District Health Board

Consultant Physician, Dr B

A Report by the

Health and Disability Commissioner

(Case 15HDC00937)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

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Executive summary

1. In September 2013, Ms A went to a public hospital as she was feeling unwell. It was thought she had a viral infection and an incidental finding of lower abdominal tenderness was noted. She was placed under the care of Senior Medical Officer (SMO) consultant physician Dr B.

2. Dr B ordered an ultrasound scan. A query of ovarian cancer was listed in the "question to be answered" section of the scan request, and the scan request was noted to have priority status. Other than ovarian cancer being listed as a possible question for the scan to assess, there is no other mention in her clinical notes of it being considered as a cause for Ms A's symptoms.

3. Dr B told HDC that the possibility of ovarian cancer was not discussed directly with Ms A at the time, based on her history of anxiety and depression.

4. Dr B's plan, which was recorded in the clinical notes by his registrar, was to discharge Ms A after the ultrasound scan had been performed, with a recommendation that she follow up with her GP if her symptoms did not settle.

5. Contrary to the plan documented in the clinical notes, Ms A was discharged by a house officer prior to the inpatient ultrasound scan being carried out and the initial scan request was cancelled. Instead it was arranged for Ms A to have an ultrasound scan of her abdomen and pelvis as an outpatient. The outpatient ultrasound request contained no specific reference to ovarian cancer. The status of the request was noted to be normal (scan to be completed within three months).The request also did not indicate that the report was to be copied to Ms A's GP.

6. Ms A's discharge summary states that the diagnostic impression was of a viral illness. It also noted that her GP was to follow up on the result of the ultrasound scan. There was no mention of any concerns of ovarian cancer.

7. Dr B told HDC that he does not recall being made aware of these arrangements.

8. On 29 November 2013, Ms A had her outpatient ultrasound scan. The ultrasound report noted a mass likely to be of ovarian origin, and recommended gynaecological referral and tumour marker correlation.

9. Neither Ms A nor her GP received a copy of the scan or a report relating to it. In addition, the result was not communicated verbally by the radiologist to Dr B or to the house officers who arranged for the outpatient scan.

10. On 11 December 2013 (almost 12 weeks after Ms A had been discharged from the hospital), the ultrasound report was viewed and accepted electronically by Dr B. There is no evidence that Dr B took any action in relation to the findings.

11. In January 2015, Ms A's GP reviewed Ms A and advised her that she had a mass in her lower abdomen/pelvic region. An urgent referral was made for an ultrasound scan

which showed a large ovarian mass. Ms A underwent surgery and a multidisciplinary meeting (MDM) diagnosed her with high-grade serous carcinoma of the ovary.

12. On 20 April 2015, at a consultation with her oncologist, Ms A queried why the tumour had not shown up on her ultrasound scan of 2013. The report was accessed electronically, and it was discovered that the report had identified the tumour at that time.

Findings

13. For not providing Ms A with the information that a reasonable consumer in Ms A's circumstances would expect to receive, it was found that Dr B breached Right 6(1)[1] of the Code of Health and Disability Services Consumers' Rights (the Code).

14. For not taking any follow-up action on her clinically significant test results, whether that be further investigations, or contacting her GP to ensure that someone was taking the follow-up action required, it was also found that Dr B breached Right 4(1)[2] of the Code.

15. There were several systemic contributing factors in this case. The district health board (DHB) was unable to explain how or why a number of these acts and omissions took place. These failings paint a picture of poorly coordinated and documented care. Accordingly, the DHB was found to have breached Right 4(1) of the Code.

Recommendations

16. It was recommended that Dr B undertake a random audit of a selection of radiology test results to ensure that the patient radiology test results he has received in the last three months have been followed up appropriately and communicated to his patients. It was also recommended that Dr B provide a written apology to Ms A's family.

17. It was recommended that the DHB:

- provide a report to HDC regarding the steps it has taken to facilitate systems to enable patients to receive a copy of their results directly;
- use this case as an anonymised case study for the education of staff, particularly around oversight of junior clinicians, communication, and documentation;
- provide a report to HDC regarding the status of the recommendations made during the Root Cause Analysis (RCA); and
- provide a written apology to Ms A's family for its breach of the Code.

[1] Right 6(1) of the Code states: "Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive."
[2] Right 4(1) of the Code states: "Every consumer has the right to have services provided with reasonable care and skill."

Complaint and investigation

18. The Commissioner received a complaint from Ms A about the services provided to her by the DHB and Dr B, consultant. The following issues were identified for investigation:

- *Whether Dr B provided Ms A with an appropriate standard of care between September 2013 and December 2013;*
- *Whether the DHB provided Ms A with an appropriate standard of care between September 2013 and December 2013.*

19. The parties directly involved in the investigation were:

Ms A	Consumer/complainant
Dr B	Provider
DHB	Provider

Also mentioned in this report:

Dr E	Consultant physician and psychiatrist

20. Information was also reviewed from Registrar Dr C, a medical centre and general practitioner (GP) Dr D.

21. Independent expert advice was obtained from a consultant general physician, Dr Richard Shepherd (**Appendix A**).

Information gathered during investigation

September 2013 — Admission to the public hospital

22. Ms A (aged 67 years at the time of these events) had a medical history that included Crohn's disease,[3] mild chronic obstructive pulmonary disease (COPD),[4] arthritis, anxiety, and depression.

23. On 2 September 2013, Ms A went to the Emergency Department (ED) at the public hospital as she was feeling unwell. Her clinical notes state that she had been experiencing vomiting and feverous symptoms for a few days, as well as headaches and generalised myalgia (muscle pain). She was transferred to the General Medical Service with a suspected viral infection and an incidental finding of lower abdominal tenderness. On 4 September 2013, she was transferred and admitted to the medical ward and placed under the care of Senior Medical Officer (SMO) consultant physician

[3] A type of inflammatory bowel disease.
[4] Progressive lung disease.

Dr B. Dr B had a team of junior doctors working with him, which included a team registrar and two house officers.[5]

24. On 4 September 2013, an on-call house surgeon reviewed Ms A and noted that an ultrasound could be considered "for chronic abdominal bloating". Ms A told the clinician that previously, during a pulmonary rehabilitation session,[6] a physiotherapist had recommended that she undergo investigations for ovarian cancer in view of her distended abdomen. It is further documented that Ms A said that she did not see anyone regarding this at the time. Ms A told HDC that she had thought that her abdomen size was increasing because of weight gain.

25. Later in the clinical notes that day, Dr B's registrar documented that Ms A had a tender abdomen "over lower zones", and that she told the clinicians that she "[a]lways has [a slightly] distended abdomen".

Inpatient scan scheduled

26. Dr B ordered an ultrasound scan that day to assess the underlying basis for the abdominal distension. A house surgeon processed the abdominal ultrasound scan request on the same day, and the radiology computer record shows that this was arranged for 6 September 2013. A query of ovarian cancer was listed in the "question to be answered" section of the scan request, and the scan request was noted to have priority status.

27. Other than ovarian cancer being listed as a possible question for the scan to assess, there is no other mention in her clinical notes of it being considered as a cause for Ms A's symptoms.

28. Dr B told HDC that the house surgeon and/or registrar are responsible for documenting his concerns regarding his patient. He further told HDC that he discussed the possibility of ovarian cancer with at least some members of his team "but [he] cannot comment on why [his] concern was not recorded in the notes, especially given it was clearly referred to in the inpatient scan request".

29. Dr B's team registrar, Dr C, told HDC that he cannot recall why he would not have documented an important differential diagnosis such as ovarian cancer, "if this was indeed clearly raised."

30. Dr B told HDC that the possibility of ovarian cancer was not discussed directly with Ms A at the time, based on her history of anxiety and depression.

31. On 5 September 2013, Dr B reviewed Ms A. The clinical notes state that Ms A looked better on examination, though she still reported some lower abdominal tenderness. Dr B's plan, which was recorded in the clinical notes by his registrar, was to discharge Ms A after the ultrasound scan had been performed (which was booked for 6

[5] The house officers are no longer practising at the DHB and, as such, have not provided a response. HDC has been unable to locate them.

[6] Pulmonary rehabilitation is an individually tailored multidisciplinary programme for patients with chronic respiratory disease.

September 2013), with a recommendation that she follow up with her GP if her symptoms did not settle.

Discharge from the public hospital and scheduling of outpatient scan

32. Contrary to the plan documented in the clinical notes, Ms A was discharged by a house officer on the afternoon of 5 September 2013. Dr B told HDC that the decision to discharge Ms A was likely to have been made by Dr C, although the DHB has said that it has no information about who made the request to discharge. The clinical notes do not outline the decision for discharge. Dr C told HDC that he has no "recollection as to why or by whom the discharge, contrary to the initial plan, was authorised". Dr C further stated: "any discharges from the day would typically have been brought to the SMO's attention and reviewed either on the day of discharge itself or at latest the following day".

33. Ms A's discharge summary states that the diagnostic impression was of a viral illness. It also noted that her GP was to follow up on the result of the ultrasound scan. There was no mention of any concerns of ovarian cancer, although it noted: "Complained tenderness in lower abdomen on deep palpation … no palpable mass … impression was possibly 2nd to the viral gastroenteritis." On the same day, a copy of the discharge summary was sent electronically via Healthlink[7] to Ms A's GP, Dr D.

34. Ms A was discharged prior to the inpatient ultrasound scan being carried out. A house officer cancelled the initial scan request (which had included mention of ovarian cancer). Another house officer arranged for Ms A to have an ultrasound scan of her abdomen and pelvis as an outpatient.

