General Surgeon, Dr C

Capital and Coast District Health Board

A Report by the

Health and Disability Commissioner

(Case 09HDC01932)

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Executive summary

1. In November 2008, Ms B was referred to Dr C at a private clinic (the Clinic) for consideration of gastric bypass surgery. It was noted in the referral that Ms B had been diagnosed with bipolar affective disorder (BPAD) in March 2008, and that she was under the care of a private psychiatrist. It was also noted that in November 2007 Ms B had weighed 107kg, that she had gained over 40kg since being on medication for her BPAD, and that in October 2008 she weighed 150kg.

2. Ms B attended three preoperative assessments at the Clinic. Dr C did not contact Ms B's psychiatrist as part of his assessment of Ms B's suitability for surgery.

3. On 10 February 2009, Ms B underwent gastric bypass surgery. By that time, her weight had increased to 172.9kg, a gain of over 20kg in two months. Ms B's initial recovery from surgery was straightforward. She was reviewed by Dr C six weeks postoperatively (on 26 March 2009), at which time she was prescribed multivitamins. Patients who have had gastric bypass surgery are known to be at risk of vitamin deficiencies because of their restricted diet, and therefore need to take multivitamins on an ongoing basis.

4. Between 13 March and 7 May 2009, Ms B presented at the public hospital nine times. Her symptoms invariably included abdominal pain, nausea, and vomiting. A range of investigations were carried out during the course of her admissions, but the cause of her symptoms was not identified. For the most part, Ms B was under the care of the upper gastrointestinal service, but a number of other services, including dietetics, psychiatry, and pain management, were also involved.

5. Dr C was aware of Ms B's ongoing problems and her admissions to the public hospital, and he was in contact with clinicians there.

6. Ms B was not prescribed multivitamins during her admissions to the public hospital between 13 March and 7 May 2009.

7. On 18 May 2009, Ms B was admitted to the public hospital for the tenth time. On 26 May 2009, she complained of blurry vision. On 31 May 2009, Ms B was reviewed by an ophthalmologist, who noted paralysis of the muscles responsible for eye movement, and a reduction in visual acuity. The next day, a neurology review indicated thiamine deficiency and a Wernicke's type encephalopathy. Ms B's sight and mobility have been permanently harmed.

Decision

8. The Commissioner found that Dr C did not adequately assess Ms B's suitability for surgery. He failed to obtain a formal psychiatric or psychological assessment, or consult her psychiatrist.

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9. In the circumstances, the Commissioner found that Dr C failed to provide services to Ms B with reasonable care and skill and, accordingly, breached Right 4(1) of the Code.[1]

10. When Dr C saw Ms B on 26 March 2009, he was aware of her problems, which included nausea, vomiting, and pain. The Commissioner was critical of Dr C's failure to take steps to arrange for Ms B to have an alternative mode of administration of the multivitamins, and his failure to advise clinicians at the public hospital that he had prescribed multivitamins for Ms B.

11. The Commissioner found that Ms B was not asked whether she was taking multivitamins, and was not prescribed them during her admissions to the public hospital until her thiamine deficiency was diagnosed. In addition, there was a failure by staff at the public hospital to adequately assess Ms B's nutritional status in light of her ongoing nausea and vomiting. In the circumstances, the Commissioner found that Capital and Coast District Health Board failed to provide services to Ms B with reasonable care and skill and, accordingly, breached Right 4(1) of the Code. The Commissioner was critical of other aspects of the care provided to Ms B by Capital and Coast DHB.

Complaint and investigation

12. Ms A complained to the Commissioner about the services provided to her daughter, Ms B. The following issues were identified for investigation:

- *Whether Capital and Coast District Health Board provided Ms B with an appropriate standard of care between March and August 2009.*
- *Whether Dr C took appropriate steps to obtain Ms B's informed consent for surgery, including consent to participate in research.*
- *Whether Dr C provided Ms B with an appropriate standard of care between November 2008 and August 2009.*

13. An investigation was commenced on 29 March 2011. The parties directly involved in the investigation were:

Ms A	Complainant
Ms B	Consumer
Dr C	Provider
Capital and Coast DHB	Provider

14. Other parties mentioned in this report include:

Dr D	Surgical fellow
Dr E	General practitioner
Dr F	Psychiatrist

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

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RN G	Registered nurse
Dr H	Surgical fellow
Ms I	Dietitian
Dr J	Surgeon
Dr K	Surgeon
Dr L	Gastroenterologist/hepatologist
Dr M	Psychiatric registrar
Ms N	Dietitian

Also mentioned in this report:

Dr O	Bariatric surgeon
Dr P	Consultant surgeon
Dr Q	Neurologist
Dr R	Author of review

15. Information was reviewed from:

Ms B, Ms A, Dr C, Capital and Coast DHB, Dr E, and ACC.

16. Independent expert advice was obtained from surgeon Dr Habibur Rahman (**Appendix A**) and surgeon Dr Richard Flint (**Appendix B**).

Information gathered during investigation

Background

17. On 20 November 2008, GP Dr E referred Ms B (then aged 22 years) to Dr C at the Clinic for consideration of gastric bypass surgery. Dr E noted that she had previously referred Ms B to Dr O for consideration of gastric banding, but Dr O thought Ms B would be better managed by a gastric bypass.

18. Dr E noted in her referral to Dr C that Ms B was seeing a private psychiatrist, that she had been diagnosed with bipolar affective disorder (BPAD) in March 2008, and that she was on "a host of medications" to manage this. Dr E noted that when she first saw Ms B in November 2007, Ms B weighed 107kg, that she had gained over 40kg since being on medication for her BPAD, and that in October 2008 she weighed 150kg, with a body mass index of 57.[2]

19. Dr E stated: "There is no doubt her medication has been largely (But ?all) to do with this weight gain."

[2] The BMI system has known limitations but is used to indicate whether a person is underweight, overweight, or an ideal weight for his or her height. A person with a BMI above 30 is considered obese. The side effects of both risperidone and paroxetine include significant weight gain.

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20. Dr E stated further: "I have no idea if she is a suitable candidate for this procedure and hence would be grateful for your opinion."

21. At that time, Ms B was taking sodium valproate EC 500mg, risperidone 1mg, paroxetine hydrochloride 20mg x 2, clonazepam 2mg, and zopiclone 7.5mg.

Preoperative assessments

22. On 5 December 2008, Ms B had an initial interview at the Clinic with Fellow Dr D.[3] Dr D's notes indicate that his discussion with Ms B included the uncertain outcomes of gastric bypass surgery, including weight loss, eating patterns, and vitamin deficiencies. Ms B's weight at this time was 152kg. Dr D noted that Ms B had had BPAD for one year and that she was on medication, but had never been hospitalised for treatment of her BPAD.

23. On 6 December 2008, Dr D wrote to Dr E stating, "we think [Ms B] would be a good candidate" for gastric bypass surgery, noting that if Ms B decided to proceed she would need to return for another visit with Dr C and one of the practice nurses.

24. On 15 January 2009, Ms B was seen by registered nurse (RN) RN G for a preoperative nursing interview. RN G noted that Ms B was under the care of psychiatrist, Dr F. RN G noted that Ms B was "taking many psychotropic medications" and queried "Medications ?Elixir Form". RN G recorded that Ms B was encouraged to see the Clinic counselor before surgery, to explore her emotional triggers for eating.

25. On 23 January, Ms B was seen primarily by Fellow Dr H, but she was also reviewed by Dr C. Dr H noted that Dr C "discussed all aspects in detail, including complications and uncertainties". Ms B confirmed that she had read written material and viewed a DVD about gastric bypass surgery, both provided by the Clinic. The written material included a booklet about gastric bypass surgery, in which it was stated:

> "Because your intake of food will be severely restricted you will be placed on a multi-vitamin tablet. It is important that you take this each day for the rest of your life. It is difficult to predict what might happen if you don't do this but subtle vitamin deficiencies might occur."

26. Dr H wrote to Dr E to confirm that Ms B had decided to proceed with surgery. He noted that Ms B's blood tests indicated that she had insulin resistance and dyslipidaemia.[4]

27. Ms B's mother, Ms A, accompanied Ms B to her three preoperative appointments at the Clinic.

[3] A fellow is a physician training in a particular specialty.
[4] Dyslipidemia is an abnormal amount of lipids (eg, cholesterol and/or fat) in the blood.

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Suitability for surgery

28. In relation to his assessment of Ms B's suitability for surgery, Dr C advised HDC:

> "We were comfortable that she was in a stable situation, and that although substantial weight gain had occurred following the institution of medication, the need for this medication was ongoing and in my experience such weight gain is seldom, if ever, completely reversible following cessation of such medication"

Psychosocial assessment

29. In response to the provisional opinion, Dr C stated that he considers an adequate psychosocial assessment is desirable but can be conducted efficiently and effectively in most presenting candidates "by a bariatric team consisting of experienced surgeons (prepared to accept responsibility for this type of assessment), experienced and interested nursing and nutrition staff, coupled with an experienced counsellor. Such is the [private hospital] team." However, he said that formal assessment is reserved for patients who are judged to be potentially unstable or have been hospitalised within the past five years because of their psychiatric condition.

Psychiatric assessment

30. There is no reference in the records from the Clinic to any assessment of Ms B's psychiatric condition, or the conclusion that it was stable. The records note that Ms B had been diagnosed with BPAD and had been on medication for the previous 12 months. However, as stated, the referral letter from Dr E of 20 November 2008 stated that Ms B's BPAD was diagnosed in March 2008 (ie, eight to nine months previously).

31. Dr C stated:

> "Providing patients presenting in this situation are in a stable situation vis-à-vis their psychiatric status and they have not previously been hospitalized, we do not normally consider it important to seek specific information from their consulting psychiatrist, particularly when a general practitioner's letter of referral has been given and raises no specific cause for concern in this respect."

32. Additionally, Dr C stated:

> "It would however normally be our practice to copy our letters to the psychiatrist, but on this occasion we did not have an address for [Dr F] other than that he was practicing from somewhere in […] Street. From my recollection [Ms B's] only contact was a telephone number, and for this reason he was not included in our distribution list for correspondence. For the reasons mentioned, I did not consider this to be a particular concern. Some 40% of my gastric bypass patients admit to previous psychiatric disorder, in particular depression, and a number have had BPAD. I do not consider these to be a contraindication to surgery, and indeed the psychiatric status of the patient is often assisted by the major weight loss that follows gastric bypass and the improvements in self-esteem that accompanies such weight loss."

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33. Dr C stated that he does regularly make contact with psychiatrists if the patient has required hospitalisation, particularly if that has occurred in the year or so prior to the surgery. However, he cannot remember a psychiatrist ever discouraging the surgery.

Contact with counsellor

34. Dr C said that he offers patients six free counselling sessions, and that RN G encouraged Ms B to see the counsellor after surgery. Dr C said that Ms B "was sufficiently preoccupied with problems postoperatively that she was never seen by our counsellor, and indeed given her state of mind at the time, such sessions would have been of unlikely value".

35. Dr C advised HDC: "[I]t is unusual for our patients to be seen prior to surgery by our counsellor, and when this is done it would seldom, if ever, be used as part of an assessment of suitability for surgery." Ms B was not seen by the counsellor before or after surgery.

Surgery (10 February 2009)

36. Ms B was admitted to the private hospital on 9 February 2009, by which time her weight had increased to 172.9kg, a gain of over 20kg in two months.[5] The following day, Dr C performed a Fobi Pouch gastric bypass,[6] cholecystectomy,[7] and portal vein cannulation.[8] Surgery proceeded without major complications, although Dr C noted that the cholecystectomy was difficult because of Ms B's size, and "there were thousands of tiny stones present within the gallbladder and into the cystic duct".

37. Ms B's initial recovery was straightforward.

Discharge and follow-up

38. On 16 February, Ms B was discharged home. Over the following ten days there was some telephone contact between Ms B or Ms A, and Dr C or RN G, particularly in relation to Ms B's fluid intake.

39. On 25 February, RN G noted: "Not taking epilim[9] — has not taken epilim for over 1 week! Eating too fast. Not taking any responsibility. Have instructed [Ms B] to contact her GP promptly to have her epilim prescribed as an elixir. She must be recommenced on this promptly." Later that day, RN G noted: "GP will fax ELIXIR to local pharmacy — [Ms B] has said she will commence her medications promptly …"

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[5] Dr C operates at the private hospital under a Clinical Privileges agreement.

[6] The Fobi Pouch gastric bypass involves dividing the stomach with a reinforced staple line to form a vertical pouch, and placing a ring around the pouch to permanently limit the size of the outlet, thereby limiting the rate at which the pouch is emptied.

[7] Surgical removal of the gallbladder.

[8] Portal vein cannulation involves placing a catheter into the vein that extends from the stomach, pancreas and intestines to the liver. The purpose was to obtain portal blood for research purposes. Ms B's consent for this was obtained prior to surgery.

[9] Sodium valproate.

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Urinary tract infection

40. On 9 March, Ms B was seen by a GP and commenced on an antibiotic for a suspected urinary tract infection. On 11 March, Ms B presented at an Accident & Emergency Clinic, with worsening symptoms. A GP at the clinic noted that the urine test results from 9 March showed mixed flora.[10] A further urine sample was taken, and the GP prescribed a different antibiotic.

