Obstetrician, Dr A

Midwife, Ms D

Waikato District Health Board

A Report by the

Health and Disability Commissioner

(Case 09HDC01581)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

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Executive summary

Background

1. Ms B had her first pregnancy confirmed in late 2008 when she was 21 years of age. A routine scan two months later identified concern about the growth of the baby, and Ms B was referred to the fetal medicine service at Waikato Hospital Women's Outpatient Department antenatal clinic. She was seen by obstetrician and gynaecologist Dr A, a specialist in maternal-fetal medicine, who monitored the growth of Ms B's baby.

2. Ms B attended five appointments at the fetal medicine clinic. At the fourth and fifth appointments, she had an ultrasound scan and was seen by Dr A but routine antenatal assessments (including blood pressure and urine tests) were not undertaken. Ms B, her mother and her partner recall Ms B experiencing various symptoms at the time of these appointments and communicating those symptoms to Dr A. Dr A is emphatic that she was not advised of these concerns. The clinical notes do not record any discussion of Ms B's wellbeing having taken place at either appointment.

3. Later on the day of her fifth appointment, Ms B became seriously unwell. An ambulance was called and Ms B was admitted to Waikato Hospital with elevated blood pressure. She was found to have serious toxaemia and had an emergency Caesarean section to deliver her baby girl at 26 weeks' gestation. Her baby died a few days later.

Decision summary

4. Staff working at the Waikato Hospital Maternity Unit Outpatient Department had expressed concerns about their ability to assess and process patients because of the systems in place. The difficult configuration of the department also had an impact on the ability of the clinic staff to provide a quality service.

5. By not ensuring that the fetal medicine clinic had appropriate systems in place, roles at the clinic were clearly defined, and the clinic midwife was able to undertake the necessary observations on all patients, Waikato District Health Board (Waikato DHB) breached Rights 4(1)[1] and 4(4)[2] of the Code of Health and Disability Services Consumers' Rights (the Code).

6. In view of the information provided, I am satisfied that Ms B's symptoms were brought to Dr A's attention on the day of her fifth appointment. As the obstetrician responsible for monitoring Ms B, in these circumstances, Dr A's failure to adequately assess Ms B or follow up the absence of blood pressure recordings or urinalysis results was a significant departure from expected standards and a breach of Right 4(1) of the Code.

7. Midwife Ms D was the midwife assigned to Dr A's clinic on the days of both these appointments. Although she may have been busy elsewhere when Ms B attended the clinic, Ms D should have reviewed Ms B's records and alerted Dr A that Ms B's

[1] Right 4(1) of the Code states: "Every consumer has the right to have services provided with reasonable care and skill."
[2] Right 4(4) of the Code states: "Every consumer has the right to have services provided in a manner that minimises the potential harm to, and optimises the quality of life of, that consumer."

routine recordings needed to be taken by another nurse. Ms D is asked to reflect on her role in this tragic outcome.

Investigation process

8. On 13 August 2009, the Health and Disability Commissioner (HDC) received a complaint from Ms B about the services provided by Waikato DHB. On 23 November 2009, an investigation was commenced. Ms B's Waikato Hospital clinical records, the DHB's policies, responses from the parties involved, and a response from sonographer Ms E, were obtained and reviewed.

9. The parties directly involved in the investigation were:

Dr A	Obstetrician/provider
Ms B	Consumer
Mr B	Ms B's partner/complainant
Ms C	Ms B's mother/complainant
Ms D	Midwife/provider

Also mentioned in this report:

Ms E	Sonographer
Ms F	Independent midwife
Dr G	Obstetric consultant

10. Independent expert advice was obtained from midwife Joyce Cowan (Appendix A), and obstetrician Dr Ian Page (Appendix B.)

11. The following issues were identified for investigation:

Dr A

- *The adequacy of the treatment and care Dr A provided to Ms B in relation to her pregnancy in 2009.*
- *The adequacy of the information Dr A provided to Ms B in relation to her pregnancy in 2009.*

Waikato DHB

- *The adequacy of the treatment and care Waikato DHB provided to Ms B in relation to her pregnancy in 2009.*

12. On 21 January 2010 the investigation was extended to include midwife Ms D as follows:

- *The adequacy of the treatment and care Ms D provided to Ms B in relation to her pregnancy on two days in early 2009.*

Information gathered during investigation

Background

13. Ms B's pregnancy was confirmed in 2008 by an ultrasound scan ordered by her GP, when Ms B was in the sixth week of her pregnancy. The scan estimated her date of delivery. Soon after her first ultrasound, the GP ordered a further ultrasound scan when Ms B reported some bleeding.

14. The following month, Ms B booked in with the local midwives, and advised independent midwife, Ms F, that although she intended to move to another region, she wanted to remain under the local midwives' care. Ms F referred Ms B for a Maternal Serum Screen (MSS)[3] instead of a nuchal scan, because it was too late in her pregnancy for a nuchal scan.[4] The MSS and obstetric ultrasound showed that the baby was small and the liquor volume was lower than normal, and Ms F referred Ms B to the Waikato Hospital Maternity Unit Outpatient Department, which is known as the Women's Outpatient Department (WOD).

Antenatal clinic assessments

15. Consultant obstetrician and fetal medicine specialist Dr A saw Ms B for the first time at the WOD antenatal clinic.[5] Dr A advised HDC that although Ms B was 21 weeks and one day into her pregnancy at this time, the fetus measured 19 weeks and five days by scan and was considered to have early onset IUGR.[6] Dr A explained that the IUGR and raised AFP[7] did not bode well for the pregnancy. She told Ms B that the scan did not clearly show the fetal anatomy because of reduced liquor volume, fetal position and size, and asked her to return to the clinic in two weeks.

16. Dr A advised HDC that the reason for Ms B's referral to the clinic was that her fetus was not growing and was symmetrically small, which constituted a diagnosis of early onset symmetrical IUGR. Dr A stated that one of the most common causes of early onset symmetrical IUGR is a fetal chromosomal abnormality such as Down syndrome. The other common cause for this clinical presentation is placental insufficiency due to maternal hypertension. Waikato DHB midwife Ms D (who is employed part-time at WOD), recalls that Ms B was referred to the antenatal clinic after a follow-up anatomy scan showed that her baby was small for dates. Ms D stated that the focus of these appointments for the client is the scan. They get to see the baby and are able to listen to the sonographer, and talk to the obstetric consultant about what is on the screen and ask questions about the baby.

[3] A Maternal Serum Screen is a routine antenatal blood screen to detect any underlying medical conditions that may affect the pregnancy, such as diabetes.
[4] A nuchal scan is a sonographic prenatal screening scan (ultrasound) to help identify higher risks of Down syndrome in a fetus. The scan is carried out at 11 to 13 weeks pregnancy and assesses the amount of fluid behind the neck of the fetus — known as the nuchal fold or the nuchal translucency. Fetuses with a high risk of Down syndrome tend to have a higher amount of fluid around the neck.
[5] A number of clinics are held in WOD, such as antenatal, ultrasound and fetal medicine.
[6] Intrauterine Growth Restriction.
[7] AFP (alpha-fetoprotein) is a protein normally produced by the liver and yolk sac of a fetus. A pregnant woman carrying a fetus with neural tube defects may have high levels of AFP.

17. Ms D advised HDC that fetal medicine is a team discipline consisting of the midwife, sonographer and obstetric consultant. She stated that ideally, an assessment of the woman takes place as soon as possible after her arrival at the clinic. The midwife is advised when the woman arrives, when the receptionist places an attendance slip on the clinic counter. The clinic midwife does an initial assessment of the woman when she arrives, evaluating all the available data. This involves checking the information available on the front sheet of the woman's file, including her contact details, the details of the Lead Maternity Carer (LMC), allergies, medications, blood group, and medical and surgical history. The midwife is also expected to check all blood test results and scan reports. Blood pressure, urinalysis and weight are recorded. Ms D stated that this can take between 10 to 15 minutes to complete.

18. When a woman's recordings are completed she is taken to a consulting room to meet the consultant. If the woman arrives late for her appointment she will have her scan first. The scan schedule is very tight. There are six half-hour slots per clinic, and if the woman is more than 10 minutes late, the scan will not be done. If a scan is required, the midwife's assessment can be delayed until after the scan, because the scan takes precedence.

19. Ms B recalls that at her first appointment at the antenatal clinic, she was told that her baby's growth was at 19 weeks instead of 21 weeks, and that the reason for this could be congenital, or a problem with the food the baby was receiving. She said that her blood pressure was not checked, but a urine sample was taken because the urine dip-test showed a moderate amount of protein. Ms B said Dr A:

> "… offered me an amniocentesis.[8] The procedure was not explained to me and I refused to have it. I was told to 'pack a bag' because baby was not looking very well and I needed to be prepared to stay in hospital. Also I was advised to go to [my local] Hospital on my return [home] for steroid injections to help the baby, which I did. I was also told that if the steroids didn't work I would have to go to hospital for bed-rest and they would look at 'taking the baby out', and that if things did not look better, baby would probably be born prematurely."

20. Dr A stated that Ms B verbally declined the amniocentesis procedure.

21. In response to the provisional opinion, Ms B said that she had been mistaken when advising HDC that she had been told to "pack her bags" at this appointment. Ms B said that it was at the following appointment that this was said.

22. Two weeks later, Ms B was seen for her second appointment by an obstetric registrar, who examined her, reviewed the scan report and then discussed the findings with Dr A. An appointment was made for Ms B to return in one week for further assessment.

23. Ms D said that when Ms B attended the clinic for the second appointment, she assessed her before the scan. Ms D saw that Ms B did not have a midwife in the town

[8] A procedure used in prenatal diagnosis to obtain amniotic fluid which can be used for genetic and other diagnostic tests.

she had moved to and advised her to contact the local maternity service to register with that practice as she might need a local midwife for check-ups between clinic appointments. Ms D entered the routine antenatal checks she conducted of urinalysis, weight, blood pressure and fetal position, which were all normal, on Ms B's "Antenatal Visit Worksheet".

24. Ms B does not believe that she was advised to engage a new midwife, as she was attending the Waikato Hospital clinic weekly.

25. Dr A saw Ms B again at her third appointment, after her scan. At this time, Ms B was 24 weeks and 4 days' gestation. Dr A noted that Ms B's urine had been tested at the clinic before her appointment and showed a trace of protein, but her blood pressure was 100/64mm/Hg (the normal range for an adult is about 120/70mm/Hg). A mid-stream urine test was ordered to rule out infection and confirm the presence of protein. Dr A stated that she was concerned that Ms B's baby had IUGR because of placental insufficiency or a chromosomal abnormality, and talked to Ms B and her partner, Mr B, about the option of the diagnostic test — amniocentesis. Dr A explained the amniocentesis test to them, describing its purpose, and how it is carried out by inserting a needle through the mother's abdomen into the pregnancy sac to withdraw amniotic fluid, to conduct chromosomal testing to eliminate genetic abnormalities such as Down syndrome. Ms B again declined to have an amniocentesis.

26. Dr A stated that the benefit for Ms B of having an amniocentesis was that she would have a confirmed diagnosis if there was a chromosomal abnormality such as Trisomy 21 (Down syndrome). Dr A said that some of these chromosomal problems are lethal and the fetus or baby does not survive the pregnancy or labour. This would therefore help the obstetric team and Ms B to plan and make decisions regarding the mode and timing of delivery. Dr A stated that this information would also give the family the knowledge and time to prepare for the outcome.

27. Dr A said that she told Ms B that there was a 1% risk of a miscarriage or preterm delivery from amniocentesis, because of the invasive nature of the procedure. Additionally, the pregnancy may be further compromised and an already sick fetus may succumb to the procedure because of uterine contractions, infection or leakage of amniotic fluid.

28. Dr A explained to Ms B and Mr B that Ms B needed to have steroid injections to minimise the risk to her baby of respiratory distress syndrome, and to allow the baby the optimal chance of survival. The injections are given as one course of two injections, 24 hours apart. Ms B consented to having the steroid injections. The usual practice is for the patient to have the first injection in the hospital with the second being given by the LMC midwife. However, Ms B was living in a new town and her midwife was in her previous town.

29. Ms D stated that she checked with Ms B at this appointment if she had contacted the new maternity service to register. Ms B said that she had not. Ms D administered Ms B's first steroid injection, and telephoned the hospital in her new town to arrange for

Ms B to have the second steroid injection there, and for Ms B to attend the antenatal clinic there, as it was closer to her home than Waikato Hospital.

30. The midstream urine test taken that day and reported two days after the third appointment for the attention of Dr A reported a positive plus 1 protein, which is one of the signs of pre-eclampsia.[9]

Fourth appointment

31. Dr A saw Ms B again at the WOD antenatal clinic. Ms B was accompanied by her mother, Ms C. Ms B said that were about five people in the room when she had her ultrasound scan. She recalls that in the room were: Dr A, the blond woman doing the scan, Ms E ("who popped in and out and told the younger blond woman how to do the scan"), a man who stood in the corner, and another woman who walked in and out of the room. The Obstetric Ultrasound report notes: "Scanned by: [Ms E] DMU and [an] Obstetrician."

32. Ms E, sonographer, was present during the scan. Ms E advised HDC that she performed ultrasound examinations on Ms B on her first, third and fourth appointments. The examinations lasted between 12 and 15 minutes. She recalls thinking that Ms B's presentation was most likely early severe placental insufficiency, and as such she was alert for any symptoms that would support this working diagnosis. Ms E said it is her normal practice to ask a patient during the scan how she is feeling and if the baby has been moving normally. She said she is confident that Ms B would have had an opportunity during the scan to report any symptoms, but she does not remember Ms B making any such comment.