35. The outpatient ultrasound request noted an "[i]ncidental finding of lower abdominal tenderness on examination" and queried whether Ms A's "pain" was secondary to viral gastroenteritis (an intestinal infection, often referred to as stomach flu), and whether there was an adhesion from previous abdominal surgery. It also queried "other pathology" but contained no specific reference to ovarian cancer. The status of the request was noted to be normal (scan to be completed within three months), whereas the inpatient scan had been given priority status. The DHB told HDC that it has been unable to ascertain the reason why the clinical risk of ovarian cancer was not transcribed into the outpatient request.

36. The request also did not indicate that the report was to be copied to Ms A's GP. Dr B told HDC: "It is usual practice that on the request to radiology, the results of any outpatient tests are sent to the patient's GP." He said that this was particularly so where GPs are asked to follow up. He further said, however: "[B]ut for reasons unknown to me this was not arranged by the team during the discharge process."

37. The clinical documentation does not outline why the decision was made to change the ultrasound from an inpatient scan to an outpatient scan.

[7] A computerised system that enables healthcare providers to share patient information across disparate systems.

38. Dr B told HDC that he does not recall being made aware of these arrangements. He further said that he was not notified that the scan had not been performed during Ms A's admission, or of the decision made by his medical team to change the scan from an inpatient investigation to an outpatient one.

39. Dr B stated:

> "It seems to me that the urgency I indicated on the ward round, and reflected in the inpatient [ultrasound scan] request … was overlooked by my team at the time of discharge despite concerns being raised about possible ovarian cancer in the original inpatient scan request form. … I believe the request for the routine outpatient scan by the house-officer mis[re]presented my management plan for [Ms A]."

40. Dr B further noted that his registrar, Dr C, was present during his ward rounds (where Ms A's distended abdomen was discussed), but Dr B cannot recall whether either of the junior doctors were present. He said: "It is my impression that the doctor who arranged [Ms A's] discharge was not sufficiently informed of my concerns about possible ovarian cancer."

41. The DHB also noted in its RCA Report (carried out after these events) that junior doctors organised for Ms A to be discharged and to have an outpatient scan, and that Dr B was not advised of the new discharge plan (including the fact that Ms A was going to be discharged prior to having an ultrasound).

42. The DHB further told HDC that "having rotating junior doctors and the challenge of appropriate handover of care, is a constant challenge and this also creates the risk of further errors".

43. The DHB stated:

> "[T]here are constant pressures on the Public Hospital to maintain acute flow and ensure all patients get adequate care and this does lead to, where appropriate, having tests undertaken as an outpatient to ensure patients do not sit in the hospital inpatient system unnecessarily."

44. Dr B told HDC that "it is usual practice for the discharging doctors to arrange to have the outpatient scan result seen in a virtual clinic or the patient reviewed in a medical outpatient clinic". He stated:

> "[I]n this case the medical team who ordered the outpatient scan did not arrange for virtual clinic follow-up (review by a consultant or registrar), [and] instead requested follow-up be arranged by the GP … Furthermore, the doctor who ordered the outpatient scan did not request the [ultrasound] scan report go to the GP. These might be considered deviations from normal practice. … I assumed the 'urgent' [ultrasound] scan had been done as per my order and that the patient had been discharged with no concerns regarding the scan."

Outpatient scan

45. On 29 November 2013, Ms A had her outpatient ultrasound scan.

46. The report was both written and reviewed by a radiologist.[8] The ultrasound report was issued on 5 December 2013. It noted a "4.4 cm right adnexal mass" likely to be of ovarian origin, and recommended gynaecological referral and tumour marker correlation.

47. Neither Ms A nor her GP received a copy of the scan or a report relating to it. In addition, the result was not communicated verbally by the radiologist to Dr B or to the junior doctors who arranged for the outpatient scan.[9]

48. On 11 December 2013 (almost 12 weeks after Ms A had been discharged from the hospital), the ultrasound report was viewed and accepted electronically by Dr B. There is no evidence that Dr B took any action in relation to the findings.

49. Dr B told HDC:

> "[I]n signing off this report, I had responsibility for ensuring [Ms A] had appropriate follow-up. Sadly, I do not remember accepting this result or my subsequent actions."

50. Dr B told the RCA committee that he assumed, since he had not been informed by the radiologists of the abnormal finding, that the results had been conveyed to Ms A's GP by the Radiology department.

51. Dr B told HDC that he did not realise that his team had not arranged for the result to be sent to Ms A's GP. He further said that, while there is no mention of this being done, "it would be expected given the request for GP follow up". Dr B said that he accepts, however, that he should have ensured that Ms A's follow-up was in the hands of her GP.

52. Dr B further told HDC that his clinical practice is solely an inpatient service, and therefore he had not expected to find himself as the last point of contact bridging Ms A's care with her GP's care. He stated: "[I]t is not unusual as [a senior medical officer] in our system, to receive the results of tests arranged by our junior colleagues, whether we asked for those tests or not."

53. The RCA noted that "[a]t the time [December 2013] there was no system in place for the [ultrasound] report to be sent automatically to the GP". In addition, it noted that the junior doctor who ordered the ultrasound did not specifically request that the report be sent to the GP.

54. The RCA also noted that ultrasound reports are not sent to patients automatically, and must be requested through the patient's GP or via patients themselves through the DHB's Release of Information Services.

[8] A visiting doctor from overseas and no longer at the DHB.
[9] The RCA noted that opinions differ as to whether a 4cm cystic structure in the radiology report was a finding that needed any further action beyond the standard radiology reporting.

55. Ms A's GP, Dr D, told HDC:

> "The reason I did not follow up is because normally we would expect outside providers to either follow up the result of investigations they had ordered themselves or ensure that we will receive a copy of the result they wish us to review. In this case I was not sent a copy of the ultrasound report. … I understood that if the hospital wished me to follow up on a scan report, then it would be their responsibility to ensure that I received a copy of that report. In addition [Ms A] had told me that the ultrasound had been verbally reported to her as 'satisfactory' which meant that my threshold for concern was lowered[10]."

56. In addition, Dr D told HDC:

> "We have systems in place to follow up all investigations requested by us (by way of automatically generated tasks) but we did not have systems in place to search for results ordered by outside providers. In light of this case we are now using the same system to manually create a task as an 'alert' when we receive any request to follow up results from an external provider. This means in future I will be made aware if an expected result is not received."

2014–2015 — diagnosis of ovarian cancer

57. Around December 2014/January 2015, Ms A began to have problems with her bladder (a frequent need to urinate and a low output). On 30 January 2015, Ms A visited Dr D, who advised her that she had a 10cm right-sided mass in her lower abdomen/pelvic region.

58. An urgent referral was made for an ultrasound scan. The ultrasound scan, performed on 2 February 2015, showed a large ovarian mass of approximately 13cm in diameter. Further investigations identified a large cystic mass (measuring 14.3 x 12.4 x 9.1cm) on the right side of Ms A's pelvis, appearing consistent with ovarian malignancy with peritoneal spread. Ms A underwent surgery and, on 3 March 2015, a multidisciplinary meeting (MDM) diagnosed her with high-grade serous carcinoma of the ovary, stage 3C.[11] Subsequently, Ms A was advised that the tumour had spread to her lower bowel and stomach lining, and she was referred for chemotherapy.

59. On 20 April 2015, at a consultation with her oncologist, Ms A queried why the tumour had not shown up on her ultrasound scan of 2013. The oncologist accessed the report electronically, and it was discovered that the report had identified the tumour at that time.

[10] During the scanning process Ms A recalls being told that everything was fine. She took this to mean there was nothing of concern identified during the scanning process. This was prior to any results being reviewed and processed.

[11] The stage of cancer is determined by the International Federation of Obstetrics and Gynecology (FIGO) stating system. It is important to determine, if possible, the type of cancer and the presumptive site of origin. Stage 3 means that the cancer involves one or both of the ovaries or fallopian tubes, or has spread to the peritoneum outside the pelvis and/or to lymph nodes along the major blood vessels behind the abdomen. Stage C means that the cancer has spread past the pelvis to the abdomen and is larger than 2cm, with or without spread to the lymph nodes.

60. The DHB told HDC that "there are several systemic contributing factors leading to this adverse outcome". The DHB noted the failure to send the ultrasound report to the GP, and directing that the ultrasound be undertaken as an outpatient, which it said "created a risk in managing both the ultrasound and follow up in an outpatient setting and issues around handover including the fact that the request for an outpatient ultrasound did not raise the potential of an underlying malignancy".

61. The RCA noted that "the delay in treatment of ovarian cancer may have had a significant impact on this patient's prognosis".

Other information

62. The DHB told HDC that, at the time of these events, there were no specific policies or guidelines in place regarding the decision-making powers of junior doctors/registrars.

63. Dr B told HDC that he is "certain" that he discussed the possibility of ovarian cancer during the ward round. He said that it is possible that the house officer who omitted to mention any concern regarding ovarian cancer on the outpatient scan request was not present during these conversations. Dr B told HDC that house officers may not be present on a ward round, and can miss issues relevant to the patient's care. Dr B said that normally the registrar provides the continuity of oversight in these situations.

64. During the course of this investigation, Dr B provided HDC with a letter written by Dr E, a consultant physician and psychiatrist at the DHB. Dr E told HDC that, at the DHB, "[i]n order to make the rounding process and distribution and discharge of patients more efficient, the general medicine system results in a constant shifting mix of [senior medical officers] and [resident medical officers]". He further said:

> "[T]his discontinuity is compounded when the discharge summary is completed. The [house officer] who is the least educated and experienced member of the team … is delegated to summarise the patient's entire experience on a sheet. … [T]here is no built-in system for [resident medical officer/senior medical officer] review of the discharge summaries."