The public hospital — first presentation (13 March 2009)

41. On 13 March, Ms B was admitted to the public hospital with abdominal pain, dysuria,[11] fever, nausea and vomiting. It was thought that Ms B had partially treated cystitis[12] that had progressed to pyelonephritis.[13] She was treated with intravenous (IV) antibiotics and given analgesia. An abdominal X-ray was performed. This was initially reported by a junior surgical registrar as showing a dilated loop of small intestine, but consultant surgeon Dr P considered this was incorrect. The radiologist reported the X-ray as normal, with no evidence of bowel dilatation, bowel obstruction, or perforated intestine.

42. That day, locum dietitian reviewed Ms B in relation to her poor oral intake. The locum dietitian noted that she talked to Ms B about suitable foods to increase her protein and nutrient intake, while still continuing her weight loss. On 16 March, Ms B was reviewed by dietitian Ms I. Ms I noted that Ms B was not yet on any routine vitamin/mineral supplement, and that Ms B's oral intake at that time was "very limited". Ms I reviewed Ms B the following day, 17 March, noting that Ms B was to have further follow-up from Dr C. Ms B was also visited on the ward that day by RN G, who noted: "Remains not very motivated — not drinking as much fluids as required — S/B [seen by] dietitian."

43. On 18 March, Ms B reported that she was feeling better and was discharged home.

The public hospital — second, third and fourth presentations

44. On 20 March, Ms B re-presented at the public hospital Emergency Department (ED) with abdominal and back pain, nausea and vomiting. She was seen by the General Surgery team. An abdominal/pelvic CT scan showed a trace of free fluid and mild fat stranding, but no evidence of bowel obstruction. Ms B was discharged the following day.

45. On 23 March, Ms B re-presented at the public hospital ED with abdominal pain radiating to her back. She was assessed by a consultant ED physician. Ms B was noted to have non-specific abdominal pain with no evidence of obstruction or peritonism.[14] She was advised to take regular adequate analgesia and ensure adequate fluid and oral intake, and discharged home.

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[10] Urine cultures with more than one organism, usually considered to be contaminated.
[11] Painful urination.
[12] Bladder inflammation.
[13] A kidney infection that develops from bacteria that has spread from the bladder.
[14] Inflammation of the thin tissue that lines the inner wall of the abdomen and covers most of the abdominal organs.

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46. On 26 March, Ms B re-presented at the public hospital ED. She was reviewed by the on-call General Surgery team. An abdominal X-ray was performed and reported as normal. It was noted that Ms B was due to see Dr C later that day, and she was discharged home.

Six-week review with Dr C (26 March 2009)

47. Ms B saw Dr C as scheduled, for her six-week postoperative review. In his follow-up letter to Dr E (dated 27 March and copied to the public hospital), Dr C noted the difficulties Ms B had been experiencing. He stated that in his view, it was likely that her problems were not related to the bypass surgery but that she had developed a low-grade cholangitis.[15] Dr C said that there were difficulties in treating this and stated that, under the circumstances, it would be appropriate to proceed with non-operative treatment in the first instance. Dr C prescribed a two-week course of ciprofloxacin, an antibiotic, and noted his intention to see Ms B again at the end of that time. Dr C noted in his clinical record: "commence multivitamin", but did not mention in his letter to Dr E that he had prescribed multivitamin tablets.

48. In the letter to Dr E, Dr C stated:

> "At the present time I have encouraged [Ms B] to concentrate on those medications that are most important for her, including the Ciprofloxacin, and to concentrate on regular amounts of fluid intake. Once things improve and her nausea settles then she should be able to resume other types of food and all of her medications."

49. Ms A recalls that the prescription from Dr C was filled and that she tried to get her daughter to take the multivitamin tablets, but she was vomiting frequently, and shortly thereafter she was admitted to the public hospital again. Ms B cannot recall whether the prescription was filled, but believes that when she was readmitted to the public hospital the following day, her mother gave hospital staff either the prescription or the multivitamins.

50. On 27 March, RN G documented that should Ms B be readmitted to the public hospital, Dr C wanted her to be under the care of surgeon Dr J. Dr C explained in his response to HDC that it seemed unsatisfactory to him at that time that Ms B fell under the care of the ED and/or the on-call surgical team on each visit to the public hospital. He stated that he was keen that the upper gastrointestinal (upper GI) surgeons, Dr J and Dr K, should become involved, and that thorough investigations be carried out to exclude stones in the CBD. RN G later noted that she had spoken with Dr J and Dr K regarding this.

The public hospital — fifth, sixth and seventh presentations

51. Ms B was readmitted to the public hospital that afternoon (27 March), again with abdominal pain, nausea and vomiting. It was noted that she had been vomiting one to

[15] Infection of the common bile duct (CBD).

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two times a day for the previous two weeks. She was treated with IV antibiotics and given pain relief.

52. On 30 March, Ms B was transferred to the upper GI team. On 1 April, an ultrasound was performed, indicating a normal biliary tree[16] with no stones, and normal portal blood flow. It was noted that the CBD was not well visualised. That day, RN G spoke with Dr K and recorded in the clinical notes that Ms B was in the public hospital with pain and that further investigations were being organised.

53. On 2 April, Ms B was referred to a consultant gastroenterologist and hepatologist, Dr L. Ms B was continuing to complain of abdominal pain and nausea, and there was concern that this might be related to the stomach pouch and its surgical joins. On 3 April, Dr L assessed Ms B and performed a gastroscopy. No cause for her symptoms was identified.

54. Ms B was booked for Magnetic Resonance Cholangiopancreatology (MRCP)[17] as an outpatient, and was discharged the following day.

55. During that admission, Ms B was also seen by clinicians from the dietetic, psychiatry, and acute pain management services. On 2 April, Ms B was seen by Ms I, who noted that Ms B should be able to tolerate small, minced, moist meals. Ms I noted that she would review Ms B the following day. On 3 April, psychiatric registrar Dr M reviewed Ms B and noted that she would liaise with Ms B's private psychiatrist.[18] Dr M noted that she would review Ms B again after the weekend, and asked to be paged if Ms B was to be discharged in the meantime. There is no record of further contact with Dr M or Ms I prior to Ms B's discharge on 4 April.

56. RN G followed up with Ms B by telephone on 6 April, noting that Ms B was still complaining of abdominal pain, but was drinking 1–1.5 litres daily, tolerating soups, and eating three times a day. RN G noted that Ms B was continuing to take her psychiatric medications.

57. On 7 April, Ms B re-presented at the public hospital with continued abdominal pain radiating to her back, dysuria, blood in her urine, fever, nausea and vomiting. She was given IV fluids and antibiotics, and medication for pain and nausea. She was discharged the following day with a prescription for oral antibiotics and analgesia.

58. On 9 April, Ms B re-presented with similar symptoms, and was admitted under consultant surgeon, Dr P. Ms B was commenced on antibiotics and given medication for pain and nausea. At 6pm on 11 April, Ms B told nursing staff that the doctor who had seen her that morning had said she could go home if she wanted to, and that she wanted to do so. The progress notes indicate that Ms B initially agreed to wait until

[16] The network of ducts or channels branching through the liver.
[17] A technique to visualise the biliary tract and pancreatic ducts.
[18] Records indicate that over the course of Ms B's admissions, staff made several attempts to contact Dr F but were unable to do so.

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she could be seen by a doctor, but that at 6.50pm she self-discharged, saying that she did not want to wait and that she would see her GP the following Monday.[19]

Further review with Dr C (15 April 2009)

59. On 15 April, Dr C reviewed Ms B again at the Clinic. In his follow-up letter to Dr E (dated 24 April), Dr C noted Ms B's ongoing problems and the investigations being undertaken at the public hospital. He wrote that he did not think the gastric bypass was responsible for Ms B's present troubles, but that they most likely related to the biliary tree. Dr C noted: "[Ms B] is taking a regular multivitamin tablet and needs to continue with this throughout her life." This letter was copied to Ms B and the public hospital (Medical Records). Capital and Coast DHB advised HDC that Dr C's letter of 24 April was not available to the upper GI team until after the commencement of this investigation. Dr C's progress notes indicate that he spoke to Dr J but no detail of that conversation is recorded.

The public hospital — eighth and ninth presentations

60. From 18–30 April, Ms B had a further admission to the public hospital under the care of the Upper GI team. Capital and Coast DHB stated that during that admission, there was a formal discussion on the surgical ward between Dr C, Dr L, Dr K and Dr J, although this is not documented.

MRCP and ERCP

61. The MRCP was performed on 24 April. This showed no obvious abnormality, but the possibility of stones could not be excluded. In order to investigate further, an Endoscopic Retrograde Cholangiopancreatography (ERCP)[20] was requested, and Ms B's condition was discussed again with Dr L.

62. The ERCP was attempted on 28 April, but was unsuccessful as Ms B was unable to tolerate the endoscope. Arrangements were made to perform a Percutaneous Transhepatic Cholangiogram (PTC)[21] and ERCP under general anaesthesia.

Psychiatric review

63. On 20 April, Ms B was seen by Dr M, who noted that Ms B advised that she had discontinued all of her psychiatric medications five weeks earlier, and that she had not been honest about this when seen two weeks previously. In response to the provisional opinion, Ms B stated she had a difficult relationship with Dr M who, in her view, misunderstood her personality and failed to acknowledge her distress about her constant pain, terror at being in hospital with an undiagnosed illness, and her separation from her family, friends and pets.

[19] With regard to the reports of Ms B self-discharging, Ms A states that on one occasion Ms B and her father waited hours for her to be discharged. Ms A explained that Ms B's father became concerned at the prospect of having to drive to her place and back home in the dark, and declined to wait any longer. She left the hospital to calm him.
[20] A procedure for diagnosing and treating problems of the biliary and pancreatic ducts.
[21] A procedure to visualise the anatomy of the biliary tract.

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64. Dr M noted that Ms B appeared to be in a mixed phase of BPAD and borderline personality traits, and at risk of self-harm. Ms B was commenced on venlafaxine, and sodium valproate was restarted. It was noted that Ms B should have the smaller 200 mg tablet, as she found the larger tablet difficult to swallow.

65. On 20 April and 22 April it was noted that Ms B might need to be transferred to the Inpatient Mental Health Service, but further reviews on 24 and 30 April indicated an improvement in Ms B's mental state. In response to the provisional opinion, Ms B stated that she found the suggestion that she would be admitted to the psychiatric unit to be threatening and suggestive of punishment. Ms B said that Dr M's conversations with her were in the ward, even though there was a private room available.

66. Entries on 24 and 27 April indicated that Ms B was taking her psychiatric medications and tolerating them well. However, on 30 April, it was noted that Ms B had refused the sodium valproate and venlafaxine for the previous 3–4 days because of the side effects. The venlafaxine was discontinued, and Ms B agreed that she would take the sodium valproate in syrup form at night. That day, a house officer noted that Ms B had been "assessed by psych team as safe from a mental health point of view to go home", and that once Ms B had been seen by the dietitian, she could go on weekend leave from the next day.

Dietetics review

67. The records do not include a dietetics referral, but Ms I advised that a referral was received on 30 April. Ms I stated that she was not able to see Ms B immediately. Ms B did not wish to wait, and discharged herself that day against medical advice. Ms I stated that the house officer asked Ms B to telephone Ms I, but Ms B did not do so. Ms I said that when she saw Ms B subsequently and asked her why she had not telephoned, Ms B's reply was very "non-committal".

Acute Pain Management Service

68. During this admission, Ms B was also seen by the Acute Pain Management Service.

PTC/ERCP

69. On 5 May, Ms B was admitted electively for the PTC/ERCP, which was performed the following day. A sphincterotomy[22] was also performed, with no stones found in the CBD.

Psychiatric review

70. On 7 May, Ms B was reviewed by Dr M, who noted that Ms B reported good compliance with sodium valproate, but that a nurse had reported that Ms B was refusing it. The medication chart shows that Ms B refused the medication at 9pm on 5 May, but accepted it intravenously at 12.30am on 6 May. Dr M noted a further discussion with Ms B about the medication's side effects and risks. Ms B was assessed as being safe for discharge from a psychiatric point of view, and she was discharged home.

[22] A cut in the lower end of the CBD.

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The public hospital — tenth presentation

71. On 18 May, Ms B presented to a GP, again with abdominal pain, nausea and vomiting. The GP contacted the on-call surgical registrar at the public hospital, and Ms B was readmitted. An abdominal X-ray on 20 May was reported as normal. On 21 May, Ms B was transferred to the upper GI team. A HIDA scan[23] was performed, and no concerns were identified.

Dietetics review

72. Ms B was re-referred to the dietetic service. On 19 May, dietitian Ms N attempted to review Ms B, but Ms B was in pain and asked Ms N to return at a later time. Ms N noted that Ms B was not having much solid or oral intake, and was vomiting but able to tolerate fluids. Ms N attempted to see Ms B on 21 May, but she was asleep. On 22 May, Ms N noted that Ms B's oral intake remained inadequate, and that her micronutrient status was "likely to be compromised".

73. Ms N encouraged Ms B to continue to try oral fluids and food. In the clinical record she noted: "? Should this patient be having a multivite supplement?" Capital and Coast DHB stated that this "was not verbally communicated to the medical or nursing staff, or picked up on from the notes, and therefore no treatment was implemented".

Psychiatric review

74. Ms B was also seen on 22 May by Dr M, who noted that Ms B reported "full compliance with [sodium valproate] since discharge, though unable to tolerate anything oral for [2 days]".