33. Ms C recalls that the room where the ultrasound and consultation took place was very small, and there were a number of staff present. Dr A entered the room and told Ms B she needed to have an amniocentesis, and "best do it now" so they could rule out Down syndrome. Ms B recalls that Dr A said amniocentesis would show any birth defects and gave her a pamphlet explaining amniocentesis. Ms C told Dr A to "hang on", because her daughter needed time to think about this, and to know what to expect. Ms C said that they had heard that an amniocentesis could bring on early labour. Ms B said she told Dr A that she wanted to talk it over with her partner before she made any decision. She recalls that Dr A gave them 15 minutes to discuss it. When Dr A returned, she looked disappointed when Ms B told her that she wanted further time to consider having this procedure and to talk it through with her partner.

34. There is discrepancy between Ms B's and Ms C's recollection of the discussions about Ms B's condition at this appointment and that of Dr A.

35. Ms C recalled that she told Dr A that she was concerned about her daughter, because she had gained excessive weight, had been vomiting, was experiencing blurred vision

[9] Pre-eclampsia is a common problem in pregnancy, usually affecting first pregnancies and occurring in as many as 10% of pregnant women. It most commonly causes high blood pressure and protein in the urine. The cause is unknown and the treatment difficult. The only known cure is to deliver the baby and placenta.

and tingling in her hands and discolouration on her eyelids, and that she asked Dr A if she thought Ms B might have toxaemia. Dr A said, "No. She is normal." In response to the provisional opinion, Ms B stated that her mother was mistaken when she told HDC about the symptoms she was having on the day of her fourth appointment. Ms B said that on that day her hands and feet were "badly swollen with dots on them" and tingling, but she was not vomiting and did not have blurred vision. However, Ms B agreed that her mother showed Dr A Ms B's swollen hands and feet.

36. Dr A stated that she was not advised that Ms B had visual disturbances and tingling in her hands and feet at this appointment, and does not recall Ms C suggesting that her daughter might have toxaemia. Dr A said if these symptoms had been brought to her attention, it would have confirmed her belief that placental insufficiency was causing the IUGR, and she would have immediately admitted Ms B to hospital.

37. Dr A said she explained to Ms B and Ms C that the baby's prognosis was poor, and talked again about amniocentesis, and the value it had in relation to providing a chromosomal analysis of the fetus. Ms B and Ms C talked about the procedure for a few minutes then told Dr A that they wished to have more time to consider and discuss the procedure with Mr B, and would advise her of their decision at the next appointment. Dr A gave Ms B a pamphlet about amniocentesis that she could take home to discuss with Mr B.

38. Dr A reported this appointment to Ms F, stating:

> "I saw [Ms B] along with her mother at my Antenatal clinic today. [Ms B] has a fetus on board that has early onset IUGR. I talked to [Ms B] along with her mother as to the causes of early onset IUGR and I have once again mentioned to her that the causes are chromosomal abnormality, fetal infection, placental insufficiency and rare genetic syndromes."

39. Dr A advised Ms F that she would be happy to see Ms B again in a week for "further amniocentesis or investigations as [Ms B] wishes". Dr A noted that the baby would need to be delivered early.

40. WDHB has a protocol, "Antenatal Referral Process", which sets out the process for the patient management in WOD (**attached** as Appendix C). This protocol specifies that after a consultation at the antenatal clinic, the consultant is to dictate notes for the client and complete the documentation worksheet/clinic notes. However, Dr A stated, "It is the responsibility of the hospital midwife/nurse to fill in the upper part of this form [the Antenatal Visit Worksheet] with recordings of BP, urine, weight and height."

41. Dr A advised that she is responsible for reporting on the ultrasound with the sonographer and counselling the patient on the details of the scan and follow-up plan. She dictates her assessment and follow-up plan for typing and sending to the patient's referrer, either the GP or midwife LMC. The referrer also receives a copy of the scan report.

42. The WOD "Antenatal Referral Process" also specifies that the midwife "collates all clinical information and among other things, communicates with the Lead Maternity Carer". Ms D stated that she has "no absolute recall" of this clinic, or of seeing Ms B on the day of her fourth appointment. She advised HDC that she "dated the recording column [on Ms B's Antenatal Visit Worksheet] prior to commencing the clinic [on the day of the fourth appointment] … in anticipation of performing the assessment".

43. Ms D believes the reason that she did not undertake the routine antenatal assessment (for protein, ketones and sugar in the urine, blood pressure, oedema[10] and fetal wellbeing) of Ms B at the fourth appointment was because she had a client booked for amniocentesis at 1pm that day. Ms D said, "in all probability I was tending to that client's post procedural needs when [Ms B] came for her [1.30pm] appointment."

44. The Antenatal Visit Worksheet recorded the date [of the fourth appointment] and that Ms B was "25+" weeks gestation, but no urine, blood pressure and weight recordings are noted on the worksheet for this appointment. The omission was noted, as the boxes for recording the urine and oedema observations have been circled, and a question mark entered next to the absence of recordings. Dr A has initialled at the bottom of Ms B's Antenatal Visit Worksheet on that day noting, "Offered Amnio again. Will decide next wk".

Fifth appointment

45. Ms B told HDC that, on the day of her fifth appointment, she woke with a headache. Mr B recalls her telling him that she had a "massive headache — the worst in her life". He drove her to the hospital for her antenatal appointment.

46. The time of Ms B's appointment (as noted on Ms B's radiology referral) was 2.30pm. The ultrasound report by another sonographer[11] did not record the time the scan was conducted. Dr A stated that she estimates, after checking the time noted on the ultrasound images, that she saw Ms B between 2.57pm and 3.10pm on that day.

47. Ms B recalls that there were about five people in the scan room when she went in for her scan. She said she was not introduced to the people in the room, but recalls that there was the receptionist, two women doing the scan and Dr A. As Ms B lay down in the chair the woman doing the scan asked her how she was feeling. Ms B replied that she was "not feeling great", that she had the "worst headache ever and the lights were very bright".[12]

48. Again, there is discrepancy between Ms B's, Mr B's and Dr A's account of events.

[10] Swelling.
[11] This sonographer resigned her position shortly after these events and has not been able to be contacted for comment.
[12] HDC has not been able to contact the sonographer on duty that day.

49. Ms B stated, "[My partner] and I told [Dr A] about my symptoms whilst in the small room after the scan as well."[13] Ms B recalled that she asked Dr A what was happening, but "I felt [Dr A] didn't want to know about it".

50. Mr B recalls Ms B telling Dr A that she had a bad headache and that she was not able to see properly (she was seeing lights and her vision was fuzzy), and that her hands were swollen. He recalls that Dr A just asked again whether they would consent to an amniocentesis, and appeared "a bit mad" that they would not consent. Mr B is unable to recall whether they left the clinic after seeing Dr A, or went back into the clinic waiting room.

51. In response to the provisional opinion, Dr A advised HDC that at the fifth appointment, the sonographer requested her presence as Ms B's scan was difficult to interpret due to lack of amniotic fluid and the small size of the fetus. Dr A stated that she finished what she was doing and went into the scan room where she saw Ms B and Mr B. She recalls greeting them and saying to Ms B, "How are you?" and asking her whether there had been any change since the last appointment. Dr A stated that despite being asking open-ended questions, Ms B and Mr B did not report any symptoms such as headache. She said that she was focussed on them and would have heard such symptoms if reported. She said: "When I saw [Ms B] and [Mr B] I was not made aware of her symptoms of headache, nausea, vomiting, or tingling in her hands either via other clinic staff or during my consultation with them."

52. Dr A said that following the scan, while the sonographer was typing her report, she took Ms B and Mr B into another consulting room for privacy and further discussion about fetal size and the issues in respect of the scan findings. She had expected that after this discussion they would wait in the waiting room for the midwife to do her assessment. However, she did not specifically request that Ms B not leave the clinic until she had been seen by a midwife. Dr A said that when she dictated her reporting letter to Ms B's LMC, Ms F, at the end of the clinic, she presumed that Ms B's blood pressure and urine tests had been done and found to be normal as she had not been told otherwise. Dr A stated that the specialist is often reliant on the midwife/nurse to verbally advise them of any abnormal results. Dr A said that she regrets making this assumption and stated that if the symptoms of headache, blurred vision, nausea/vomiting or tingling had been mentioned to her, she would have personally checked Ms B's blood pressure and urinalysis rather than expecting it to be done by the midwife/nurse and would have admitted Ms B straight away.

53. Dr A recorded the details of her examination of Ms B in her letter to Ms F, noting:

> "I saw [Ms B] along with her partner today at my Antenatal clinic. [Ms B] still has a baby on board that has very early onset IUGR. I requested her to come today mainly for assessment of amniotic fluid and Dopplers and am happy to say that the Dopplers and the amniotic fluid have not worsened. …

[13] Ms B said the symptoms were that she had a bad headache, her vision was blurred with fuzzy lines across her eyes, her hands were tingling and her feet were swollen.

> I have once again given [Ms B] an option of amniocentesis but she and her partner declined once again today. I have asked her to come back in a week's time and we will hope to bring her a few weeks closer to her due date and we will obviously think about delivering the baby if the Dopplers deteriorate in the next few weeks. We will continue to monitor her very closely on a weekly basis and if necessary maybe next week or so we might even admit her to keep monitoring Dopplers, maybe twice a week from now onwards. Next week she is due for a growth scan. Her steroid injections have already been completed and possibly next week I will consider admitting her to hospital for further close surveillance."

54. On the Antenatal Visit Worksheet for Ms B's fifth appointment, on the boxes for recording the urine and oedema, observations were again circled and a question mark entered. Aside from the date and gestation, there are no other recordings on the Antenatal Visit Worksheet for the fifth appointment. Again, Ms B's routine blood pressure, weight and urine assessments were not undertaken. The section "remarks" is blank and Dr A has not signed or initialled the form.

55. However, Dr A advised HDC that although the Worksheet may appear sparse, it should be read in conjunction with the letter to Ms F and the ultrasound report. The reporting letter makes no reference to Dr A having assessed Ms B's health or discussed her general wellbeing with her.

56. Ms D stated that she dated the recording column on Ms B's Antenatal Visit Worksheet for the fifth appointment, again in anticipation of performing the assessment. Ms D advised, "I had been assigned a Gynaecology clinic on the morning of that day and often unfinished work needs completion in the afternoon … I can only assume that the workload was such that I was not available and waiting for [Ms B] before or after her scan."

Events following fifth appointment

57. Mr B said that Ms B was "really bad" on the drive home, and appeared to be getting worse. They decided to stop off at Ms B's mother's house rather than drive straight home. Ms B thought that if she could spend some time in her mother's pool, she would feel better.

58. Ms C stated that her daughter and partner arrived at her house at about 4pm. She was very concerned about her daughter's appearance and told her to go and lie down. However, Ms B said she was hot and wanted to get into the pool. Ms C recalls that when Ms B was in the pool she said she felt like her head it was "going to explode". She then started to vomit. Ms C and Mr B helped Ms B out of the pool and onto a bed. Ms C told her daughter that she was going to ring for an ambulance, but Ms B told her not to worry. She said she had just come from the hospital and had been told she was fine. Ms C said she stayed in the room with her daughter, putting cold flannels on her face. However at 11pm, she was so worried that she told her daughter she was calling an ambulance.

59. The St John ambulance arrived at Ms C's house at 12.19am the following morning. The ambulance recorded that the "time of onset" of "Headache, Vomiting" was 6.30pm and noted:

> "Female 36 weeks gestation.[14] 1st pregnancy. Monitored weekly at Waikato Women's due to small baby. Well yesterday. Today increasing headache, nausea & vomiting. Keeping up fluid intake & eating although vomiting. This evening ↑ headache & pain in neck. Panadol @ 6pm Ø [nil] effect. O/A[15] GCS[16] 15. Headache with some photophobia & neck pain. Ø other pain. Ø contractions or vaginal discharge. BP↑ [170/110]. Temp OK. Other vitals OK. Normal toileting today. Transported directly to Waikato Womens." The form noted, "2x Panadol taken at midnight."

Admission

60. Ms B was admitted to Waikato Hospital at 1.50am. She was seen at 2.20am by the obstetric registrar, who recorded:

> "Sudden onset generalised headache + nausea
> Uncontrolled vomit since ~ 6pm
> Photophobia
> Ø neck stiffness but uncomfortable."

61. The registrar noted that Ms B's blood pressure was elevated at 150/106mm/Hg, and that the cause of her symptoms was not clear, but queried pre-eclampsia, meningism, subarachnoid haemorrhage and migraine. When the results of blood tests were reported, the diagnosis was confirmed as pre-eclampsia. The registrar noted, "Treatment for pre-eclampsia is delivery. However as only 26/40, would be preferable to gain more fetal maturity." Further recordings were taken which showed Ms B's blood pressure to have lowered to 140/88mm/Hg. The fetal heart rate was within normal range at 150 beats per minute. The treatment plan was for Ms B's blood pressure and fluid intake and output to be monitored, and a further medical review to be undertaken.

62. At 4.45am, the hospital midwife recorded a retrospective note. She noted that Ms B arrived at the hospital accompanied by the ambulance officers and her partner. The midwife recorded:

> "0155. T 36.8. P82. BP 152/96. O^2 sat 98
> Looked feverish & vomiting clear fluid
> Rx of vomiting since early yesterday am – but has been able to drink some water. Headache, sore neck. Dislikes strong light – photophobia."

