General Practitioner, Dr B

Medical Centre

A Report by the

Health and Disability Commissioner

(Case 15HDC00660)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

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Executive summary

1. On 3 April 2006 Ms A (aged 46 years) consulted her general practitioner (GP), Dr B, at a medical centre, because of tiredness. A blood test was arranged, which revealed borderline iron deficiency (low ferritin). The results were discussed with Ms A at a later appointment. Dr B considered that Ms A's low ferritin was secondary to her menstruating and physical training. Iron supplements were prescribed, which addressed the deficiency.

2. On 9 February 2007 Ms A self-referred to a sports physician, Dr C, with regard to her tiredness and inability to gain weight. Dr C noted that Ms A was experiencing rectal bleeding and blood in her bowel motions weekly. Dr C wrote a reporting letter to Dr B making recommendations for Ms A's ongoing care. Dr C's suggestions for management included investigation of the source of Ms A's lower gastrointestinal bleeding. Dr C also arranged blood tests and asked Dr B to follow up the results.

3. On 14 February 2007 Ms A consulted Dr B. Ms A told HDC that she took a copy of Dr C's letter to the consultation, and that Dr B referred to the letter during the consultation.

4. Dr B dealt with a number of the recommendations made in Dr C's letter regarding Ms A's management. However, there is no record in the clinical notes of any attempt to clarify the rectal bleeding symptom reported in Dr C's letter, or take any action in relation to it.

5. Dr B reviewed Ms A approximately twice a month from March to June 2007 in relation to other health matters. Further blood tests were performed throughout 2007 and 2008, which returned normal results. There is no reference to rectal bleeding in the clinical notes for any of these consultations in 2007 or 2008. Ms A does not recall whether she raised the issue of rectal bleeding at subsequent consultations.

6. In November 2009 Ms A suffered a bout of diarrhoea and experienced some rectal bleeding. She consulted GP Dr D at the medical centre, who performed a rectal examination and recommended a colonoscopy. Ms A was referred to a gastroenterologist and underwent a colonoscopy, which revealed a tumour. Subsequently she was diagnosed with colorectal cancer.

Findings

7. By failing to follow up on the recommendation made in Dr C's letter regarding Ms A's rectal bleeding, Dr B failed to provide services to Ms A with reasonable care and skill, and breached Right 4(1)[1] of the Code of Health and Disability Services Consumers' Rights (the Code).

8. The medical centre was found not to have breached the Code.

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

Complaint and investigation

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

- *The appropriateness of the care provided to Ms A by Dr B.*
- *The appropriateness of the care provided to Ms A by the medical centre.*

10. An investigation was commenced on 10 September 2015. The parties directly involved in the investigation were:

Ms A	Consumer/complainant
Dr B	General practitioner/provider
The medical centre	Provider
Dr C	Sports physician/provider
Dr D	General practitioner/provider

11. Information was received from all the above parties.

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

Information gathered during investigation

Background

13. Ms A was a sportsperson. Despite having a good level of fitness, at times she experienced low energy levels,[2] which she could not "push through". Ms A told HDC that since before 2000 her GP had been Dr B[3] of the medical centre. Prior to moving overseas in 2010, Dr B had been practising at the medical centre for 28 years.

14. In 2001, when Ms A was 41 years old, she reported rectal bleeding to Dr B. She told HDC that at the consultation there was a discussion about her family history of bowel cancer (her grandfather had died of bowel cancer). The bleeding was recorded as suggestive of "outlet" type bleeding[4] and, after examination, it was found that it was caused by an anal fissure.[5] There is no record of a discussion about family history in the clinical notes for that consultation.

15. On 3 April 2006, Ms A (then aged 46 years) consulted Dr B with tiredness. At the appointment, blood tests were ordered, which showed normal haemoglobin, mild

[2] It appears that these symptoms began in 2006.
[3] Dr B had been a vocationally registered general practitioner since 1988. He is a Fellow of the Royal New Zealand College of General Practitioners..
[4] Bright red blood after or during defecation.
[5] A crack or tear in the anus and anal canal.

macrocytosis, and mild iron deficiency.[6] The results were discussed with Ms A at a follow-up appointment on 11 April 2006. Dr B stated: "In my experience it is not uncommon for women who are menstruating regularly, with the added factor of [physical exercise] (which can cause reduced iron stores), to have slightly low ferritin levels." Dr B prescribed an iron supplement, and a later repeat of the ferritin test showed that Ms A's ferritin levels were in the normal range.

