Gynaecologist, Dr D

A Report by the

Health and Disability Commissioner

(Case 15HDC01847)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

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Executive summary

1. On 7 May 2015, Ms A consulted gynaecologist Dr D for treatment of symptoms of endometriosis. Dr D performed a diagnostic laparoscopy on 12 May 2015. There are differing accounts of what information was provided to Ms A regarding the risks of surgery. During surgery, Dr D found that Ms A had stage four endometriosis and a "markedly thickened" left fallopian tube.

2. Ms A became unwell and experienced pain following surgery. She re-presented to see Dr D on 18 May 2015. Dr D arranged to perform further surgery the following day. Ms A understood that her left fallopian tube might need to be removed. The consent form that Ms A signed did not specify that both of Ms A's fallopian tubes might need to be removed, and the possibility of the right fallopian tube needing removal was not discussed with her.

3. Dr D undertook surgery on 19 May 2015. The left fallopian tube was grossly distorted because of infection, and was removed. Dr D found that the right fallopian tube was also swollen and had free pus coming out of the end of it. She stated that "a painstaking decision [was] made" to remove the right fallopian tube as well. Dr D said she was concerned that, if she left the right fallopian tube, it would be a nidus for ongoing infection and sepsis, and Ms A might require further surgery acutely in the following few days. Further, if she was septic, potentially she might need treatment in an intensive care unit.

Findings

4. The Commissioner considered that although Ms A may have required further surgery or intensive care treatment in the near future, it is plainly unacceptable that Dr D removed the right fallopian tube without Ms A's consent. The right to decide was Ms A's, and she was deprived of it.

5. The Commissioner found that prior to the surgery of 19 May 2015, Dr D failed to provide Ms A with the information that a reasonable consumer would need in order to give informed consent. Accordingly, Dr D breached Right 6(2) of the Code of Health and Disability Services Consumers' Rights (the Code).[1]

6. It follows that Ms A was not in a position to give informed consent to the surgery. In addition, Dr D removed Ms A's right fallopian tube without informed consent. Accordingly, Dr D also breached Right 7(1) of the Code.[2]

7. The Commissioner made adverse comment that in removing both of Ms A's fallopian tubes, Dr D did not take the least invasive treatment option available to her, and that Dr D did not take microbiological samples during the surgery of 19 May 2015.

[1] Right 6(2) of the Code states: "Before making a choice or giving consent, every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, needs to make an informed choice or give informed consent."
[2] Right 7(1) of the Code states: "Services may be provided to a consumer only if that consumer makes an informed choice and gives informed consent, except where any enactment, or the common law, or any other provision of this Code provides otherwise."

Recommendations

8. The Commissioner recommended that Dr D undertake further training on informed consent, and provide a written apology to Ms A.

Complaint and investigation

9. The Commissioner received a complaint from Ms A about the services provided to her by a medical centre, a surgical clinic, and Dr D. The following issue was identified for investigation:

Whether Dr D provided Ms A with an appropriate standard of care in 2015.

10. The parties directly involved in the investigation were:

Ms A	Consumer
Mrs C	Consumer's mother
Consumer's grandmother	
Dr D	Provider

Also mentioned in this report:

Dr B	General practitioner
RN E	Registered nurse
Dr F	Medical microbiologist

11. Information was also reviewed from ACC, the surgical clinic, and the medical centre.

12. Independent expert advice was obtained from gynaecologist Professor Neil Johnson (**Appendix A**).

Information gathered during investigation

Introduction

13. Ms A, aged 20 years at the time of these events, had a family history of endometriosis.

14. Endometriosis is a condition in which tissue that normally grows inside the uterus grows outside it. Most often this is on the ovaries, fallopian tubes, and tissue around the uterus and ovaries; however, in rare cases it may also occur in other parts of the body. The main symptoms are pelvic pain and infertility. Nearly half of those affected have chronic pelvic pain.

15. On 18 December 2014, Ms A consulted a general practitioner (GP) in relation to contraception, heavy periods, and pelvic pain. The GP prescribed naproxen[3] for pelvic pain. At that time, Ms A had recently commenced a new relationship. It is noted in Ms A's GP records that Ms A had genital swabs taken in 2013, the results of which were normal, and that she had a long history of heavy, painful periods.

16. On 1 May 2015, Ms A's regular GP, Dr B, referred Ms A to gynaecologist Dr D,[4] as Ms A had increasing dysmenorrhoea (painful periods) and heavy frequent periods.