Changes made following these events

65. Dr B told HDC that he is now "even more vigilant when it comes to reviewing results and ensuring that the appropriate follow up is actioned". Furthermore, he said:

> "I will continue to work to ensure that the purpose of any investigations are understood by all members of the team and in particular, by the patient. On occasions where I am anxious that malignancy or other serious illness needs to be excluded, I will make this explicit to raise everyone's awareness of the need to know the result of the test.
>
> …
>
> I now take a much more proactive role in critiquing the discharge summaries my junior doctors write on my behalf. I also take careful consideration of the discharge arrangements for my patients, even when they are discharged to the care of their GP and not seen by me. I now go to greater lengths to ensure my

junior doctors fully document my comments and concerns about patients particularly when made during our private reviews of patient records and results."

66. The DHB told HDC that changes made include:

- All scan results (including outpatient scan results) are sent to the patient's GP if the GP is registered with the DHB; and
- Urgent radiology results are now routinely telephoned through to the requesting clinician, and the Radiology department has a policy that encourages radiologists to contact the referrers with any unexpected or significant findings.

67. The RCA undertaken by the DHB resulted in the following recommendations:

- The DHB to facilitate systems to enable patients to receive a copy of their results directly. As part of this, the DHB is exploring the possibility of a fully integrated Electronic Health Record that enables patient portals and a more rigorous electronic system to ensure better visibility of health care for patients, whanau, and clinicians;
- The DHB to consider the development of an urgent report flag that goes from Radiology's Information System to Eclair (the clinical information system used at the DHB), which would result in certain reports standing out from all the others in Eclair. However as part of its response to my provisional opinion, the DHB stated that it has concerns that such a system would "place too much responsibility on radiologists to assess what might be a significant or unexpected finding without clinical knowledge of the patient.";
- The DHB to explore the benefit of reviewing the standard radiology report so that the summary of significant findings is placed at the beginning of the report;
- The Radiology department to develop a process for ensuring that patients who may require further investigation as a result of the initial imaging are informed that they need to follow up on the result with their GP if they are not told the result within two weeks by either their referring clinic/team or their GP. However as part of its response to my provisional opinion, the DHB noted that, the medical radiation technologist would not necessarily appreciate the significance of the findings they made during their examination of the patient. Although it further noted that there is already in place a standard protocol for sonographers to tell patients at the end of the scan to check with their referrer for the results of the examination.

Response to provisional opinion

68. Ms A, Dr B and the DHB were asked to comment on the relevant sections of my provisional opinion.

69. Dr B responded and stated he was disappointed with the provisional determination that "based solely on the ward round notes, I failed to inform [Ms A] of the possibility she might have ovarian cancer."

70. He also stated that because his treatment plan (for an inpatient ultrasound scan) was subsequently changed by his team, transferring all follow up to her GP, he did not agree with my finding that his care of Ms A in terms of failing to inform her of her ultrasound result was suboptimal.

71. Dr B stated that he was happy to carry out the recommendations outlined in my report.

72. Dr B advised that his omission in this case was not a reflection of his usual standard of practice, he said: "it was an inadvertent oversight and one I very much regret."

73. Ms A responded from hospital where she was now receiving end of life care. She stated that if she had urgently been sent a copy of her scan result that she "would not be in this Hospice, desperately ill and with a limited time to live."

74. The DHB responded and its response has been incorporated into this report where relevant. It agreed to report back further in relation to my recommendations.

Opinion: Dr B — breach

Assessment and request for tests

75. As part of his assessment of Ms A on 4 September 2013, Dr B ordered an inpatient abdominal ultrasound scan. "Ovarian cancer" was listed in the "question to be answered" section of the scan request (which was written by a house officer), and the scan request was noted to have priority status.

76. Dr B told HDC that the possibility of ovarian cancer was not discussed directly with Ms A at the time, based on her having a history of anxiety and depression.

77. On 5 September 2013, Ms A appeared to have improved but still reported some lower abdominal tenderness. Dr B's documented plan was to discharge Ms A after the ultrasound scan. Later that day, however, Ms A was discharged by a house officer. The initial priority scan request that had included the concern of ovarian cancer was cancelled, and instead it was arranged for Ms A to have an ultrasound scan as an outpatient. This was given "normal" status, and the new scan request contained no reference to any suspicion of ovarian cancer.

78. There is nothing documented as to why there was a change made regarding Dr B's plan; in addition, Ms A's discharge summary made no mention of any concern relating to cancer.

79. Dr B said that his registrar had been present during his ward rounds (where Ms A's distended abdomen was discussed), but he cannot recall whether either of the junior

doctors were present. He told HDC that, in his view, the "urgency" he had indicated on the ward round, and reflected in the inpatient scan request, was overlooked by his team (or some members of it) despite his concerns about possible ovarian cancer.

80. Dr B said that he was never made aware of the changes made regarding Ms A's management. He further said that he assumed that the urgent ultrasound scan had been performed as per his "order", and that Ms A had been discharged with no concerns regarding the scan.

81. During the course of this investigation I obtained expert advice from Dr Richard Shepherd (a consultant physician in general medicine). Several factual scenarios have been suggested by Dr Shepherd to assist in trying to establish what may have occurred in this case. It has been suggested that Ms A's early discharge, the change from a priority inpatient scan to a normal outpatient scan, the omission of the reference to ovarian cancer on the outpatient scan request (when it had been included on the inpatient scan request), and the omission to request on the outpatient scan request that the results of the scan be sent to Ms A's GP, could be attributed to a failure of effective communication and oversight on behalf of Dr B. Conversely, some of these acts or omissions could be attributed to the registrar and junior doctors involved, either misunderstanding Dr B's concerns and clinical plan or acting outside of a delegated authority. As I have been unable to consider information from the junior staff involved, I cannot make findings as to exactly how these acts and omissions occurred.

Outpatient scan

82. On 29 November 2013, Ms A had her outpatient ultrasound scan and, on 5 December 2013, the ultrasound report was issued. The report noted a mass that was thought likely to be of ovarian origin. Gynaecological referral and tumour marker correlation was recommended.

83. On 11 December 2013 (almost 12 weeks after Ms A had been discharged from hospital), the ultrasound report was viewed and accepted electronically by Dr B.

84. Dr B acknowledged to HDC that, in accepting the report, he had the responsibility "for ensuring [Ms A] had appropriate follow-up". However, Dr B took no action in relation to the findings.

85. Dr B told HDC that he thinks he assumed that the results had been conveyed to Ms A's GP by the Radiology department, and that he had not realised that his team had not arranged for the result to be sent to Ms A's GP. He further said that, even though there is no mention of the result being sent to the GP, it would be expected given the request for GP follow-up. Dr B accepts, however, that he also should have ensured that Ms A's GP was to follow up the scan result.

86. Dr Shepherd advised me that ultimately the clinician responsible for requesting a scan should also be responsible for following up the result. He also said that, in this case, "[s]ystems were in place at the DHB at the time of the incident to adhere to this general principle. System errors, or the failure of the abnormal result to be viewed by

a responsible physician, do not appear to have been factors [in these results not being followed up]."

87. Dr Shepherd advised me that Dr B's failure to contact Ms A's GP, or to arrange further follow-up regarding her ultrasound result, is a "moderately severe departure from the accepted standard of care".

88. Dr Shepherd also advised: "By signing off investigation reports, I believe the majority of practising doctors would acknowledge that in doing so, they have accepted the responsibility for ensuring appropriate follow up and communication of results." I agree.

89. The standard premise, as stated in *Coles Medical Practice 2013*, is: "If you are responsible for conducting a clinical investigation you are also in charge of conducting follow up and keeping the patient informed."

90. As Dr B himself acknowledges, he had the responsibility for ensuring that Ms A had the appropriate follow-up, including being informed of the results, and, if he felt that her GP was undertaking the follow-up (as Dr B states was his belief at the time), he should have ensured this by contacting the GP.

91. However, Dr B did not inform Ms A of his concerns about ovarian cancer when he decided to order an ultrasound initially, and, after viewing the scan result, failed to inform Ms A of her result. I note in response to my provisional report that, Dr B said he was disappointed with the provisional determination that "based solely on the ward round notes, I failed to inform Ms A of the possibility she might have ovarian cancer." As documented above, this decision was based on Ms A evidence and Dr B's own admission that the possibility of ovarian cancer was not discussed directly with Ms A at the time, based on her having a history of anxiety and depression.

92. By failing to do so, Dr B did not provide Ms A with the information that a reasonable consumer in Ms A's circumstances would expect to receive. Therefore, I find that Dr B breached Right 6(1) of the Code.

93. I am also critical that Dr B did not contact Ms A's GP and enquire as to whether the GP would be informing Ms A of the result.

94. I further find that, by not taking any follow-up action on her clinically significant test results, whether that be further investigations, or contacting her GP to ensure that someone was taking the follow-up action required, Dr B failed to adhere to fundamental basic medical practice. As I have stated previously in several opinions, doctors owe patients a duty of care when handling test results, including following up on their results.

95. I note again in response to my provisional report that, Dr B did not agree with my finding that by failing to inform Ms A of her ultrasound result, his standard of care in this regard was suboptimal. However, as outlined above, Dr B himself acknowledged to HDC that, he had the responsibility for ensuring that Ms A had was informed of the

results and, if he felt that her GP was undertaking the follow-up (as Dr B states was his belief at the time), he should have ensured this by contacting the GP.