16. Dr B saw Ms A again on 16 July and 11 August 2006 for unrelated health matters. There is no reference in the clinical notes to tiredness or rectal bleeding being discussed at those consultations. Ms A's ferritin level was recorded on 17 August 2006 as being 15 nanograms per millilitre.[7]

17. Ms A continued to feel tired. Because of this and her inability to gain weight, on 9 February 2007 she self-referred to sports physician Dr C. That day, Dr C wrote a reporting letter to Dr B (copied to Ms A). In that letter, Dr C noted that Ms A had presented with low energy levels; however, he also recorded a number of other health issues including depression; fatigue; poorly controlled exercise-induced asthma; rectal bleeding; low ferritin; and macrocytosis.[8] Dr C also recorded in the letter that Ms A was experiencing blood in her bowel motions weekly, and ordered blood tests, the results of which he asked Dr B to follow up.

18. Under the heading of "Management", Dr C referred Ms A back to Dr B for management of the listed problems. His suggestions for management included:

a) Consideration of an antidepressant medication.

b) Trial of a long-acting Beta 2 agonist in combination with an inhaled corticosteroid.

c) Consideration of investigation of the source of her lower gastrointestinal bleeding.

d) Consideration of referral for a treadmill ECG for her chest pain.

e) Further investigation and management of her current low ferritin (16) ug/l (20-160).

f) Follow-up of the macrocytosis.

g) Investigation of sterile pyuria. [9]

14 February 2007 consultation

19. On 14 February 2007 Ms A consulted Dr B to follow up Dr C's recommendations. She told HDC that she took a copy of Dr C's letter with her to the consultation, and said that Dr B saw the letter. Ms A told HDC: "I remember him referring to the letter as he went through a couple of the points." Ms A said that at this appointment Dr B

[6] Haemoglobin 136g/L (normal range (115–160); serum iron 9µmol/L (normal range 10–30); iron binding capacity 67 (normal range 45–72); iron saturation 13 (normal range 20–45); ferritin 15µg/L (normal range 20–160).
[7] A typical range for women is 20–160 nanograms per millilitre.
[8] Macrocytosis is the enlargement of red blood cells. It typically causes no signs or symptoms and is usually detected incidentally on routine blood tests. Macrocytosis is not a specific disease, but it may include an underlying problem that requires medical evaluation.
[9] The presence of elevated numbers of white cells in urine.

questioned her about her family history of bowel cancer and other symptoms, and said to her that she was not in the risk group for bowel cancer and he did not think that further tests were needed.

20. Dr B told HDC that he cannot recall the consultation of 14 February. He also does not recall telling Ms A that further tests were not needed. According to the clinical notes from 14 February, Dr B dealt with a number of the recommendations made in Dr C's letter regarding Ms A's management, namely prescription of an antidepressant, changes to her asthma regimen, and prescription of an iron supplement. The notes also record an intention to recheck Ms A's urine test.

21. There is no reference in the clinical notes to rectal bleeding, any abdominal or rectal examination, or that Dr C's letter was discussed.

22. Dr B accepted that he should have followed up on the rectal bleeding reported in Dr C's letter.

23. Dr B told HDC that a possible explanation for not following up at the 14 February 2007 consultation was that he did not have a copy of Dr C's letter to refer to. However, Dr B accepted that "even if [Dr C's] letter was not available to [him] on 14 February 2007,[10] it would have been subsequently".

24. Dr B told HDC: "I think I would have responded to [Dr C's] recommendation if I had seen a copy of the letter. If I did not see a copy of the letter, I cannot explain why."

25. There is a record in the clinical notes on 10 February that a complete blood count was obtained, with the comment: "[M]acrocytes are increased. Automated white cell and platelet counts are normal." Dr B told HDC that these results were converted by the medical centre from its prior practice management system and, as a consequence:

> "I do not know whether the 10 February date refers to the date that the bloods were taken, the tests completed, or the results made available to the practice. As a consequence it cannot be known whether I had these blood results available to me during the 14 February [2007] consultation. In any event, from my retrospective review, the results appear normal."

26. There is no record that Dr B reviewed the blood test results ordered by Dr C, or that he discussed them with Ms A, either on 14 February, or at subsequent consultations.

Further consultations in 2007–2008

27. Dr B reviewed Ms A approximately twice a month from March to June 2007 in relation to other health matters (sterile pyuria, olecranon bursitis,[11] and insomnia[12]). On 24 April 2007 Dr B reviewed Ms A regarding olecranon bursitis and a history of

[10] The clinical notes indicate that Dr C's letter was received on 15 February 2007, and is recorded as having been received and filed by Dr B on 15 February 2007.
[11] A condition characterised by pain, redness and swelling caused by inflammation of the olecranon bursa (between the loose skin and the pointy bone at the back of the elbow).
[12] Inability to sleep.

heavy periods.[13] Ms A told HDC that she cannot recall whether Dr B asked her about rectal bleeding at this consultation.

28. Further increased iron supplements were prescribed from March to June 2007 to manage Ms A's ferritin levels.[14] A complete blood count is recorded in the clinical notes on 12 June 2007 and 25 September 2007. The blood results were normal. Dr B recorded at a consultation on 28 September 2007: "Discussed bloods, will repeat at 6 months." There is no reference to rectal bleeding or other gastrointestinal symptoms in the clinical notes for any of the consultations with Dr B in 2007.