[14] This is an error, as Ms B was 26 weeks' gestation.
[15] On assessment.
[16] Glasgow Coma Scale used to assess level of consciousness. Range 1 to 15, normal being 15.

63. At 2.15am, the midwife tested Ms B's urine and was concerned that although the test showed no glucose or ketones there were four plusses of protein.[17] A urine specimen was sent to the laboratory for analysis. Intravenous fluids were started and Ms B was given medication for nausea and pain control.

64. At 4.50am, Ms B was assessed by the medical registrar who noted that she had "developed a generalised headache this morning" which was "6/10" (pain rating). The registrar found no focal neurological abnormality, but Ms B's headache had gradually got worse over the course of the evening until it was 8-9/10, but that this had lessened to a 6-7/10 at the time of the examination.

65. Ms B was monitored hourly and continued to have a severe headache, despite regular Panadol.

66. At 10.15am, Ms B was seen by obstetric consultant Dr G. Dr G noted that Ms B had a sudden onset of headache on the morning of her fifth appointment, between 8.30 and 9am, accompanied by generalised nausea. Dr G requested a head MRI to rule out thrombosis. Ms B's blood pressure remained elevated. She had the MRI at 3.54pm.

67. At 5.30pm, the registrar recorded that the MRI showed changes (multiple small reversible ischaemic foci)[18] to Ms B's brain, and noted that she was to have a Caesarean section as soon as it could be arranged. Ms B was immediately prepared for theatre and her baby girl was delivered at 7.10pm.

68. The baby was transferred to the neonatal intensive care unit. Ms B was closely monitored and made a good recovery. Sadly, the baby died a few days later.

Dr A's review of events

69. Dr A advised HDC that she saw Ms B between 2:57pm and 3:10pm on the day of the fifth appointment. Dr A noted that Ms B advised HDC that she stopped at her mother's house on the way home (which is three hours by car from the hospital) and her mother immediately called the ambulance.[19] Dr A said this indicated that there was a gap of three hours between Ms B leaving the clinic and her symptoms occurring. Dr A noted that the clinical notes of the Waikato Hospital obstetric and gynaecology registrar and senior house officer recorded at 2.20am the following day, state that Ms B "had a generalized headache and nausea along with uncontrolled vomiting since about 6pm". Dr A said that these notes and the ambulance driver's history are consistent with her recollection that Ms B had not mentioned any of these symptoms to her or the clinic staff earlier during the afternoon of [her fifth appointment].[20]

[17] This can be a sign of urinary tract infection or kidney disease, and also pre-eclampsia.
[18] Areas where blood supply has been impaired.
[19] Ms B did state this in her letter of complaint to HDC, (which was provided to Dr A) but later provided further information about the sequence of events which is supported by her mother and Mr B and the clinical records.
[20] The notes taken by each of these parties are cited above.

Postnatal review

70. Ms B advised HDC that she was asked to return to Waikato Hospital for a six-week postnatal check-up.[21] She stated that she was not physically checked by the doctor who saw her, who told her the purpose of the check-up was to check her progress after the death of her baby. She said:

> "I was seen by a doctor who had not been involved at any time during the pregnancy, birth or death of the baby. … I wanted to ask questions and receive honest explanations for my care by a consultant. I felt pushed away when I tried to ask these questions. I believe that a first time mother should be given good information to support her.
>
> To date I have received no explanation of my condition, or why any of the events which occurred took place in the first place."

71. Waikato DHB advised that the usual practice is that the most appropriate clinician to follow up a woman would be determined at the monthly perinatal meeting, and is usually the clinician most involved in her care. However, when Ms B was admitted she was under the care of the specialist on acute services, as Dr A does not have an inpatient commitment.

72. In mid-2009, Ms B was seen at Waikato Hospital by an obstetric and gynaecology consultant. The consultant wrote to Ms B's new GP advising that she had reviewed Ms B that day. She noted that "you will have received a copy of the Perinatal Mortality meeting report". The consultant stated that she would arrange for the new GP to be sent the discharge summary, as she may not have received a copy of this from the New Born Intensive Care Unit. The consultant outlined the recommendations arising from the Perinatal Mortality meeting in relation to the care plan for Ms B for subsequent pregnancies. She noted Ms B's concern regarding the management of her pregnancy by Dr A. The consultant stated, "I have requested an appointment for [Ms B] to be seen by [Dr A] regarding these concerns."

73. A few days later, Ms D called Ms B and arranged an appointment for her. However, Ms B did not attend the appointment.

74. The DHB explained: "A follow-up plan was unfortunately not documented at the time of the perinatal mortality meeting, and I suspect that follow-up by default was arranged by [the obstetric and gynaecology consultant]. This was not in [Ms B's] best interest, and we have since tightened up our process around this."

Additional information

Dr A

75. Dr A was formerly employed as a specialist obstetrician and gynaecologist at Waikato Hospital. More recently, she was contracted to provide a fetal medicine service at

[21] There is no record of Ms B attending a clinic at Waikato Hospital for this check-up. The earliest appointment was the mid-2009 appointment recorded by the consultant. I note that Ms B was, at discharge from Waikato Hospital, referred to her local maternity service for follow-up care.

WOD. She stated that her role is unlike an obstetrician who is concerned with the secondary care of a patient during her pregnancy and post-partum. According to Dr A, her role was to; perform diagnostic prenatal procedures for chromosomal, genetic and metabolic disorders, such as amniocentesis and chorionic villus sampling, and to supervise and report ultrasound examinations, manage fetal abnormality pregnancies, and counsel parents who have an abnormal pregnancy.

76. Dr A advised HDC that she has no job description, or any written contract, and has asked Waikato DHB for these on numerous occasions. She believes that the lack of job description and contract has led to a blurring of boundaries, job confusion and a significant shifting of responsibility of care. It also prevents further development of the service. Dr A stated that the working environment in WOD is not ideal and the flow-through of patients is extremely dysfunctional. She said the difficult clinic layout had been discussed with management "innumerable times with no solution to date".

77. Dr A said that she believes that Ms B's blood pressure and other recordings were missed by the midwife on those two occasions as a direct result of systems failures and practical difficulties.

78. Following these events (date not provided), Dr A met with Waikato DHB's Clinical Medical Advisor and Clinical Unit Leader to discuss this case. Concerns were raised at this meeting by the Clinical Medical Advisor and Clinical Unit Leader about Dr A's practice of focussing on the fetus and not considering the maternal factors, and the standard of documentation in the unit.

79. Dr A stated that at this meeting, she "once again highlighted"[22] the need to improve the WOD service, by having an obstetric registrar attend the fetal medicine clinics so that, as well as learning, the registrar would provide valuable assistance in dealing with maternal medicine problems such as blood pressure and cardiac abnormalities, and social problems. The registrar could also act as a liaison between the clinic and the in- and outpatient care of the woman during her pregnancy.

80. Dr A stated that she is concerned that Waikato DHB advised HDC that it had been noted that she "focuses on the fetus without consideration of the maternal context", and that their expectation is that "a full obstetric history and examination would be expected for each patient to identify other risk factors in the pregnancy which should be referred to the DHB obstetrician to manage".

81. Dr A stated:

> "This is not the role of a fetal medicine specialist but that of an Obstetrician/LMC. However, should they want me to practice in this manner, due to the current workload and resource issues, the only way this could occur would be if an

[22] Dr A wrote to WDHB Women's Health Service Manager on 15 April 2008, expressing her concern about the lack of resources at WOD, stating that the situation was "unsafe both for ourselves as care providers and for the patients. … It is in these difficult working conditions that mistakes are made."

> obstetric registrar/consultant attended the clinic with me and the registrar would then be the liaison person. …
>
> I believe I provided a high level of professional care, which included ensuring appropriate and regular monitoring and providing reasonable and adequate explanations to [Ms B] and her family about the guarded prognosis that was to be expected of her pregnancy. The risk factors and all information were taken into consideration in providing treatment and planning. The sad outcome is greatly regretted. …
>
> I take this opportunity once again to express my sincerest condolences to [Ms B], her partner and family."

Dr A's role

82. Waikato DHB confirmed that Dr A resigned her permanent position as an obstetric and gynaecology specialist at Waikato DHB in 2007. At the time she was providing the fetal medicine service. Waikato DHB stated that Dr A was approached by the then Service Manager and Clinical Unit Leader to provide ongoing services in fetal medicine as a contractor, which would have been an extension of her duties. The Waikato DHB Service Manager — Womens & Children's Services, stated:

> "Since then [Dr A] has been providing the service and we have been remunerating her for these services.
>
> There is a draft contract between [Dr A] and Waikato District Health Board dated [2007]. It is correct that this has never been signed and we do not know whether [Dr A] has been provided with a copy of the document.
>
> I do not believe that standards and quality of clinical care are stipulated by job descriptions and contracts. As professionals we are responsible to provide the highest standard of care and maintain our standards, knowledge and skills with ongoing continuous medical education."

Ms D

83. Ms D is a registered nurse and midwife, who has worked part-time at WOD at Waikato Hospital for three years. (She has worked for Waikato DHB for 15 years.) Ms D's duties at the WOD are: clinical file preparation for the gynaecology and antenatal clinics, the taking and recording of initial assessments of patients attending the clinics, and following up the consultants' instructions regarding the patient's ongoing treatment and care. Ms D is also involved with the patients attending the department for termination of pregnancy. She is responsible for explaining the termination process and procedure to these patients, obtaining their consent and administering the pre-procedure medication.

84. Ms D believes that the physical geography of the WOD "contributed meaningfully" to the "circumstances surrounding this disastrous situation". She said that the layout of the clinic is not conducive to efficiency and ensuring the privacy of the patient and, as there is no examining room, the midwife assessment is conducted in a public toilet in

the waiting room. There are no designated rooms for the recording and storing of clinical records, and telephone consultation.

85. Ms D stated that the only opportunity she has to establish a rapport with the patients is when she is taking the recordings and assessing the woman's general wellbeing. When all the recordings are completed the woman is taken to a consulting room to meet the consultant. If a scan is required, the midwife assessment can be delayed. Ms D stated that she rarely stays in the scan room for the entire procedure, because she is usually assessing the next patient to be seen. She only stays in the room when invasive tests, such as an amniocentesis, are performed. Ms D stated that the sonographer or the receptionist takes the patient to the scan room if she is busy elsewhere.

86. Ms D stated that since these events, the appointment letter sent to patients now requests that they arrive ten minutes prior to their appointment. This allows the midwife time to complete the initial assessment. Ms D stated that the system could be further enhanced if the appointment letters included information about the requirements of the appointment, eg, the midwife assessment, the scan, specialist consultation, and any other tests required.

87. Ms D advised HDC that she has changed and improved her practice since these events, by reinforcing to each patient the need to provide a urine sample, have her blood pressure checked and her weight recorded. Ms D has enlisted the assistance of the sonographer who, while performing the scan, also asks the woman if she has had these checks, and if she has not, asks the patient to wait to be seen by the midwife.

88. Ms D stated:

> "Fetal Medicine is a specialty requiring compassion for the woman who has her hopes and dreams of a normal pregnancy shattered by bad news. We are here to give information and support and we aim to provide the best possible care in an environment that is not supportive to the emotional and physical needs of the client."

Waikato Hospital antenatal clinic — function

89. Waikato DHB advised HDC that clinics held at WOD include the following: colposcopy, gynaecology, antenatal, ultrasound, special baby, combined fetal medicine and combined obstetric/diabetes. WOD is managed by a Clinical Nurse Manager.

90. New referrals are received at central entry points, entered into the DHB patient management system (iPM) and then graded by the consultant. The referrals are then appointed by the receptionist and/or booking clerk, based on grading. Returning patients are given appointments according to the consultant's instructions. Although clinic templates, for the numbers seen per clinic, are already set within the iPM system, these can be altered upon discussion with individual clinicians based on patient need. The clinic schedules are determined by the relevant consultant's schedule and availability, and are generated by the Clinical Nurse Manager on a

weekly basis. The purpose of the schedules is to inform the Women's Outpatient staff of the clinics scheduled and the allocation of nursing staff to the clinics.

91. There is a template for the clinic in the computer and this identifies the number of patients that can be booked. A General Day List is computer generated and is a summary of the bookings in the clinic. A copy is printed when the clinic is made up by the receptionist prior to the clinic and is given to the nurse/midwife assigned to the clinic along with the patient's notes. As this clinic is demand driven, the numbers of women attending the clinics vary between one and eight. The number of patients attending is clearly visible on the computer, and any variance in the numbers of booked patients should be discussed with the consultant.

92. The patients are booked into the clinic by the receptionist, according to their clinical need which is determined by the nurse/midwife or consultant. A handwritten appointment sheet is generated by the receptionist for the clinic. This is used to book patients for an ultrasound or fetal medicine procedure. This sheet is used by the receptionists, sonographers and the fetal medicine nurses and consultants.

93. The nurses are allocated to clinics in accordance with the scope of their practice and the clinic taking place. One nurse or midwife is allocated per clinic, and is allocated according to demand. The nurse or midwife allocated to a clinic "ensures patient's journey through the clinic", and would normally perform and document the patient's baseline observations prior to the patient being seen by the consultant.

94. During the clinic, as the patients arrive and depart, the General Day List is updated with the information on the computer and the sheet is printed at the end of the clinic. A copy is attached to the patients' notes and is given to the typist to complete the dictation from the clinic. The information on the sheet is available on the computer for any staff with access rights. This includes, but is not limited to, the nurses, midwives and consultants.