96. For not taking any follow-up action on her clinically significant test results, whether that be further investigations, or contacting her GP to ensure that someone was taking the follow-up action required, Dr B did not provide services to Ms A with reasonable care and skill; accordingly, I also find that Dr B breached Right 4(1) of the Code.

Opinion: The DHB — breach

97. This report considers the care provided to Ms A between September and December 2013 by the DHB.

98. I am concerned about several aspects of Ms A's care.

99. My expert advisor, Dr Richard Shepherd, advised me that this case includes issues of communication, documentation, and oversight of resident medical officers. While I am unable to make findings in relation to exactly how these acts and omissions occurred, as discussed below, I agree that a mix of these issues was likely at play.

100. It is unclear why the initial inpatient scan that was ordered for Ms A was changed to an outpatient scan, and to normal status from priority status. There is no documentation to outline why this decision was made. The DHB also said that it has been unable to ascertain why the clinical risk of ovarian cancer was not transcribed from the inpatient request into the outpatient request.

101. Despite Dr B having discussed with some of his team the possibility that Ms A had ovarian cancer, aside from the inpatient scan request, the clinical notes from her time in the General Medical Service contain no mention of ovarian cancer being considered as a possible cause of her symptoms.

102. Dr Shepherd advised me:

> "I would regard the absence of such a significant clinical concern from the consultant review documentation as a moderate departure from the expected standard."

103. In addition, the DHB has been unable to determine who made the decision to discharge Ms A. The clinical notes do not outline the reason for the decision to discharge. The early discharge was contrary to Dr B's documented management plan, and Dr B was not told of the new discharge plan.

104. Dr Shepherd advised:

> "The documentation at the time surrounding the discharge process also does not explain the events that occurred. In my view that also falls below the expected standard."

105. Furthermore, Ms A's discharge summary stated that the diagnostic impression was of viral illness. There was no mention of any concern relating to ovarian cancer. Her discharge summary noted that her GP was to follow up on the result of the ultrasound scan. However, while a copy of the discharge summary was sent to Ms A's GP, the outpatient scan request did not indicate that the report was to be copied to Ms A's GP, contrary to usual practice at the DHB. After attending the outpatient scan, neither Ms A nor her GP received a copy of the scan or a report relating to it.

106. Dr Shepherd stated: "Such a failure would fall below the expected standard of care given the GP was being requested to follow up the result." Dr Shepherd advised that this failure did not remove the clinical responsibility for the management of the result by the ordering clinician, but that "[i]t did however remove a further safety redundancy from the system". I agree.

107. Given the lack of information available to me, I am unable to make findings as to exactly how these acts and omissions occurred. However, in my view, the DHB team had sufficient information to provide Ms A with appropriate care. District health boards are responsible for the operation of the clinical services they provide, and are responsible for any service failures. I consider that a series of acts and omissions by staff led to Ms A receiving poorly coordinated care. In particular:

- The initial inpatient scan was changed without documented explanation from an inpatient scan to an outpatient scan, and from having priority status to having only normal status;

- The house officer completing the request for an outpatient scan did not request a copy of the scan to be directed to Ms A's GP, even though the discharge summary said that the GP was to follow up on the results. The concerns about ovarian cancer were not transcribed from the inpatient scan request to the outpatient scan request;

- Ms A was discharged contrary to Dr B's documented plan in her clinical notes, without any documented explanation and without informing Dr B;

- There were no concerns about a possibility of ovarian cancer documented by the General Medical Service, other than on the in-patient scan request.

108. The DHB has acknowledged that there were several systemic contributing factors in this case. The DHB has not been able to explain how or why a number of these acts and omissions took place. These failings paint a picture of poorly coordinated and documented care. I consider that the DHB failed to provide services to Ms A with reasonable care and skill and, therefore, breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights.

Recommendations

109. I recommend that Dr B:

a) Provide a written apology to Ms A's family for his breaches of the Code. The apology is to be sent to HDC within three weeks of the date of this report, for forwarding to Ms A's family;

b) Undertake a random audit of a selection of radiology test results to ensure that the patient radiology test results he has received in the last three months have been followed up appropriately and communicated to his patients. Dr B should provide evidence to this Office of this audit and its outcome, within three months of the date of this report.

110. I recommend that the DHB:

a) Provide a written apology to Ms A's family for its breach of the Code. The apology is to be sent to HDC within three weeks of the date of this report, for forwarding to Ms A's family;

b) Provide a report to HDC regarding the steps it has taken to facilitate systems to enable patients to receive a copy of their results directly. As part of this, the report is to include the consideration that has been given regarding those patients without electronic access. The DHB is to report back to HDC on this within six months of the date of this report;

c) Use this case as an anonymised case study for the education of staff, particularly around oversight of junior clinicians, communication, and documentation, and report back to HDC on this within six months of the date of this report;

d) Provide a report to HDC regarding the status of the recommendations made during the RCA, and report back to HDC on this within six months of the date of this report.

Follow-up actions

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

112. A copy of this report with details identifying the parties removed, except the expert who advised on this case, will be sent to the Royal Australasian College of Physicians, and it will be advised of Dr B's name.

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

Appendix A: Independent advice to the Commissioner

The following expert advice was obtained from a consultant general physician, Dr Richard Shepherd:

> "My name is Dr Richard Shepherd. I have been asked to provide an opinion to the Commissioner on case number C15HDC00937 regarding the care [Ms A] received from [the DHB]. I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.
>
> I am a Consultant General Physician employed full-time by the Waikato District Health Board. I graduated from Otago Medical School in 1997 with Bachelor of Medicine and Surgery (MBChB). I have attained fellowships with the Royal New Zealand College of Urgent Care, The Division of Rural Hospital Medicine and the Australasian College of Physicians. I have subspecialty interests in nephrology, emergency medicine and palliative care. I have completed the Auckland University Postgraduate Diploma of Community Emergency Medicine, the RACP Clinical Diploma in Palliative Medicine and the Otago University Certificate in Physician Performed Ultrasound. I have no conflicts of interest to declare in this case.
>
> **I have been requested by the Commissioner to provide expert advice on the following issues:**
>
> 1/ Was it appropriate for the ultrasound scan to be changed from an inpatient to an outpatient scan?
>
> 2/ In cases where an outpatient ultrasound scan is required, who holds the clinical responsibility for the management of the results?
>
> 3/ Please comment on [Dr B's] failure to contact [Ms A's] GP, or arrange further follow up regarding her ultrasound results.
>
> 4/ Was the follow up advice noted on the discharge summary of 5th September 2013 satisfactory given the clinical scenario presented?
>
> 5/ Any comments you may wish to make in regards to the systems in place for scan results between [the DHB] and General Practices. In particular, are the remedial actions described in [the DHB's] Root Cause Analysis appropriate?
>
> **For each of the above issues raised, my advice has been sought regarding:**
>
> a) What is the standard of care/accepted practice?
>
> b) If there has been a departure from the standard of care or accepted practice, how significant a departure it is in my view.
>
> c) How would the departure be viewed by my professional peers?
>
> **Sources of information reviewed in the preparation of this report:**
>
> Letter of complaint from [Ms A]
>
> Response and clinical notes from [the DHB]

Response and clinical notes from [Dr D] GP

Medical Council of New Zealand Resource Publications

— Good Medical Practice 2013
— Cole's Medical Practice in New Zealand 2013

Managing Patient Test Results — RNZCGP 2005

Overview:

[Ms A] first presented to [the public hospital] on 2nd September 2013 after feeling unwell for three days with generalised myalgia, headache, nausea and vomiting, and coryzal symptoms. Diagnoses initially considered included meningitis, a flare of her chronic obstructive pulmonary disease, and viral illness. A history of chronic abdominal bloating was noted and on examination abdominal tenderness particularly in the right iliac fossa was found. No other features of undiagnosed malignancy (abdominal mass, constitutional symptoms, weight loss) were noted. The diagnostic impression given on the discharge summary was that of viral illness/possible viral gastroenteritis. Initially she was planned to undergo an inpatient ultrasound on 5th September. This was however cancelled, and [Ms A] was discharged from hospital, her symptoms having improved. An outpatient scan was requested instead. This was performed on 29th November 2013 and reported a 4.4cm right adnexal mass, likely of ovarian origin. Gynaecological referral and tumour marker correlation were recommended by the reporting radiology intervention fellow.

A Root Cause Analysis conducted by [the DHB] found that a copy of the ultrasound report was not sent to [Ms A's] GP, and that [Ms A] said she had been falsely reassured by the team performing her ultrasound that everything was all right.

The ultrasound report was viewed and accepted by [a] consultant physician on 11th December 2013. [The DHB's] audit trail records the report was viewed at 09:28hrs 11/12/2013 and accepted by the consultant at 09:29hrs. There is no evidence of any action having been taken within the clinical record. [The DHB's] Root Cause Analysis states that in the involved physician's account of events he was unable to recall if any communication occurred regarding this with [Ms A's] GP. The GP involved had no recollection, or documented record of any communication, in relation to the ultrasound report.

In January 2015, [Ms A] attended her GP due to problems evacuating her bladder. A 10cm tumour in the lower abdomen was felt and an ultrasound and CT scan were arranged.

[Ms A] underwent exploratory surgery on 24th February 2015. A diagnosis later confirmed high grade serous carcinoma of the ovary, stage IIIc with significant post-operative residual tumour at the base of the small bowel mesentery.