29. Blood tests were also performed in January, April, June and September 2008. There is no evidence of anaemia[15] in any of these results, and Ms A's ferritin levels remained normal throughout this period. Other consultations took place for skin lesions, asthma review and recurrence of depression. Ms A told HDC that it was frustrating to have been regarded as suffering from depression, and that too much emphasis may have been placed on that issue, "when that was not the whole position (low energy levels are a hard thing to fight)". There is no reference to rectal bleeding or other gastrointestinal symptoms in the clinical notes for any of the consultations with Dr B in 2008.

30. Ms A told HDC that she cannot recall whether she brought up the issue of rectal bleeding at any subsequent consultations with Dr B. Dr B noted that at consultations after 14 February 2007 he "omitted to ask about rectal bleeding but did note that [Ms A] suffered from heavy periods on 24 April 2007 which is why [he] was happy to provide occasional iron prescriptions while monitoring [Ms A's] ferritin levels". Dr B accepted that he should have investigated Ms A's gastrointestinal symptoms as another possible cause of her low ferritin levels.

Cancer diagnosis

31. Ms A said that in November 2009 she was taking a health supplement that caused a bout of diarrhoea, and she experienced some rectal bleeding. At the time, she had also been taking Voltaren[16] for knee pain. On 16 November 2009 she consulted GP Dr D at the medical centre, as Dr B was not available at that time. Dr D's clinical notes include:

> "Has had worsening of [per rectum] bleed which she has had for the last couple of years. Now she has had increased amount and frequency. Spontaneous [per rectum] bleed — soiled her undergarments. No associated pain in the perianal area. Grandfather — maternal died of bowel cancer at the age of 80 [years].
>
> Pr exam — no lumps, but melena[17] +++
>
> [Advise] colonoscopy."

[13] The first mention of periods in the clinical notes is "periods [four] weekly" on 25 September 2000.
[14] 24 April; 18 June 2007.
[15] A condition in which there is a deficiency of red cells or of haemoglobin in the blood, resulting in pallor and weariness. Anaemia is recognised as a feature of colorectal cancer.
[16] An anti-inflammatory drug taken to relieve pain and reduce inflammation.
[17] Black "tarry" faeces that are associated with upper gastrointestinal bleeding.

32. Ms A's blood count remained similar to her previous results, and there was no evidence of anaemia. Dr D recommended a colonoscopy and referred Ms A to a gastroenterologist. Ms A underwent a colonoscopy on 25 November 2009, which revealed a tumour, and she was diagnosed with colorectal cancer.

33. Ms A was then referred to the District Health Board (the DHB) where, on 15 December 2009, a surgeon performed a hand-assisted laparoscopic high anterior resection.[18]

34. The cancer was categorised as Dukes' C, meaning it was relatively advanced.[19] Ms A underwent postoperative adjuvant chemotherapy,[20] starting on 8 February 2010. This comprised six cycles of a tablet form of chemotherapy (capecitabine) and five cycles of an intravenous chemotherapy (oxaliplatin). Ms A told HDC that six cycles of oxaliplatin were planned, but because she experienced side effects including numbness and tingling in her feet and hands, her last dose of intravenous chemotherapy was cancelled, because it was becoming more painful for her to walk, and the chances of damage becoming permanent increased with each dose of oxaliplatin. Regular follow-up took place with a medical oncologist. A follow-up colonoscopy on 25 May 2011 revealed three small colonic polyps (which were removed), and a further surveillance colonoscopy was required after two years.

35. Ms A said that the cancer has had a major impact on her quality of life, and a big impact on her family. She said that the chemotherapy was a terrible experience, which caused numerous side effects. She said: "I am a positive person who wants to keep busy and I do feel completely let down by my medical professional [Dr B]."

Dr B — further information

36. After becoming aware of the events that had occurred with regard to Ms A, Dr B told HDC :

> "My attitude to managing cases of rectal bleeding has changed significantly with earlier interventional investigation such as endoscopy and earlier referrals to Colorectal Surgeons or Gastroenterologists. I have been in mortal fear of missing another bowel cancer. I take extra care to ensure that all correspondence is read."

Policy and subsequent events

37. The medical centre told HDC that it did not have a written "Results Policy" in place at the time of events, but said that "doctors were aware of the clinic's systems and their professional obligations regarding the actioning of results".

38. Subsequent to these events, the medical centre developed a Patient Test Results and Reports Management Policy (April 2010). In respect of specialist reports, the policy states:

[18] This operation involves the removal of the sigmoid colon, the upper rectum and a variable portion of the left colon.
[19] The Dukes' bowel cancer staging system is divided into four groups — A, B, C and D. Dukes' A is early bowel cancer and Dukes' D is advanced.
[20] Treatment given to reduce the risk of cancer recurrence.