95. The nurse or midwife assigned to the clinic reconciles the clinic and is responsible for discussing any patients that did not attend with the consultant and implementing any plan, such as contacting the patient and advising the referrer of the non-attendance. Attendance slips that are placed on the clinic reception counter by the receptionist that have not been picked up by the midwife during the clinic are reconciled at the end of the clinic.

96. The clinic processes are the same for all the WOD clinics, including the antenatal and fetal medicine clinics.

97. In 2008/09, Waikato DHB had in place a protocol for processing patients attending antenatal outpatient appointments − "Protocol — Women's Outpatient Department Process" (the WOD Protocol). The WOD Protocol sets out flow diagrams for the "Antenatal Referral Process" (**attached** as Appendix C). The "Antenatal Referral Process" (2.1.1) records the procedure after the client checks in at reception as:

> "Client waits in waiting room

> Client attends scan in MAFAU ultrasound room
> Midwife attends to client (takes urine samples, blood pressure). Write obs in Maternity Information Booklet
> Client is then taken to consultant room for appointment
> Consultant dictates notes for the client & completes documentation worksheet/clinical record
> …
> Midwife completes clinical documentation, electronic perinatal system and contacts LMC with outcome of visit."

98. The "Fetal Medicine Management" (2.1.3) flowchart records that, following a women's arrival at the clinic, the procedure is:

> "Preparation for procedure
> - complete additional documentation (eg USS form)
> - counselling
> - consent
> - blood tests (as requested)
> - discuss process re test results
>
> Performing of procedure
> Confirm process re test results. Completion of working sheet."

99. The policies and procedures are kept in desk files by the receptionist and/or booking clerk. All new staff to WOD are provided with a full orientation to the department.

Review of WOD

100. Waikato DHB advised that a review of the fetal medicine service was commenced in January 2010, after the clinicians and sonographers made a presentation to the DHB General Manager about the working constraints posed by the WOD layout.

Action taken re Ms B

101. Waikato DHB advised HDC that a perinatal mortality meeting was held on 2 April 2009, to examine this case (as is done on all perinatal deaths), but there has been no review of Dr A's practice. The Perinatal Mortality Meeting Report noted: "Acute admission [the next day]. Hx (history) of severe & worsening headache + vomiting, photophobia. Started before seen at MAFAU US."

102. The DHB Women & Children's Services Service Manager advised HDC that the DHB's expectation of Dr A's role was made explicit at the meeting when she was told that a full obstetric history and examination (if indicated) would be expected for each patient, to identify other risk factors in the pregnancy which should be referred to the DHB obstetricians to manage. To enable the clinician to do this the volumes in the clinics needed to be reduced. If the volumes could not be managed, Dr A was required to escalate this to the Clinical Unit Leader.

103. The DHB stated that there is a significant need for a maternal fetal medicine service in its region. It is standard practice for all the DHB's antenatal clinics to do a minimum

of baseline observation of patients — height, weight and blood pressure and urine dipstix at each visit.

104. The DHB acknowledged that this did not occur on two occasions during Ms B's antenatal visits.

> "I can only speculate that if the blood pressure and urine analysis were done, the clinician would have been alerted to this, and would have taken action. I would hope that improvements we have made would prevent a similar incident to recur."

Responses to provisional opinion

Ms B

105. Ms B was provided with a copy of the "Information gathered during investigation" section of the provisional opinion. Ms B's responses have been added to the final report.

Ms D

106. Ms D did not comment on the provisional opinion.

Waikato DHB

107. Waikato DHB advised that it has carried out an informal review of its WOD's Maternal Fetal Medicine Clinic (MFM clinic), and a number of changes have been made as a result of that review. One of the most important changes is that both the patient's scan and routine observations must be completed prior to the patient being seen by the consultant. The scheduling of the MFM clinic now allows this to occur.

108. The midwife allocated to the MFM clinic is dedicated to this clinic only and does not cover any other clinic. This decreases her workload and allows her to focus on the MFM patients.

109. The consultant now has a dedicated room in the MFM clinic to see patients, and the midwife is required to be present during the consultation.

110. The problem of how to fit urgent patients in an already busy clinic was also identified. The decision for this has been escalated to the Charge Nurse Manager who is able to allocate extra resources such as bringing in a senior registrar, scheduling an extra clinic with a consultant or triaging patients in consultation with the medical staff.

Dr A

111. In response to the provisional opinion, Dr A stated:

> "While I do accept your view that as the specialist I should be considered ultimately responsible for [Ms B's] wellbeing, the fact that I am the only one found to have breached her rights does seem to me to be harsh in light of certain factors."

112. Dr A pointed out that these factors were:

- Ms B was very quiet and rarely shared much information.
- Ms B had a Lead Maternity Carer (LMC) who was responsible for her antenatal management and care, and her visits to the Clinic were supplementary care.
- The Clinic delivers a multidisciplinary team service comprising the specialist, hospital midwife/nurse and sonographer. Although each team member works collaboratively, an important factor is that each member has an independent list of patients and not all of these patients are seen by each member of the team.
- While the antenatal referral process would appear to provide the seamless movement of a patient through the clinic for various appointments with individual team members, this is often not the case. Instead of the patient being seen in the correct order, by the midwife/nurse, sonographer (if required) and specialist, this order is not always followed (as was the case of Ms B).
- Dr A is often called upon to review scans and provide advice which can be disruptive and provides an opportunity for miscommunication.

113. Dr A stated that there were "serious systemic factors which impeded an efficient and appropriate standard of care being provided to Ms B". She said that she repeatedly raised this with the DHB prior to this incident, and while the DHB made some changes, she believes that the DHB has failed to provide reasonable support for staff working at the Clinic to ensure an appropriate standard of care was provided to patients attending the Clinic.

114. Dr A asked that the following issues be considered before a final decision is made on this matter:

- When she saw Ms B for the first time, a special Doppler test was performed to study the uterine artery. This uterine artery Doppler is usually abnormal in patients with high risk of developing pre-eclampsia. In Ms B's case the Dopplers were normal. Dr A stated that her conduction of this test clearly shows that from the beginning she was thinking in terms of placental insufficiency related to pre-eclampsia.
- Ms B's blood pressure readings taken at the Clinic before her fourth appointment were normal.
- Whilst not intending any criticism of Ms B or Ms C, Dr A said that "categorically" no mention was made to her at the fifth appointment of Ms B having visual disturbances, headache, increasing swelling and tingling in her hands and feet.
- Dr A asked why, if Ms B and Ms C did not consider her to be "sufficiently attentive" to their concerns at the fourth and fifth appointments, they did not

contact Ms B's LMC who was her primary caregiver and should have been made aware of any adverse symptoms. Dr A stated that she is equally sure that these symptoms were not brought to her attention at the fourth appointment.

115. Dr A stated:

> "It is completely inexplicable to me how this serious misunderstanding occurred, and I can only repeat my sincere regret and apologies to [Ms B] and [Mr B] for any contribution of mine.
>
> Perhaps [Ms B] mentioned her symptoms to a clinic staff member or the sonographer during the scan (when I was not present), but this absolutely **was not** communicated to me as I am very clear that I was not made aware of the symptoms [at the fifth appointment].
>
> It is also possible that [Ms B's] symptoms (if present from the morning as may be possible) only started to become very severe soon after she left the hospital and then escalated through the afternoon and evening at her mother's house. It is known that pre-eclampsia can develop gradually or come on quite suddenly even flaring up in a matter of hours. It appears she spent time in the swimming pool after arriving at her mother's house around 4pm, and the vomiting commenced only after that time. …
>
> The totality of the evidence does seem to point towards the high probability that [Ms B's] symptoms started or progressed rapidly after she left hospital shortly after 3pm. It is important to note there was an eight hour time difference from when [Ms B] left the hospital and when the ambulance was called. Also there was a 17 hour delay between her being admitted to hospital and the Caesarean section being performed. …
>
> I do acknowledge however, that because of the organisation and 'appointment flow' problems endemic in the Fetal Medicine clinics at that time, which led to systemic errors and oversights, Ms B's BP and urine examinations were not performed [at the fifth appointment] before they left the clinic, and that resulted in a delay in her diagnosis of pre-eclampsia by approximately eight hours. My part in these errors and oversights is greatly regretted …
>
> I was not responsible for taking BP and doing the urine examination: this is clearly the responsibility of the midwife/nurse. It is logically and practically impossible for the specialist to take on the role of guaranteeing this occurs before a patient leaves the clinic where the expected flow of the appointment is disrupted for some reason (i.e. assessment by midwife/nurse, scan, then consultant). The Clinical Charge Nurse has overall responsibility for the functioning of the Fetal Medicine Clinic".

116. Dr A's counsel stated, "The practice of medicine is as much 'art' as 'science'. Clinical decisions are very dependent on what information is available to the clinician." Having noted the conflict of evidence, Counsel submitted that it is imperative that HDC "pays due regard to the 'science' of inaccurate patient recall following

consultations, particularly when there has been emotionally distressing sequelae, and carefully balances the evidence from all sources".

117. Dr A stated that she agreed with Dr Page's opinion that the outcome for Ms B's baby would likely not have been different, even if she had been admitted to hospital immediately after the clinic. Dr A said that it is important for Ms B and her family to consider the following points to assist them to understand this. She said:

- The fetus was growth restricted and there was very little amniotic fluid in the pregnancy sac. This severely interferes with the maturation and development of the fetal lungs.
- The majority of babies with IUGR die because of the growth restriction, extreme prematurity and lung hypoplasia (under-development of the lungs) even if they are born alive.
- Unfortunately the prognosis for the baby was very poor right from the start; this had been communicated to the family at the outset.

Changes to practice

118. Dr A provided a written apology to Ms B and Mr B. Dr A advised HDC that she has made the following changes to her practice in the last one to two years. She stated that she has thought "long and hard" about what happened at the fourth and fifth appointments and has reflected on what she did and discussed the circumstances with colleagues. The changes that she has made are:

- An obstetric and gynaecology registrar has been assigned to the Maternal Fetal Medicine Clinic to assist her with cases, history taking and the dictation of letters.
- All patients now must have their blood pressure, urine and weight documented on the Antenatal Worksheet before she sees them. If these recordings are not completed, Dr A will not see the patient, and the notes are returned to the midwife who is asked to complete her part of the patient's assessment.
- The role of the LMC is emphasised to the patient and the process of shared care explained in detail, as well as the need for regular blood pressure, urine and weight checks.
- The number of patients Dr A now sees at the clinic has reduced to minimise the risk of oversight and miscommunication.
- Dr A is fully up to date with her Continuing Professional Development points to maintain her fellowship with the Royal Australian and NZ College of Obstetricians and Gynaecologists. She has also undertaken further study in communication and the importance of completing documentation.

Opinion: Breach — Dr A

Dr A's role

119. Dr A was formerly employed as a specialist obstetrician and gynaecologist at Waikato Hospital. More recently, she was contracted to provide a maternal and fetal medicine service at Waikato DHB's Women's Outpatient Department. In this role Dr A performs diagnostic pre-natal procedures for chromosomal and metabolic fetal disorders, such as amniocentesis and chorionic villus sampling, and supervises and reports obstetric ultrasound examinations, manages fetal abnormality pregnancies, and counsels parents who have an abnormal pregnancy.

120. Dr A stated that the clinic delivers a multidisciplinary team service comprising the specialist, midwife or nurse, and sonographer. Each team member has an independent list of patients, and while the referral process is intended to be seamless, this is often not the case. She noted that there is a correct order for antenatal clinic patients to be seen, ie, the midwife/nurse, sonographer and specialist, but for various reasons this order was not always followed. Dr A said frequent distractions, such as being called to review scans and give staff advice provided an opportunity for miscommunication. She advised HDC that there were "serious systemic factors" at the clinic that "impeded an efficient and appropriate standard of care being provided to [Ms B]". Dr A advised the DHB of these difficulties in April 2008.

121. Dr A was clear that she was contracted to provide fetal medicine services. She stated that, although she had no job description or written contract that formally identified the level of services she was expected to provide, she considered that her role differs from other obstetricians who are concerned with the secondary care of a patient during pregnancy and post-partum. Dr A said that her role is to perform diagnostic prenatal procedures and manage fetal abnormality pregnancies only and that the provision of secondary pregnancy and post partum care is provided by the DHB obstetricians. In response to the provisional opinion, Dr A pointed out that Ms B had an LMC midwife, Ms F, who was primarily responsible for her antenatal care, and the visits to the Maternal Fetal Medicine clinic were supplementary care.

122. My expert independent obstetrician, Dr Ian Page, advised HDC that Dr A should have ensured that there was clarity between herself and Ms F with regard to continuing antenatal care, and the need for extra assessments if she believed that clinical responsibility for Ms B was remaining with the LMC. Dr Page noted that Dr A's letters to Ms F imply that Ms B's management plan was being made by the clinic, even though no formal handover of care had been made.

123. Dr A also submitted that Ms B's LMC should have been Ms B's "first point of call" if she had concerns during her pregnancy. In my view, any involvement of the LMC does not change Dr A's responsibility to adequately assess Ms B when seeing her.