A Medical Oncologist concluded the delay in treatment of ovarian cancer may have had a significant impact on [Ms A's] prognosis, from at least 60% long term

survival and cure for stage 1 or 2 high grade serous carcinoma of the ovary, to a less than 5–10% long term survival and a median survival of about 3 years for a sub-optimally debulked stage IIIc tumour.

Advice to the Commissioner:

1/ Was it appropriate for the ultrasound scan to be changed from an inpatient to an outpatient scan?

In my opinion the decision to perform the ultrasound scan as an outpatient would not be considered a deviation from accepted practice or the standard of care.

[Ms A] was admitted to hospital with what the clinical team felt was an acute illness with poorly localising symptoms and signs. The initial diagnostic evaluation pursued meningitis, an exacerbation of her airways disease, potential urinary source of sepsis and viral illness. She did not appear to have what would be regarded as clear red flag symptoms of underlying malignancy. Her clinical signs and initial investigation results did not significantly raise the pre-test probability for intra-abdominal malignancy. Consequently, in my opinion, inpatient imaging was not mandated. A history of abdominal bloating was obtained and a clinical examination did record significant abdominal tenderness. On balance, in the setting of her acute presentation, I would consider the discharging team's impression of an undifferentiated viral illness was not unreasonable.

An element of uncertainty regarding this undifferentiated presentation does appear to have been recognised. Plans were made to arrange an ultrasound to potentially clarify things further, and to seek review with her GP if her symptoms persisted after 1–2 weeks. In the absence of malignancy red flags the decision to complete an ultrasound as an inpatient, versus an outpatient, would largely come down to physician clinical judgement as to the patient's in hospital progress. In this case it appears [Ms A's] symptoms were felt to have improved to the point of being fit for discharge. This appears to have been clinically appropriate. With the benefit of hindsight, an inpatient scan, and then result, would likely have been acted on differently, and so have led to a very different outcome. The outpatient scan was however requested in a timely manner based on the clinical details known at that time. In my opinion, such known details did not mandate an urgent scan triage category. The ultrasound scan did subsequently identify the significant pathology, and did recommend further appropriate action. In my opinion this decision did not directly lead to [Ms A's] poor outcome.

2/ In cases where an outpatient ultrasound scan is required, who holds the clinical responsibility for the management of the results?

In my opinion, and I believe in that of the majority of my professional peers, the general principle should be applied that the clinician responsible for requesting the scan should also be ultimately responsible for following up the result. Systems were in place at [the DHB] at the time of the incident to adhere to this general principle. System errors, or the failure of the abnormal result to be viewed by a responsible physician, do not appear to have been factors.

These issues have been subject to the previous commissioner's attention and are described in the New Zealand Medical Council's reference text 'Cole's Medical Practice in New Zealand 2013'. In Chapter 14 'The Management of Clinical Investigations' it notes that this is a contentious issue in New Zealand practice with no clear agreement on the level of responsibility that should be held by doctors, patients and those conducting the investigations. It further notes that failure to manage test results appropriately has the potential to cause harm, and that a number of basic principles may assist in protecting patients. As the previous commissioner noted — 'the devil, of course, is in the details'.

The above basic principle said; lines of clinical responsibility can become blurred and ambiguous particularly within the interface between a discharging acute secondary healthcare service and a continuing care primary service. Each party may incorrectly assume the other has, or will, take responsibility. From each party's submission to the commissioner this may have been a factor. The discharge summary clearly stated on three occasions under the 'Management', 'Discharge' and 'Advice to GP' sections 'Please chase the result of abdominal USS'. On the surface this could, not unreasonably, be regarded by a secondary care physician as a clearly communicated delegation of that follow up responsibility to the named GP providing ongoing care. Again however 'the devil is in the details'. In the GP's submission to the HDC he notes 'the reason I did not follow-up is because normally we would expect outside providers to either follow up the results of investigations they had ordered themselves, or ensure that we will receive a copy of the result they wish us to review'. He further goes on to state 'I understood that, if the hospital wished me to follow up on a scan report, then it would be their responsibility to ensure that I received a copy of that report'. In my opinion, I would tend to agree. It could be considered a wishful, and perhaps unconsidered, expectation of secondary care, that a community GP could follow up on countless results he has not requested, has not received a copy of, and where he does not have ready access to the systems to chase up such results. A lack of appreciation of such issues and pressures in general practice might lead hospital doctors to place an undue burden on GPs and inappropriately delegate clinical responsibility for result follow up. Having agreed lines in the sand that all understand and follow therefore becomes critical.

Because of the significant potential for real avoidable harm and the multiple points within which any system can fail I would agree with the conclusions and common principles stated in Cole's Medical Practice 2013 — most specifically, but not limited to 'If you are responsible for conducting a clinical investigation you are also responsible for ensuring that the results are appropriately communicated to those in charge of conducting follow up and keeping the patient informed'. In my opinion, that is a clear line in the sand.

I would regard departure from this expected standard of care as a moderately severe deviation.

3/ Please comment on [Dr B's] failure to contact [Ms A's] GP, or arrange further follow up regarding her ultrasound results.

In my opinion [Dr B's] failure to contact [Ms A's] GP, or arrange further follow up regarding her ultrasound result, is a departure from the accepted standard of care. I would regard this as a moderately severe departure with significant avoidable harm having resulted. I would regard my peers as holding similar views. Good patient safe practice mandates a proactive follow up approach in cases where such a potentially clinically significant result has been highlighted, and one does not know for certain it has been addressed.

According to [the DHB's] Root Cause Analysis documentation, the doctor responsible for accepting the report assumed, that in the absence of having been informed by radiology of the abnormal finding, that these results had been conveyed to the patient's GP. In my opinion such assumptions increase risk, rely inappropriately on others' assumed actions, and seek to undermine the systems in place to support patient safety. This could not be regarded as proactive follow up of clinically significant results. By signing off investigation reports, I believe the majority of practising doctors would acknowledge that in doing so, they have accepted the responsibility for ensuring appropriate follow up and communication of the results, in proportion to the severity and urgency of the problem. In this case merely forwarding on such a significant report to the GP could potentially expose the patient to another weak link in the system that could, and in my experience, does, fail. A more proactive approach of direct contact with the GP/patient would increase patient safety and be more in keeping with debated principles and accepted practice.

As noted above, this appears to be the general guiding view of the New Zealand Medical Council and the standards discussed in Cole's Medical Practice in New Zealand and Good Medical Practice publications.

From the Root Cause Analysis documentation it appears the ultrasound report was viewed at 09:28hrs on 11/12/13 and accepted at 09:29hrs. In my opinion the report is a long and detailed report containing a number of significant findings and conclusions. Within a one to two minute time frame I was unable to adequately read, process, consider my actions, potentially review the patient's file and then be confident to accept the report. It is an unknown factor whether simply overlooking the contents of the report occurred, amongst what may well have been many other reports for sign off that day. The Root Cause Analysis report does not identify this as a potential factor.

4/ Was the follow up advice noted on the discharge summary of 5th September 2013 satisfactory given the clinical scenario presented?

In my opinion the information contained in the discharge summary was satisfactory given the clinical scenario presented and did not deviate significantly from the accepted standard.

It would be an accepted standard that patients are informed why the clinical examination proposed had been recommended, that they are informed of the system for learning test results and the system for arranging follow up. [The DHB's] discharge summary appears to be concise yet detailed. It covers [Ms A's]

presentation, relevant past medical history, medications, in hospital progress, management, and probable diagnosis. It then details information regarding plans for an outpatient ultrasound, follow up of this result with her GP and follow up with her GP if her symptoms failed to settle. Whilst the specific heading 'Advice to Patient' does not clearly describe who will follow up the result of the ultrasound scan, the preceding headings under 'Advice to GP' and 'Discharge', do state that her GP had been requested to follow up the results. In my opinion, it is not unreasonable to expect the average patient would read the document in its entirety and understand this fully. Whilst such advice that the GP would be responsible for following up the result can be criticized for the reasons discussed earlier — in my opinion the discharge summary was clear enough at communicating the discharging team's expectations and plans to the patient.

It is not clear from the documentation supplied to me what the GP practice's policy was at the time of the incident regarding notification of results to patients. Whether this was a system of non-notification of normal results — in essence no news is good news policy — is unknown. It is not clear what, if any, expectations or understanding [Ms A] had regarding this. This may have been an additional factor. Much of the controversy regarding responsibility for following up patient test results has centred on the area of patient responsibility for their own health within healthcare systems. This would effectively see the patient as the last link, or defence, in the chain with policies and practices in place to ensure they are aware of their test results. In [Ms A's] case, the interaction between primary and secondary care and the patient's own responsibility for her health appears to have been further confounded by the statements in her complaint that she was told by the staff performing her ultrasound scan that 'there is nothing to worry about'. This likely dissuaded her from making further enquires of her GP concerning the formal report, with another opportunity for intervention having been lost.

The RNZCGP resource 'Advice on Minimising Error in Patient Test Result Management' includes guidance on providing patients with clear information on the GP practice's system for notification of test results and that patients should be able to enquire about their results as a backup to the practice's notification system.

5/ Any comments you may wish to make in regards to the systems in place for scan results between [the DHB] and General Practices. In particular, are the remedial actions described in [the DHB's] Root Cause Analysis appropriate?

In my opinion, the remedial actions described broadly in [the DHB's] Root Cause Analysis do go a significant distance in further improving patient health and safety around the management of clinical investigations. These are in keeping with many of the broad principles previously highlighted by the commissioner and discussed in Cole's Medical Practice in New Zealand 2013. The measures, as described in the Root Cause Analysis report, have looked at improvements to the computer systems, improving staff operational knowledge around such systems, and policies and ways to empower patients to take responsibility for their own health as a final check point in any system. The measures described do in fact go

further than those currently in place within my own district health board. Again however, the devil is in the detail.

