# General Practitioner, Dr D

## A Report by the
## Health and Disability Commissioner

## (Case 18HDC01602)

Health and Disability Commissioner
*Te Toihau Hauora, Hauātanga*

## Contents

## Executive summary

1. From May 2018, Mrs A, aged 63 years, had intermittent abdominal pain after eating, and weight loss and loss of appetite. On 12 July 2018, Mrs A, accompanied by her son, Mr C, consulted general practitioner (GP) Dr D. Mrs A described having had a loss of appetite, feelings of discomfort in her stomach, and indigestion, but at that time she had none of these symptoms.

2. On examination, Mrs A's abdomen was soft and bowel sounds were present. No masses were palpable, and she had no localised tenderness. Her diagnosis was recorded as "Dyspepsia",[1] and Dr D provided Mrs A with a prescription for one month's supply of omeprazole[2] 10mg twice daily. Dr D gave Mrs A a form for blood tests, which included liver function tests (LFTs),[3] amylase,[4] and a full blood count.

3. Dr D stated that he considered gallstones as a possible cause of Mrs A's symptoms. He said: "I expected to review [Mrs A] again toward the end of the course of [omeprazole], or sooner if it had not helped." However, there is no record of any anticipated follow-up.

4. Mr C said Dr D told them that if the pain persisted, Mrs A should come back. However, as the pain improved over the following two weeks, Mrs A did not go back to Dr D. Mr C said that he was under the impression that Dr D would call him if the results were abnormal, because his mother does not speak English.

5. Dr D received the test results on 16 July 2018. Mrs A's full blood count, ferritin, and amylase were normal, but her LFTs were raised. Dr D did not contact Mrs A to advise her of the abnormal results; however, he did contact the laboratory to have Hepatitis A, B, and C serology performed. The results of those tests were normal.

6. Mrs A visited her daughter, Ms B, in another region and, while she was there, her pain worsened. On 15 August 2018, Mrs A, accompanied by Ms B, attended Medical Centre 2 and saw Dr E. Dr E conducted an abdominal examination, which was unremarkable, and ordered blood tests.

7. On 16 August 2018, Dr E contacted Ms B and advised her that Mrs A had an abnormal LFT result and a likely obstruction in her biliary system.[5] Ms B told him that Mrs A had severe

[1] Dyspepsia, also known as indigestion, is a term that describes discomfort or pain in the upper abdomen. It refers to a group of symptoms that often include bloating, discomfort, nausea, and burping.
[2] Omeprazole reduces the amount of acid produced in the stomach. It is used to treat a number of conditions associated with high stomach acid affecting the stomach and gut, such as indigestion, reflux, and ulcers.
[3] The LFT measures the levels of several substances (enzymes and proteins) that are excreted by the liver. Levels that are higher or lower than normal can indicate liver problems. The test is performed to establish the presence of damage or inflammation in the liver.
[4] Amylase is an enzyme produced by the pancreas and salivary glands. An amylase blood test can determine whether a person has a disease of the pancreas by measuring the amount of amylase in the body.
[5] The organs and ducts that make and store bile (a fluid made by the liver that helps to digest fat), and release it into the small intestine. It includes the gallbladder and bile ducts inside and outside the liver.

abdominal pain that day, so Dr E advised her to take her mother to the Emergency Department for further assessment.

8. Mrs A presented at the public hospital. She was diagnosed with gallstone pancreatitis[6] and underwent a laparoscopic cholecystectomy[7] on 23 August 2018.

**Findings**

9. Dr D's services were suboptimal. He failed to communicate abnormal test results to his patient and failed to act on the results appropriately.

10. As the clinician who ordered the blood tests, Dr D had a responsibility to communicate the results and the implications to Mrs A. By failing to inform Mrs A of the results, Dr D failed to provide her with information that a reasonable consumer would expect to receive and, accordingly, breached Right 6(1)[8] of the Code of Health and Disability Services Consumers' Rights (the Code).

11. In light of the test results, which were well outside the normal range, Dr D also had a responsibility to arrange further assessment of Mrs A's condition. Referral for an urgent ultrasound scan was indicated. By failing to make the referral, Dr D did not provide services to Mrs A with reasonable care and skill, and also breached Right 4(1)[9] of the Code.

**Recommendations**

12. It was recommended that Dr D:

a) Arrange an independent audit of his clinical records to ensure that all abnormal patient test results received in the last three months were communicated to patients and followed up appropriately.

b) Provide a written apology to Mrs A for his breaches of the Code.