> "All correspondence (reports) are read by the doctors, initialled,[21] then sent to nurses to action … Follow-up appointments will be made 'as appropriate'. Reports are then filed in the patient's notes.
>
> "**If there are any issues that arise regarding results these are to be managed by the patient's own doctor.**" (Emphasis in original.)

39. The medical centre told HDC that it now has an induction folder that is given to new GPs as part of their orientation programme when commencing work at the clinic. The medical centre noted that Dr B joined the medical centre before the induction folders were developed, having commenced initially as an independent practitioner at the clinic.

Response to provisional opinion

40. Ms A's response to the "information gathered" section of the opinion has been incorporated into the report where appropriate.

41. Dr B told HDC that he appreciated the opportunity to comment on the provisional opinion, and advised that he does not wish to make comments on the report.

42. The medical centre told HDC that it agrees with the conclusion of the opinion.

Opinion: Dr B — Breach

43. The first record of Ms A having reported rectal bleeding to Dr B was during a consultation on 14 November 2001. Dr B diagnosed that the bleeding was caused by an anal fissure. In respect of that report of rectal bleeding, my in-house clinical advisor, GP Dr David Maplesden, noted that an "innocent" cause for the bleeding was found, and he advised that it seemed unlikely that the bleeding at this time was related to Ms A's later diagnosis of colorectal cancer. Dr Maplesden noted that "there were some mild deficiencies in clinical documentation in that an actual management plan was not recorded". He further advised:

> "Provided there was some 'safety-netting' advice provided regarding the need to be seen again if the bleeding persisted or changed in nature, I would regard [Ms A's] overall management on this occasion as being consistent with expected standards."

44. I accept Dr Maplesden's advice and consider that, overall, Dr B's management of the bleeding in 2001 was appropriate.

45. On 3 April 2006 Ms A consulted Dr B with symptoms of tiredness. Blood tests were arranged, which revealed borderline iron deficiency. Dr Maplesden advised that the blood test results did not indicate that Ms A was anaemic, although she had low

[21] The copy of Dr C's letter provided to HDC is not initialled.

ferritin levels that responded to iron supplements. Ms A was also recorded as having low ferritin in February 2007. Dr Maplesden advised me that such a reduction in iron stores would not be uncommon in a menstruating female, particularly as Ms A had heavy periods. Dr Maplesden stated:

> "I feel it would be common practice to provide intermittent iron supplementation to menstruating female patients with the type of blood test results evident for [Ms A], without further specific investigation but with ongoing monitoring of blood count and iron stores (as was done in [Ms A's] case), provided there was no history of significant [gastrointestinal] symptoms or other symptoms suggesting a cause other than menstrual blood loss to account for the reduction in iron stores."

46. I accept that advice and consider that Dr B's actions in 2006 were in accord with accepted practice.

47. On 9 February 2007 Ms A self-referred to Dr C with regard to her tiredness and inability to gain weight. Dr C noted that Ms A was experiencing rectal bleeding and blood in her bowel motions on a weekly basis. The same day, Dr C wrote a reporting letter to Dr B making recommendations for Ms A's ongoing care. Dr C's suggestions for management included consideration of antidepressant medication, a trial of asthma medications, investigation and management of low ferritin, and follow-up of macrocytosis and sterile pyuria. Dr C also suggested consideration of investigation of the source of Ms A's "lower gastrointestinal bleeding". Dr C arranged blood tests and asked Dr B to follow up the results.

48. On 14 February 2007 Ms A consulted Dr B to discuss Dr C's recommendations. She said that she took her copy of Dr C's letter to the consultation and showed it to Dr B, who referred to the letter during the consultation. Ms A said that Dr B asked her about her family history of bowel cancer and other symptoms, and told her that she was not in the risk group for bowel cancer and that he did not think that further tests were needed.

49. While unable to recall the consultation, Dr B suggested that he might not have had a copy of the letter at the consultation on 14 February, but accepted that even if the letter had not been available to him that day, it would have been subsequently. Dr B told HDC: "I think I would have responded to [Dr C's] recommendation if I had seen a copy of the letter. If I did not see a copy of the letter, I cannot explain why."

50. According to the clinical notes from 14 February, Dr B dealt with a number of the recommendations made in Dr C's letter regarding Ms A's management, namely prescription of an antidepressant, changes to her asthma regimen, and prescription of an iron supplement. The notes also record an intention to recheck Ms A's urine test. There is no reference in the clinical notes to rectal bleeding, any abdominal or rectal examination, or to Dr C's letter or the blood test results he had ordered. I am unable to make a finding as to whether rectal bleeding was discussed at the consultation.