Action 1 details that all scan results are to be sent to the GP. On the surface this may seem an obvious and simple solution for secondary care. This is not a policy my current district health board employs where it is at the discretion of the requesting doctor to nominate that a copy of the report goes to the GP. In my opinion policies around such change should take great care to ensure confusion and additional holes in the system are not created. Potentially such a policy may risk contributing to further assumptions by secondary care doctors requesting tests, that the responsibility for following up, and actioning results, has been shifted back to their primary care colleagues — in effect opening the gates for far more potential errors or system malfunctions the policy sought to improve. Care should also be taken not to put too great a burden on doctors and systems that are already overburdened. The time, resources and opportunity cost required of GPs, if general practice providers were to become flooded with even more results they had little knowledge of and did not request, should not, in my opinion, be underestimated. This could have the potential for much unforeseen harm shifted into primary care.

In my own view health informatics has lagged painfully behind the advance in many other areas of medicine and is a daily frustration for front line doctors, and an ongoing contributor to avoidable information errors in medicine. A uniform national, integrated, shared electronic medical record in my opinion would be a panacea. In the information age the traditional medical axiom 'for every error made for not knowing, three are made for not looking, (or finding)' remains strangely even more relevant. Tragically, errors similar to those made in this case, are not uncommon and feature regularly within the HDC's own literature and medico legal publications such as 'Case Book' (provided by the Medical Protection Society). Systems have improved, yet errors continue to find a way and create a perfect storm. In a high reliability industry any system should be anticipated to fail with measures in place to support such failures. For these reasons I would applaud the measures suggested in the Root Cause Analysis report which seek to empower and assist patients to be informed, take charge of their own health care and support doctors in providing the best healthcare possible within the less than ideal systems and resources available.

The devil, of course, is in the detail — and in my view that has yet to be overcome in previous recommendations or [the DHB's] Root Cause Analysis."

On 9 February 2017, the following further expert advice was received from Dr Shepherd:

"Further to my independent Medical Advice to the Commissioner dated 05/04/2016 I have been requested to review the additional information provided by [Dr B] and [the DHB] and advise whether this changes my previous advice in any way, or raises any new issues. I have also been asked to make any further comments or recommendations beyond the steps [the DHB] [has] already put in place.

On reviewing [Dr B's] further submission, in my opinion there are a number of potential explanations and perturbations of those explanations to be considered. I acknowledge the nuances of my responses to the original questions posed by the commissioner could be influenced by which version of events is preferred by the commissioner. In summary though, I do not consider they significantly alter my original advice to the specific questions posed.

I make further more detailed comment regarding [Dr B's] and [the DHB's] responses in the original question format put by the commissioner.

Sources of Information:

Further Response by [Dr B] 9th September 2016

Further Response from [the DHB] dated 3rd October 2016

1/ Was it appropriate for the ultrasound (U/S) scan to be changed from an inpatient to an outpatient scan?

In essence the further comments and information received do not materially alter my original advice to the commissioner. In my opinion the decision to perform the U/S on an outpatient basis would not be considered a deviation from accepted practice. The question of its timeliness — i.e. days to weeks to months, is a matter of opinion much clouded by the benefit of hindsight. Depending on the commissioner's preferred view of events, I would however accept [Dr B's] subsequent comments, and his provided additional information, that supports his statements that he was significantly concerned regarding underlying ovarian pathology to regard that the scan should be performed on an urgent basis. That concern is absent from the documented clinical notes, but is clearly present on the scan request form which has now been provided. Given that clear concern, I would agree that a days to week(s) timeframe would have represented a timely scan and would then fall within an accepted standard of care. If such concerns for cancer were still present at the time of discharge, then I would agree with [Dr B] that requesting the scan on a non-urgent basis would not be regarded as timely, and would therefore fall outside the accepted standard of care for a high suspicion of cancer imaging request.

Both [Dr B's] further submission, and [the DHB's] response, centre on the change of status for the U/S scan, the specifics of why this occurred, and where clinical responsibility for this lay. Ultimately there is no contemporaneous documentation in the clinical record that outlines why this occurred. The Resident Medical Officers/Junior Doctors (RMOs) involved in the discharge and requesting of the U/S have not been able to be contacted to give their version of events. This does open a number of additional issues surrounding communication, documentation and oversight I will discuss subsequently under the question 4/ heading.

To more specifically address [Dr B's] subsequent submission — I have no doubt that had the scan been performed on an inpatient basis the outcomes would have been very different. That fact alone however, cannot be used as evidence for the

scan having to be done as an inpatient. I would agree with [the DHB's] further comments that where appropriate, tests undertaken as an outpatient, ensure patients do not sit in the hospital inpatient system unnecessarily where there are constant pressures to maintain acute flow and ensure all patients get adequate care. It does however create a risk in managing the U/S, and its follow-up in the outpatient setting. This is where things tragically became unstuck in this case, and where in my opinion, the greatest opportunity to review the processes lies.

The difficulty when reviewing the decision at the point in time it was made, is the power of applying in retrospect, the knowledge of the ultimate cancer diagnosis. It is very easy to be wise in retrospect as [Dr B's] further comments highlight. I would agree with [Dr B's] comment that the most important question at the time was whether an U/S was required within days, or weeks (or months). This question largely revolves around the related question of 'What was the degree of suspicion for significant underlying pathology at the time of [Ms A's] discharge?' High suspicion would suggest an urgent scan (either as an inpatient or soon after discharge) and low suspicion a less urgent scan (perhaps weeks to months after discharge).

As mentioned in my original advice to the commissioner such an assessment would come down to physician opinion — a complex process formed from integrating the history, performing the examination, reviewing the investigation results and weighing probabilities of likelihood. I accept medical records will not always capture the opinion and thoughts of the consulting physician and reconstructing the degree of clinician concern from the patient notes can be a matter of opinion. In my opinion there appears to be a disconnect between the content of the clinical notes as recorded at the time, and [Dr B's] subsequent comments regarding his concerns for significant underlying pathology. [Dr B's] ward round notes and assessments over the period of his care of [Ms A] do not document any specific concerns regarding malignancy or specifically ovarian pathology. Unexplained abdominal bloating and localised abdominal tenderness were noted with the notes recording 'Sore Abdomen ?Cause'. The vast majority of patients who complain of such symptoms will not subsequently be given a cancer diagnosis as the explanation. No note of specific malignancy red flags were highlighted in the notes. In response to [Dr B's] further comments I accept such symptoms can be consistent with ovarian cancer but in my opinion, with the details as recorded in the notes and amongst [Ms A's] clinical scenario and many other symptoms at the time of her presentation, many reasonable physicians would not regard them as specific enough red flags that would mandate an urgent scan status. This would not be outside the 'NZ Ministry of Health Faster Cancer Treatment: High suspicion of cancer definitions July 2015 — Gynaecological Cancer'. I accept pelvic pain is one such listed red flag, but this is again not a feature in [Ms A's] recorded notes. What of course constitutes bloating, versus pelvic pain, versus abdominal tenderness can be a matter of opinion within the clinical context. The statement by the […] Cancer Society [Dr B] includes in his further comments merely further supports the difficulties encountered here — 'Early cancers of the ovaries often cause no symptoms. When ovarian cancer

causes symptoms they tend to be symptoms that are more commonly caused by other things'. Again it is all too easy to be wise in retrospect.

That said the original documentation supplied to me did not include a copy of the actual U/S request forms submitted to radiology (an inpatient scan request form and then a different outpatient scan request form). On reviewing this request form it does clearly raise the question of '?Ovarian Cancer ?Pelvic pathology'. This opinion and obvious concern for more significant serious pathology from [Dr B] is otherwise absent in the clinical notes and in turn the discharge summary. Its appearance in the request form does bridge the gap between what is recorded in the notes (and upon which my initial advice was largely based) and [Dr B's] subsequent comments regarding his concerns for significant pathology. He further states in his comments that such possibilities were not discussed with the patient (and hence not documented by the RMO staff) due to [Ms A's] history of anxiety and depression.

Ultimately I would agree with [the DHB's] statement that 'it has been a challenge to understand the exact actions that were undertaken'. Returning to my opening statement, I acknowledge the nuances of my responses to the original questions posed by the commissioner could be influenced by which version of events is preferred by the commissioner. I will return to those alternative views in question 4/, but ultimately I do not consider they significantly alter my original advice to the specific question posed.

2/ In cases where an outpatient ultrasound scan was required, who holds the clinical responsibility for the management of the results?

[Dr B] and [the DHB's] further comments do not significantly alter my original advice to the commissioner.

As stated in my original advice this is a contentious issue and one where lines of responsibility can be easily blurred, miscommunication can result and assumptions are easily made. The statement 'I assumed' appears frequently in [Dr B's] further submission. For this reason the overriding principle must be adhered to that the clinician responsible for requesting the scan should ultimately also be responsible for following up adequately on the result — If such a principle is adhered to then assumption should not be a factor.

There are undoubtedly many additional factors contributing in this case all of which are valid points [Dr B] makes in his additional submission. Any system can be improved and fine-tuned. I would agree with [Dr B's] comments that there were areas within the system that could have added extra levels of protection and that there could have been other opportunities for the information to be passed along. In my opinion however, these were not so much 'system errors' as 'system absences' and human errors of communication. The more redundancies built into a system hopefully the less potential for errors to slip through. It then becomes a matter of how many redundancies are put into the system and what flow on effects such additional measures might have — both good and bad. Any system can still however be defeated unless lines of responsibility are clear and

assumptions are not made. The system in place at the time did ultimately perform as it was supposed to — to notify the requesting doctor of the scan result — in that respect there was no system error. The system did inform the correct doctor of the correct result with the correct timing that was indicated on the request form. This result was viewed and acknowledged. At that point human factors came into play.