[6] Gallstones form in the gallbladder. In cases of gallstone pancreatitis, the stone leaves the gallbladder and blocks the opening from the pancreas to the first part of the small intestine (duodenum). This causes a backup of fluid that can travel up both the bile duct and the pancreatic duct. Gallstone pancreatitis can be very painful and life-threatening if not treated.

[7] Removal of the gallbladder.

[8] Right 6(1) states: "(1) Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive, including—
(a) an explanation of his or her condition; and
(b) an explanation of the options available, including an assessment of the expected risks, side effects, benefits, and costs of each option; and
(c) advice of the estimated time within which the services will be provided; and
(d) notification of any proposed participation in teaching or research, including whether the research requires and has received ethical approval; and
(e) any other information required by legal, professional, ethical, and other relevant standards; and
(f) the results of tests; and
(g) the results of procedures."

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

## Complaint and investigation

13. The Health and Disability Commissioner (HDC) received a complaint from Ms B about the services provided to her mother, Mrs A,[10] by Dr D. The following issue was identified for investigation:

- *Whether Dr D provided Mrs A with an appropriate standard of care in 2018.*

14. The parties directly involved in the investigation were:

| | |
|---|---|
| Mrs A | Consumer |
| Ms B | Consumer's daughter/complainant |
| Mr C | Consumer's son |
| Dr D | Provider/general practitioner (GP) |
| Dr E | Provider/general practitioner |

15. Information was also reviewed from:

Medical Centre 1
District health board

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

## Information gathered during investigation

### Background

17. Mrs A, aged 63 years at the time of these events, can speak only limited English. Dr D, a GP, has practised at Medical Centre 1 since 1995.

18. On 20 November 2017, Mrs A saw Dr D at Medical Centre 1. Dr D stated that at that appointment Mrs A did not mention any abdominal symptoms.

19. On 14 February 2018, Mrs A consulted Dr D, with her son, Mr C, present as translator. Dr D stated that he diagnosed and treated Mrs A for essential hypertension.[11] At that stage, her weight was 48kg. Dr D said that Mrs A had a history of chronic depression, and he provided her with treatment for that. He said that she did not mention any abdominal symptoms during the consultation.

### Consultation 12 July 2018

20. Ms B, Mrs A's daughter, told HDC that from May 2018, her mother had experienced intermittent abdominal pain after eating, and weight loss and loss of appetite. Dr D saw

[10] Mrs A supported the complaint.
[11] High blood pressure.

Mrs A on 12 July 2018, again with Mr C as translator. Dr D stated that at that consultation, Mrs A had several issues, including episodic epigastric discomfort and a cough, and she required a renewal of her medications, including her medication for depression. Dr D told HDC that Mrs A described a loss of appetite, feelings of discomfort in her stomach, and indigestion, but that when he saw her at that time, she had none of these symptoms. Mrs A's weight was 47kg.

21. Dr D said that on examination, Mrs A's abdomen was soft and bowel sounds were present. No masses were palpable, and she had no localised tenderness. Her diagnosis was recorded as "Dyspepsia", and Dr D provided Mrs A with a prescription for one month's supply of omeprazole 10mg twice daily, plus a repeat prescription for anti-hypertensives, and antibiotics for a possible chest infection. Dr D gave Mrs A a form for blood tests, which included liver function tests (LFTs), amylase, and a full blood count.

22. Dr D stated that he considered gallstones as a possible cause of Mrs A's symptoms. He said: "I expected to review [Mrs A] again toward the end of the course of [omeprazole], or sooner if it had not helped." However, there is no record of any anticipated follow-up.

23. Mr C told HDC that Dr D told them that if the pain persisted, Mrs A should come back. However, the pain improved over the following two weeks, so Mrs A did not think she should go back to Dr D. Mr C cannot remember exactly what Dr D said, but Mr C said that he was under the impression that Dr D would call him if the results were abnormal, because his mother does not speak English.

24. Dr D stated that he received the test results on 16 July 2018. He said that Mrs A's full blood count, ferritin, and amylase were normal, but her LFTs were raised. After receiving the results, Dr D did not contact Mrs A to advise her of the abnormal results. However, he did contact the laboratory to have Hepatitis A, B, and C serology performed. The results of those tests were normal.

**Dr E**

25. Mrs A visited Ms B and, while she was there, her pain worsened. Ms B stated that usually her mother's pain increased two hours after she had eaten, and went away in another three hours or so. Ms B said that her mother would feel better after she vomited, and she had no appetite.