124. Dr A submitted that she cannot be responsible for taking a full history and examination of each patient to identify risk factors. However, Dr Page noted that Dr A is a vocationally trained obstetrician and gynaecologist. He said "strictly speaking there is no such obstetric sub-specialty as 'Fetal Medicine', but only 'Maternal-Fetal

Medicine'", as it is impossible to completely separate the management of the fetus from the mother. He said that if Dr A was only contracted to undertake diagnostic prenatal procedures, report and supervise the ultrasounds, and counsel and manage fetal abnormalities, then she should have ensured that WDHB had arrangements in place for the total care of the women she saw. Dr Page noted that Dr A's letters to LMC midwife Ms F refer to "my Antenatal clinic". He said that he therefore concluded that Dr A was actually functioning as an obstetrician rather than just an obstetric sonologist. I also note that the clinic is called "Maternal and Fetal Assessment Unit", and Dr A signed her letters as "O & G Consultant". Accordingly, I am satisfied that Dr A's role at the clinic was one of an obstetrician working in maternal-fetal medicine.

125. The DHB's Women and Children's Services Service Manager confirmed that the draft contract between Dr A and Waikato DHB, dated December 2007, was not signed. Dr A stated that she believes that this situation has led to a "blurring of boundaries, job confusion and a significant shifting of responsibility of care". However, the Manager stated that appropriate standards and quality of care are not stipulated by job descriptions and it is expected that professionals are responsible for providing a high standard of care. I agree.

126. Dr A has stated that she was not responsible for taking the women's blood pressure and doing the urine examinations as, in her view, this is the responsibility of the midwife/nurse. She stated that the Clinical Charge Nurse has overall responsibility for the functioning of the Fetal Medicine Clinic.

127. In my view, in order for Dr A to carry out an effective assessment of Ms B, she should have checked the blood pressure and urine examination results. I accept Dr Page's advice that particular care should have been taken at each visit to diagnose or exclude pre-eclampsia by measuring the blood pressure and checking the urine for protein. Dr Page advised: "That [Dr A] did not ensure this had been undertaken would be viewed with moderate disapproval by her peers, particularly as she is a vocationally-trained obstetrician and gynaecologist."

Third appointment

128. Dr Page advised that Dr A's antenatal assessment of Ms B at her third appointment was appropriate, as the blood pressure recording and urinalysis were undertaken and a formal ultrasound assessment performed. Dr A made a diagnosis of placental insufficiency, and although she did not mention that she considered that pre-eclampsia was the underlying pathology, this did not alter the management at this point. Ms B was appropriately started on steroids to improve fetal lung maturity, as the likelihood of a pre-term delivery was recognised. Ms B was appropriately advised about these issues.

Fourth appointment

129. Dr Page was critical of Dr A's assessment of Ms B at the fourth appointment. Pre-eclampsia, characterised by high blood pressure and proteinuria, is a common syndrome associated with intrauterine growth restriction and particular care should be

taken at each antenatal visit to diagnose and exclude it. Dr Page stated that when early-onset growth restriction is suspected as being the result of placental insufficiency, the woman should always be promptly questioned about the presence of any of the usual signs and symptoms associated with this condition, which include headache, visual disturbances, swelling and tingling of hands and feet.

130. Although Ms C recalled that her daughter had gained excessive weight, had blurred vision, tingling hands and discolouration on her eyelids, and had been vomiting, and that Dr A was told about these symptoms when Ms B attended her fourth antenatal appointment, Ms B later advised HDC that she did not have nausea and vomiting at this time. She said her hands were swollen and tingling and her feet were swollen. Ms B stated that her mother grabbed her hand and showed it to Dr A and asked whether this was toxaemia. Dr A disputes this and said that had she been aware of Ms B's symptoms "[she] would have immediately either taken the BP readings [herself] or arranged for the clinic staff to do so, and the urine would have been tested immediately as well".

131. Ms B's baseline recordings of weight, blood pressure and urinalysis, which should be routinely performed and documented by the midwife assigned to the clinic to rule out the onset of pre-eclampsia, were not conducted and recorded at this visit. Dr A stated that "[she] did not recognise or note that the midwife had failed to take/record [Ms B's] BP and urine examinations [at the fourth appointment]".

132. Dr A stated: "It is the responsibility of the hospital midwife/nurse to fill in the upper part of this form [the Antenatal Visit Worksheet] with recordings of BP, urine, weight and height." In contrast, independent midwife expert advisor Joyce Cowan stated: "Responsibility for checking of urine and blood pressure in this context rests with the people present rather than a midwife who was not present because she was busy with other duties."

133. Dr Page stated that the absence of the blood pressure and urine test should have been apparent to Dr A when she signed off the worksheet. I accept that there were time pressures at this clinic, with tight time slots for ultrasound examinations and midwives having many duties to perform. However, whatever the reasons for these assessments not being performed and documented, Dr A should have known that the recordings had not been done when she saw Ms B at the fourth appointment, as she initialled the Antenatal Visit Worksheet. When Dr A signed off Ms B's Antenatal Visit Worksheet that day she simply noted, "Offered amnio again. Will decide next week."

134. Dr A stated that working conditions at WOD were extremely dysfunctional and believes that Ms B's blood pressure and other recordings were missed as a direct result of systems failures and the practical difficulties of managing patient flow in the clinic. The WOD "Antenatal Referral Process" protocol sets out the process for patient management in the clinic. This protocol specifies that the consultant dictates consultation notes at the end of the review of the patient and completes the documentation worksheet and/or the clinical record.

135. As already noted, pre-eclampsia (toxaemia) is the most common syndrome associated with early-onset growth restriction, and therefore particular care should be taken to diagnose or exclude it. This is done by measuring the mother's blood pressure and checking the urine for protein. At an earlier visit, Ms B's urine had tested positive for protein.

136. While I accept that it is not Dr A's role to perform these tests, Dr A had a responsibility to ensure that Ms B knew that these basic checks should be completed prior to her leaving the clinic and Dr A also had the responsibility to review the results, as this was an important part of Ms B's antenatal assessment.

Fifth appointment

137. Ms B reports having awoken with a headache on the day of her fifth appointment. Her partner, Mr B, recalls that when they were driving from home to Waikato Hospital for the clinic appointment, she told him that it was a "massive" headache, "the worst in her life".

138. Ms B and Mr B recall that they saw Dr A at the clinic at about 3pm. Ms B recalls telling the sonographer who was preparing her for the scan that she was "not feeling great", and that she had the "worst headache ever and that the light was very bright". Ms B was not introduced to the staff in the scan room, but believes that the receptionist, Dr A and another person were in the room at the time.

139. Dr A advised that when she saw Ms B in the scan room she enquired about Ms B's wellbeing and asked if there was any change since her last appointment. She said that despite asking open-ended questions, Ms B and Mr B did not report any symptoms such as a headache. Dr A made no record of any information sought or provided.

140. After the scan, Ms B and Mr B talked to Dr A in a separate room. Ms B stated that she told Dr A about her symptoms. Mr B recalls that Ms B told Dr A that she had a bad headache and that she was not able to see properly, and that her hands were swollen. Ms B said she felt that Dr A did not want to know. Ms B and Mr B both recall that Dr A asked them again if they would consent to an amniocentesis. Mr B said Dr A seemed a "bit mad" that they would not consent to the amniocentesis.

141. Dr A stated that it is "completely inexplicable" how this "serious misunderstanding" about Ms B's symptoms occurred, and is adamant that this information was not provided to her. Dr A stated that Ms B was a quiet woman who rarely shared much information and did not respond to her "open-ended" questions. She believes that Ms B may have mentioned her symptoms to a clinic staff member, or the sonographer, when Dr A was not present. However, I consider it is more likely than not that Ms B told Dr A about her symptoms.

142. A clinician in these circumstances should elicit from the patient information about how she is feeling, and document her general condition, including any symptoms reported. Ms B's clinic appointments were for the express purpose of assessing why her baby was failing to grow normally and Dr A was well aware that one of the

reasons for this could be pre-eclampsia. She should have been more vigilant in assessing Ms B's wellbeing.

143. When Dr A reported to the LMC, Ms F, that she had reviewed Ms B at the clinic for her fifth appointment, she did not mention Ms B's general health or whether Ms B had expressed any concerns. The letter expressed concern for the well-being of the fetus and that Dr A had "once again given [Ms B] the option of amniocentesis but she and her partner had declined once again today". The letter details the result of the Dopplers, which remained much the same.

144. I do not accept that Dr A was only responsible for assessing fetal wellbeing and that general antenatal care was "the responsibility of the obstetricians". As Dr Page explained, it is impossible to separate completely the management of the fetus from the mother. Dr A is a vocationally-trained obstetrician and a specialist in maternal and fetal medicine, and should have been alert to the possibility that Ms B might develop pre-eclampsia, which could place both mother and baby at risk. Particular care should be taken at each visit to diagnose or exclude pre-eclampsia. Dr Page stated that Dr A should have taken proactive steps to rule out risk factors, such as asking Ms B about any symptoms and ensuring basic observations and tests were done, and documenting these actions.

145. In my view, the distractions of being asked for advice and to review scans, and Dr A's frustration at WOD systems does not account for her failing to adequately assess Ms B and follow-up the absence of the blood pressure recordings and urinalysis on Ms B's Antenatal Visit Worksheet on two occasions. Such assessments were particularly important in the circumstances where, as she advised HDC, Dr A was already considering the possibility of pre-eclampsia and where a previous urinalysis result (from her third appointment) had indicated Ms B had elevated protein levels.

146. In response to my provisional opinion, Dr A said that when she finished her consultation with Ms B and Mr B the day of the fifth appointment, she "expected they would wait in the waiting area for the midwife to complete her observations". However, she did not "specifically [request] Ms B to make sure she did not leave the clinic until she had been seen by the midwife".

147. Dr A said that when she dictated her letter to the LMC to record the visit, she "presumed" that Ms B's blood pressure and urine tests had been done and found to be normal as she had not been told otherwise. She said that the specialist is often reliant on the midwife or nurse to verbally advise them of any abnormal result. She said she regrets making this assumption, and said if she had been told that Ms B had a headache, blurred vision, nausea and tingling in her hands when she spoke to her and Mr B that day, she would have personally checked Ms B's blood pressure and urinalysis and admitted her straight away.

148. In my view, for Dr A to presume Ms B's routine test results were satisfactory because she had not been told otherwise and rely on the clinic midwife or nurse to advise her verbally of any abnormal result instead of checking the results for herself is not the standard expected of a senior experienced obstetrician, especially one working in

maternal fetal medicine who was well aware of the link between growth restriction and pre-eclampsia. Having no awareness of these results, Dr A was not in a position to carry out an adequate assessment of Ms B.

149. Dr A was aware that patient flow-through at the clinic was less than satisfactory. As it was her responsibility to complete the documentation worksheet in accordance with the Antenatal Referral Process, Dr A should have noticed that the recordings had not been done at either the fourth or fifth appointments, and followed them up.

150. In response to the provisional opinion, Dr A stated:

> "I agree and accept that I should have asked the midwife/nurse what [Ms B's] BP and urine examination were before or after the scan or otherwise should have picked up the lack of BP and urine examination documentation on the examination sheet at the end of the clinic at approximately 4-5pm. [Ms B] left the clinic shortly after 3pm, but if this review had occurred at 4-5pm a telephone call could possibly have been made requesting she have these examinations as a matter of urgency with her LMC."

151. In my view, the review of the results was part of the expected assessment of Ms B and should have been carried out as part of the consultation. I find that Dr A failed to adequately assess Ms B's wellbeing and follow up the absence of blood pressure recordings and urinalysis at the fourth and fifth appointments, and these were serious omissions. Accordingly, in my opinion, Dr A breached Right 4(1) of the Code.

Opinion: Adverse comment — Ms D

152. Ms D was an experienced midwife who had been working in the WOD for three years. Ms D's duties at the clinic were to take the initial assessments of the antenatal and gynaecology patients arriving at the clinic, prepare the files for the attending consultants, and follow up on treatment orders. She also attended to women presenting to the clinic for terminations of pregnancy.

153. On the afternoons of Ms B's fourth and fifth appointments, Ms D was assigned to the fetal medicine clinic. A printed summary of the bookings in the clinic is given to the midwife assigned to the clinic, along with the patient's notes. Ms D advised that her normal practice is to take a patient's baseline recordings of blood pressure and urinalysis of women attending the fetal medicine clinic and to ask about other symptoms such as swelling, visual disturbances and changes in the baby's movements. If any of these signs are reported, Ms D takes a sample of the patient's blood for assessment of liver and renal function.

154. The WOD "Antenatal Referral Process" specifies that the midwife "attends to the client (takes urine samples, blood pressure)". Ms D advised HDC that one of the clinic midwife's tasks is to check all the available data on the client's file, including

all blood test results, scan reports and ensuring that blood pressure, urinalysis and weight are recorded. At the fourth and fifth appointments, although Ms D dated Ms B's Antenatal Visit Worksheet and noted the gestation, she did not perform the routine tests listed on the sheet.

155. My expert independent midwife Joyce Cowan advised that Ms B did not receive care of an appropriate standard at the fourth and fifth appointments. As the clinic midwife, Ms D was responsible for the basic assessments of the women attending the clinic. However, Ms Cowan does not consider that Ms D was entirely responsible for Ms B being processed without midwifery input on those days. The clinic had unsystematic routines and there was considerable pressure because of tight appointment times. As a result, the sonographer and/or receptionist would sometimes take women to the scan room before the midwife had the opportunity to question the patient and perform the routine tests. Ms Cowan advised that this provided a situation where omissions of key aspects of care were likely to occur.

156. Ms D, like Dr A, believes that the "physical geography" of the clinic contributed to these events. Ms D recalls that the reason she did not take Ms B's blood pressure and other recordings at the fourth appointment was that she was assisting with a patient who had been booked for an amniocentesis and believes that she was involved with the next client when Ms B completed her scan. In my view, if Ms D was not available to perform the tests herself, she should have either communicated this to Dr A as the consultant, or arranged for another appropriate staff member to perform the tests, or told Ms B to wait until she was available to perform the tests herself. As it was, Ms B left the clinic without having had these tests performed.