51. I have taken into consideration the evidence available, including that Ms A says that she took a copy of the letter to the consultation and showed it to Dr B, and that Dr B took action in respect of many of the items listed in Dr C's letter. Accordingly, I find

that Dr B did have access to, and read, Dr C's letter at that time, and so knew about Dr C's recommendation for further investigation of Ms A's rectal bleeding. I am concerned that, despite this, Dr B failed to take any further action regarding that bleeding.

52. I am also critical that there is no record that Dr B reviewed the blood test results ordered by Dr C, or that he discussed them with Ms A, either on 14 February 2007, or at subsequent consultations.

53. Ms A consulted Dr B regularly from March to June 2007 in relation to a history of heavy periods and other health matters. Further blood tests and consultations took place throughout 2008. There is no record of Ms A having complained of further rectal bleeding, and Ms A does not recall whether she brought up the issue of rectal bleeding with Dr B at any subsequent consultations. Dr B told HDC that he omitted to ask about rectal bleeding at those consultations, and said that he did not consider that gastrointestinal symptoms/rectal bleeding might be a possible cause of her low ferritin levels.

54. Dr Maplesden noted that there is no reference in any of Dr B's notes, on 14 February 2007 or subsequently, that he attempted to clarify the rectal bleeding symptom further by way of history, examination, or referral. Dr Maplesden advised that this represents a moderate to severe departure from expected standards. I accept this advice.

55. In my view, by failing to follow up on the recommendation made in Dr C's letter regarding Ms A's rectal bleeding, Dr B failed to provide services to Ms A with reasonable care and skill, and breached Right 4(1) of the Code.

Opinion: The medical centre — No Breach

56. During the period under investigation, Dr B was an employee of the medical centre. In addition to any direct liability for a breach of the Code, under section 72(2) of the Health and Disability Commissioner Act 1994 (the Act), employing authorities are vicariously liable for any breach of the Code by an employee. Under section 72(5) of the Act, it is a defence for an employing authority to prove that it took such steps as were reasonably practicable to prevent acts or omissions leading to an employee's breach of the Code.

57. Medical practices have a responsibility to ensure that they have effective systems in place for handling incoming correspondence, test results, and patient follow-up. It is essential that those systems are robust and support clinicians in providing good quality care. The Royal New Zealand College of General Practitioners' document

Aiming for Excellence[22] states that practices should have an "effective system for the management of clinical correspondence, test results, and other investigations".

58. There is no evidence to suggest that the medical centre's database system failed to alert Dr B to Dr C's letter, and I am satisfied that Dr B's shortcomings identified above cannot be attributed to the medical centre. Accordingly, I find that the medical centre did not breach the Code.

Recommendations

59. Dr B has provided an apology in response to the provisional opinion.

60. Should Dr B return to practise in New Zealand, I recommend that he undertake further education and training in managing correspondence and the diagnosis and treatment of colorectal cancer, at an agreed workshop with the Royal New Zealand College of General Practitioners, and provide evidence to HDC of having completed this training.

61. I recommend that the medical centre review its system for managing incoming correspondence and test results, and report the outcome of the review to HDC within two months of the date of this report.

Follow-up actions

62. The Medical Council of New Zealand will be advised that this investigation has been concluded.

63. 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.

[22] Royal New Zealand College of General Practitioners, *Aiming for Excellence*, RNZCGP Standard for New Zealand General Practice 2011–2014 (2011).

Appendix A: In-house clinical advice to the Commissioner

The following expert advice was obtained from general practitioner Dr David Maplesden on 18 August 2015:

"1. Thank you for the request that I provide clinical advice in relation to the complaint from [Ms A] about the care provided to her by [Dr B]. In preparing the advice on this case to the best of my knowledge I have no personal or professional conflict of interest. I agree to follow the Commissioner's Guidelines for Independent Advisors. I have reviewed the available information: complaint from [Ms A]; response from [Dr B]; [the medical centre's] GP notes; [the DHB's] clinical notes. [Ms A] states she presented to [Dr B] *with rectal bleeding initially some 2–3 years prior to 2009 (possibly a tear) and then again some time later. He questioned a family history of bowel cancer (my grandfather died of it in his 80s) and other symptoms such as diarrhoea (which I wasn't experiencing). I did have a low iron count (for which I was taking iron supplements) and was having heavy periods at the time.* [Ms A] recounts she was training for [sporting events] over this period and was frustrated at a lack of energy and inability to gain weight leading to a consultation with sports physician [Dr C]. [Dr C] advised [Dr B] to follow-up [Ms A's] symptom of rectal bleeding (amongst other recommendations). She states: *[Dr B] re-questioned family history ... and other symptoms but stated that I was not in the high risk group for bowel cancer and didn't think that further tests were needed.* [Ms A] states she did not have any altered bowel pattern until she took a health supplement in late 2009 which led to severe diarrhoea and worsening of her rectal bleeding resulting in referral for colonoscopy and diagnosis of colorectal cancer (CRC). [Ms A] believes [Dr B] should have referred her for colonoscopy following [Dr C's] recommendation in February 2007 and that this may have resulted in earlier and more effective treatment of her cancer.