26. On 15 August 2018, Mrs A, accompanied by Ms B, attended Medical Centre 2 as a casual patient, and saw Dr E. Dr E recorded that the omeprazole did not seem to help Mrs A much, and noted that she had had "epigastric discomfort off and on for 3 months … [usually] worse 2 hours after meal, [especially] in the evening, lasted for 2–3 hours with nausea feeling".

27. Dr E conducted an abdominal examination, which was unremarkable. He recorded "epigastric pain with [weight] loss ?cause", and noted that Mrs A required further assessments and blood tests, and might need an "UGIscopy".[12] Dr E ordered blood tests.

28. On 16 August 2018, Dr E contacted Ms B with the results, and advised her that Mrs A had an abnormal LFT result and a likely obstruction in her biliary system.[13] Ms B reported that Mrs A had severe abdominal pain that day, so Dr E advised her to take her mother to the Emergency Department for further assessment.

**The public hospital**

29. Mrs A presented at the public hospital. The Emergency Department records of Mrs A's initial assessment note that she had had severe abdominal pain intermittently for the previous two months. That day her pain was 8/10, and she was noted to have yellowing in her eyes, nausea, and vomiting. She was also noted to have pale stools and dark urine. Her weight was 46.6kg. Mrs A was diagnosed with gallstone pancreatitis.[14] She underwent a laparoscopic cholecystectomy[15] on 23 August 2018, and was discharged on 25 August 2018.

**Dr D: further information**

30. Dr D told HDC that he was not aware that Mrs A was going to be out of the region around the time of the follow-up. He accepts that he could and should have notified Mrs A earlier about her blood test results. He stated that the normal practice was to telephone patients if there were urgent issues, but he did not do so in Mrs A's case because:

- Mrs A was due for a follow-up appointment approximately three weeks after he reviewed the test results, or she was to come in earlier if the pain worsened.
- Mrs A did not present with any symptoms that gave him cause for immediate concern when he saw her on 12 July 2018.
- He knew that Mrs A had a month's worth of medication.
- Mrs A and Mr C knew that they could always come in as needed.
- Mr C and his family have been patients at the clinic for much longer than Mrs A, and have come in as needed.

[12] An upper GI (gastrointestinal) endoscopy involves visually examining the upper intestinal tract using a lighted, flexible endoscope.
[13] The organs and ducts that make and store bile (a fluid made by the liver that helps to digest fat), and release it into the small intestine. It includes the gallbladder and bile ducts inside and outside the liver.
[14] Gallstones form in the gallbladder. In cases of gallstone pancreatitis, the stone leaves the gallbladder and blocks the opening from the pancreas to the first part of the small intestine (duodenum). This causes a backup of fluid that can travel up both the bile duct and the pancreatic duct. Gallstone pancreatitis can be very painful and life-threatening if not treated.
[15] Removal of the gallbladder.

*Recording of safety-netting advice*

31. Dr D stated that it is usual for him to record the safety-netting advice he provides to patients. He said that he gave advice verbally, but did not document it, and he considers that this was because it was a very busy day and Mrs A had raised several issues during the consultation.

32. Dr D stated that he performed a random review of his patient records made during the month leading up to this incident, and that all new presentations did have safety-netting advice recorded in the files.

33. Dr D agrees that he should have requested an ultrasound once he received the abnormal results. He stated that he is committed to ensuring that he follows up on abnormal results, and will no longer defer until the next planned or expected follow-up with the patient. He stated:

> "One of the ways that I am doing this is by using my staff to contact patients with results that are abnormal. We also now monitor more minor abnormalities and follow up with patients about these results."

34. Dr D stated that he has reviewed the BPAC article on liver function testing in primary care (July 2007). He also intends to enroll in relevant Medical Protection Society risk management workshops. He said that he has now set aside more time at the end of the working day to go back over the day's consultations and complete any missing information.

**Medical Centre 1: policy**

35. Medical Centre 1 provided HDC with its "Management of Patient Test Results and Medical Reports" policy (June 2014). The policy states that in the case of any significant tests that a practitioner wishes to follow up specifically, the practitioner should send him/herself a task message and action it personally.

36. The policy states that it is the ordering practitioner's responsibility to follow up on his or her own test requests, and that the patient should be advised that test results and reports may be obtained by making an appointment with the practice nurse or doctor, or by the practice staff contacting the patient directly regarding any abnormal results.

