gynaecology assessment or emergency assessment.

  Abdomen

  - Tenderness — site, any guarding or rebound
  - Uterus — palpable at symphysis at approximately 12 weeks
  - Look for other possible pathology e.g., appendix, gut.

3. Take a history and check the patient's:
   - presenting symptoms.

     Presenting symptoms

     - Last menstrual period (LMP)
     - Location and severity of abdominal or pelvic pain
     - The timing, extent, and severity of bleeding
   - relevant gynaecological and obstetric history.

     Gynaecological and obstetric history

     - Past gynaecological and obstetric history
     - Presence of an intrauterine contraceptive device (IUCD)
     - Recent contraceptive or emergency contraceptive
     - Smear history — especially if irregular bleeding before the pregnancy
4. Consider bimanual pelvic and speculum examination if bleeding heavily or hypotensive.

   Speculum examination

   - Determine source and amount of bleeding.
   - Cervix — general appearance, length, orifice (os) open or closed, evidence of products of conception (POC) in cervical os.
   - Remove any POC from the cervix with sponge forceps and place in a sterile specimen jar or if a large quantity, in a jar with formalin, to send for histology.
5. Investigations — if clinically stable, and symptoms NOT highly suggestive of ectopic pregnancy.
   - arrange antenatal bloods with group and screen. Group and screen should be less than 7 days old.
   - arrange quantitative human chorionic gonadotropin (hCG) testing. Some rural providers (e.g., Lakes District Hospital) have access to 24 hour point of service quantitative hCG.

     Quantitative human chorionic gonadotropin (hCG) testing

     - If hCG less than 2000 units, repeat after 48 hours.
     - Expect an approximate doubling of level every 48 hours up to 6 weeks gestation for an ongoing intrauterine pregnancy.

- Expect hCG level to usually fall more than 50% in pregnancy that is miscarrying.
- Interpret hCG levels in conjunction with patient symptoms, as hCG levels in some ectopic pregnancies can mimic the expected rise or fall of a continuing pregnancy or a miscarriage.
- If expected patterns are not followed, seek gynaecology and obstetric advice.

- perform swabs if suspicious of infection, or consider opportunistic STI testing."