2. [Dr B] notes [Ms A] was never anaemic but she did have low ferritin levels when she presented with tiredness in April 2006. [Dr B] felt the low ferritin was explained by [Ms A's] menstrual pattern and her training regime and the ferritin improved with the provision of iron supplements. [Dr B] states: *I accept that I should have followed up on the bleeding reported in [Dr C's] letter, and I cannot explain why I did not do this. Although [Ms A] was noted to have heavy periods I should have investigated her gastrointestinal symptoms as another possible cause of her low ferritin levels.*

3. GP notes date from 25 September 2000. There is also on file a [DHB] surgical outpatient record dated 15 February 1989 when [Ms A] was seen with a three month history of right iliac fossa pain. It is documented at this stage she had not had any rectal bleeding, change in bowel habit or weight loss and weight was recorded as 54.9kg. She was noted to have a possible pelvic mass on rectal examination and ultrasound was ordered. The results of these investigations are not available on file and given the timing it is unlikely this episode had any relevance to subsequent events.

4. The first history of any rectal bleeding is noted at a consultation dated 14 November 2001 and diagnosis of anal fissure was made. Notes include: *PR bleeding … not very painful, small amts on motions, wt increasing, occas loose motion/diarrhoea cyclically with periods …* On examination *posterior anal fissure, not too deep or chronic …* Blood tests were apparently ordered but there are no results for this date on file. The documentation does not reveal what further management was undertaken or the nature of any follow-up. Over the next five years (until the end of 2005) [Ms A] was seen occasionally (fewer than two consultations per year on average) for musculoskeletal and respiratory issues. There is no reference to any bowel symptoms over this period. Blood counts performed in 2000 and 2003 showed persistent borderline macrocytosis but no anaemia, and iron studies in 2003 showed elevated serum iron returning to normal when rechecked after five days (8 and 13 May 2003). I could not determine from the notes that any iron supplements were prescribed to [Ms A] over this period.

5. On 3 April 2006 [Ms A] presented to [Dr B] with symptoms of tiredness. She [was training regularly] . Weight was 63kg. There is no reference to additional symptoms (such as rectal bleeding, change in bowel pattern etc.). Blood tests were ordered and showed normal haemoglobin, persisting mild macrocytosis as previously noted, and mild iron deficiency (serum iron 9 µmol/L — normal range 10–30; normal iron binding capacity; iron saturation 13 (20–45); ferrritin15 µg/L (20–160)). On 11 April 2006 the results were discussed with [Ms A] and iron supplements prescribed. In his response, [Dr B] states he assumed [Ms A's] low ferritin was secondary to her menstruating and training. [Ms A] was seen on 16 July and 11 August 2006 for unrelated problems and there is no reference to tiredness or gastrointestinal symptoms at these consultations. Blood tests were repeated on 17 August 2006 and showed normal haemoglobin and ferritin now within the normal range. There is no record of further prescribing of iron supplements in 2006.

6. In early 2007 [Dr B] evidently referred [Ms A] to sports physician [Dr C] for review of her tiredness (date of referral not evident from the available documentation). [Dr C] reviewed [Ms A] on 9 February 2007. Multiple potential health issues were identified (including depression, asthma and sterile pyuria) with explicit advice in a letter to [Dr B] to follow these up. Of note there is reference to rectal bleeding with recommendation of *investigation for the source of her lower gastrointestinal bleeding … further investigation and management of current low ferritin … I also think she would benefit from some lower gastrointestinal investigations because of her rectal bleeding.* There is no reference in the letter to nature or duration of the bleeding or whether there were additional symptoms such as weight loss or change in bowel pattern. [Dr C] organised blood tests (10 February 2007) which showed a blood count essentially unchanged from previous results (no anaemia) and normal iron studies other than a mildly reduced ferritin (16 µg/L).

7. [Dr B] reviewed [Ms A] on 14 February 2007. Consultation notes refer to discussion regarding depression and intention to recheck [Ms A's] urine test. There is no reference to a symptom of rectal bleeding nor to any abdominal or

rectal examination. An antidepressant was prescribed together with changes to [Ms A's] asthma regime. A further prescription was provided for iron supplement. It appears the letter from [Dr C] was filed on 23 February 2007.

8. [Dr B] reviewed [Ms A] on 15 March 2007 in relation to her depression. Through March and April 2007 her sterile pyuria was further investigated by way of urine culture and cytology and renal ultrasound with no abnormality detected. Repeat blood count on 22 March 2007 was normal, and ferritin on 10 April 2007 was stable at 16 µg/L. On 24 April 2007 [Dr B] reviewed [Ms A] regarding an olecranon bursitis and history of heavy periods. She was prescribed Cyklokapron for the menorrhagia and advised to increase her iron supplementation. A further iron prescription was provided on 4 May 2007. On 7 May 2007 there was a consultation for insomnia.