**Responses to provisional opinion**

37. Dr D and Mrs A both had nothing further to add.

## Opinion: Dr D — breach

38. On 12 July 2018, Dr D saw Mrs A regarding her epigastric symptoms. He ordered blood tests but did not record any safety-netting advice or anticipated follow-up. Dr D said: "I expected to review [Mrs A] again towards the end of the course of [omeprazole], or sooner if it had not helped." However, he did not record this, and no appointment was made.

39. Mr C said that Dr D told them that Mrs A should return if the pain persisted. However, Mrs A's pain improved over the following two weeks, so she did not think she should go back to Dr D. Mr C said that he was under the impression that Dr D would call him if the results were abnormal, because his mother does not speak English.

**40.** Given that Dr D made no record of the follow-up advice he provided, I accept Mr C's account of what was said at the consultation.

41. On 16 July 2018, the results indicated abnormal LFTs. Dr D contacted the laboratory to request Hepatitis A, B, and C serology, but did not contact Mrs A to inform her of the test results or arrange for any further steps to be taken.

42. The Medical Council of New Zealand's publication *Good Medical Practice* (2008) requires clinicians to "have systems in place to ensure that test results are acted upon in a timely manner, including notification of patient as appropriate". I am concerned that although Dr D requested the blood tests and received the results, he did not ensure that Mrs A was aware of the abnormal results. As this Office has stated previously,[16] doctors owe patients a duty of care in handling patient test results, including advising patients of, and following up on, abnormal test results. The primary responsibility for following up test results rests with the clinician who ordered the tests.

43. My expert advisor, Dr David Maplesden, advised that Mrs A's LFT results were well outside the normal range, and she was experiencing symptoms that may have been related to the abnormal results. Dr Maplesden stated:

> "I think my peers would be moderately critical of this oversight, a mitigating factor being the stated (but not documented) intention to review [Mrs A] in one month, when results would have presumably been discussed."

44. There was a failure to communicate the test results, and a lack of clarity regarding the safety-netting advice. Mrs A was told that the plan was that she should return for a revisit in about a month if the pain did not go away. In my view, this was unsatisfactory. It is the responsibility of the practitioner who ordered the tests to inform the patient as to how the results will be conveyed, such as the practitioner will contact the patient, or the patient may be asked to contact the practice.

[16] 15HDC01387 available at www.hdc.org.nz.

45. As stated, I accept the account that Mrs A was told that she was to return if the pain persisted. I do not consider it was appropriate for Dr D to fail to advise Mrs A of the abnormal results and rely on her possibly returning in a month, particularly as she was to do so only if the pain continued.

46. Dr Maplesden advised that best practice is to document follow-up arrangements and any "safety netting" advice provided. I note that Dr D stated that this is his usual practice, and that he will do so in future.

47. Dr Maplesden was also critical about the failure to arrange further investigations. He stated that the clinical picture presented from the results was that Mrs A most likely was suffering from cholestasis,[17] secondary to either gallstones or malignancy. He advised that the elevation in ALT[18] and AST[19] suggested some hepatocellular[20] injury secondary to the biliary obstruction. However, he said that it was not unreasonable to exclude acute hepatitis.

48. Dr Maplesden stated that patients with elevated ALP[21] and GGT[22] should be referred for an urgent ultrasound, and he was mildly to moderately critical that Mrs A was not referred for an ultrasound following receipt of her blood test results.

**Conclusions**

49. I consider that Dr D's services were suboptimal. He failed to communicate abnormal test results to his patient, and he failed to act on the results appropriately.

50. As the clinician who ordered the blood tests, Dr D had a responsibility to communicate the results and the implications to Mrs A. Provision of this information would have enabled Mrs A to be a partner in her own treatment. By failing to inform Mrs A of the results, Dr D failed to provide her with information that a reasonable consumer would expect to receive and, accordingly, breached Right 6(1) of the Code.

51. In light of the test results, which were well outside the normal range, Dr D also had a responsibility to arrange further assessment of Mrs A's condition. Referral for an urgent ultrasound scan was indicated. By failing to make the referral, Dr D did not provide services to Mrs A with reasonable care and skill, and also breached Right 4(1) of the Code.