75. On 21 May, a doctor from the Acute Pain Management Service noted that nursing staff had reported a suspicion that Ms B was taking oral fluids "in secret", and that her behaviour when she was not aware of being observed was not consistent with the high levels of pain she reported. In response to the provisional opinion, Ms B and her mother stated that they found this "bizarre" as Ms A took many types of drinks into the hospital trying to find something her daughter could enjoy or at least tolerate. Ms B would take a few sips but this usually induced a bout of vomiting.

76. On 25 May, it was noted that different routes of administering sodium valproate had been discussed with a pharmacist. However, that same day, Dr M noted that Ms B's compliance with this medication was "patchy", and that it should be stopped to see whether it was contributing to Ms B's nausea and vomiting.

77. On 26 May, Ms B was seen by a consultant psychiatrist and Dr M. Later that day, Dr M saw Ms B again, with her mother. Dr M noted that Ms B complained of blurry vision, and rubbed her right eye frequently. On examination, visual field testing was normal. Dr M wrote: "I recommended we consider a CT head and she reacted 'No, I don't need that, I'm sure I'm okay', and said nothing further." Dr M's impression was of "very complicated family dynamics", and "[m]ood instability, with sound previous documentation suggesting Bipolar Disorder". In response to the provisional opinion,

[23] A HIDA scan (Hepatobiliary Iminodiacetic Acid scan) is an imaging procedure that helps track the production and flow of bile from the liver to the small intestine.

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Ms A stated that by that time Ms B disliked Dr M so much that she did not want to consider any suggestion Dr M made. In addition, Ms B was concerned about the safety of having many X-rays and scans.

Further reviews

78. That day, Ms B was also seen by RN G. RN G noted that Ms B's private psychiatrist had closed his practice, and that "[Ms B] says she felt comfortable deciding not to have any further medication — a decision she says was guided with professional input".

79. On 28 May, Ms N noted that she had attempted to review Ms B on the two previous days but she was being seen by other teams at those times. Ms N noted that Ms B reported tolerating oral fluids a little better, and that she should be encouraged to increase the variety of foods being consumed.

Visual symptoms

80. On 29 May, a surgical registrar noted a "lengthy discussion with the family". This included a discussion in relation to Ms B's complaints of visual disturbance. Ms B was offered an ophthalmology review and head CT scan, but declined those.

81. Ms A recalls that when Ms B told a registrar on the ward about her vision, the registrar was "extremely condescending [and] obviously skeptical, and implied that [Ms B] was attention seeking". An entry in the progress notes records that Ms A telephoned at 11pm on 29 May and reported that her daughter's eyes "seemed to be turning inwards today", and that her daughter told Ms A she could not focus and could barely see her.

82. On 31 May, Ms B was seen by an ophthalmology registrar, who noted ophthalmoplegia[24] and a reduction in visual acuity. An urgent CT scan was ordered to exclude a blood clot in a cavity at the base of the brain.[25] The CT was reported as normal.

Thiamine deficiency

83. On 1 June, a neurology review indicated thiamine deficiency and a Wernicke's type encephalopathy.[26] Ms B was given a multivitamin preparation and thiamine intravenously, and folic acid and Vitamin B complex.

84. Ms A stated that she had previously asked staff several times about her daughter's nutritional levels, and was always told: "[H]er levels are fine." Ms A stated that she sometimes referred specifically to vitamins. She recalls being told that staff were concerned about what Ms B was drinking, but not about her eating.

[24] Paralysis of the muscles responsible for eye movement.

[25] Cavernous sinus thrombosis.

[26] Wernicke's encephalopathy is a serious neurological disorder caused by a lack of thiamine and characterised by a loss of muscle co-ordination (ataxia), ophthalmoplegia, and mental confusion.

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85. Ms B stated that she had repeatedly asked staff why she was not being given the multivitamins Dr C had prescribed, and was told that her blood results were being checked and she was fine.

86. On 3 June, Ms N reviewed Ms B and recommended enteral feeding to address her inadequate micronutrient and trace element intake. However, the following day, there was an improvement in Ms B's oral intake. On 9 June, Dr C recommended supplementary feeding by Total Parenteral Nutrition (TPN). The next day, there was an unsuccessful attempt to insert a PICC[27] line for the TPN. This was attempted again on 12 June, and Ms B was started on TPN.

87. Ms A recalls that when the thiamine deficiency was first discussed with Dr C, he responded that it would be a vitamin A deficiency rather than thiamine.

88. In his response to HDC, Dr C's explained:

> "The only knowledge I had of loss of sight occurring as a result of vitamin deficiency related to vitamin A deficiency, which has occasionally been reported many years after gastric bypass. Vitamin A is a fat soluble vitamin and is one of those vitamins included in the multivitamin preparation we prescribe. I had not been aware that a thiamine deficiency might also lead to loss of sight. The much more common feature of this deficiency (Wernicke's encephalopathy) is loss of balance and nystagmus but without loss of vision."[28]

89. On 26 June, a multidisciplinary team meeting was held to discuss Ms B's management plan. On 31 July, TPN was discontinued. On 6 August, Ms B was transferred to an Assessment, Treatment and Rehabilitation service.

90. In a letter to ACC dated 22 April 2010, neurologist Dr Q stated: "It is clear … that [Ms B] has been permanently harmed by Wernicke's encephalopathy as a direct adverse effect of bariatric surgery." Dr Q also noted lorazepam as the only psychiatric medication Ms B was taking at that time.

Additional information from Capital and Coast DHB

91. Dietitian Ms I reviewed the dietetic service provided to Ms B. Ms I stated that there was ongoing dietetic involvement over the course of Ms B's admissions, with the "encouragement of oral intake the main treatment". She stated that dietitians know micronutrient intake is compromised in patients who have had surgery to treat obesity, but there is no quick way to tell whether a person has deficiencies, as it takes three weeks to get test results. She noted that dietitians are not able to order such tests themselves, and while they can make suggestions about vitamin charting, responsibility for this lies with medical staff. Ms I also noted:

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[27] Peripherally inserted central catheter.

[28] The body's reserves of thiamine can be depleted after only 20 days of inadequate supply. The reported symptoms of Wernicke's encephalopathy include confusion; loss of muscle coordination (ataxia); leg tremor and vision changes.

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- Ms B met the referral criteria for dietetic input and should have been referred to the dietetic service within 24 hours of her "third admission";[29]
- a number of Fobi pouch patients were seen by the inpatient and outpatient service during the first half of 2009. The dietitians identified that they did not have the skills or knowledge to advise these patients on what to eat. Accordingly, Ms I and an outpatient dietitian met with RN G on 21 May 2009 to discuss the education provided to patients at the private hospital, so that consistent messages could be given when these patients are admitted to the public hospital;
- dietitians rely on the written word as their main communication tool with other team members. Surgical consultants are often in theatre, clinic or private practice, and may be on the ward at different times to the dietitians, who work across several wards. Dietitians do their best to communicate issues to the house surgeon or registrar if available;
- it was difficult to tell how much food Ms B was eating because of the inadequate documentation by nurses and incomplete food charts;[30] and
- communication between staff could have been better, with more notice paid to Ms B's poor oral intake as documented in the dietitians' reviews.

92. In its response to this complaint, Capital and Coast DHB stated that Ms B's case was complex, and noted that thiamine deficiency is rare and difficult to diagnose.[31] It advised that there was a continued effort to diagnose the cause of Ms B's symptoms, and stated: "Her symptoms were not considered unimportant and all possible causes for her symptoms were appropriately investigated." Capital and Coast DHB stated that it considers Ms B's thiamine deficiency was a consequence, rather than a cause of her symptoms (pain, nausea and vomiting), and that psychiatric and behavioural issues were contributing factors.

93. In response to the provisional opinion, Ms B stated that for months she was in a state of unrelenting pain and fear. At times she did not eat for days and she slept badly. She considers that she was not listened to properly, and negative comments in her notes influenced the way that some staff perceived her.

94. Capital and Coast DHB outlined the efforts made to investigate the causes of Ms B's symptoms, with a range of investigations and the involvement of staff from a number of services. It states that there was "a multipronged approach between different departments and specialties".

95. HDC asked Dr K and Dr J about their awareness of the need for Ms B to be taking multivitamins postoperatively. They stated:

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[29] In Ms I's summary, Ms B's third admission was 10–11 April, during which there was no dietetic intervention. It appears that Ms I's concern about the delayed referral in fact relates to Ms B's subsequent admission, from 18–30 April, when she was not referred to the Dietetics service until the day of discharge.

[30] Food charts were commenced on 29 May 2009, when it was noted that there was a "need to establish oral intake and pain meds accurately".

[31] Capital & Coast DHB refers to reports of thiamine and vitamin deficiencies in the literature, which indicate Vitamin B_{12} or thiamine deficiency in 2–3 per 10,000 cases, or 0.02–0.03%.

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"We were aware of the possibility of Vitamin B_{12}, iron and folic acid deficiency following bariatric surgery as these are common postoperatively and are usually tested for three to six months after surgery. In respect to [Ms B] we undertook regular blood tests to assess for anaemia and mean corpuscular volume, which are surrogate markers of the aforementioned vitamin levels — these were always normal. However, at that time we were not aware of micronutrient deficiency and the importance of multivitamins following bariatric surgery in regards to micronutrient deficiency."

96. On 9 December 2009, Capital and Coast DHB advised HDC that it was arranging for an external review of the care provided to Ms B. On 26 February 2010, HDC received a copy of the review report, completed by Dr R. Dr R found no areas of major concern with regard to the general ward care of Ms B. With regard to use of multivitamins, Dr R stated:

"In hindsight it was an oversight not to provide this lady with multivitamins at an earlier stage however given the complexity of the case, her other symptoms for which no [obvious] cause could be found, together with her general non compliance and tendency to self-discharge I think that it is completely understandable."

97. While Dr R's review of Ms B's care was in relation to the care provided postoperatively at the public hospital, he referred briefly to the issue of preoperative assessment. He noted the 1991 National Institute of Health consensus guidelines for assessing a patient's suitability for gastric bypass surgery, which include:

- a BMI of 40 or more without significant co-morbidities or 35 or more with;
- a patient must have demonstrated a genuine exercise and dieting programme in the past; and
- a patient needs to be psychologically suitable for surgery.

98. With regard to the latter, Dr R stated: "This is a very difficult area and I understand the patient had been seeing a psychiatrist and I would assume that her mental status would have been evaluated prior to her coming for surgery."

99. Capital and Coast DHB outlined the following changes it has made as a result of this case and its investigation:

- In complex cases involving multiple disciplines, the upper GI service undertakes multidisciplinary team meetings with the relevant specialist services, in order to optimise patient care.
- From early 2010, the dietetic service has been involved in the education of house surgeons and staff nurses, with regard to dietetic service referral criteria, special diets, and the initiation of TPN.
- The dietetic service now actively recommends a more comprehensive vitamin/trace element supplement for bariatric surgery patients.

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- The dietetics team is now represented on the Bariatric Special Interest Group of Dietitians NZ. A National Standard of Care is being developed to assist in the management of bariatric patients.
- The dietetic service is developing an evidence based re-feeding guideline for the management of at-risk patients.
- Ongoing education of nursing staff in relation to the importance of the nutrition screen and dietitian referral criteria.

Responses to the provisional opinion

100. The following responses were received in addition to those already incorporated above.

Dr C

101. Dr C submitted:

- He disagrees with the opinion of the HDC experts that a formal psychiatric assessment of Ms B should have been obtained before surgery. He considers the HDC's experts' views were formed with the benefit of hindsight.
- What was required was more effective support and management of Ms B's psychiatric status when she was in the public hospital two to three months after the surgery.
- Dr E did not indicate that Ms B's condition was unstable. Rather, Dr E, like most doctors at the time, was unclear who should be considered suitable for bariatric surgery.
- It was clear to him, his staff, Ms B and her mother that Ms B was "in a very stable position with respect to her mood and psychiatric status, notwithstanding … the use of a variety of medications".
- His notes do not detail the reasons for believing that Ms B was stable preoperatively. However that was their assessment, otherwise they would not have proceeded without a formal psychological assessment.
- They attempted to contact Ms B's psychiatrist by calling his telephone number, without result.
- It is acceptable for an experienced clinician and team such as himself and his staff to make a judgement about psychological suitability for bariatric surgery.
- He considers that the recommendation of the American Society of Metabolic and Bariatric Surgery referred to by HDC's independent expert, Dr Flint, is supported by only weak evidence.
- Formal mental health evaluations involve additional costs to patients and programmes without good evidence to support them.
- The outcome for Ms B was an extraordinary and serious outcome of treatment provided according to reasonable standards.

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Capital and Coast DHB

102. Capital and Coast DHB responded as follows:

- Capital and Coast DHB has stressed in its previous responses that in 2009 there was a general lack of awareness of the importance of multivitamins following bariatric surgery with regard to micronutrient deficiency.
- At the time of these events, the dietetic service's experience with the bariatric patient group was limited to bariatric patients who experienced complications following private surgery.
- Capital and Coast DHB has made significant progress and practice changes following this event and the subsequent external reviews. This has been particularly important following the commencement of in-house bariatric surgery in 2012.
- At the time of these events Dr J and Dr K were not aware of the remote possibility of thiamine deficiency, but they now ensure all patients are commenced on multivitamins following bariatric surgery and referred for dietetic review. They have attended educative courses and seminars since the time of these events.