9. Repeat blood tests on 12 June 2007 showed normal blood count other than the previously noted macrocytosis, and ferritin was now normal at 32 µg/L. When repeated on 25 September 2007 the blood count was essentially unchanged and ferritin 30µg/L. A prescription for Cyklokapron and iron had been provided on 13 June 2007 with further Cyklokapron provided on 27 November 2007. There were consultations on 13 June 2007 (hyperventilation and headache) and 28 September 2007 (breast check). There was no reference to symptom of rectal bleeding or other gastrointestinal symptoms at any of the consultations with [Dr B] in 2007.

10. Blood tests were performed on 9 January, 29 April, 13 June and 29 September 2008. There was no evidence of anaemia on any of these tests and ferritin level remained normal throughout this period. Cyklokapron was prescribed in April, July and September 2008 implying [Ms A] had ongoing issues with heavy periods, and iron was prescribed 15 July 2008. There were several consultations for treatment of skin lesions, asthma review and recurrence of depressive symptoms. There is no reference to rectal bleeding or other gastrointestinal symptoms in 2008.

11. In 2009 [Ms A] was seen for cervical smear on 19 February 2009 (repeated on 15 April 2009 as inadequate sample on earlier smear), and for knee pain and respiratory symptoms on 10 March 2009. The first reference to any rectal bleeding symptom since the letter from [Dr C] is documented in a consultation with provider [initials] at [the medical centre] on 16 November 2009: *Has had worsening of PR bleed which she has had for the last couple of years. Now she has had increased amount and frequency. Spontaneous PR bleed … no associated pain in the perianal area. Grandfather maternal died of bowel cancer at the age of 80 yrs. PR exam — no lumps but melaena ++. Adv colonoscopy.* Blood count at this time was similar to previous results with no evidence of anaemia.

12. [Ms A] was referred to [a gastroenterologist] and underwent colonoscopy in [a] Hospital on 25 November 2009. This showed a tumour at the rectosigmoid junction with biopsy histology confirming adenocarcinoma. Further treatment was fast-tracked through [the DHB] ([surgeon]). [Ms A] was seen in [the DHB's] surgical pre-admission clinic on 2 December 2009. Admission notes are brief but include: *frank pr bleeding not needing tx + altered bowel habit. Colonoscopy*

proven rectosigmoid cancer. No weight loss, no fevers, no nausea, normal appetite. Otherwise fit & well. On examination *no palpable liver, no masses.*

13. A laparoscopic high anterior resection was performed on 15 December 2009 and the tumour removed. Recovery was uneventful. In a letter dated 24 January 2010 [oncologist] has noted: *It would appear her primary tumour was a very early tumour at a T1 tumour and hence it is a surprise to see two nodes involved although I do note that her tumour was moderately to poorly differentiated.* [Ms A] subsequently underwent several cycles of chemotherapy. At follow-up colonoscopy on 25 May 2011 [Ms A] had three small colonic polyps removed and was to have further surveillance colonoscopy in two years.

14. As basis for subsequent comments, I refer mainly to the Ministry of Health/New Zealand Guidelines Group publication *Suspected Cancer in Primary Care: Guidelines for investigation, referral and reducing ethnic disparities (2009)* which was made available to New Zealand GPs in late 2009 but predominantly reinforced expected practice prior to that time. I have listed below recommendations from that publication relevant to this case:

(i) *A person aged 40 years and older reporting rectal bleeding with a change of bowel habit towards looser stools and/or increased stool frequency persisting for 6 weeks or more should be referred urgently to a specialist*

(ii) *A person presenting with a palpable rectal mass (intraluminal and not pelvic), should be referred urgently to a specialist, irrespective of age. Note that a pelvic mass outside the bowel should be referred urgently to a urologist or gynaecologist*

(iii) *A non-menstruating woman with unexplained iron deficiency anaemia and a haemoglobin of 100 g/L or below, should be referred urgently to a specialist*

(iv) *A person presenting with a right-sided abdominal mass, should be referred urgently for a surgical opinion* (good practice point)

(v) *For a person with equivocal symptoms, a complete blood count may help in identifying the possibility of colorectal cancer by demonstrating iron deficiency anaemia. This should determine if a referral is needed and whether the person should be urgently referred to a specialist*

(vi) *For a person where the decision to refer to a specialist has been made, no examinations or investigations other than an abdominal and rectal examination, and a complete blood count should be undertaken as this may delay referral*

(vii) *A person at low risk of colorectal cancer with a significant symptom (rectal bleeding or a change in bowel habit) and a normal rectal examination, no anaemia and no abdominal mass, should be managed by a strategy of treat, watch and review in three months* (good practice point)

15. [Ms A] was 46 years old when seen by [Dr C] in February 2007 with (amongst other symptoms) a history of apparent persistent rectal bleeding. The incidence of bowel cancer in the 45–49 year age group in New Zealand is 23.5 per 100,000, which gives a risk of contracting the disease within the five year

period (45–49) of 0.12%[1] (low risk). [Ms A] evidently had no history of inflammatory bowel disease or adenomatous polyps, or significant family history that might have increased her risk (a single second degree relative with CRC diagnosis at advanced age not being associated with significant increase in CRC risk).