3/ Please comment on [Dr B's] failure to contact [Ms A's] GP, or arrange further follow-up regarding her ultrasound result.

The further comments from [Dr B] do not alter my original advice to the commissioner.

4/ Was the follow-up advice noted on the discharge summary of the 5th September 2013 satisfactory given the clinical scenario presented?

I would agree with [Dr B's] related further submission comments concerning the RMO completing the outpatient U/S scan request form. From the additional information provided, there was a failure to request a copy of the result was sent to her GP when this form was completed. This was in the setting of the request on the discharge summary that the GP followed up the U/S result. This result was in effect therefore not subsequently provided to the GP when the scan was later performed. Such a failure would fall below the expected standard of care given the GP was being requested to follow-up the result. That said, in my opinion this did not remove the clinical responsibility for the management of the test result by the ordering clinician as per question 2/ and my original advice. It did however remove a further safety redundancy from the system.

I would however make a number of additional comments based on recurring themes in [Dr B's] further submission which relate back to this question and the focus of [Dr B's] response to question 1/. This largely concerns the issues of the practices of the RMO doctors in the team, the communication between [Dr B] and his team, the resulting documentation, and perhaps lines of responsibility and delegated authority. These factors are recurrently highlighted by [Dr B] as significantly contributing to events. As noted earlier there is no contemporaneous documentation in the clinical record that outlines such communication or the decision making process around the time of discharge. The RMOs involved in the discharge and requesting of the U/S have not been able to be contacted to give their version of events.

In my opinion there is a significant disconnect between the content of the clinical notes, discharge summary, and [Dr B's] subsequent submissions. The RMO doctors making the entries into such notes at the time of [Dr B's] consultations do not raise the differential diagnosis of malignancy, or ovarian pathology or appear to have grasped [Dr B's] concerns regarding such diagnoses that he explains in his subsequent submissions. I would agree with [Dr B's] statement that 'the doctor that arranged [Ms A's] discharge was not sufficiently informed of my concerns about possible ovarian cancer'. This appears to be reflected in the content of the clinical notes over her admission from other members of the team also. The question must then be asked — why not? The only significant reference

to ovarian pathology appears to be in the initial inpatient U/S request form. From [Dr B's] submission it also appears such concerns were also not discussed directly with [Ms A] herself which adds further concerns.

Given the issues now raised regarding the role of the RMO doctors in this case I comment briefly on the Senior Medical Officer (SMO) to RMO interface. Many hospitals will have a specific written policy regarding delegated authority for SMOs to RMOs. I am not aware of [the DHB's] specific policy, or the details of their RMO's orientation to such a policy. As a general principle the SMO is ultimately responsible for all patients seen, admitted or discharged by their RMOs and they must ensure they are kept reasonably informed regarding the condition of those patients. RMOs work under delegated responsibility and SMOs remain accountable for the decisions and actions of RMOs. RMOs however have a responsibility to remain within their area of competence and to seek assistance when required.

In my opinion, and I believe in the majority of my colleagues, SMOs take a very dim view of their RMO staff discharging patients without informing their consultant prior to doing so. If the discharge was in keeping with previously discussed management plans and instructions, then there would not be an expectation to micromanage the discharge. A change in an explicit consultant plan i.e. 'do U/S as an inpatient' to then 'discharge the patient and perform U/S as an outpatient' would not be considered reasonable without prior discussion. In my opinion it would be very unusual for RMO doctors to change an explicit consultant plan and discharge a patient without discussion — very unusual indeed. Any such actions would usually be very firmly discussed at the time with the RMO doctor, significantly discouraging future similar behaviour. If a patient was discharged by the team RMOs without consultant approval, then it would remain the consultant's responsibility to contact the patient and negotiate a return to hospital or other such deemed appropriate plan.

In this case it has been a challenge to understand the exact actions that were undertaken.

One view could be that communication between [Dr B] and his team, and [Ms A], resulted in the team and [Ms A] failing to appreciate his concerns regarding an ovarian malignancy or significant other underlying pathology. This could have led to many of the issues [Dr B] points to as contributing to miscommunication and subsequent events — i.e. [Ms A's] discharge without an inpatient scan, the ordering of an outpatient scan instead, the non-urgent request priority of this scan, the discharge summary not highlighting to the GP concerns regarding malignancy, and [Ms A] herself perhaps being unaware of concerns and therefore not taking a proactive part in her own follow-up. Based on the clinical notes, and the RMO doctors' actions at the time, in my opinion there does not appear to be a shared understanding of [Ms A's] case. If that was to be accepted, one would then also be somewhat critical of [Dr B] not following up with his team the following day when it would have become apparent to him that [Ms A] was no longer in hospital under his care and that he was not aware of the U/S result. This would be

in the setting of his stated concerns regarding an underlying malignancy and with his name being on the form as the requesting doctor and doctor responsible for signoff of an inpatient scan. Such a view might raise concerns regarding the standard of communication in this case.

An alternative view as [Dr B] highlights in his subsequent submission is that [Ms A's] discharge was without his knowledge or approval, and that in doing so he was not informed of the change of the U/S scan to an outpatient, or of the follow-up arrangements, and was unaware of the contents of the discharge summary at the time. His team did not adequately document his clinical concerns or impressions during [Ms A's] admission. In essence the team RMOs were responsible for [Ms A's] discharge and subsequent arrangements. Such a view might then raise concerns regarding the standard of SMO oversight and supervision of the team RMOs.

A further hypothetical view could also be considered. This would not however be in keeping with [Dr B's] recollection of events. An U/S could initially have been requested as an inpatient at the time of [Ms A] being initially most unwell and the possibility of ovarian pathology considered and documented on the request form. The U/S could however be unable to be performed within the resource constraints at the time, despite the request form. [Ms A's] symptoms could then have improved over the course of her admission to the point where she was felt to be clinically well enough for discharge, even though the U/S had not yet been able to be performed. The RMO doctor could then have discussed the ongoing delays in obtaining an U/S with an SMO as per their delegated authority. A decision could then have been made to defer the U/S to an outpatient basis and so allow discharge with SMO agreement. The initial concern regarding ovarian pathology could have been reconsidered as her symptoms improved in hospital, and in the absence of clear red flags, a decision could have been made to down grade the perceived urgency of the scan request. The ongoing clinical suspicion for malignancy could have been felt to be low as she improved, with such concerns therefore not documented in the ongoing clinical notes, or discussed with the patient, or being included on the discharge summary. The involved RMOs could then have contacted radiology, cancelled the inpatient request form and resubmitted an outpatient request form to radiology which could result in a similar radiology audit trail. Radiology may not then (as cited as an error by [Dr B]) 'connect the 2 requests for the same test, on the same patient, within a matter of days with quite different urgency status and clinical indications' as they could have been contacted by the RMO to explain the reason for the cancellation. The discharge summary could then have been completed reflecting the details as documented.

I acknowledge, which view, or permutations of such views, is ultimately accepted by the commissioner, could alter the nuances of events, and therefore the nuances of my advice. This in turn could alter where clinical responsibility is perceived to lie in this case and perhaps the complex weighting of which aspects of 'the system' ultimately let [Ms A] down.

5/ Any comments you may wish to make in regards to the systems in place for scan results between [the DHB] and general practices?

I would be supportive of [the DHB's] additional comments regarding the measures they have introduced to date to provide additional redundancies into their system. These include, as mentioned in [the DHB] submission, urgent results being phoned through, a policy encouraging radiologists to phone through unexpected outpatient results, and an ordering system that can track and audit requests. If such audit reports were run regularly (e.g. weekly) and provided to individual clinicians, this could allow test requestors to be able to identify the number, and any delays in viewing, outstanding unacknowledged reports. This should be a powerful measure to further reduce risk in tracking and timely sign off of results for individual clinicians.

I would also agree with the principles [Dr B] highlights in changes to his communication practice concerning ensuring the purpose of any investigations are understood by all members of the team and in particular the patient. All such measures should go some distance to further improving patient safety and reducing the recurrence of adverse events.

With respect to [the DHB's] change to results now being automatically sent to the GP if registered with [the DHB], I would continue to have some concerns as highlighted in my original response to the commissioner. I appreciate the challenges between the primary and secondary care interface and the debate and discussion that has occurred up to the current point. My own DHB, representing one of the largest in the country, has not implemented the routine sending of reports to GPs who have not been the test requesting doctor. In the interests of continuous quality improvement, an audit of the changes that have been made could be of interest to the radiology network to receive feedback from their registered GPs regarding their views of this new system. If the routine sending of results to GPs, despite them having never ordered the test, was felt to be an appropriate solution one could then also ask if, or why, this is not also implemented across all reports and not just radiology (e.g. histology results, lab results)? Such an error as occurred in this case could equally apply to the systems in place for these reports. To not apply such measures across the whole system, including those discussed in the first paragraph above, might be considered rather blinkered and siloed thinking.

If a view were to be formed that human error factors also played a significant role in this case then perhaps a widening of focus to ensuring adequate orientation and training to such systems and the role and expectations clinicians should have in operating within these systems should also be considered. In my opinion, the operational understanding of information management and the areas for pitfalls to occur, are not always well appreciated by clinical staff. The majority of learnings from cases such as this are often poorly discussed and disseminated within the hospital environment. Is this something the patient safety service within [the DHB] could champion if they do not already do so? Given the issues raised by [Dr B] concerning the RMO doctors in this case, and depending on which view the commissioner prefers, a review of [the DHB's] delegation of authority policy,

and the RMO orientation process to such policies, could be considered if felt to represent a systemic human error factor in this case.