103. Capital and Coast DHB provided further information on changes made since the events outlined in this report. These include:

- Further education sessions have been undertaken by dietitians, including sessions discussing the risks for all bariatric surgery patients and micronutrient deficiencies.
- All new dietitians receive orientation time with the Professional Leader where it is stressed that documentation is not the only form of communication.
- Dietitians are now able to prescribe nutritional supplements and vitamins, and dietitians at Capital and Coast DHB are being supported to undertake the required training to become endorsed prescribers.
- The guideline for patients at risk of re-feeding syndrome is now in place.
- Since 2009 significant emphasis has been placed on improving documentation and communication and processes. The "Patient Admission to Discharge" plan has been completely revised to ensure a clear plan of care is in place and regularly reviewed.
- There is now a Medicines Reconciliation process in place, whereby a ward pharmacist undertakes a reconciliation of usual medications for all new patients on admission.

104. Capital and Coast DHB has apologised to Ms B.

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Opinion: Dr C

Breach — the adequacy of Ms B's preoperative assessment

105. Ms B was a young woman with a recently diagnosed psychiatric condition. She was concerned about her rapid weight gain and consulted Dr C about the possibility of undergoing bariatric surgery.

106. I accept that Dr C and his staff discussed the surgery with Ms B, including the potential complications and uncertainties. However, Ms B's particular circumstances raised questions about her suitability for this type of surgery, and I am concerned that Dr C did not adequately assess Ms B.

107. Ms B had been diagnosed with BPAD in March 2008, and there were indications that her subsequent weight gain was, at least in part, related to the medication she was taking for that condition. When Ms B was referred to Dr C she was under the care of a psychiatrist.

108. My expert advisor, Dr Rahman, considered that there were a number of factors indicating that Ms B was a high risk patient who needed further psychiatric assessment prior to surgery. These include Ms B's diagnosis with epilepsy in 1998 and treatment with sodium valproate, her diagnosis with BPAD in 2008, and the fact that she required multiple medications to control her symptoms.

109. Dr Rahman further advised that if, following a psychiatric assessment, Ms B was deemed suitable for surgery, she should have had psychological support at the time of her surgery and postoperatively.

110. I note also that while Dr R's review was in relation to the care provided postoperatively at the public hospital, he also referred briefly to the issue of preoperative assessment. He noted the 1991 National Institute of Health (NIH) consensus guidelines for assessing a patient's suitability for gastric bypass surgery. These include that the patient must:

- have a BMI of 40 or more without significant co-morbidities or 35 or more with significant co-morbidity;
- have demonstrated a genuine exercise and dieting programme in the past; and
- be psychologically suitable for surgery.

111. With regard to the latter, Dr R stated: "This is a very difficult area and I understand the patient had been seeing a psychiatrist and I would assume that her mental status would have been evaluated prior to her coming for surgery."

112. In relation to this issue, HDC obtained further independent expert advice from surgeon Dr Richard Flint. Dr Flint noted that Ms B's preoperative assessment did not include a formal psychiatric or psychological assessment, which is contrary to the NIH guidelines as well as guidelines issued by the American Society for Metabolic and Bariatric Surgery. Dr Flint also noted that there was no contact with Ms B's

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psychiatrist to develop an independent assessment of her psychiatric status. Dr Flint stated: "Therefore I do not believe [Ms B's] preoperative assessment was adequate and [Dr C] has strayed from standard practice in this regard."

113. I have noted the information from Dr C regarding his assessment of Ms B's suitability for surgery, and the basis on which he concluded that Ms B's psychiatric disorder was not a particular cause for concern. Dr C advised HDC: "We were comfortable that she was in a stable situation." However, there is no record of any assessment or enquiries to ascertain whether Ms B's psychiatric condition was stable. In her referral letter, Dr E advised that Ms B had been diagnosed eight to nine months previously, but the private hospital records refer to a period of a year.

114. Dr C said that he did not consult the psychiatrist because Dr E's letter of referral "raised no specific cause for concern". However, I note that the referral letter of 20 November 2008 advised that Ms B was seeing a private psychiatrist and was "on a host of medications to manage [her BPAD]". Dr E stated: "I have no idea if she is a suitable candidate for this procedure and hence would be grateful for your opinion." I do not accept that this letter raised no concerns.

115. In addition, Dr C said that he did not send reporting letters to Dr F because he did not have an address for him, other than that he was practising from somewhere nearby, and Ms B's only contact was a telephone number. Dr C advised that his staff attempted to contact the psychiatrist without success. Despite this I remain of the view that Dr C could have done more to obtain Dr F's address.

116. Dr C submitted that as he and his team are experienced in bariatric surgery it was acceptable for them to make a judgement about Ms B's psychological suitability for bariatric surgery. While his notes do not detail his reasons for believing that Ms B was stable, he stated that that was their assessment, otherwise they would not have proceeded with the bariatric surgery without seeking a formal psychological assessment.

117. I remain of the view that Dr C should have obtained a formal psychiatric or psychological assessment or, at the very least, consulted with Dr F. Ms B had been diagnosed with BPAD eight to nine months earlier, and I am not satisfied that Dr C had sufficient information regarding the stability of Ms B's psychological status in late 2008, including whether her medication regimen was still being adjusted. I am not convinced that he had enough information to conclude that Ms B was psychologically suitable for gastric bypass surgery at that time.

118. Ms B was not necessarily unsuitable for surgery because of her BPAD. However, as part of the preoperative assessment process, Dr C should have discussed the proposed surgery with Dr F, in order to ascertain whether Dr F had any concerns about Ms B undergoing such surgery in the near future, or her ability to make the required lifestyle changes postoperatively, and whether he considered that further assessment was necessary. This would also have been an opportunity to consider whether Ms B would benefit from any additional psychological support at the time of her surgery and postoperatively. I note also Dr Flint's advice that Ms B should have had a

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management plan in place with her psychiatrist following surgery. I do not consider that Dr C's submission that, in other cases, psychiatrists have expressed no concern about their patients undergoing bariatric surgery is relevant to this situation.

Conclusion

119. Ms B had the right to have services provided by Dr C with reasonable care and skill. Dr E had noted Ms B's BPAD, her medication, and her weight gain, and queried whether she was a suitable candidate for bariatric surgery. Dr Rahman advised that Dr C's failure to assess Ms B's suitability for surgery was a moderate departure from expected standards. In my view, Dr C did not adequately assess Ms B. He failed to obtain a formal psychiatric or psychological assessment, or to consult her psychiatrist. In my opinion, Dr C failed to provide services to Ms B with reasonable care and skill and, accordingly, breached Right 4(1) of the Code.

Adverse comment — weight gain

120. Ms B's weight was not stable prior to the surgery. In November 2007 her weight was 106kg, and in October 2008 it was 150.5kg, by which stage her BMI was approximately 57. When she had the surgery, her weight was 172.9kg. Dr Rahman referred to Ms B's weight gain between her initial assessment at the Clinic and her surgery, and advised: "A 20kg weight gain indicates poor motivation, poor compliance, poor comprehension and a reluctance to change lifestyle."

121. In contrast, Dr Flint does not consider this further weight gain significant. He notes that it is not uncommon for patients on psychiatric medications to gain weight as these medications often stimulate appetite. Dr Flint stated further: "It is nonsensical to insist that a patient who cannot lose weight by any other means cannot access surgery until they lose weight."

122. Ms B's further weight gain may have been attributable to her psychiatric medications, it may have been an indicator of the factors noted by Dr Rahman (poor motivation, poor compliance, poor comprehension and a reluctance to change lifestyle), or it may have been a combination of those factors. The further weight gain was documented at the time of Ms B's admission for surgery, but there is no evidence that the significance of this was considered further or discussed with Ms B. Had Ms B's psychiatric or psychological status been assessed more fully at the outset, as discussed above, I would have some reassurance that the significance of this further weight gain was appreciated.

123. As noted above, the 1991 National Institute of Health consensus guidelines for assessing a patient's suitability for gastric bypass surgery include that the patient has demonstrated a genuine exercise and dieting programme in the past. Ms B's weight gain in the period prior to the surgery would suggest that she did not have control over her weight at that time. The medication she was taking may well have contributed to her weight gain, but there is no record of Dr C or his team having considered the significance of Ms B's continued weight gain or having discussed it with her.

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Adverse comment — multivitamin therapy

124. Dr C said that it was his practice at that time to commence patients on multivitamin therapy six weeks postoperatively. However, as a result of Ms B's experience, he now prescribes multivitamins to his gastric bypass patients from the date of discharge from hospital, and stresses the importance of taking these daily for life. He noted that, as it is not uncommon for patients to have difficulty taking tablets in the first week or two following surgery, he had previously sought to spare patients this problem.

125. Dr Rahman stated:

> "Up to 50% of bariatric patients will be deficient in water-soluble vitamins. My practice is to commence multivitamin therapy pre-operatively or on discharge following surgery. Although there are some variations in practice in this regard, I would consider it advisable to start multivitamin therapy sooner than six weeks."

126. I note that during the preoperative nursing interview, RN G queried whether Ms B's medications should be given in an elixir form, and later, two weeks after surgery, RN G arranged for Ms B to have her epilepsy medication in elixir form. On 26 March 2009, Ms B saw Dr C for her six-week postoperative review. Dr C was aware of the pain, nausea and vomiting Ms B had been experiencing. Given his knowledge of those problems, I am concerned that Dr C did not instigate an alternative mode of administration for the multivitamins.

127. Dr C noted in the clinical record: "[C]ommence multivitamin." However, he did not inform Dr E of this. In his reporting letter to Dr E, Dr C stated: "At the present time I have encouraged [Ms B] to concentrate on those medications that are most important for her, including the Ciprofloxacin, and to concentrate on regular amounts of fluid intake. Once things improve and her nausea settles then she should be able to resume other types of food and all of her medications." In my view, Dr C should have noted in his letter to Dr E on 27 March 2009 that he had prescribed Ms B multivitamins, the importance of these, and that she would require multivitamins on an ongoing basis.

128. Ms A recalls that the prescription from Dr C was filled and that she tried to get Ms B to take the multivitamin tablets, but Ms B was vomiting frequently, and shortly thereafter she was readmitted to hospital. Ms B cannot recall whether the prescription was filled, but believes that when she was readmitted to the public hospital the following day, her mother gave hospital staff either the prescription or the multivitamins.

129. As outlined above, Ms B was not prescribed multivitamins during her admissions to the public hospital until 1 June 2009. I accept that Dr C was not responsible for Ms B's clinical care while she was in the public hospital. However, Dr C knew about Ms B's repeated admissions. Both he and RN G were in contact with Dr J and Dr K, although nothing was recorded by Dr C or RN G between 15 April 2009 and 25 May 2009, aside from one entry on 6 May 2009 confirming that Ms B's anaesthetic notes had been faxed to the hospital.

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130. I agree with Dr Rahman that it would have been prudent for Dr C to have discussed with Dr J and Dr K the risks associated with Ms B not taking, or absorbing therapeutic levels of, the multivitamins he had prescribed, and alternative modes of administrating those multivitamins. Dr Rahman stated:

> "[The prescribing of multivitamins] should have been documented by [Dr C] in his letter to the GP, when he commenced [Ms B] on multivitamin therapy. I would expect the patient to provide this information to hospital staff on admission. I would also expect the consultants at [the public hospital] to be aware that patients who have had bariatric surgery usually require multivitamin therapy postoperatively. [Dr C] knew that [Ms B] was in [the public hospital]. It would have been prudent for him to have contacted the consultants whose care she was under to discuss the possible concerns, risks and outcomes, including the risks that might arise if not taking/getting therapeutic levels of psychiatric medications and multivitamins."

131. I do not consider that sending to the medical records department of the public hospital a copy of the 24 April follow-up letter to Dr E, which mentioned that Ms B was taking multivitamins, was sufficient communication in this case.

Opinion: Capital and Coast District Health Board

Introduction

132. Ms B had bariatric surgery at a private hospital on 10 February 2009 and was discharged on 16 February 2009. She recovered well until 9 March 2009, when she was diagnosed with a suspected urinary tract infection and prescribed antibiotics. Ms B took the antibiotics over the next 24 hours, but felt no better and presented to an Accident & Emergency Clinic on 11 March 2009.

133. Thereafter, Ms B had ten admissions to the public hospital over the course of 11 weeks. On 1 June 2009, she was diagnosed with thiamine deficiency. It is evident that this was a very difficult situation for Ms B, and for her family.

134. The cause of Ms B's symptoms was not ascertained over the course of repeated admissions. Ms B was, understandably, extremely frustrated by her symptoms and her situation. Ms B and her mother said that while some of the care Ms B received was very good, there were a number of occasions when Ms B found staff unkind or disrespectful. Capital and Coast DHB has apologised for this, and confirmed that Ms B's concerns have been brought to the attention of relevant staff.

135. Although Ms B was under the care of several doctors over the course of her admissions, from the end of March 2009 she was mostly under the care of Dr J and Dr K. I note that both are experienced in bariatric surgery.

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Breach — Ms B's nutritional status and multivitamin therapy

Nutritional status

136. I have considered Dr Rahman's comments and the responses from Capital and Coast DHB in relation to the assessment and monitoring of Ms B's nutritional status. Dr Rahman considers that the potential nutritional complications of Ms B's surgery were not anticipated, and that there was a failure to adequately assess Ms B's nutritional status postoperatively. Capital and Coast DHB stated that the focus of the dietitians was the adequate intake of macronutrients, through a varied diet. It stated that a varied diet could also provide sufficient micronutrients, so no further assessments were indicated, and consideration of potential nutritional complications did not arise.