[17] Cholestasis is a decrease in bile flow owing to impaired secretion or obstruction of the bile flow.
[18] The alanine aminotransferase (ALT) test is a blood test that checks for liver damage.
[19] Aspartate aminotransferase (AST) is an enzyme found in cells throughout the body. In healthy individuals, levels of AST in the blood are low. When liver or muscle cells are injured, they release AST into the blood. This makes AST a useful test for detecting or monitoring liver damage.
[20] Relating to the liver.
[21] Alkaline phosphatase (ALP) is an enzyme found in several tissues throughout the body. Elevated levels of ALP in the blood are most commonly caused by liver disease or bone disorders.
[22] GGT is an enzyme found in high level in the liver, kidney, pancreas, heart, and brain. It is also found in lesser amount in other tissues. This test is used to detect diseases of the liver or bile ducts. It is also done with other tests (such as the ALT, AST, ALP, and bilirubin tests) to distinguish between liver or bile duct disorders and bone disease.

## Recommendations

52. I recommend that Dr D:

a) Arrange an independent audit of his clinical records to ensure that all abnormal patient test results that he has ordered in the last three months have been communicated to patients and followed up appropriately. Dr D should provide evidence to this Office of this audit and its outcome within three months of the date of this report.

b) Provide a written apology to Mrs A 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 Mrs A.

## Follow-up actions

53. 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 D's name.

54. 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 New Zealand College of General Practitioners and 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 GP Dr David Maplesden:

"1. Thank you for providing this file for advice. To the best of my knowledge I have no conflict of interest in providing this advice. I have reviewed the available information: complaint from [Ms B], daughter of [Mrs A]; response from [Medical Centre 1]; [Medical Centre 1] clinical notes; clinical notes [Medical Centre 2]; clinical notes [the public hospital].

2. [Ms B] states that her mother began to develop intermittent abdominal pain after eating from about May 2018. This was associated with weight loss and loss of appetite. She attended [Dr D] regarding these symptoms on 12 July 2018. He prescribed [Mrs A] omeprazole and ordered blood tests. Follow-up was scheduled for one month if the pain persisted. [Dr D] did not contact [Mrs A] regarding her results. While visiting [Ms B] in [another region] in August 2018, [Mrs A] attended [Dr E] at [Medical Centre 2] for an opinion regarding her ongoing symptoms. He ordered blood tests and telephoned the next day concerned at marked liver function abnormalities. At that time [Mrs A] was experiencing an exacerbation of her abdominal pain and [Dr E] advised her to attend [the public hospital's] ED. In [the public hospital] [Mrs A] underwent further investigations which showed likely gallstone pancreatitis. She underwent laparoscopic cholecystectomy on 23 August 2018 and has made an uneventful recovery. On discussing [Mrs A's] condition with [Dr D], it became evident the blood results of 12 July 2018 had also shown marked liver function abnormality which had not been acted upon by [Dr D]. [Ms B] is concerned that her mother was not notified of the abnormal results and that further investigation of the abnormal results was not initiated in a timely fashion.

3. [Dr D] states in his response that [Mrs A] is unable to speak English. He saw her for the first time on 20 November 2017 in regard to hypertension. The first presentation with abdominal symptoms was 18 July 2018 and sequential weights showed only a 1kg weight loss between February and July 2018. [Mrs A] was not experiencing acute abdominal symptoms when seen on 18 July 2018. When the blood results returned [Dr D] states he contacted the laboratory to have hepatitis A, B and C serology performed on the sample. This was normal. He states his intention was to discuss the results with [Mrs A] when she returned for review a month after her previous appointment.

4. Clinical notes review

(i) 14 February 2018 — [Mrs A] (with her son) consulted [Dr D] for repeats of blood pressure medication and history of depression and social phobia. Prescriptions were provided for amlodipine, candesartan and moclobemide. Blood pressure was 170/100 and weight 48 kg.

(ii) Next consultation with [Dr D] is 12 July 2018. History includes *off food — loss of appetite, as if eats feels indigestion/discomfort, bowels regular.* Weight is 47 kg (BMI

21.2), blood pressure 110/70 and pulse 72. Additional examination findings include: *soft abd, BS ok, no masses felt, no loc tenderness.* Diagnosis was recorded as *Dyspepsia* and prescription provided for one month supply of omeprazole 10 mg BD. A form was provided for blood tests (see below). Repeat prescription was also provided for antihypertensives, and symptom of recent cough was assessed as possible chest infection and prescription for antibiotics provided. There is no record of anticipated follow-up. On 18 July 2018 the observation of abnormal liver function tests is noted and action of contacting the laboratory to request hepatitis A, B and C serology. There is no subsequent entry until 17 August 2018 when [Mrs A's] son presented to discuss his mother's condition.