On the outstanding wish list would be a fully integrated Electronic Health Record as discussed in the closing paragraph from [the DHB] and in my original advice. In an ideal world I would further add on to the wish list a radiology request system that allows the requesting clinician to actually see what the wait time for a study is when requesting an outpatient scan. Sadly, to date both remain elusive in New Zealand with room for much improvement.

Dr Richard Shepherd
Consultant Physician General Medicine
Waikato District Health Board
MBChB FRACP."

On 6 November 2017 the following further expert advice was received from Dr Shepherd:

"Further to my original advice to the commissioner, I have been asked to comment further regarding a third submission from [Dr B] dated 15 September 2017 and from a colleague [Dr E] dated 15 September.

I have read and agree to follow the Commissioner's guidelines for Independent advisors.

I have reviewed both further submissions and re-reviewed my original advice with reference to the specific original questions posed by the commissioner:

1/ Was it appropriate for the ultrasound scan to be changed from an inpatient to an outpatient scan?

2/ In cases where an outpatient ultrasound scan is required, who holds the clinical responsibility for the management of the results?

3/ Please comment on [Dr B's] failure to contact [Ms A's] GP, or arrange further follow up regarding her ultrasound results.

4/ Was the follow up advice noted on the discharge summary of 5th September 2013 satisfactory given the clinical scenario presented?

5/ Any comments you may wish to make in regards to the systems in place for scan results between [the DHB] and General Practices. In particular, are the remedial actions described in [the DHB's] Root Cause Analysis appropriate?

Sources of information reviewed in the preparation of this report:

Letter from [Dr B] dated 15 September 2017

Letter from [Dr E] dated 15 September 2017

'Swiss Cheese' Model — James Reason, 1990. Reason, J. (1990) Human Error. Cambridge: University Press, Cambridge.

Opinion:

[Dr B's] third detailed submission to the commissioner provides further comments regarding his view of events. By way of overview [Dr B's] further comments and explanation of events largely expands in detail on his concerns regarding the process of [Ms A's] discharge. Such concerns centre on her inpatient ultrasound being changed to an outpatient scan and the sequence of events regarding follow-up of that result. He also discusses the other parties who in his view were, or should have been, involved or responsible in that process. Additional concerns centre on his work environment and systems in place influencing workload, pressure to discharge patients and poor continuity of care involving attending junior doctors. These later issues are in particular commented on by a colleague [Dr E] also working in medicine at [the DHB].

1/ Commenting firstly on [Dr B's] additional views and explanations regarding [Ms A's] discharge:

I would reiterate my previous comments that it has been a challenge to understand the exact actions that were taken in many aspects of this case from the clinical record alone. Depending on the commissioner's preferred view, issues of communication and documentation may underlie much of the process errors in this case. I would again agree with [Dr B] that there were additional factors outside of the specific questions posed above that contributed to the chain of events in this case. I comment more specifically on those issues below.

Documentation at the time of events does not in my opinion adequately highlight [Dr B's] clinical concerns regarding ovarian pathology. In my opinion such concerns should have been expressly stated in the clinical record of her consultant review. Not just on the radiology request form — which may not be immediately apparent in the clinical record and indeed was not available in the clinical notes documentation initially provided to me. Nor should such a concern only appear in previous junior doctor notes. It is not uncommon for a consultant review to subsequently disagree with previous statements and plans made by junior doctors. In my opinion, and I believe in the majority of my colleagues, the purpose of a consultant review should be to clearly define the significant clinical problems or diagnoses (and management plan). This is absent from [Dr B's] ward round notes. By expressly including such information in the consultant review record [Dr B's] concerns for ovarian pathology would have been readily available to all of [Ms A's] clinical team as the default primary communication tool for good medical practice. This would have included being available to the discharging house officer who was not present at the time of the consultant ward round. I would regard the absence of such a significant clinical concern from the consultant review documentation as a moderate departure from the expected standard and as contributing to the subsequent chain of events that [Dr B] describes.

It would be accepted clinical practice that the registrar or house officer attending the consultant ward round would enter the documentation into the notes — i.e. the clinical details, [Dr B's] examination findings and his impression or problem list and plan. I would note however that this responsibility is delegated by the reviewing consultant. I would agree with both [Dr B] and [Dr E] that the clinical notes written in such a setting unfortunately do not always adequately reflect the content of the consultation.

In my opinion many physicians would not regard the routine review of clinical notes to determine accuracy as standard practice. The delegation of note taking to junior doctors would normally be deemed to lie within their expected competency without direct supervision expectations. Variance in such practice does however exist and might be determined by a multitude of factors such as previous experiences, perceived ability of junior staff, team environment, or 'busyness' etc.

Enhanced redundancies to clinical practice could involve consultant review of the notes prior to sign off if such concerns expressed by [Dr B] and [Dr E] existed at the time. I would not regard that as standard practice at many institutions however. Such practice would ensure that the clinical records adequately reflected the consultant's views, diagnoses and plan. In doing so this might reduce the potential for the chain of miscommunication and oversights that [Dr B] explains in this case.

In my own institution the post take consultant ward round problem list is policy mandated to be dictated, or written, by the consultant, at the time of the ward round. I would acknowledge though that mitigating factors such as 'busyness' do often derail that policy. Its application is also not widely used across other services within the hospital nor indeed actually accepted as standard practice by all within the general medicine service despite that specific policy. I would note however that culture has changed over time. With the introduction and orientation to that policy, the staff delegated to documentation will often prompt their SMO colleagues to expressly state and confirm the problem list (or diagnoses). In my view this has dramatically improved accuracy and documentation standards — and ultimately clinical care.

In institutions operating an electronic clinical record accurate documentation is also undoubtedly facilitated by the ability to edit the junior staff documentation prior to completion of the ward round and signoff.

In my opinion a breakdown in documentation does appear to underlie the initial hole in the 'Swiss cheese' of events that [Dr B] describes. This appears to have set up circumstances for subsequent failures.

The documentation at the time surrounding the discharge process also does not explain the events that occurred. In my view that also falls below the expected standard. Beyond merely documentation, in my opinion communication between the involved clinical staff operating in a team structure in this case, also fell

below the expected standard. I would regard that as a moderate deviation from the expected standard.

My previous comments note an apparent disconnect between the documented records and [Dr B's] view of [Ms A's] case. [Dr B] has provided his views and explanation surrounding such events in detail. I would agree with [Dr B] that the junior doctors involved do not appear to have been available to provide their explanation of events with reference to [Ms A's] discharge and arrangements for her outpatient U/S scan.

Again as previously stated I acknowledge which view of events, or permutations of such views, is ultimately accepted by the commissioner could alter the complex weighting of which aspects of the system ultimately let [Ms A] down.

In terms of the original stated questions posed by the commissioner however, the further provided submissions do not materially alter my previous additional advice dated 09/02/2017.

2/ Commenting secondly on [Dr B] and [Dr E's] wider system comments regarding issues of medical records, junior doctor continuity within team structures, hospital capacity pressures, pressure for early discharge, 'decompression protocol' and lack of available general medicine follow-up clinics:

I would agree with many of the issues described above and recognise many of them as daily frustrations to many practising physicians. In my own institution very similar policies, practices and pressures are present including a 'hospital capacity protocol'. In my view the majority of patient interactions are subject to, and mitigated by, many of the factors described. The process of 'medical triage' is in effect present in many daily decisions. These might include from when to discharge 'well enough' patients to make way for 'sicker' patients in an overloaded hospital; to decisions to defer inpatient investigations to outpatient investigations; to prioritising radiology requests to days, weeks or months; to even how long to devote to a patient consultation or checking documentation. In a resource limited setting such trade-offs will unfortunately always exist. These have the potential to expose weaknesses in systems and individual's practices in unexpected 'Swiss cheese' ways.

I would agree with [Dr B] and [Dr E] that such factors are seldom taken into account as 'mitigating circumstances' when adverse events occur. 'Busyness' is not often factored into a review of adverse outcomes. Such issues present at the time decisions are made are seldom reflected in the clinical record and can be very difficult to reconstruct after the fact. I would acknowledge that it is all too easy to be wise in retrospect with all the time in the world, and from the reviewing comfort of an arm chair. From the additional information [Dr B] provides (his text messages) I would agree that 'busyness' was a factor in play around [Ms A's] discharge process. Good communication, good documentation and good supervision take time. Lots of time. That time, in my view, is seldom prioritised by rosters, staffing ratios, cross cover, 'decompression protocols' or

the growing unpredictable workload queue in the emergency department. Without that time, efficiencies must be undertaken, 'triage' must occur, and other members of the team delegated to, and relied upon. Communication and documentation can also suffer. All such factors increase the potential for 'medical Swiss cheese.' Built in redundancies in individuals' practice and systems can all help avert error when holes align. At some point however there is often a final point in the chain. Sign off of results will often represent one such final point. Due care of abnormal results must be taken.

With reference to the specific question 5 posed by the commissioner regarding systems:

'Any comments you may wish to make in regards to the systems in place for scan results between [the DHB] and General Practices. In particular, are the remedial actions described in [the DHB's] Root Cause Analysis appropriate?' — the further submissions do not alter my original advice.

Dr Richard Shepherd
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Waikato District Health Board
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Date: 06/11/17."