137. There is evidence that staff were aware of Ms B's poor oral intake, and attempts were made to address this. Ms B was referred to the dietetic service during four admissions, and reviewed by a dietitian on nine occasions prior to 1 June 2009. Dr K and Dr J have confirmed that they were aware of the possibility of Vitamin B_{12}, iron and folic acid deficiencies, and that appropriate tests for these were undertaken, the results of which were always normal. There were indications at times that Ms B's oral intake was improving. However, a key issue was that the specific risk of thiamine deficiency was not sufficiently appreciated.

138. I accept that there were a number of complicating factors. Ms I noted in her review that the public hospital dietitians are aware of micronutrient deficiency among patients who have had bariatric surgery, but also that the necessary tests could not be ordered by a dietitian, and it takes several weeks to get the results. Ms I also commented that dietitians could only make suggestions about vitamin charting, although I note that there is no evidence of such a suggestion having been made prior to 22 May 2009.

139. The dietitians were not always able to review Ms B as planned, because she was being seen by other staff, or was asleep or in pain. Ms B was due to see a dietitian on 30 April 2009 but left before that review took place. Hospital staff were aware that Dr C and RN G continued to be involved, and the dietitians sought advice from RN G on working with patients who had had bariatric surgery.

140. Ms I suggested that the referral to the dietetic service should have been made earlier in the admission. I agree and consider that the risk of micronutrient deficiency should have been brought to the attention of medical and nursing staff sooner. A plan could then have been put in place to monitor Ms B's oral intake more closely and assess whether it was adequate for her nutritional needs.

141. Dr Rahman commented that there was a "lack of nutritional care and knowledge" at the public hospital. He stated:

> "At no stage during all [of Ms B's] admissions until the end of May 2009, was there any assessment of her nutritional status in light of her inability to tolerate anything orally. There was [a] lack of understanding of her nutritional requirements at macro and micro levels both."

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142. Dr Rahman noted that there was no discussion about the need for Ms B to go on total parenteral nutrition while her condition was being assessed and investigated, and stated that he considered that the potential nutritional complications of Ms B's bypass surgery were not anticipated.

143. Dr Rahman stated that while the nursing notes refer to Ms B's poor oral intake, nausea, vomiting and abdominal pain, at no point in those entries is there mention of her nutritional status and the long-term effect of poor oral intake. Dr Rahman noted the dietitian's entry in the clinical records regarding multivitamins and supplementation. This was not communicated verbally to medical staff, not noticed, and not acted upon.

144. In response to Dr Rahman's comments, Capital and Coast DHB stated that nausea and vomiting are the most common complaints after bariatric surgery, and are typically associated with inappropriate diet and noncompliance with a gastric diet. Capital and Coast DHB also referred to the exacerbation of Ms B's BPAD during this period.

145. Dr Rahman considers that "the nutritional assessment and requirements were overlooked in [Ms B's] case from the 13th March 2009 right through to 26th May 2009, until she developed visual disturbances". I agree with Dr Rahman that Ms B's nutritional status postoperatively was not adequately assessed.

146. I accept that Ms B was seen by the dietitians on a number of occasions, and that efforts were made to assist her to improve her oral intake. Blood tests were taken, which would have revealed any deficiencies in Vitamin B_{12}, iron, and folic acid. However, insufficient attention was paid to the effect of Ms B's nausea and vomiting on her ability to maintain an adequate intake of micronutrients.

Multivitamin therapy

147. On 26 March 2009, when Ms B was six weeks post surgery, Dr C prescribed multivitamins. Ms B's mother stated that the initial prescription for multivitamins from Dr C was filled, and she tried to get Ms B to take them but Ms B was vomiting frequently. Ms B cannot recall whether Dr C's prescription for multivitamins was filled, but she believes her mother gave hospital staff either the prescription or the multivitamins when she was re-admitted the following day.

148. However, Ms B was not prescribed multivitamins during her admissions to the public hospital until 1 June 2009. Dr C did not record in his letter of 27 March 2009 to Dr E, which was copied to the public hospital, that Ms B had been prescribed multivitamins. However, Dr C did record this in his letter to Dr E of 24 April 2009, which was also copied to Ms B and the public hospital, but Dr J and Dr K advised that the letter was not available to the Upper GI team during Ms B's admissions.

149. Ms B's mother said that she frequently asked hospital staff about Ms B's "levels" and sometimes referred specifically to vitamins, but she was constantly reassured that there was no cause for concern. Ms B stated that she repeatedly asked staff why she was not being given the multivitamins she had been prescribed, and was told that her

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blood results were being checked and that she was fine. Capital and Coast DHB stated that Ms B never advised its staff that she had been prescribed multivitamins. There is no documentation in the clinical records regarding this. Listening to patients is fundamental to effective care, and I would certainly be concerned if, as Ms B states, she repeatedly asked about multivitamins and was not listened to.

150. The records show that between 26 March (when Dr C prescribed the multivitamins) and 1 June, Ms B was readmitted to the public hospital six times, and she was in hospital for approximately six of the nine weeks. Multivitamins were never listed as a current medication on admission, or prescribed during admission. Multivitamins were not listed as a current medication in any ambulance records.

151. Capital and Coast DHB stated that despite Ms B having been commenced on multivitamins by Dr C at her six-week review, "she did not at any stage volunteer this information to any of the medical, nursing staff, Dietitians or indeed to the ward pharmacist during any of her admissions". Ms B said that during this period she did not take multivitamins while she was at home, was never given them with her discharge medications and that, in any event, she was only ever at home temporarily.

152. Irrespective of whether Ms A and/or Ms B specifically asked staff about the multivitamins, I am concerned that staff did not know that Ms B required multivitamins. I agree with Dr Rahman when states that he "would have expected the consultants to be aware that patients who have had bariatric surgery usually require multivitamin therapy postoperatively".

153. Dr J and Dr K state that they were aware of the possibility of Vitamin B_{12}, iron and folic acid deficiency following bariatric surgery, as these are common and are usually tested for three to six months after surgery. They note that Ms B was tested with respect to these. However, they were not aware of micronutrient deficiency, and the importance of multivitamins following bariatric surgery with regard to micronutrient deficiency.

154. It appears that Ms I was aware that patients who have had bariatric surgery require multivitamins, as she noted on 16 March 2009 that Ms B was not yet on a supplement. Ms I also noted in her review of the dietetic service provided to Ms B that dietitians are aware that micronutrient intake is compromised in patients who have had bariatric surgery.

155. On 22 May 2009, Ms N queried in the notes whether Ms B should be taking a multivitamin supplement. This was after an education session on the postoperative care of gastric bypass patients with RN G the previous day. Capital and Coast DHB has acknowledged that Ms N's entry was not picked up by nursing or medical staff. This is concerning; clinical notes are not only a record of the care and treatment that has been provided, but a vital communication tool between staff. The failure of clinicians to read patients' notes is an issue that all too frequently comes to my attention.

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156. Ms I noted in her review that the dietitians rely on the written word as their main communication tool. However, it is also critical that when there are issues of particular importance, staff take appropriate steps to ensure relevant colleagues are aware of those issues.

157. It appears that in this case, the importance of multivitamins for Ms B and the risk of micronutrient deficiency were not sufficiently recognised, particularly in light of her ongoing nausea and vomiting. The need for Ms B to be taking multivitamins should have been identified and acted upon. The specific risk of thiamine deficiency, albeit rare, was not sufficiently appreciated, and opportunities to communicate the need for Ms B to be taking multivitamins were missed. There was, understandably, a focus on trying to identify the cause of Ms B's ongoing symptoms. There was a need to involve clinicians from a number of teams and disciplines in Ms B's care and treatment. In such circumstances, the need for effective co-ordination, communication and oversight becomes all the more important, but also all the more challenging.

158. I note the steps that have been taken subsequently by Capital and Coast DHB to increase staff awareness of the need for vitamin supplementation among patients who have had bariatric surgery, and that this is now actively recommended by dietitians.

Conclusion

159. I consider that the care Ms B received at the public hospital was suboptimal in a number of respects. Ms B was not asked whether she was taking multivitamins, and was not prescribed them during her admissions to the public hospital until her thiamine deficiency was diagnosed. Furthermore, in the context of Ms B's ongoing nausea and vomiting, her nutritional status was not adequately assessed. In my opinion, Capital and Coast DHB failed to provide services to Ms B with reasonable care and skill and, accordingly, breached Right 4(1) of the Code.

Adverse comment — Documentation of communication between Dr C and the public hospital

160. Dr C said that he had a close working relationship with Dr K and Dr J during the relevant period. He noted that they are both very familiar with the particular form of gastric bypass he undertakes, and were aware of his thoughts that Ms B's problems might have related to stones in her bile duct. Dr C considers that there was "good and adequate communication between the key players, being myself, Dr J and Dr K, the level of which may not be apparent by examination of written notes".

161. Capital and Coast DHB stated that there were "numerous" conversations between its surgeons, Dr J and Dr K, and Dr C and his team, both formally and informally, from 27 March until 31 May 2009. However, Ms B's hospital records contain only one documented entry of such a conversation, which refers to the possibility of a common bile duct stone. I note, for example, Capital and Coast DHB's assertion that there was a formal discussion on the surgical ward between Dr C, Dr L, Dr K and Dr J prior to the initial ERCP on 28 April 2009. However, there is no record of this in Ms B's hospital notes.

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162. Overall, I consider that the recording of the conversations between the public hospital clinicians and Dr C could have been better.

Adverse comment — Psychiatric medications

163. Dr Rahman also considers that insufficient attention was given to the possible consequences of Ms B's symptoms of nausea, vomiting, and abdominal pain in terms of her ability to tolerate or absorb adequate amounts of medications taken orally, including her psychiatric medications.

164. On 6 April 2009, RN G noted that Ms B had told her that she was continuing to take her psychiatric medications. However, a fortnight later Ms B told Dr M that she had stopped taking her psychiatric medications five weeks earlier. It is not clear whether Ms B had stopped completely, as medication administration records show that while she was in hospital, she sometimes refused and sometimes accepted prescribed medications. It is also not clear whether Ms B discussed discontinuing her medications with Dr F and, if so, when. Records indicate that the public hospital staff attempted to contact Dr F, but were not able to do so before he closed his practice.

165. However, Ms B presented at the public hospital six times between 20 March and 18 April, with vomiting as a presenting symptom on each occasion. Even if it were reasonable for staff to believe that Ms B was taking her psychiatric medications during that period (unless explicitly refused), it appears that greater consideration should have been given to the possibility that she may not have been absorbing therapeutic amounts of those medications.

166. The progress notes indicate that once Ms B was restarted on psychiatric medications after 20 April, her ability to tolerate them was reviewed several times. Changes were made in an effort to improve the likelihood of her tolerating the sodium valproate (ie, by prescribing smaller tablets and the syrup form) and, on one occasion, it was administered intravenously.

167. In my view, closer attention should have been paid to whether Ms B's presenting symptoms were impacting adversely on the efficacy of her psychiatric medications.

Adverse comment — Diagnosis of thiamine deficiency

168. Capital and Coast DHB stated that Ms B's case was complex, and noted that thiamine deficiency is rare and difficult to diagnose.[32] It advised that there was a continued effort to diagnose the cause of Ms B's symptoms, and stated: "Her symptoms were not considered unimportant and all possible causes for her symptoms were appropriately investigated." Capital and Coast DHB stated that it considers Ms B's thiamine deficiency was a consequence, rather than a cause of her symptoms (pain, nausea and vomiting), and that psychiatric and behavioural issues were contributing factors.

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[32] Capital & Coast DHB referred to reports of thiamine and vitamin deficiencies in the literature, which indicate Vitamin B_{12} or thiamine deficiency in 2–3 per 10,000 cases, or 0.02–0.03%.

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169. Capital and Coast DHB outlined the efforts made to investigate the causes of Ms B's symptoms, with a range of investigations and the involvement of staff from a number of services. It stated that there was "a multipronged approach between different departments and specialties".

170. Dr Rahman stated that while primary thiamine deficiency is rare and difficult to diagnose, it is not a rare condition in bariatric bypass surgery. He advised:

> "A healthy individual who is deprived of thiamine will become deficient in a month's time. The features of deficiency are quite varied because of the multi-organ involvement. Initial features are nausea, vomiting, back ache or abdominal pain. As deficiency progresses the nervous system and heart are involved."

171. I accept that the clinicians at the public hospital attempted to find the cause of Ms B's ongoing symptoms. However, I am left with the impression that Ms B was perceived as a non-compliant patient, and there was a lack of awareness of the extent to which this apparent non-compliance may have been contributed to by her erratic dosage of psychiatric medication. In addition, her mental state may have been affected by her thiamine deficiency. Furthermore, I am aware that Dr C asserted that Ms B's symptoms were not related to the surgery he had performed. All of these factors appear to have contributed to the clinicians at the public hospital focusing on causes for Ms B's symptoms other than a vitamin deficiency. However, despite these factors I am concerned that Dr J and Dr K, who are both experienced in bariatric surgery, were not aware of the possibility (albeit rare) of thiamine deficiency.