16. In 2001 when a history of rectal bleeding was first recorded by [Dr B], [Ms A] was 41 years old. The bleeding pattern was suggestive of 'outlet' type bleeding and an 'innocent' cause for the bleeding was found (anal fissure) after appropriate examination. Provided there was some 'safety-netting' advice provided regarding need to be seen again if the bleeding persisted or changed in nature, I would regard [Ms A's] overall management on this occasion as being consistent with expected standards although there were some mild deficiencies in clinical documentation in that an actual management plan was not recorded. There is no record between November 2001 and February 2007 of [Ms A] presenting with GI symptoms or notifying [Dr B] that her rectal bleeding was persisting. If she did present such symptoms to [Dr B] over this period I would be at least moderately critical that the symptoms were not documented or investigated further by way of at least an appropriate physical assessment. However, subsequent notes (see section 11) suggest the symptom was not prominent over this period.

17. [Ms A] was not demonstrated to be anaemic on any of the blood test results on file. She did have a mild reduction in iron stores noted in April 2006 and February 2007 which responded to modest intake of supplemental iron. Such a reduction in iron stores would not be uncommon in a menstruating female particularly if [Ms A] suffered from heavy periods as was noted from April 2007. I feel it would be common practice to provide intermittent iron supplementation to menstruating female patients with the type of blood test results evident for [Ms A], without further specific investigation but with ongoing monitoring of blood count and iron stores (as was done in [Ms A's] case), provided there was no history of significant GI symptoms or other symptoms suggesting a cause other than menstrual blood loss to account for the reduction in iron stores. However, [Ms A] evidently had a significant symptom of ongoing rectal blood loss which, even without an associated change in bowel pattern, required at least a current physical examination to determine whether there was an obvious anorectal cause for the bleeding and either treatment directed at the cause or further investigation depending on the assessment findings. As noted above, it is not clear [Dr B] was made aware of this symptom between November 2001 and February 2007.

18. In February 2007 [Dr C] apparently obtained from [Ms A] a history of persistent rectal bleeding which, quite reasonably under the circumstances (sports physician providing an opinion on [Ms A's] tiredness symptom and revealing several potential health issues requiring follow-up), he recommended [Dr B] investigate further. [Dr C] was quite explicit in his written recommendations to [Dr B] and it is evident [Dr B] was aware of these recommendations. However, there is no reference in any of [Dr B's] notes up until the time [Ms A] was seen

[1] These figures from: NZGG. Surveillance for people at increased risk of colorectal cancer. 2012. Available at: www.**nzgg**.org.nz/.../surveillance-increased-risk-**colorectal-cancer**.pdf

by another provider in November 2009 complaining of exacerbation of her rectal bleeding which she had had for 'the last couple of years', to an attempt to further clarify the rectal bleeding symptom by way of history, examination or referral. **I think this represents a moderate to severe departure from expected standards**. Mitigating factors are that [Ms A] was at low risk of developing CRC (see section 14) and she had no additional 'alarm' features such as change in bowel pattern to looser stools, weight loss or anaemia. However, she required at least further interrogation to clarify the nature of the bleeding and associated symptoms, and a physical examination to determine whether there was an obvious local cause for her bleeding and to exclude any abdominal mass. If an obvious local cause for bleeding had been found (such as haemorrhoids or anal fissure) and this was consistent with the bleeding pattern described, and noting the absence of significant anaemia at this time, I think it would have been reasonable to defer further investigations for three months to assess response to any treatment provided (see section 14(vii)). If the bleeding had responded to treatment, further investigation might reasonably have been deferred unless the bleeding returned and failed to respond to another course of appropriate treatment (for the identified local cause), or 'alarm' symptoms developed. However, this is all conjecture as no appropriate assessment was undertaken to determine whether there was a local cause for the bleeding. I would be severely critical if [Ms A] had continued to complain to [Dr B] of symptoms of rectal bleeding between February 2007 and November 2009 and such symptoms were neither documented nor investigated.

19. With the benefit of hindsight, it seems unlikely [Ms A's] rectal bleeding symptom in 2001 was related to her diagnosis of CRC noting her tumour, although aggressive, was at an anatomically 'early' stage when detected (see section 13) and an obvious local cause had been found to explain her bleeding in 2001."