(iii) Liver function results

| Liver test | Normal range | 16/7/18 result | 15/8/18 result | 16/8/16 result |
|---|---|---|---|---|
| Bilirubin | 2–20 µmol/L | 10 | 41 | 82 |
| ALP | 40–130 U/L | 447 | 703 | 679 |
| GGT | 10–35 U/L | 576 | 875 | 558 |
| ALT | 5–30 U/L | 94 | 204 | 127 |
| AST | 10–30 U/L | 40 | – | 137 |

Other tests ordered on 16 July 2018 (including blood count, renal function, ferritin and amylase) were unremarkable. Lipase (together with amylase a marker for pancreatic inflammation) was markedly elevated at the time of admission to [the public hospital].

(iv) [Mrs A] attended [Medical Centre 2] ([Dr E]) with her daughter on 15 August 2018. Notes include: *epigastric discomfort on and off for 3 months … usu worse 2 hours after meal, esp in the evening, lasted for 2–3 hours with nausea feeling …* Lack of relief with omeprazole was noted. Abdominal examination was unremarkable. [Dr E] recorded: *epigastric pain with wt loss ?cause … need to have further assessment, blood test, may need UGIscopy, will have blood tests here and see specialist in [her home town] … TCB or see a Dr if worse or any concerns.* Blood tests were performed (see results above).

(v) [Dr E] telephoned [Ms B] with the results the next day (16 August 2018) noting: *… abn liver function test, likely obstruction biliary system, daughter reported Mum is having severe abd pain today, advised daughter to take pt to ED for further assessment.*

(vi) In ED [Mrs A's] three month history of intermittent abdominal pain was noted with the pain having become worse and continuous in the preceding 48 hours, associated with nausea and vomiting. She was noted to have pale stools and dark urine with icteric sclerae and epigastric tenderness. Weight was 46.6kg. She was treated with analgesia and IV fluids with a diagnosis of gallstone pancreatitis. Ultrasound and MRCP

were performed and [Mrs A] proceeded to laparoscopic cholecystectomy on 23 August 2018 and was discharged on 25 August 2018.

5. Comments
(i) [Mrs A's] management by [Dr E] and [public hospital] staff was consistent with accepted practice.

(ii) There are two main issues with [Dr D's] management of [Mrs A]. The first is the failure by [Dr D] to notify [Mrs A] of her significantly abnormal liver function results in a timely fashion. The results were well outside the normal range and [Mrs A] was experiencing symptoms which may have been related to the abnormal results (and in hindsight they certainly were related). I think my peers would be moderately critical of this oversight, a mitigating factor being the stated (but not documented) intention to review [Mrs A] in one month when results would presumably have been discussed. The practice will have a policy on handling of results and this should be obtained for review.

(iii) The second issue is the timeliness and nature of further investigation of the abnormal results. The clinical picture presented was marked elevation of GGT and ALP which were both increased above three times the upper limit of normal (ULN). This pattern represents most likely cholestasis secondary to either gallstones or malignancy given [Mrs A's] history of intermittent upper abdominal pain. Such a cause was accurately identified by [Dr E]. The elevation in ALT and AST suggest some hepatocellular injury secondary to the biliary obstruction, but it was not unreasonable to exclude acute hepatitis as part of investigations. However, local recommendations suggest that patients with elevation of ALP and GGT to the degree shown by [Mrs A] should be referred for urgent ultrasound[1]. I am mildly to moderately critical that [Mrs A] was not referred for ultrasound following receipt of the blood test results, a mitigating factor being the stated (but not documented) intention to review [Mrs A] in one month when I presume such referral would have been made given the lack of response to the PPI therapy prescribed by [Dr D].

(iv) Best practice is to document follow-up arrangements and any 'safety-netting' advice provided. [Ms B] has confirmed in her response that follow-up in a month was discussed although she states this was only if [Mrs A's] pain did not settle. The nature of [Mrs A's] presentation on 12 July 2018 together with the blood results (including normal amylase) was consistent with recurrent biliary colic rather than pancreatitis. Had [Mrs A] been notified of her results in a timely fashion and was then referred for ultrasound which confirmed gallstones, it is unlikely she would have had surgery performed in the public system prior to her episode of gallstone pancreatitis although the occurrence of that complication is likely to have resulted in surgery being expedited."

**Addendum 10 January 2019**
"The practice results policy is standard and fit for purpose. It does not alter the comments in my original advice."

[1] https://bpac.org.nz/resources/campaign/lft/bpac_lfts_poem_pf.pdf Accessed 18 December 2018