Recommendations

172. I recommend that Dr C:

- apologise to Ms B for his breach of the Code. The letter is to be sent to HDC by **31 July 2013** for forwarding to Ms B;
- review his practice with regard to the assessment of patients prior to bariatric surgery;
- review his practice with regard to the need to seek information from other clinicians regarding his patients' psychological suitability for surgery;
- review his reporting letters to ensure they contain all relevant information; and
- report to HDC by **31 July 2013** on the outcome of the reviews and any changes to his practice following the reviews.

173. Following receipt of my provisional opinion, Capital and Coast DHB apologised to Ms B for its breach of the Code and provided the following information in response to recommendations in the provisional opinion:

- a copy of the referral criteria for input from the dietetic service;

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- a copy of its guideline for the "Nutritional Management of Adult In-patients at-risk of Re-feeding Syndrome", a draft guideline for the management of adult inpatients at risk of re-feeding syndrome, and a draft guideline for the nutritional management of sleeve gastrectomy patients;
- a copy of the protocol developed by the dietitians to assist in ensuring that bariatric patients have a micronutrient assessment and supplementation;
- training material used to ensure nursing and medical staff are fully aware of the risk of micronutrient deficiency among patients who have had bariatric surgery; and
- confirmation that dietitians now take appropriate steps to communicate significant issues to medical staff in a timely manner.

174. I also recommend that Capital and Coast DHB:

- advise the actions it has taken to ensure correspondence received from external health care professionals is reviewed by relevant clinicians in a timely fashion, and report back to HDC by **31 July 2013**; and
- audit compliance with the guidelines and protocols developed since and/or in response to this complaint; and report the results of the audit to HDC by **31 December 2013**.

Follow-up actions

- A copy of this report with details identifying the parties removed, except the experts who advised on this case and Capital and Coast DHB, will be sent to the Medical Council of New Zealand, and it will be advised of Dr C's name.

- A copy of this report with details identifying the parties removed, except the experts who advised on this case and Capital and Coast DHB, will be sent to the Royal Australasian College of Surgeons, and it will be advised of Dr C's name.

- A copy of this report with details identifying the parties removed, except the experts who advised on this case and Capital and Coast DHB, will be sent to the Obesity Surgical Society of Australia and New Zealand and the New Zealand Private Surgical Hospitals Association, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

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Appendix A — Independent surgical advice to the Commissioner — Dr Rahman

The following expert advice was obtained from surgeon Dr Habibur Rahman:

"Thank you for asking me to provide advice on a complaint received by the Health & Disability Commissioner regarding the care and treatment of:

[Ms B]
[Address]
[Date of Birth]
NHI: [Number]

At [the public hospital] from March 2009 to August 2009.

My name is Habibur Rahman and I am a fellow of the Royal Australasian College of Surgeons since December 2000 and have had post fellowship training in Bariatric Surgery in 2006. I am vocationally registered with the Medical Council of New Zealand in General Surgery and I am a member of the Obesity Surgical Society of Australia and New Zealand as well as a member of the International Federation for the Surgery for Obesity and Metabolic disorders. I am also a Preceptor for new Bariatric Surgeons in Auckland and currently a full-time Consultant at Counties Manukau District Health Board in General surgery, Bariatric and Endocrine surgery. At the same institute on the Nutritional team for parenteral nutrition advice. I have been an independent advisor to Accident Compensation Corporation since 2003 and have been an Intern Supervisor at Counties Manukau District Health Board for Medical Council of New Zealand for the last ten years. I have also been an Examiner in surgery for the Medical Council of New Zealand Registration Exams for overseas doctors.

Conflict of Interest
I do not know the Surgeons or the patient and have no conflict of interest.

Materials read
(1) I have read through the notes supplied to me by the Health & Disability Commissioner which include notes from Capital and Coast District Health Board.
(2) Notes from the Accident & Emergency Centres
(3) Notes from [the private hospital]
(4) Notes from Specialist Neurologist, [Dr Q]

References that I have read in regard to the assessment include:
1. Journal of Obesity Surgery, No 20 Vol 8
2. Bariatric Times — with a topic of Internal Hernias after laparoscopic gastric bypass surgery review of literature, April 2007
3. AM. Surgery 2002 July on Internal herniation
4. Journal of Roentgenology 2007, Vol 188 Page numbers 745 to 750
5. Up to date [website: http://www.uptodate.com]

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Background and Summary

[Ms B] has been an obese lady who went to [the private hospital] for assessment and consideration of weight loss surgery in December 2008. At the time of initial assessment she was noted to be morbidly obese and had a background history of bipolar mental disorder on treatment. It was noted that her mental disorder was well controlled. She had been known to have polycystic ovarian syndrome and hyperlipidaemia and her medications at the time of assessment included, Risperidone 1 mg daily, Epilim 500 mg daily, Paroxetine 40 mg daily, Clonazepam 2 mg daily and Zopiclone 1 at night. After her initial assessment and advice with the risks of the operation explained she went on to have an open roux-en-y gastric bypass surgery plus open cholecystectomy and portal vein cannulation for portal vein sampling for research purposes. Her initial operation was described as uneventful except the cholecystectomy part was technically difficult and her postoperative period was unremarkable as well. She had the initial surgery on 10 February 2009 and was discharged from [the private hospital] on the 16th February 2009. She was coping well with her postoperative care until the 9th March 2009. Some four weeks after her surgery she presented to her GP, Dr E, with nausea, vomiting and abdominal pain associated with dysuria. The GP made a diagnosis of urinary tract infection and prescribed antibiotics consisting of nitrofurantoin. A urine sample at the time, before the commencement of antibiotics, showed mixed flora of urine possibly on the basis of contamination. She took the antibiotics and over the next 24 hours felt no better, she then represented to an Accident & Emergency Centre on the 11 March 2009 with similar features. She was noted to have normal mid-stream urine with all her observations normal, other than a temperature of 35.5°C. Her antibiotic was changed from Nitrofurantoin and she again noted no improvement in her condition.

I am not aware of the treatments prescribed at that point but two days later she was admitted to Capital and Coast District Health Board, [the public hospital] with a four day history of abdominal pain, nausea and vomiting on the 13th March 2009. She described the pain as in her paraumbilical area and in the right flank which came in waves and also got worse on movement. At the time her observations were normal and she was noted to have tenderness in the right upper quadrant. All other examination findings were normal, including a repeat mid-stream specimen of urine. There was no growth on the culture of the urine from the earlier specimens that were taken at the GP. A diagnosis of pyelonephritis was made despite negative urine sample. On this occasion her blood test showed a C-reactive protein of less than 4 and white count of 10.6.

On her admission she had an abdominal x-ray which showed a dilated loop of small bowel measuring up to 5cm. The patient explained to the medical staff the next day that she had not been taking her Epilim and her medications as she was very nauseous and had vomited two to three times during the day.

She could not tolerate any oral intake as well. Her nausea persisted for the entire admission with her abdominal pain. No cause was found and the patient kept

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telling the medical staff of her inability to drink because of her nausea. She was discharged on 18th March 2009 with a diagnosis of pyelonephritis. She represented to the Emergency Department on 20th March 2009, with similar features and had an abdominal CT scan on the 21st March 2009.

The CT scan finding showed anterior fat stranding of her bowel mesentery and some free fluids in her peritoneal cavity. She was discharged from hospital and then represented to [the public hospital] on 27th March 2009 with the same symptoms as before but this time with vomiting one to two times per day for the last two weeks. She also complained of hot and cold episodes. She was assessed and prescribed IV fluids and pain relief and had an abdominal ultrasound which was reported as normal. She had an upper GI endoscopy which showed normal oesophagus and normal stomach. She was then referred to the Pain Team for what was labelled as Chronic Pain syndrome. She was seen by the Pain Team who made some changes to her pain management but the nausea and abdominal pain persisted. Her symptoms continued with constant nausea, vomiting and inability to tolerate any oral intake.

On 4th April 2009, she felt slightly better and was discharged. She presented to the Emergency Department on 7th April 2009 three days later with similar episode. On 9th April 2009 she was readmitted with abdominal pain, nausea and vomiting and had observation in the Emergency Department for two days. She then discharged herself.

[Ms B] was readmitted on 18th April 2009 with the same symptoms of nausea, abdominal pain and vomiting and inability to tolerate any oral intake including oral medications. She felt depressed with some suicidal feelings. She was seen by the Consultant Surgeon, [Dr J] and requested an MRCP. No assessment at this point was made of her nutritional status or her oral intake or nutritional supplementation. The MRCP was done on 24th April 2009 and this suggested the possibility of a small stone in the common bile duct. She was also assessed by the Psychiatric Team and a diagnosis of bipolar disorder was confirmed with some suicidal ideas. [Ms B] felt that she was very weak and tired and wanted to go home and she was sick of being in hospital and nothing was happening. When she was told that she had stones in the common bile duct, she felt happy and relieved to know that there was a cause for her symptoms.

On the 28th April 2009 she had an unsuccessful ERCP. At this time her liver function test showed a hepatitic picture and not an obstructive one. She was discharged on 30th April 2009 to have an ERCP under general anaesthetic and percutaneous transhepatic cholangiography in a week's time.

[Ms B] however was readmitted on 5th May 2009 with ongoing abdominal pain, vomiting and inability to tolerate oral intake. Unfortunately there was nothing done about her nausea and vomiting and on the 6 May 2009, she had an ERCP and a PTC under general anaesthetic. This showed a normal result with no stones or filling defects.

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Postoperatively she developed fast atrial fibrillation which was to be investigated as an Outpatient. The day after her ERCP on 7th May 2009, she was assessed by [Dr K], Consultant Surgeon and he had given her the result of the findings and said that she could be discharged home with oral intake.

[Ms B] had indicated to the nurses at this point, that she still felt very nauseous and was not able to tolerate anything by mouth and the abdominal pain on the right side was still present. [Ms B] was also concerned and indicated to the nurses that she had not eaten for more than three weeks. She was discharged from hospital.

On 18th May 2009 [Ms B] was readmitted to [the public hospital] with abdominal pain, nausea and vomiting. She was assessed and admitted for observation and pain relief. On 26th May 2009 she complained of blurred vision and a CT scan was suggested but this was declined. On 29th May 2009 [Ms B] complained to her mother that she had difficulty seeing her and this was relayed to the Nursing Staff by her mother. On 31st May 2009, Ophthalmology referral and assessment found her to have bilateral reduced visual acuity with peripheral oedema and swelling. She had bilateral disc pallor with left dystrophia and vertical jerking nystagmus.

On the 1st June 2009 she was seen by a Neurologist, [Dr Q] and a diagnosis of acute thiamine deficiency was made with Wernickes type encephalopathy. She had muscle weakness and could not get out of bed at the time.

She has now had a final assessment in Neurology on 22nd April 2010. This has indicated that she will have permanent blindness in both eyes with peripheral neuropathy affecting most of all muscle strength peripherally. [Ms B] now has limited mobility with the aid of a walker and needs constant guidance for daily activities. She has very poor vision and has oscillopsia with memory loss. These are now regarded as permanent damage.

My assessment of [Ms B's] treatment:
Having read through the medical records and having made an assessment, I have noticed deficiencies in the care of [Ms B]. [Ms B] possibly has been a difficult patient because of her sometimes not listening to the Medical Staff's advice and self discharging herself on one occasion. The areas of concern that I found after having read through all the medical records are:

(1) Lack of anticipation of potential risks and complications of Gastric Bypass surgery
[Ms B] is a high risk patient with morbid obesity and mental disorder consisting of bipolar disorder and had undergone a major operation consisting of roux-en-y gastric bypass, a difficult open cholecystectomy and intraoperative cannulation of her portal vein for portal blood sampling for research purposes.

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Having had these three major operations, as a single event I find that there was very little anticipation from the Care-giving Team at [the public hospital], of the potential complications from [Ms B's] operations including:

(1) Internal hernias
(2) Volvulus of her neoanatomy
(3) Risk of small bowel intussusception
(4) Portal vein thrombosis secondary to intraoperative cannulation
(5) Bowel obstruction
(6) Stenosis at the anastomotic points.

This comment is made on the basis of the assessment [Ms B] had during her first few admissions, the tests that were ordered and treatment prescribed. None of the above potential complications were anticipated in light of the findings of dilated loop of small bowel of up to 5cm and a CT scan which showed anterior fat stranding in her abdomen with free fluid and the significance was not anticipated. [Ms B] in this regard should have had a close discussion between the Primary Surgeon [Dr C] and the Surgeons at [the public hospital]. These complications are quite high risk and may cause death, debilitating complications requiring months in hospital and multiple operations. This was not anticipated during her first few admissions.

(2) Misdiagnosis
[Ms B] initially presented to her GP with abdominal pain, dysuria, vomiting and nausea and a diagnosis of pyelonephritis was made. With these symptoms, a provisional diagnosis of pyelonephritis is likely but subsequently a negative urine culture test should have alerted the caring doctors of this diagnosis to be wrong. Unfortunately she had three admissions with the same diagnosis with multiple antibiotic therapy changed and no other causes of her symptoms identified. At the initial admissions, [Ms B] was not assessed by Senior Consultants and no discussion was made with anyone suggesting other diagnoses in the absence of a positive urine culture.

(3) Lack of detailed assessment
The fact that [Ms B] had been well for three weeks after her operation was not taken into account and the sudden onset of severe abdominal pain three weeks after the operation, in my opinion, is quite significant. The details of the pain were established but were not acted upon, as the pain was described to be colicky in nature which came in waves and was centred around her abdomen and was going through to her back. The pain was also made worse with oral intake. This was made worse with movements. These features of her symptoms are important as they are suggestive of complete or partial obstruction of her gastrointestinal tract. Together with the initial x-ray showing small bowel loops of up to 5 cm at the time in my opinion, is quite significant.