157. On the morning of the fifth appointment, Ms D had been assigned to work in the gynaecology clinic, and believes she returned there in the afternoon to complete unfinished work and was not present in the antenatal clinic when Ms B arrived for her appointment. Ms D stated, "I can only assume that the workload was such that I was not available and waiting for [Ms B] before or after her scan." In my view, if Ms D was rostered in the fetal medicine clinic that day, she had a responsibility to be present or make arrangements to ensure another staff member performed her tasks. Although I consider that the ultimate responsibility to ensure the tests were done lay with Dr A, I am not convinced that Ms D took reasonable actions to fulfil her responsibility to perform observations on Ms B at her fifth appointment, particularly given that Ms D had not completed Ms B's observations the week before.

158. Ms Cowan stated that the system used at WOD for progressing women from arrival at reception to midwifery assessment, ultrasound and consultant review was not consistently followed in this case, and led to Ms B missing out on midwifery input on two important dates, her fourth and fifth appointments. Ms Cowan advised that, had Ms D seen Ms B and not checked her blood pressure and urine, then the departure from the appropriate standard would have been moderate (but if she had been made aware of Ms B's symptoms and not conducted the tests, then her departure would have been severe). Ms Cowan stated that, if Ms D did not see Ms B, Ms D's omission equates to a minor departure from the appropriate standard.

159. Ms D has no recall of Ms B's fourth and fifth appointments and believes that she may not have assessed Ms B personally. However, Ms D also stated, "[Ms B] did not tell me about any symptoms that she was experiencing at her [fourth and fifth appointments]. My only comment would be lack of opportunity. … I believe I was probably doing other tasks when she arrived for her appointments and she was taken to the scan room before I was able to do an assessment."

160. Ms B recalled that at her appointments the clinic never appeared rushed. She reported to the "lady at the desk" and waited to be taken through for a scan. There were usually three to five people doing the scan. On occasions she was asked for a urine sample after the scan. The only staff member she recalls by name is Dr A.

161. Accordingly it is not possible to determine whether Ms D saw Ms B at the fourth and fifth appointments.

Summary

162. I accept that the workload in the clinic was heavy and that processes at WOD were not ideal. It appears that there was considerable pressure on the nursing staff in WOD, and that Ms D may have been busy with other clients and work on those days. Ms D was aware that Ms B was attending the clinic because of IUGR. As an experienced midwife she should have been mindful that pre-eclampsia was a syndrome commonly associated with this condition and therefore there was a need to check Ms B's blood pressure and test her urine for protein. At the fourth appointment, Ms D should have taken steps to ensure that Ms B's blood pressure and urine were tested.

163. When Ms B arrived at the clinic for her fifth appointment, Ms D should have reviewed Ms B's clinical notes, noted that the urinalysis and oedema observations had not been recorded at the previous appointment, and taken action to ensure Ms B's observations were taken.

164. Ms D could have alerted Dr A to the need to arrange for a nurse to perform Ms B's routine observations and urine test before she left the clinic. However, in my view the ultimate responsibility rested with Dr A. Despite this, I consider Ms D should reflect on her role in this tragic outcome.

Opinion: Breach — Waikato DHB

WOD systems

165. As discussed above, the systems in place at WOD to assess and process patients in the fetal medicine clinic were less than satisfactory. As this Office has previously stated:[23] "A number of studies have shown that most errors are made by well-trained people who are trying to do their job, but are caught in a faulty system that set them up to

[23] 05HDC13401, 29 June 2007.

make a mistake."[24] The lack of systematic clarity appears to have impacted on Ms D's performance in this case.

166. Waikato DHB advised that WOD provides outpatient clinics for colposcopy, gynaecology, antenatal, ultrasound, special baby, combined fetal medicine and combined obstetric/diabetes. The clinic schedules are determined by the relevant consultant's schedule, and the nursing staff are allocated to the clinics according to the scope of their practice and the clinics taking place. One nurse or midwife is allocated to each clinic. The nurses and midwives working in the clinics organise the patient's progress through the clinics and normally perform and document the baseline observations before the patient is seen by the clinician.

167. The DHB had in place a protocol that contained flow diagrams setting out the procedure for women attending WOD. The "Antenatal Referral Process" flow diagram, which covers all referrals to WOD, provides that the woman first has her scan in the ultrasound room, then the midwife attends (to take "urine samples, blood pressure" and writes observations in Maternity Information Booklet), after which the woman is taken to the consultant room for her appointment.

168. However the "Fetal Medicine Management" flowchart (for the fetal medicine clinic) records that, following a woman's arrival at the clinic, "preparation for procedure" is carried out (including counselling, consent, and blood tests as requested). The procedure (eg, scan) is then undertaken, followed by "completion of working sheet". This procedure differs in order from the more general "Antenatal Referral Process", which creates the potential for confusion when midwives are carrying out duties in multiple clinics.

169. I am also concerned that the "Fetal Medicine Management" flowchart does not specify who is responsible for each step in the process; in particular who carries out the preparation for the procedure and who is responsible for the completion of the working sheet. While I note that the "Antenatal Referral Process" flow diagram provides for the consultant to complete the documentation worksheet, no such guidance is provided in the "Fetal Medicine Management" diagram.

Definition of roles and responsibilities

170. While professionals have a responsibility to provide the highest standard of care and maintain their standards, knowledge and skills, they need guidance regarding what role they are expected to perform and what their responsibilities are. Dr Page advised that Waikato DHB appears not to have clearly detailed what was expected of Dr A in her role as the Fetal Medicine Service consultant. While I agree more clarity would have been helpful, as I have already stated, Dr A is a vocationally trained obstetrician and gynaecologist and I am satisfied that her role was that of an obstetrician working in maternal-fetal medicine. As Dr Page commented, the systems in place at the WOD did not ensure that the midwife was able to undertake the necessary observations on all patients, ideally before being seen by the consultant. In light of this, I am not

[24] L Leape, "Preventing Medical Accidents: Is 'systems analysis' the answer?" (2001) 27 *American Journal of Law and Medicine* 145.

satisfied that the DHB provided adequate guidance on the clinic midwife's responsibilities in this situation.

171. Dr Page also commented about the information that Ms B recalls giving to the clinic staff, in particular the sonographer, at her fifth appointment, about her severe headache and feeling unwell. He stated that if the clinic staff had been given this information and did not pass this onto Dr A, he would view "the clinic organisation" with severe disapproval.

Pressure in WOD

172. I note that there was pressure on the department staff to process the women through the clinics in a timely manner so that the tight scheduling of the scan appointments was met. Although a list is printed each day which details the number of patients booked for the clinics, it is apparent that the six half-hourly scan appointments took precedence.

173. If the patient arrived late for her appointment, the pressure to keep to the scan schedule meant that the nurse or midwife assigned to the clinic had limited time to perform a comprehensive well-being assessment on the woman. As she was usually assessing the next woman on the list, the nurse or midwife rarely stayed in the scanning room for the entire procedure, and therefore missed this opportunity to check that the observations had been performed and/or convey to the woman the importance of having this done.

174. In April 2008, Dr A alerted the DHB to her concerns about the resource issues and that, as a result, patients were at risk. I have not been provided with any evidence to suggest that these concerns were followed up by the DHB.

Conclusion

175. Dr Page advised that the clinic should have a formal review to identify its function. The care pathways should also be reviewed to identify whether the resources, room and staff that are required to manage patients attending different clinics, are adequate to provide the identified function. Ms Cowan also recommended that Waikato DHB conduct a review of medical and midwifery staffing, and the clinic configuration.

176. Ms Cowan advised that the organisation of the WOD clinic contributed to Ms B not being adequately examined and her symptoms not being followed up. She advised that Waikato DHB did not provide Ms B with an appropriate standard of care and that this failure was a moderate to severe departure from the standard.

177. In response to the provisional opinion, Waikato DHB advised that since these events, an informal review of the Maternal Fetal Medicine clinic has been carried out which resulted in a number of changes being made. These are: the patient must have her scan and routine observations completed before being seen by the consultant; the midwife allocated to the clinic is dedicated to the clinic only and does not cover any other clinic; management of urgent appointments is allocated to the Charge Nurse Manager who is able to allocate extra resources such as bringing in an extra senior registrar to assist with additional workloads; and the consultant now has a dedicated room to see

patients. The midwife is required to be present during the patients' consultations with the specialist.

178. The DHB also advised that changes have been made to the Perinatal Mortality Review processes. Dr A is now required to attend Perinatal Mortality reviews of her patients. She now has an identified time during the week to see her perinatal patients. The Perinatal Mortality Review processes have been amended to ensure that the correct consultant is identified and the consultant is asked to meet with the family, so that the family sees the clinician who provided the majority of the care.

179. In my opinion, by not ensuring that the fetal medicine clinic had appropriate systems in place at that time, to ensure appropriate assessments were reliably carried out, Waikato DHB failed to provide services of an appropriate standard and failed to provide services in a manner that minimised potential harm to Ms B. Accordingly Waikato DHB breached Rights 4(1) and 4(4) of the Code.

Other comment

180. It is regrettable that, following Ms B's urgent delivery and the subsequent death of her baby, Ms B was not provided with a timely opportunity to discuss this tragic outcome with those involved in her care. Ms B clearly felt that her questions about her condition and what had occurred were not answered at her six-week postnatal check up. I agree with the DHB's comments that it is unfortunate that a follow-up plan was not documented following the perinatal mortality meeting, and that Ms B's postnatal check-up was with a clinician she had never met before. I note that the DHB has now "tightened up" this process.

Recommendations

181. I recommend that Dr A:

- enter into a mentoring relationship with a maternal-fetal medicine sub-specialist (including at least three face-to-face meetings each year) until **21 December 2012,** and that the mentor provides written confirmation to the Royal Australian and New Zealand College of Obstetricians and Gynaecologists that the mentoring has occurred.

182. I recommend that Waikato DHB:

- apologise in writing to Ms B and Mr B for its breaches of the Code. The apology is to be sent to HDC by **20 February 2012** and will be forwarded to Ms B and Mr B.

- review the changes made to the Maternal Fetal Medicine clinic to ensure that it has clear pathways for the care of patients attending the clinic, along with the provision of adequate rooms and staff to provide care.

- review the changes made to the Perinatal Mortality review processes to ensure that patients have access to the relevant clinicians so that they have their questions addressed.

- ensure that contracts between the DHB and external contractors clearly state the contractor's role and the DHB's expectations for the role, and that there are processes in place to ensure both the contractor and the DHB meet their respective obligations.

- report back to HDC by **30 March 2012** on the actions taken on the above recommendations.

Follow-up actions

- Dr 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 will be sent to the Medical Council of New Zealand, the Midwifery Council of New Zealand, and the Nursing Council of New Zealand.

- A copy of the final report with details identifying the parties removed, except the names of the experts who advised on this case and Waikato DHB, will be sent to the Royal Australian and New Zealand College of Obstetricians and Gynaecologists, and they will be advised of Dr A's name.

- A copy of the final report with details identifying the parties removed, except the names of the experts who advised on this case and Waikato DHB, will be sent to the College of Midwives and to DHBNZ, and will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A: Independent midwifery advice — Joyce Cowan

"I have been asked by the Commissioner to provide an opinion on case number 09/01581 concerning [Ms B]. I have read and agree to follow the Commissioner's guidelines for Independent Advisors.

I am a registered midwife with a Master of Health Science in Midwifery. I have had experience as a core midwife but have practiced as an independent midwife for the last 20 years. Over the last 9 years I have also worked part time at Auckland University of Technology where I am a senior lecturer in midwifery. I have a special interest in pre-eclampsia and hold the position of Director for New Zealand Action on Pre-eclampsia (NZAPEC). In that role I facilitate study days for midwives and doctors and write a quarterly newsletter containing information on pre-eclampsia research and practice issues.

My referral instructions from the Commissioner are as follows:-

Purpose

The purpose of my report is to provide expert advice about whether midwife [Ms D] and Waikato DHB provided an appropriate standard of care to [Ms B].

Background

[Ms B], aged 21 years, had her first pregnancy confirmed in [2008] when she was 6 weeks pregnant. [Her] midwife [Ms F] provided her antenatal care [the following gmonth]. A scan organised by [Ms F] showed [Ms B's] baby to be small for dates. [Ms F] referred [Ms B] to Waikato Women's Hospital on [date] for follow up of scan results.

[Ms B] attended Waikato Women's Hospital antenatal clinic on [five occasions]. At these visits, obstetrician [Dr A] saw her. [Dr A] was very concerned about [Ms B's] baby and advised it was suffering intrauterine growth restriction (IUGR).

When [Ms B] attended the clinic [for her fourth appointment] her mother, who had some nursing experience, accompanied her. She told [Dr A] that she was concerned her daughter might have toxaemia (pre-eclampsia) because she was complaining of visual disturbances and had tingling in her hands and feet.

[Ms B] did not have her blood pressure and urine checked at this visit.

[A week later], [Ms B] returned to the clinic for another appointment. She told [Dr A] that she had a severe headache, swollen hands, photophobia and vomiting.

Again her blood pressure and urine was not checked by either the clinic midwife [Ms D] or the obstetrician [Dr A].

On the way home [Ms B's] condition worsened. She went to her mother's house and an ambulance was called. [Ms B] was admitted to Waikato Hospital ED where she was diagnosed with pre-eclampsia.