Dr D, surgical clinic, and the medical centre

17. The clinical services manager stated that the surgical clinic is the provider of surgical health facilities, and that Dr D is credentialled (qualified)[5] to work at the facility. The clinical services manager stated:

> "It is the role of the surgical clinic, firstly to ensure that [Dr D] is suitably qualified through the credentialing process to work in the facility and, secondly, to provide a safe environment for the operative procedure to be performed in."

18. The surgical clinic's credentialling information states that medical practitioners practising at the clinic are independent practitioners, and that neither the surgical clinic nor its subsidiaries, officers, or employees will be liable for any acts, errors, or omissions of practitioners practising independently at the clinic, nor for the acts, errors, or omissions of any assistants engaged by the practitioner.

19. The medical centre (in the same building as the surgical clinic), provided Dr D with consulting rooms and carried out patient administration tasks, including scheduling of appointments. Dr D had a contract for services with the medical centre. The medical centre does not have a credentialling structure in place.

Appointment 7 May 2015

20. Dr D first saw Ms A on 7 May 2015. Dr D explained to Ms A that there are four different kinds of endometriosis ranked from stage one through to stage four. Dr D told Ms A that she was unlikely to have stage four endometriosis, because she was so young.

21. Dr D told HDC that she and Ms A discussed surgical and conservative management of endometriosis. Dr D said that she offered conservative management, but Ms A preferred surgery because her GP had already tried her on various medications. In response to the "information gathered", Ms A disputed that conservative management was discussed. Dr D said that Ms A expressed a desire for laparoscopic surgery to treat the endometriosis, to be done as soon as possible because she was starting a new job in two weeks' time.

[3] A nonsteroidal anti-inflammatory drug that relieves pain.
[4] Dr D is a fellow of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG).
[5] The surgical clinic has developed a system to ensure that those who practise there have current and applicable credentials and work within a scope of practice reflecting these credentials within the clinic's environment.

22. Dr D stated that she told Ms A that the next available surgery was within a week. Dr D cannot recall what she said to Ms A, but explained her standard process, which she thought she would have followed. Dr D stated:

> "I handed her information booklets on the laparoscopic treatment of endometriosis [detailed below], we discussed having a Mirena[6] coil and the reasons for that and the pros and cons of that and the risks associated with that and expectations for that along with hysteroscopy[7] and how we put it in. And so those brochures were given to her."

23. Dr D further stated that her standard process would be to discuss the Mirena, the hysteroscopy, the D&C,[8] and the problems potentially associated with that, such as perforation, infection, malposition, bleeding, and spotting.[9] She said she would have told Ms A that if stage four endometriosis was found, a secondary operation would be required. In response to the "information gathered", Ms A stated that Dr D did not discuss that a secondary operation would be required, and did not discuss D&C.

24. Dr D told HDC that her standard process was to discuss anaesthetic; the risk of bleeding, blood loss, and the potential need for transfusions; clotting issues, deep vein thrombosis, clots in the lungs; damage to other structures inside the abdomen, bowel, bladder and uterus; infection and that antibiotics are not given unless there is an increased risk of infection; the possibility of failure of the procedure; and general discussion about fertility.

25. Dr D stated that there would have been a discussion about staying overnight, going home, and expectations of aftercare with regard to pain relief. She said she would have advised Ms A that she should be able to go to work 7–10 days after the procedure.

26. Dr D stated that with regard to infection:

> "Usually I would cover, just quickly, the more common infections like belly button, wound or bladder infection and sometimes I would throw in a comment about you can get an infection anywhere in your body from where they stick the IV line, to a chest infection but I don't recall exactly what I told her on the day."

27. Dr D stated that there was no discussion at that consultation about the possibility of removing one or both of Ms A's fallopian tubes, as it was a diagnostic laparoscopy with the expectation of finding and resecting the endometriosis.

28. Ms A said that the only risk of the surgery that she was told about was that her bowel could be impaired or punctured. She said she was given a pamphlet about endometriosis but cannot recall when she was given the pamphlet. Ms A stated that

[6] An intrauterine device (IUD) with progestogen that releases the hormone levonorgestrel. Its uses include birth control and treating heavy menstrual periods.
[7] The inspection of the uterine cavity by endoscopy with access through the cervix.
[8] Dilation and curettage (D&C) is a surgical procedure in which the cervix is dilated and a special instrument is used to scrape the uterine lining.
[9] Light vaginal bleeding that occurs at any time other than when a period is due.

she was given no information by Dr D about the risk of infection, the impact on her fertility, or the possibility of being transferred to the public hospital.