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(4) Lack of knowledge of examining a morbidly obese abdomen
All the admitting House Surgeons and Registrars at [the public hospital] had indicated that clinical examination of her abdomen was unremarkable. In somebody with a weight of 158 kg, clinical examination of the abdomen is of no value as the signs elicited in an obese abdomen of this nature yields very little findings. To the examining clinician the abdomen will always feel soft and tenderness will only be elicited on very deep forceful palpation. I do not think that this was at all in any way anticipated by the examination staff of her first few initial admissions.

(5) Lack of ownership by the caring Consultants
From the records, the assessment of [Ms B], during her first few admissions was not discussed in detail with the caring Consultant. The assessment was quite superficial by junior staff and anticipation of other diagnosis to the cause of abdominal pain; nausea and vomiting were not anticipated. The assessment by the Consultants showed no detailed findings and the differential diagnosis and possible Action Plan and Treatment Plan, were not outlined. This was left to the Junior Medical Staff to fix her pyelonephritis, to sort out her common duct stones and no other diagnoses were anticipated. There was lack of regard for her symptoms and inability to pay attention to her symptoms of pain, vomiting and nausea.

She has had several admissions and each time she had nausea, vomiting and pain, and this was regarded as not important. [Ms B] had indicated that she was not able to have any oral intake and was not able to keep her medications down and was missing on some of the important medications including her mental medications. There were no attempts made to change her medications to either liquid form or intravenous form to make it easier for [Ms B] to take this. With lack of medications and lack of sleep and being in pain, this compounded her general wellbeing and she became quite drowsy and disinterested and very tired. Her bipolar disorder made it easy for doctors to relate her symptoms to being psychosomatic. [Ms B] needed a Senior Clinician in consultation with the primary Surgeon to have a Treatment Care Plan which, in my opinion is lacking from the records.

(6) Lack of nutritional care and knowledge
[Ms B] had ongoing pain, nausea and vomiting for up to three months. This was day in and day out and her complaints had not been addressed even though in the notes it was noted that she had inability to tolerate oral intake. At no stage during all her admissions until the end of May 2009, was any assessment of her nutritional status in light of her inability to tolerate anything orally. There was lack of understanding of her nutritional requirements at Macro and Micro levels both. There has been no discussion at any point of her needing to go on total parenteral nutrition while her condition was being assessed and investigated. This was also compounded by the lack of anticipation of potential nutritional complications following gastric bypass procedures.

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(7) Lack of communication
During her initial admission [Ms B] had an abdominal x-ray and a CT scan of her abdomen which showed findings of a dilated small bowel and stranding of the fat in her abdomen as well as free fluid which, in my opinion is significant. This indicates either partial or complete bowel obstruction which fits very well with her symptoms. This finding was not discussed at any point, either with the Radiologist and its significance discussed at a senior level especially with the Primary Surgeon. These findings should have prompted the Clinicians towards consideration of a relook laparotomy to avoid ongoing nausea, vomiting and abdominal pain, to exclude complications of gastric bypass surgery.

Furthermore in regard to lack of communication, there was no written document from [the private hospital] to [the public hospital] as to the detailed procedure that was carried out. There was lacking information in regards to the cannulation of portal vein during the procedure. This is significant especially in the presence of a difficult gallbladder which I presume was an inflamed gallbladder or previous inflammation and this may precipitate portal vein thrombosis. The features of thrombosis may give [Ms B's] symptoms and the abnormal liver function tests similar to [Ms B's]. There was only one documented communication between [Dr C] and [Dr J] in relation to the common bile duct and that she needed to have a MRCP. There was lack of documentation and communication between the Radiologist and the caring Clinicians, in regard to the discussions of CT findings.

The anterior mesenteric stranding with free fluid in the peritoneal cavity as well dilated segment of small bowel on the plain abdominal x-ray is quite significant. At no point was her nutritional status discussed or communicated amongst any of the caring consultants as well as the Primary Surgeon, [Dr C].

In my opinion, [Ms B] needed a more detailed assessment of her initial presentation and a high index of suspicion of complication of bariatric surgery. With this high index of suspicion, she needed to have senior clinical input in discussion with the primary bariatric surgeon. The diagnosis of pyelonephritis was misleading and no one had bothered to change the diagnosis or check the urinary results. Her symptoms of nausea, vomiting and pain continued for more than three months and were not taken seriously. There was gross lack of anticipation of nutritional requirement of a patient who was in hospital for this long, without any oral intake. There was lack of anticipation of nutritional requirements of a patient who had undergone gastric bypass procedure. There was a long delay between a diagnosis of common duct stone in March 2009 and an investigation of choice of ERCP made in May 2009. The diagnosis of common duct stone was made in light of a liver function test which was suggestive of a non-obstructive picture. In my opinion, this was also misleading and a more thorough and closer assessment of this should have been done by Senior Clinicians. [Dr C] should have been informed of [Ms B's] first symptoms and there was lack of communication in anticipation of the findings on CT and x-ray.

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In my opinion, [Ms B] may have benefited from an early intervention and possibly a relook laparotomy to exclude any complications of bariatric surgery which would have accounted for her symptoms. Early anticipation and treatment of her nutritional requirement would have saved this catastrophic outcome.

I give this opinion from the Medical Records that have been forwarded to me and to the best of my knowledge. I will be happy to furnish further information in this regard should this be required.

Kind regards

Habibur Rahman
General Surgeon"

Further expert advice

"29 August 2011

Thank you for asking me to reassess my preliminary advice in light of the responses from [Dr C] and Capital and Coast District Health Board in regards to the initial complaint to the Health & Disability Commissioner.

The changes I would like to make to my preliminary report are in regards to:

1. Dilated loop of bowel on the plain x-ray of 13 March 2009 and the CT scan findings of 21 March 2009

On the basis of the final reports, I agree that it was reasonable to exclude a bowel obstruction as the likely cause of [Ms B's] symptoms.

2. Lack of anticipation of complications from gastric bypass procedure

In my preliminary report I had included the risks in relation to the procedure including internal herniation, volvulus, stricture formation as well as nutritional complications and psychological issues. The mechanical risks were excluded by the findings of abdominal x-ray and CT scan on her first and second admission. The nutritional assessment and requirements were overlooked in this case from the 13th March 2009 right through to 26th May 2009, until she developed visual disturbances. The need for nutritional supplementation following open gastric bypass procedure was never anticipated throughout the seven admissions during this period.

[Ms B] had very poor oral intake resulting in malnutrition, vitamin deficiency and sub therapeutic levels of psychiatric medication resulting in apathy, loss of motivation, lack of comprehension and compliance.

3. Lack of communication

Responses from [Dr C] and Capital and Coast District Health Board, have said that there were numerous communications between [Dr C] and [Dr J]. In the records there is only one documented entry of a discussion between [Dr C] and [Dr J] regarding the

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possibility of a common bile duct stone. [Dr C] wrote in the [public hospital] notes only after the catastrophic result of blindness was realised.

In the nursing notes of every admission at almost every shift there are entries made of poor oral intake, nausea and vomiting with abdominal pain. At no point in those entries were there mention of [Ms B's] nutritional status and the effect of poor oral intake may have long term. During her assessment by the Dietitian, entries were made in the records in regards to her multivitamins and supplementation. It is not clear whether this was communicated to the medical staff, or the medical staff actually saw this entry and did not act upon it. This is supported by the response from the Dietetics saying that they were not sure whether this entry was communicated to the medical staff and or whether the medical staff noticed this.

[Ms B] showed early signs of Thiamine deficiency three weeks after her gastric bypass surgery. These signs were nausea, vomiting and abdominal pain. These are non specific but are signs in early Thiamine deficiency. Failure to recognise and treat this resulted in permanent neurological damage, and also led to the loss of control of her psychiatric illness. There was reluctance to take her medications (**no pills for five weeks see psychiatric assessment while inpatient**) because of constant and debilitating nausea, vomiting and abdominal pain. If she took her medications on some occasions she would vomit it out. The net result of omitted dosage and vomited dosage of psychiatric medications was low blood levels or subtherapeutic levels. Non therapeutic levels of medications led to loss of control of her psychiatric illness, resulting in apathy, loss of motivation, lack of comprehension and compliance. This made managing her, difficult and frustrating.

Comments on responses to Capital and Coast District Health Board

[The DHB has] replied that thiamine deficiency is a rare and difficult diagnosis. This is true in cases of primary thiamine deficiency. In Bariatric Bypass surgery this is not a rare condition and this is why every bariatric procedure advocates multivitamin therapy with iron therapy and trace elements in some cases.

Of note I have gone through every drug entry in the documents forwarded to me during the period from 13th March 2009 to the 26th May 2009. All of [Ms B's] psychiatric medications were charted orally, all the caregivers including the psych team had failed to anticipate that this patient was nauseous on most days and vomited almost every day (see nursing notes) and may not tolerate or absorb adequate amounts of orally taken medications to give a desired blood level to control her psychiatric illness.

Also of note during this period of admission was the lack of multivits charted in any of her drug charts. This was a very important omission and [Dr C] had indicated in his clinic letter that she would need this for the rest of her life. In fact there was no record that [Ms B] ever had taken multivitamins from the time of her operation. She became sick three weeks after her operation and could not tolerate anything orally. This important aspect of her care of vitamin therapy was overlooked by everyone including [Dr C]. The cause of constant nausea with abdominal pain and vomiting was early

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thiamine deficiency. We have had four reported cases in our institution in the last twelve months presenting in similar manner. All had early thiamine deficiency and all responded well to thiamine therapy and the symptoms resolved very quickly with no long term consequences. With her prolonged nausea, vomiting and abdominal pain it is now obvious that [Ms B] was not taking her psychiatric medications on a regular basis. This then made [Ms B's] psychiatric illness, lose control and then she became difficult to manage.

Thiamine or Vitamin B1 is one of the B group of vitamins and is a core enzyme in carbohydrate metabolism. It is used through decarboxylation of alpha-keto acids. It also takes part in the formation of glucose by acting as a core enzyme for the transketolase in the pentose monophosphate pathway. Deficiency occurs when there is reduced intake or overuse. Thiamine is a water soluble vitamin and therefore cannot have stores in the body. Daily absorption of about 5 mg occurs in the jejunum. The body reserves about 30 mg. The half life of thiamine is in the range of 9–18 days. The body cannot produce thiamine and therefore relies on oral intake.

A healthy individual who is deprived of thiamine will become deficient in a month's time. The features of deficiency are quite varied because of the multi organ involvement. Initial features are nausea, vomiting, back ache or abdominal pain. As deficiency progresses the nervous system and heart are involved. Once the nervous system is involved the damage is permanent and recovery is very minimal.

On the response regarding [Ms B] refusing to have a CT scan of her head and ophthalmology review, on 25th May 2009.

The CT scan of the head would have been of no value in diagnosis of this condition but the ophthalmology review may have helped. At this point [Ms B] had already developed blurry vision and this was at quite a late stage and therapy at that point may not have made any difference.

4. In response to high risk patients from [Dr C]

In my preliminary report I said [Ms B] was a high risk patient and that is backed by the following responses.

1. [Ms B] was a high risk patient with the diagnosis of epilepsy in 1998, bipolar affective disorder in 2008.
2. On multiple drug therapy
3. … [33]
4. She then underwent an open gastric bypass procedure at a weight of 172 kg. This puts [Ms B] six to twelve fold higher risk of complications compared to a non-obese patient undergoing the same operation. She was also at a higher risk of complications of her psychiatric disorder following surgery compared to a non-psychiatric patient. She is at a higher risk of developing nutritional complications because of her altered anatomy and physiology. [Ms B] developed thiamine deficiency early in postoperative phase, which is not uncommon. Some obese

[33] This section has been redacted as it is not relevant to the opinion.

HDC

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patients would be borderline or even deficient in vitamins especially Vitamin D and Vitamin B1 at the time of surgery.

Advice on adequacy of [Dr C's] assessment of [Ms B's] suitability for gastric bypass procedure

1. [Ms B] was diagnosed with epilepsy in 1998 and at age ten she had blackouts and was then started on Epilim. She was diagnosed with bipolar affective disorder in 2008 and she needed multiple medications to control her symptoms.
2. . …[34]
3. Preop assessment assumed her to be stable. Her initial assessment before surgery had a weight of 152 kg and at time of surgery two months later it was at 172 kg. A 20 kg weight gain indicates poor motivation, poor compliance, poor comprehension and reluctance to change lifestyle.
4. [Ms B] was assessed by another Bariatric Surgeon, [Dr O] who had turned her down for a laparoscopic gastric band. There could be multiple reasons for turning her down but one would assume that a band requires more lifestyle change and commitment with motivation and therefore she may have been turned down on that ground but I am not 100% sure why she was turned down.
5. In hindsight postoperatively her psychiatric assessment certainly indicated that she had a return of bipolar affective disorder with suicidal ideations. There was also the diagnosis of fictitious eating disorder and also a trait of personality disorder. She became non compliant after surgery.

All the above points indicate a high risk psychiatric patient who needed further psychiatric assessment prior to her surgery. If she was deemed suitable for surgery after psychiatric assessment, she should have had perioperative and postoperative psychological support.