[Ms B's] baby daughter was delivered by caesarean section [that day] at 25 weeks gestation. Sadly the baby died [a few days later].

Complaint

I have been asked to comment on the adequacy of the treatment and care midwife [Ms D] provided to [Ms B] in relation to her pregnancy [at her fourth and fifth appointments].

Supporting Information

I have reviewed the following information provided for me by the Commissioner:

1. Letter of complaint to the Commissioner from [Ms B], received 13th August 2009
2. [Ms B's] Waikato DHB clinical records received 11th September 2009
3. Response from Waikato DHB received 25th September 2009
4. Notes taken during a telephone call to [Ms C], on 15th January 2010
5. Notes taken during a telephone call to [Ms B] on 15th January 2010
6. Notes taken during a telephone call to [Ms B's] partner, [Mr B], on 15th January 2010
7. Response from Waikato DHB received 6th January 2010
8. Response from Midwife [Ms D] received 16th February 2010

Advice required regarding care provided by Midwife [Ms D]

1. Did [Ms D] provide [Ms B] with an appropriate standard of care?
2. Was [Ms D's] assessment of [Ms B] at the [fourth] antenatal appointment of an appropriate standard?
3. Was [Ms D's] assessment of [Ms B] at the [fifth] antenatal appointment of an appropriate standard?
4. Was there anything else that [Ms D] should have done in these circumstances?
5. If [Ms D] did not provide an appropriate standard of care, please indicate the severity of her departure form that standard.
6. Are there any other aspects of care provide by [Ms D] that warrant additional comment?

Advice regarding the role of Waikato DHB

1. Did Waikato DHB provide [Ms B] with an appropriate standard of care?
2. Did the organisation of the Waikato Hospital clinic contribute to [Ms B] not being adequately examined and her symptoms not being followed up?
3. What could be done to ensure this situation does not recur?

4. If the opinion is that Waikato Hospital did not provide an appropriate standard of care, please indicate the severity of departure form that standard.
5. Are there any other aspects of the care provided by the Waikato DHB that warrant additional comment?

Advice regarding Midwife [Ms D]

1. Did [Ms D] provide [Ms B] with an appropriate standard of care?

No.

For a midwife working in the antenatal clinic it would be standard practice to take a blood pressure and test urine for presence of protein during each episode of care. [Ms D] has stated that this is her normal practice. However, the following factors are important when assessing the appropriateness of [Ms D's] standards of care.

a) [Ms B] was being seen at the fetal medicine clinic as she had been referred for secondary care. Midwifery care was important as part of this care but as part of a team, including an obstetrician and sonographer. The midwife is not the secondary care provider.

b) Because of the sequence of events during [Ms B's] [fourth and fifth antenatal visits], it appears [Ms D] had no interaction with [Ms B] on both occasions. At least [Ms D] has no recollection of seeing this client on those dates and it seems that the normal midwifery assessments and discussion with the woman regarding her wellbeing did not occur. On the previous two occasions, which [Ms D] did recollect, the assessments were carried out and documented.

c) [Ms B] has not mentioned seeing [Ms D] at the [fourth and fifth appointments]. She has recalled (in her phone conversation with HDC, dated 15th January 2010) that she told the staff in the room (I assume the ultrasound room) that she had a bad headache, blurred vision, lines across her eyes, tingling hands and swollen feet. She told the doctor that she had been vomiting that morning and asked why this was happening. She reported that she was told that this was normal. Following her scan and discussion on an amniocentesis because of concerns that the baby may have a chromosome abnormality she left the clinic to go home. Responsibility for checking of urine and blood pressure in this context rests with the people present rather than a midwife who was not present because she was busy with other duties.

2. Was [Ms D's] assessment of [Ms B] at the [fourth] antenatal appointment of an appropriate standard?

   It appears [Ms D] did not assess [Ms B] personally [at the fourth appointment]. [Ms B] did not receive appropriate care but this was not entirely due to [Ms D's] lack of awareness of her presence as a full assessment including blood pressure and urine test would have been indicated as part of

the consultant assessment, particularly in view of the concerns raised by [Ms B's] mother, [Ms C].

These concerns were reported to HDC during a phone conversation on January 15th 2010. [Ms C] reported that she expressed her concerns about her daughter having toxaemia (pre-eclampsia) because [Ms B] had been vomiting, had blurred vision, tingling hands and discoloured eyelids.

3. Was [Ms D's] assessment of [Ms B] at the [fifth] antenatal appointment of an appropriate standard?

   It appears she did not assess [Ms B] [at the fifth appointment].

   [Ms B's] care at this appointment was not of an appropriate standard but [Ms D's] lack of awareness of her processing through the clinic without midwifery input was not entirely responsible for the departure from an appropriate level of care.

4. Was there anything else that [Ms D] should have done in these circumstances?

   Had [Ms D] been aware of the symptoms described above under point 1(c) she should have ordered a blood test for preeclampsia, as well as a laboratory urine test for protein quantification. However it appears that [Ms D] was unaware of [Ms B's] symptoms of headache and photophobia, which were reported to the other members of the team. It seems likely [Ms D] was not present during the consultation and that [Ms B] left the clinic without speaking to [Ms D] at all.

   It appears from [Ms D's] letter that she does not clearly remember seeing [Ms B] on these two dates. The organisation of the clinics with the possibility of the receptionist or sonographer taking the woman through for her scan before the midwife had an opportunity to question her and do the routine blood pressure and urine test provided a situation where omissions of key aspects of care were likely.

   As midwife responsible for the clinic, in theory [Ms D] was responsible for these basic assessments but the unsystematic routines and pressure created by very tight appointment times and large numbers lead to serious omissions of care for [Ms B].

5. If [Ms D] did not provide an appropriate standard of care, please indicate the severity of her departure from that standard.

   It seems very likely that [Ms D] did not actually see [Ms B] [at the fourth and fifth appointments]. In this case, her departure from provision of an appropriate standard of care relates to her being part of a team, working in a busy, overcrowded and possibly chaotic clinic.

   The system used for progressing the women from arrival at reception, midwifery assessment, ultrasound and consultant review was not consistently

followed on these occasions, leading to [Ms B] missing out on midwifery input.

Had [Ms B] seen [Ms D] and not had her blood pressure and urine checked, the severity of departure from an appropriate standard of care would be moderate but had she seen the midwife and also discussed her concerns about her symptoms, and then not had her blood pressure and urine tested the departure would be severe.

Because it is likely that [Ms D] was not directly involved with assessing [Ms B] on these two important dates, I consider her personal departure from an appropriate standard of care is minor when viewed in context.

6. Are there any other aspects of care provide by [Ms D] that warrant additional comment?

   No.

Advice regarding the role of Waikato DHB

1. Did Waikato DHB provide [Ms B] with an appropriate standard of care?

   No

2. Did the organisation of the Waikato Hospital clinic contribute to [Ms B] not being adequately examined and her symptoms not being followed up?

   Yes

3. What could be done to ensure this situation does not recur?

   Please see below

4. If the opinion is that Waikato Hospital did not provide an appropriate standard of care, please indicate the severity of departure form that standard.

   Moderate to Severe

5. Are there any other aspects of the care provided by the Waikato DHB that warrant additional comment?

   See below

Suggestions to ensure this situation does not occur again

In considering this matter I have consulted [a colleague] who is a specialist midwife with many years experience in high risk and fetal medicine antenatal clinics.

I am aware from reading the material provided to me by the HDC that some of the problems with organisation of the fetal medicine clinic have been identified and addressed. For example, a second fetal medicine specialist has been appointed to the team. Also, [Ms D] has changed the appointment scheduling so that women arrive 10 minutes before their scan time, allowing for a meeting with the midwife. She has also

made an arrangement with the sonographer to check that the woman sees the midwife before leaving the clinic.

I would like to make the following suggestions concerning the clinic and follow up postnatal meetings for women who have had complicated pregnancies such as [Ms B] experienced.

Fetal Medicine Clinic

1) **Staffing** levels for medical and midwifery staff should be reviewed if the team feel the large numbers of women seen in the clinic are a constraint against thorough assessment and documentation.

2) **The layout** of the clinic appears to be severely challenging. If there is no alternate site or plan to upgrade, perhaps consider alternative sites for some offices to allow more room for midwifery consultation. Seeing the woman in the corridor outside the toilet is not acceptable. I acknowledge I am making this comment after seeing a floor plan of the area without having visited the clinic.

3) **Team meetings** to discuss each woman seen would be a way to ensure that omissions do not occur. At present it seems there is not time for this and consequently the woman's care is fragmented.

4) **Documentation** could be adapted to include a template, which must be completed before the woman is rescheduled for her next appointment. In this way a situation where the woman has not been seen by the midwife, or not had her recordings taken would be recognised. There is not much space on the current record to add comments such as symptoms reported by the woman, advice given and action taken.

5) **Consider consultant taking blood pressure during assessment** of the woman. No system is fool proof and if the consultant (or midwife if she is present for the consultation) ensures that the blood pressure and urine are tested as part of every examination, process slips are less likely to occur.

Follow-up visits
If at all possible ensure that the woman sees practitioners who were involved with her care when seen as a postnatal follow up."

Appendix B: Independent obstetric advice — Dr Ian Page

"I am a practicing obstetrician & gynaecologist and have been a consultant for 21 years. I have been employed as such by Northland DHB for ten years. You have asked me to assess whether or not [Dr A] and Waikato DHB provided [Ms B] with an appropriate standard of care. I think that both [Dr A] and Waikato DHB did not provide [Ms B] with an appropriate standard of care — my reasons are detailed later. However it is unlikely that better care would have significantly altered the outcome, particularly with regard to the death of [her baby].

In reaching this conclusion I have read:

- the complaint from [Ms B] (pages 1−6)
- the response from Waikato DHB dated 7 September 2009 with attached clinical
- records (pages 7–72)
- notes taken during a telephone call to [Ms B's] mother on 15 January 2010
- (pages 73–74)
- notes taken during a telephone call to [Ms B] on 15 January 2010 (pages 75–76)
- notes taken during a telephone call to [Ms B's] partner on 15 January (page 77)
- the response from Waikato DHB dated 6 January 2010 (pages 78−81)
- the response from [Dr A] dated 17 December 2009 with accompanying clinical records (pages 82–120)
- the response from Waikato DHB dated 21 September 2009 (pages 121−123).

As I am not a maternal-fetal medicine sub-specialist I took advice from two such clinicians in New Zealand with regard to the roles of a maternal-fetal medicine sub-specialist and of a supervising obstetric sonologist.

The background to the case, as sent to me, is as follows:

Purpose Right 4 issues: To provide independent expert advice about whether obstetrician [Dr A] and Waikato District Health Board provided an appropriate standard of care to [Ms B].

Background [Ms B], 21 years, had her first pregnancy confirmed [in 2008] when she was six weeks gestation. Her antenatal care was provided by [the local] midwife [Ms F] from [the following month]. A scan organised by [Ms F] showed [Ms B's] baby to be small for dates. [Ms F] referred [Ms B] to Waikato Women's Hospital on [date] for follow-up of the scan results.

[Ms B] attended the Waikato Women's Hospital antenatal clinic on [five occasions]. At these visits she was seen by obstetrician [Dr A], who provides a fetal medicine service, which includes verifying ultrasound reports. [Dr A] was very concerned about

[Ms B's] baby and advised that it was suffering Intrauterine Growth Retardation (IUGR) and suggested that she undergo an amniocentesis to identify the cause of the fetus's retarded growth. [Ms B] was reluctant to undergo this procedure. [Ms B] was referred to [another] Hospital (she had moved to [another town] at the end of 2008) for steroid injections to assist the fetus's lung maturity.

When [Ms B] attended the clinic [for her third appointment], [Dr A] did not perform a physical examination. When [Ms B] attended her [fourth] appointment she was accompanied by her mother, a registered nurse, who told [Dr A] that she was concerned that her daughter might have toxaemia/pre-eclamptic toxaemia (PET) because she was complaining of visual disturbances and had tingling in her hands and feet. [Dr A] was apparently more concerned with gaining permission for an amniocentesis. [Ms B's] blood pressure and urine was not checked at this appointment.

[The following week], [Ms B] returned to the clinic for another appointment. She told [Dr A] that she had a severe headache, swollen hands, photophobia and vomiting. Again her blood pressure and urine was not checked. [Ms B's] routine antenatal examinations were not carried out [at her fourth and fifth appointments]. On the way home, [Ms B's] condition worsened. She went to her mother's house and an ambulance was called. [Ms B] was admitted to Waikato Hospital ED where she was diagnosed with PET. Her baby was delivered by Caesarean section, at 26 weeks [the day after the fifth appointment]. The baby died [a few days later].

You have asked me to comment specifically on the following:

[Dr A]

1. Did [Dr A] provide [Ms B] with an appropriate standard of care?

Overall I think [Dr A] did not provide [Ms B] with an appropriate standard of care. Placental insufficiency reflected as early-onset growth restriction should always prompt questioning as to the presence of associated signs or symptoms. Pre-eclampsia is the most common syndrome in this regard, and particular care should therefore be taken at each visit to diagnose or exclude it. This is effected by measuring the blood pressure and checking the urine for protein. That [Dr A] did not ensure this had been undertaken would be viewed with moderate disapproval by her peers, particularly as she is a vocationally-trained obstetrician and gynaecologist.

There does not appear to have been any formal contract between [Dr A] and Waikato DHB for the level of services she was expected to provide. Strictly speaking there is no such sub-specialty as 'Fetal Medicine', but only 'Maternal-Fetal Medicine'. This recognises that it is impossible to separate completely the management of the fetus from the mother.