29. Ms A's mother, Mrs C, told HDC that she attended the consultation with her daughter. Mrs C does not recall Dr D giving a detailed account of what she would do to remove the endometriosis. Mrs C said that Dr D did not discuss the risk of loss of fertility, and that the focus of the discussion about risks related to possible damage to the bowel. Mrs C said that there was no discussion about the risk of infection or the possibility that if something went wrong her daughter would need to be transferred to the public hospital.

30. Dr D booked in Ms A to have a diagnostic laparoscopy,[10] resection of endometriosis, hysteroscopy, D&C, and insertion of a Mirena. Dr D dated the "Agreement to Treatment" form 6 May 2015. The form states that the anticipated length of stay was six hours.

31. Dr D's clinical record of the consultation was in the form of a reporting letter to Dr B, and does not refer to any risks discussed.

32. Dr D stated that the usual practice was that following her discussion with a patient, the patient would go with a nurse to fill out the paperwork and receive a costing for the surgery. Mrs C recalls that a "secretary" came in with the documentation, which consisted of a folder of documents and a couple of leaflets. Mrs C stated that her daughter signed the consent form.

33. Ms A was given a brochure produced by RANZCOG, entitled "The Laparoscopic Treatment of Endometriosis — A Guide for Women". It contains a section on "The possible complications of laparoscopic surgery". Under the heading of "General risks of surgery", the brochure states: "Infection of a skin incision, the uterus, the bladder, chest or blood stream may require antibiotic treatment. Rarely, a pelvic abscess may occur." Under the heading "Specific risks of laparoscopy", the brochure states: "[P]eritonitis, an infection of the inside of the abdomen, may occur due to a small hole or burn to the bowel."

34. The "Agreement to Treatment" form was signed by Ms A on 7 May 2015. There are no risks listed on the form, although the form states:

> "I confirm that I have received a satisfactory explanation of the reasons for risks and likely outcomes of the procedure/operations/treatment, and the possibility and nature of further related treatment, should any complications arise including a return to theatre."

35. In response to the "information gathered", Ms A stated that when signing this form, she trusted that Dr D had given her all of the relevant information in relation to the risks involved. Ms A said that "[this] was not the case".

[10] Laparoscopy is a surgical diagnostic procedure used to examine the organs inside the abdomen.

36. Dr D did not obtain genital swabs or request genital swab tests be undertaken prior to the surgery as part of the preoperative preparation. She stated that this was because she deemed Ms A to be low risk for pelvic inflammatory disease (PID) or sexually transmitted disease.

First surgery — 12 May 2015

37. On 12 May 2015, Ms A presented to the surgical clinic for the procedure. Dr D told HDC that normally she would see the patient prior to surgery and ask whether the patient had any questions. She does not recall whether she saw Ms A.

38. Dr D noted in the operation report that the right ovary was relatively easily freed off the back of the uterus. The report states that the sigmoid colon contained a right ovarian cyst, which was drained. The report notes that the left ovary was moderately adhered to the back of the uterus, and sharp dissection was used to free it, and that underneath the left ovary there was a small endometrioma.[11] There is no record of the endometrioma being drained or removed. Dr D noted in the report that the left and right ovaries were sutured to the respective round ligaments.[12]

39. Dr D told HDC: "I can confirm from my operative note and my recollection that the endometrioma was not drained." She stated that it was left "with the intention of perhaps removing it at a later surgery". However, in a letter to Ms A dated 24 August 2015, Dr D stated: "Note was also made of an endometrioma on the left ovary which was drained."

40. The report notes that the left fallopian tube was "markedly thickened" and contained several small cysts. The report states: "[S]uction irrigation carried out and decision made not to progress any further with the dissection due to the proximity of the bowel to the back of the uterus and inflammatory change."

41. Dr D stated that her usual practice is to have a discussion with the patient either in recovery or on the ward. However, she does not recall when she saw Ms A. Dr D stated:

> "I would have rung the mother from recovery explaining that the operation has been done and it was stage 4 endometriosis and then because [Ms A] stayed in overnight, I caught up with her the next morning."

42. In response to the "information gathered", Ms A stated that after the surgery Dr D spoke to her mother in the family room, and explained that the endometriosis was more severe than she had first thought.