In regards to aspects of care provided by Capital and Coast District Health Board and [Dr C]

It is clear that [Ms B] had developed this catastrophic effect of thiamine deficiency following gastric bypass procedure. She presented initially with early signs of thiamine deficiency and had seven admissions to Capital and Coast District Health Board with abdominal pain, nausea, vomiting and reduced oral intake.

Severity of departures from acceptable practice in relation to Capital and Coast DHB

- [The public hospital] did not institute multivitamin therapy postoperatively, or take sufficient account of the fact that [Ms B] was unlikely to be getting therapeutic doses of her psychiatric medications. This represented a moderate departure from expected standards.
- There was a failure to adequately assess [Ms B's] nutritional status postoperatively. This was also a moderate departure from expected standards.
- The delay that occurred before the ERCP was performed represented a mild departure from expected standards.

[34] This section has been redacted as it is not relevant to the opinion.

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In the general scheme of things, this may seem quite a trivial omission of care, but the effect has been catastrophic. [Dr C] with his vast experience of gastric bypass surgery should have communicated to his counterparts at Capital and Coast District Health Board about the importance of her vitamin therapy. She also needed to have nutritional assessment and support while investigations were being carried out for the cause of her abdominal pain and nausea and vomiting. This frustration on both sides was compounded by her relapse of her psychiatric problems, possibly on the basis of a low or sub therapeutic level of psychiatric drugs in her. These were all overlooked at every level and had severe catastrophic effects. This should be taken as severe disapproval.

I give this assessment and advice to the best of my knowledge and the information forwarded to me. I would be happy to furnish you with further advice should this be required.

Kind regards

Habibur Rahman
Consultant General Surgeon
(With interests in laparoscopic, endocrine & bariatric surgery)"

Further expert advice

"14 November 2011

Thank you for asking me to reassess my preliminary advice in light of the responses from [Dr C] and Capital and Coast District Health Board in regards to the initial complaint to the Health & Disability Commissioner.

The changes I would like to make to my preliminary report are in regards to:

1. Dilated loop of bowel on the plain x-ray of 13 March 2009 and the CT scan findings of 21 March 2009

On the basis of the final reports, I agree that it was reasonable to exclude a bowel obstruction as the likely cause of [Ms B's] symptoms.

2. Time that elapsed before ERCP was performed

The concern I noted in my original advice in relation to this stands. In the event that a CBD stone is suspected, I would expect an ERCP to be performed within a week for a symptomatic patient, and within two to three weeks in an asymptomatic patient.

3. The diagnosis of pyelonephritis

The concern noted in my original advice still stands:

[Ms B] initially presented with abdominal pain and dysuria, vomiting and nausea and the initial diagnosis was made of pyelonephritis and urinary tract infection. This was initially made without any positive urinary tests and subsequent admissions and

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assessments at the Medical Centres and at [the public hospital] all transferred her GPs notes and diagnosis to subsequent admissions. From the records that I have gone through, she had three urine cultures which were all negative for bacteria on cultures and the initial culture that she had at her GP showed a mixed flora which signifies contamination during collection. Unfortunately this diagnosis was transferred from one doctor, to another doctor, to another doctor and her diagnosis of pyelonephritis, in my opinion, was a misdiagnosis. There were no attempts made to look at other reasons for her nausea, vomiting and abdominal pain.

4. Lack of involvement by senior clinicians during initial admissions

My concern in this regard is the lack of decision-making by senior clinicians. On the basis of the response from Capital and Coast District Health Board it does appear that senior clinicians were more aware and involved in [Ms B's] case than is documented in the clinical records However, there appears to have been a lack of scrutiny by senior clinicians; their involvement was not decisive or proactive.

5. Commencing multivitamin therapy

Up to 50% of bariatric patients will be deficient in water-soluble vitamins. My practice is to commence multivitamin therapy pre-operatively, or on discharge following surgery. Although there may be some variations in practice in this regard, I would consider it advisable to start multivitamin therapy sooner than six weeks.

6. Awareness of clinicians at [the public hospital] that [Ms B] had been prescribed multivitamins

This should have been documented by [Dr C] in his letter to the GP, when he commenced [Ms B] on multivitamin therapy. I would expect the patient to provide this information to hospital staff on admission. I would also expect the consultants at [the public hospital] to be aware that patients who have had bariatric surgery usually require multivitamin therapy postoperatively. [Dr C] knew that [Ms B] was in [the public hospital]. It would have been prudent for him to have contacted the consultants whose care she was under to discuss the possible concerns, risks and outcomes, including the risks that might arise if not taking/getting therapeutic levels of psychiatric medications and multivitamins.

7. Severity of departures from acceptable practice in relation to [Dr C]

- Given [Ms B's] bipolar disorder, her suitability for surgery does not appear to have been adequately assessed pre-operatively. This represents a moderate departure from expected standards by [Dr C].
- [Dr C's] failure to communicate with [the public hospital] clinicians in relation to [Ms B's] psychiatric medication and multivitamin therapy represents a mild departure from expected standards.

8. Severity of departures from acceptable practice in relation to Capital and Coast District Health Board

- [The public hospital] did not institute multivitamin therapy postoperatively, or take sufficient account of the fact that [Ms B] was unlikely to be getting therapeutic doses of her psychiatric medications. This represented a moderate departure from expected standards.

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- There was a failure to adequately assess [Ms B's] nutritional status postoperatively. This was also a moderate departure from expected standards.
- The delay that occurred before the ERCP was performed represented a mild departure from expected standards.

I give this advice to the best of my knowledge from the information provided.

Yours sincerely

Habibur Rahman
Laparoscopic, Endocrine & General Surgeon"

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Appendix B — Independent surgical advice to the Commissioner — Dr Flint

The following expert advice was obtained from surgeon Dr Richard Flint:

"**HDC complaint 09/0132**

Complaint: **[Ms B]**
Reference: **09/01932**

I, Richard Flint, have been asked to provide an opinion to the Commissioner on the preoperative assessment and preoperative care of case number 09/01932. I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

Qualifications
1997 MBChB University of Auckland
2007 PhD University of Auckland
2007 Fellowship of the Royal Australasian College of Surgeons (General Surgery)

Training
2007 Harvard University Fellow in Laparoscopic and Bariatric Surgery, Brigham and Women's Hospital, Boston, MA, USA
2008 International Fellow in Surgical Oncology, Memorial Sloan Kettering Cancer Center, New York City NY, USA
2009 Consultant General Surgeon Christchurch Hospital
Head of Bariatric Surgery Program Christchurch Hospital
Lecturer in Surgery Christchurch School of Medicine
Director Southern Obesity Surgery

Referral Instructions from the Commissioner
To enable the Commissioner to determine, from the information available, whether there are concerns about the assessment and care provided by [Dr C] and [the Clinic] to [Ms B] during the preoperative assessment and preoperative care of her gastric bypass. In addition a request has been made to indicate the severity of the departure from care if an appropriate standard has not been provided. The Commissioner has requested that the assessment be focused on the following matters:

- The adequacy of [Ms B's] preoperative assessment
- [Dr C's] account of [Ms B's] suitability for surgery
- In what circumstances is a specialist psychological or psychiatric assessment required and/or advisable for patients considering gastric bypass surgery?
- Were there any specific factors to be considered when determining the need for a specialist psychological or psychiatric assessment?

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- The significance of [Ms B's] weight gain between 5 December 2008 and 9 February 2009
- Were there any specific factors to be considered when planning for her postoperative care?

Sources of information

[HDC investigator]

- Letter requesting advice from Dr Flint (with summary of case) 27.11.12

- [Dr C]
- Extract from response to initial complaint [date]
- [Dr E]
- Letter to [Dr O] 14.11.08
- Letter to [Dr C] 20.11.08
- [Dr D]
- Letter to [Dr E] 6.12.08
- [Dr H]
- Letter to [Dr E] 23.1.09
- [Dr C's medical secretary]
- Letter to [Ms B] 28.1.09
- [Practice manager, the Clinic]
- Letter to [Ms B] 2.2.09

Consent forms

- [The Clinic] 9.2.09
- [The private hospital] 9.2.09
- Research studies in to obesity and diabetes, [The Clinic] 9.2.09

Clinical notes

- Initial interview for gastric bypass surgery 5.12.08
- Nurse interview for gastric bypass surgery 15.1.09
- Second interview for gastric bypass surgery 23.1.09
- Health Questionnaire / Nursing Assessment Form 11.2.09
- Integrated Progress Notes [the private hospital] 9.2.09 to 11.2.09

Timeline of events

?.3.08	Diagnosed with bipolar affective disorder.
14.11.08	Referred to [Dr O] for consideration of gastric band.
20.11.08	Referred to [Dr C] for consideration of gastric bypass after [Dr O] contacted [Ms B] to advise against a gastric band in preference for a gastric bypass.
5.12.08	An initial interview for gastric bypass surgery with [Dr D] (Anaesthetic Fellow to [Dr C]). [Ms B's] mother (Ms A) accompanied her.
15.1.09	Nursing consultation ([RN G]). [Ms B's] mother ([Ms A]) accompanied her.

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23.1.09	A second interview for gastric bypass surgery with [Dr H] (Surgical Fellow to [Dr C]) and [Dr C]. [Ms B's] mother ([Ms A]) accompanied her.
9.2.09	Admitted to [the private hospital].
10.2.09	Operation — Fobi Pouch gastric bypass, cholecystectomy and portal vein cannulation by [Dr C].
16.2.09	Discharged home from [the private hospital].

My interpretation of the events

From the information made available to me it appears that [Ms B] sought bariatric surgery after she gained considerable weight (BMI 58 kg/m^2; weight 152kg) following treatment of bipolar affective disorder. [Dr C] performed an uneventful gastric bypass on 10.2.09 but she suffered undisclosed adverse events following surgery leading to this complaint.

From the information supplied to me I believe that the concerns raised around [Dr C] can be summarised as to whether extra attention should have been paid to [Ms B's] history of bipolar affective disorder. A review of the literature indicates that [Ms B's] situation is not unique as up to 70% of patients undergoing bariatric surgery have a history of a psychiatric illness.[1] The effect this has on the outcome of bariatric surgery is uncertain and there is no consensus as to whether patients should be denied surgery based on their mental health status.[2] Indeed there is evidence that weight loss improves psychiatric conditions[3,4] and I would assume that it is this type of evidence that [Dr C] alludes to when he claims that the "psychiatric status of the patient is often assisted by the … gastric bypass". What is of concern, however is the significant minority that are reported to have a negative psychological response postoperatively[5–7] and an alarming increase in the rate of suicide following bariatric surgery.[8] It is this minority that warrants over-treatment of the majority as the results of a negative psychological response can be catastrophic.

Unfortunately there is no effective preoperative tool that a surgeon can use to adequately identify those that are at risk of adverse psychological outcomes following bariatric surgery. Hence the NIH guidelines for appropriate preoperative assessment for bariatric surgery[9] recommends all patients be evaluated by a multidisciplinary team with access to psychiatric expert care. The American Society for Metabolic and Bariatric Surgery (ASMBS) takes this further and recommends all patients with a known psychiatric illness should undergo a formal mental health evaluation before surgery (Recommendation 43).[10]

With this in mind I will attempt to respond to the Commissioner's questions:

The adequacy of [Ms B's] preoperative assessment

[Ms B's] preoperative assessment did not include a formal psychiatric or psychological assessment. This is contrary to NIH[9] and ASMBS[10] guidelines. Furthermore there was no contact with [Ms B's] psychiatrist to develop an

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independent assessment of her psychiatric status. Therefore I do not believe [Ms B's] preoperative assessment was adequate and [Dr C] has strayed from standard practice in this regard.

[Dr C's] account of [Ms B's] suitability for surgery
[Ms B] was suitable for surgery when considering her weight alone. Accepted practice is that patients with a BMI greater than 40 kg/m^2 are candidates for surgery as long as there are no medical co-morbidities that would render surgery too risky.[9–11] With the benefit of hindsight his evaluation of her psychiatric status was inadequate and she was later found to have been unsuitable for surgery from that viewpoint.

In what circumstances is a specialist psychological or psychiatric assessment required and / or advisable for patients considering gastric bypass surgery?
As referred to above, international guidelines recommend that a psychological or psychiatric assessment should be performed on all patients requesting bariatric surgery.

Were there any specific factors to be considered when determining the need for a specialist psychological or psychiatric assessment?
As referred to above, international guidelines recommend that a psychological or psychiatric assessment should be performed on all patients requesting bariatric surgery. The presence of bipolar disorder should have initiated a formal psychiatric assessment or at least contact with her own psychiatrist to confirm her suitability for surgery. This would have had the advantage of developing a postoperative plan in case of an adverse psychiatric event.

The significance of [Ms B's] weight gain between 5 December 2008 and 9 February
I do not see any significance of this weight gain. It is not uncommon for patients on psychiatric medication to gain weight as these medications often stimulate appetite. There has been conjecture that preoperative weight gain indicates poor postoperative result[12,13] but insistence on weight loss before offering surgery actually leads to a worse result.[14] It is nonsensical to insist that a patient who cannot lose weight by any other means cannot access surgery until they lose weight.

Were there any specific factors to be considered when planning for her postoperative care?
From the information offered to me I believe [Ms B] should have had a management plan in place with her psychiatrist following surgery.

My conclusions
From the information supplied to me I believe that [Dr C] has departed from standard practice in not following internationally accepted guidelines when working up [Ms B] for a gastric bypass.

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