If [Dr A] was only contracted to undertake diagnostic prenatal procedures, report and supervise the obstetric ultrasounds, and counsel and manage fetal abnormalities (as per her letter) then she should have ensured that Waikato DHB had arrangements in

place for the total care of the women she saw. However her clinic letters all refer to her 'Antenatal clinic' and conclude that she was actually functioning as an obstetrician rather than simply an obstetric sonologist. This is consistent with the blurring of boundaries to which she refers.

2. Was [Dr A's] [third] antenatal assessment of [Ms B] of an appropriate standard?

Yes. From a clinical viewpoint her blood pressure and urinalysis were undertaken, and the formal ultrasound assessment of the baby was performed. The diagnosis of placental insufficiency was made, but no mention made of pre-eclampsia being considered as the underlying pathology. However even if it had been formally considered it would not have altered management at this point as her blood pressure and urinalysis were normal. It was very appropriate to start steroids to improve fetal lung maturity, as the likelihood of pre-term delivery was clearly recognised.

3. Was [Dr A's] assessment of [Ms B] on the [fourth] consultation of an appropriate standard?

No — the absence of blood pressure and urinalysis should have been apparent to [Dr A] who had signed the clinic worksheet, and I believe she should have ensured they were checked. [Ms B's] mother believes she mentioned toxaemia at this visit. There is no record of any symptoms in the clinical records. [Dr A] had no recollection of them being mentioned when she wrote her response in December 2009, some 10 months after the event. She does state that had they been she would have recognised their importance and responded accordingly.

4. Was [Dr A's] assessment of [Ms B] on the [fifth] consultation of an appropriate standard?

No — the absence of blood pressure and urinalysis should have been apparent to [Dr A], and again I believe she should have ensured they were checked. This was also the advice (based on the principle) I received from the maternal-fetal medicine specialists.

5. Was the advice [Dr A] gave to [Ms B] at each of the clinic appointments appropriate?

I think the advice given to [Ms B] was correct, with regard to the probable causes of the baby's growth restriction. Amniocentesis is certainly considered in these circumstances, as the information gained may alter subsequent management of the pregnancy and delivery. The need to return for further monitoring was correct, as was the use of steroids at 24 weeks' gestation.

6. Did [Dr A] have a responsibility to physically examine [Ms B], and follow up on the concerns raised by [Ms B] and her mother in relation to [Ms B's] neurological symptoms [at the fourth and fifth appointments]?

I believe [Dr A] should have ensured that [Ms B's] blood pressure and urine were checked at both of these visits, although clinic practice may have delegated that task to the clinic midwife. It is difficult to know just what she was told by [Ms B] with regard to symptoms, and there is a significant discrepancy between the complaint from [Ms B] and her partner compared with the report from St John and the admitting doctor. The latter both state that she told them her headache and vomiting started about 6–6.30pm on [the day of the fifth appointment], ie, well after [Ms B] had seen [Dr A].

7. Was there anything else that [Dr A] should have done in these circumstances?

[Dr A] should have ensured that there was clarity between herself and [Ms B's] LMC ([Ms F]) with regard to continuing antenatal care, and the need for extra assessments if she believed that clinical responsibility for [Ms B] was remaining with the LMC. However her letters do imply that the 'hospital service' was making the management plan for [Ms B], even though no formal handover of care had been made.

Waikato DHB

1. Did Waikato DHB provide [Ms B] with an appropriate standard of care?

No. They do not seem to have made clear arrangements detailing what was expected of [Dr A] in her role as provider of fetal medicine services, nor have they ensured that the clinic midwife is able to undertake the necessary observations on all patients — ideally prior to them being seen by the specialist.

2. Did the organisation of the Waikato Hospital antenatal clinic contribute to [Ms B] not being adequately examined and her symptoms not being followed up?

Yes to the first part of the question, and possibly to the second — although I note the discrepancy around the reporting of the symptoms. A different system might have allowed greater note to be taken of any symptoms.

3. What could be done to ensure that this situation does not recur?

A clear contract for [Dr A] (and all SMOs with similar roles as external contractors) is required. This should have clear statements of what is expected within it; along with processes to ensure both the contractor and the DHB meet their respective obligations. This is quite different from the usual SMO contract for those SMOs employed by the DHB, where other quality systems are in place.

The clinic facility could have a formal review to identify exactly what it is required to do, and then ensure it has clear pathways for the care of patients attending it along with provision of adequate rooms and staff to provide the care. This should include how to manage patients attending different clinics in the same area, which is what I understand from [Dr A's] letter occurs."

Additional advice — Dr Ian Page

"As I said in point 6 it is difficult to know just what [Dr A] was told by [Ms B]. The fourth paragraph of the background you sent to me states [Ms B] told [Dr A] she had a severe headache, swollen hands, photophobia and vomiting yet your email of 7th April says she told the clinic staff of her symptoms. The difference is highly significant when trying to assess whether or not an appropriate standard of care was provided.

Looking at your email of 7th April, the ambulance report does not state at what time [Ms B] started to have her headache, but notes she took Panadol at 6pm (some 3 hours after her appointment with [Dr A]). The obstetric registrar's notes again fail to state when [Ms B's] headache started, but note she had uncontrolled vomiting from 6pm. The midwife notes vomiting since early yesterday morning, but this contrasts with [Ms B's] statement where she told the clinic staff she was nauseated (but makes no mention of actually vomiting). Dr G notes that [Ms B] stated she developed her headache on the morning of the 18th, but no mention of nausea etc.

Hence, and to re-iterate, I really cannot be sure when [Ms B's] symptoms started nor how much she mentioned them to different clinicians. To answer your specific questions

— ***If*** [Dr A] had been told about [Ms B's] symptoms [at her fifth appointment], then I think her peers would view her failure to check her blood pressure and urinalysis with severe disapproval.

— ***If*** [Dr A] had not been told about [Ms B's] symptoms [at her fifth appointment], then I think her peers would view her failure to check her blood pressure and urinalysis with mild to moderate disapproval – such disapproval would also extend to the clinic organisation. If the clinic staff had been told of her symptoms but had not told [Dr A] of them then I would increase that to severe disapproval of the clinic organisation.

— Would your opinion alter in any way if [Ms B] had not presented with a headache [at her fifth appointment], and if so how? Overall my concerns about the organisation of the service and [Dr A's] role within it would remain."

Ian Page"

Further advice
Dr Page was asked to comment on the following:

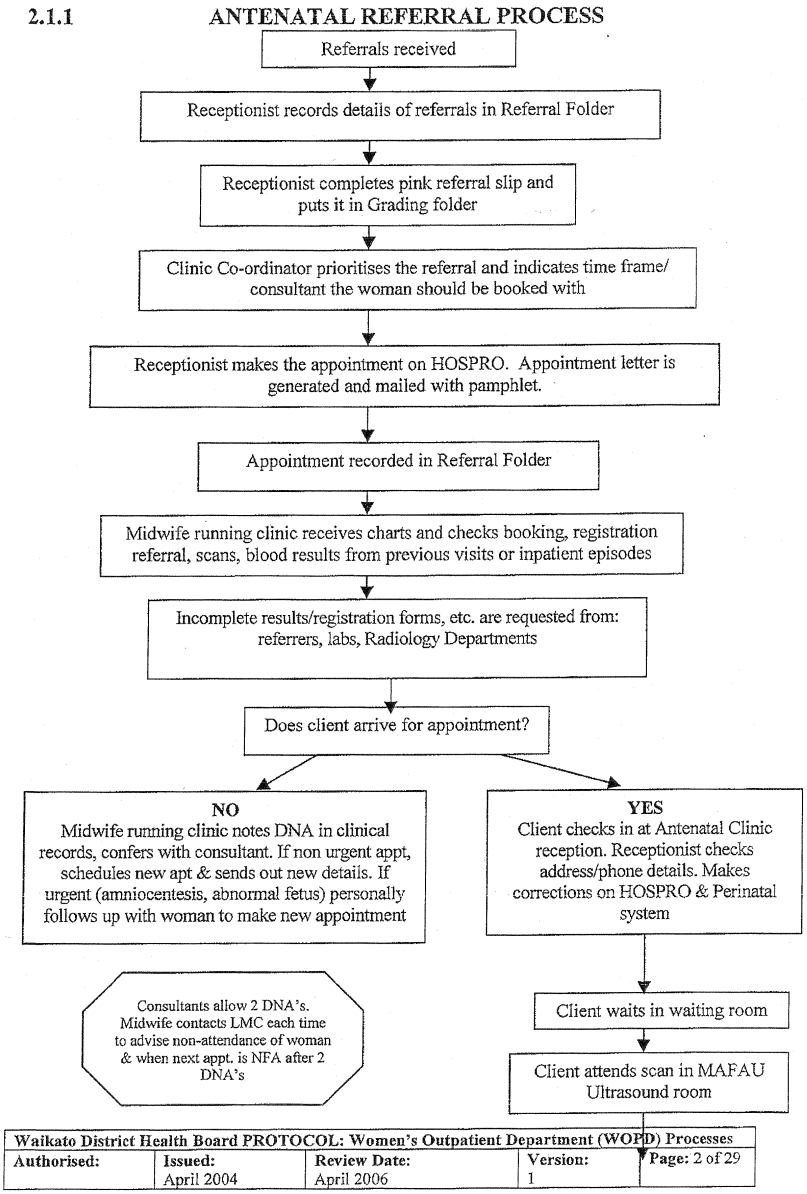
> "HDC asked you for your opinion about the severity of the omission if [Dr A] had been advised about [Ms B's] symptoms [at the fourth and fifth] antenatal appointments. In her response to the provisional opinion, [Ms B] amended the information we had obtained from her mother about her symptoms [at the fourth appointment], and what she had said about her symptoms [at the fifth appointment].
>
> [Ms B] stated that she told [Dr A] that she had swollen hands and feet [at her fourth appointment]. [At her fifth appointment] she told her that she had a bad

> headache, swollen tingling hands and was not able to see properly (seeing lights and fuzzy vision).
>
> We had understood and advised you that that [Ms B] reported that she was nauseated and had visual disturbances [at her fourth appointment] and was vomiting on [the day of her fifth appointment].
>
> If you take the vomiting out of the picture, and [Dr A] was told about the above symptoms and taken no action, would this still be a severe departure from the standard?"

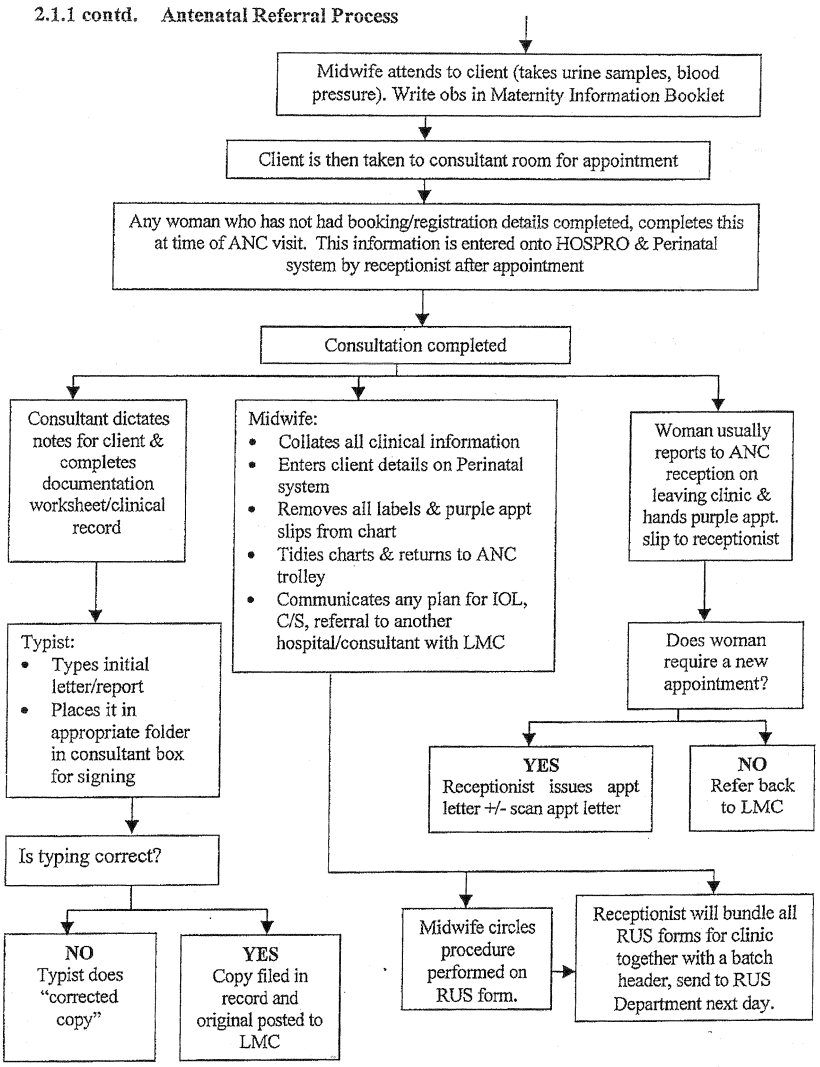
Dr Page stated:

> "I think the revised scenario you gave below would also be viewed as a severe departure from expected standards."

Appendix C: Waikato DHB's Antenatal Referral Process



Names have been removed (except Waikato DHB and the experts who advised on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.



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2.1.3 **FETAL MEDICINE MANAGEMENT**