43. Dr D said that she explained to Ms A that she had stage four endometriosis and would require further surgery. Dr D recalled that she expressed concern to Ms A about her left fallopian tube, which looked a little bit thickened and could potentially affect Ms A's fertility in the future. Dr D said that she told Ms A that at the next surgery the

[11] A cystic mass arising from ectopic endometrial tissue within the ovary. The mass contains thick, brown, tar-like fluid, and may be referred to as a "chocolate cyst".
[12] The round ligaments surround and support the uterus and connect it to the groin.

tube could be assessed by insertion of methylene blue[13] through the cervix into the uterus, in order to see whether the tube was patent (open) or not. Ms A stated that Dr D did not mention any fertility concerns regarding the left fallopian tube during their discussion.

44. Dr D cannot recall any discussion about the possibility of Ms A needing to have one or both fallopian tubes removed.

45. Dr D said that she went through the photos taken during surgery, gave Ms A a copy of the photos to take home, and then conducted the usual postoperative checks. Dr D stated that she offered to refer Ms A for a colorectal consultation because of the bowel involvement, and advised Ms A that the next surgery would be with a bowel surgeon in case there was a bowel complication. In response to the "information gathered", Ms A disputed that this referral was offered at this time.

46. Dr D said that she told Ms A to return in two weeks' time for a further discussion, and discussed the use of Zoladex.[14]

47. Ms A stated that when she woke up from the surgery, Dr D told her that she had stage four endometriosis, and that "there looked like there was something not right but she didn't have time to put a blue dye … to see what that infection actually was".

48. Dr D told HDC that she did not administer prophylactic[15] antibiotics at the time of surgery on 12 May 2015. She noted that this was in accordance with the RANZCOG statement,[16] which makes no recommendation for prophylaxis for laparoscopic procedures, endometrial curettage, or insertion of IUCDs (intrauterine contraceptive devices). Dr D also noted that Ms A was assessed as low risk for PID at that time, there was no evidence of previous infection, and the tubal thickening was not considered to be due to a hydrosalpinx.[17]

Discharge

49. Ms A was discharged on Wednesday 13 May 2015. She stated that everything was normal, except that her abdomen was very distended because of the gas that had been used. Ms A said that the following morning (14 May 2015), she was feeling unwell and vomited, and she could not stand up straight, so she telephoned the surgical clinic and spoke to Dr D's nurse, who told her to take codeine.

50. Registered Nurse (RN) RN E recorded in the nursing note of 14 May 2015:

[13] Methylene blue is used as a dye or staining agent to make certain body fluids and tissues easier to view during surgery or on an X-ray or other diagnostic examination.
[14] Zoladex (goserelin acetate) is a man-made form of a hormone that regulates many processes in the body. Zoladex overstimulates the body's own production of certain hormones, which causes that production to shut down temporarily. Zoladex is used to treat endometriosis.
[15] Intended to prevent disease.
[16] RANZCOG, College Statement C-Gen 17 Prophylactic antibiotics in Obstetrics and Gynaecology 2013.
[17] A distally blocked fallopian tube.

> "[Ms A] called concerned she is having quite a lot of pain today, day 2 post surgery. She was vomiting earlier but now had food and has managed to keep down some codeine. We discussed how her surgery was quite extensive and that it is possibly to be expected. Will call again if doesn't settle."

51. RN E discussed this advice with Dr D, who agreed with the advice given and did not arrange to see Ms A for review.

52. Ms A stated: "I sort of felt shrugged off like it was normal. Again I am talking to a professional who would know if something is seriously wrong and if something is not that serious. So I took my codeine pain relief so I was fine."

53. Ms A said that her condition remained the same on Friday 15 May and Saturday 16 May 2015. However, on Sunday 17 May 2015 she became much more unwell. She was experiencing cold sweats, and was feverish and hot and cold, and knew that something was not right.

54. Ms A stated that on Monday morning (18 May 2015) she could not move her left leg at all. Mrs C said that her daughter rang her at work and said that she was very unwell. Mrs C telephoned the surgical clinic and spoke to the triage nurse, who asked that Ms A come in at midday. As Mrs C was at work, Ms A's grandmother took Ms A to the consultation with Dr D.

Consultation 18 May 2015

55. Ms A said that she went into the practice room and, when Dr D came in, she said that Ms A's abdomen looked very distended. Ms A said that RN E took her temperature and commented that it was very high.

56. Ms A stated that she told Dr D that the pain was excruciating, and that "it was the worst pain [she had] ever felt in [her] life".

57. Dr D told HDC that her first impression was that Ms A was uncomfortable, but that she did not look unwell. Dr D stated that Ms A's temperature was 37.6°C,[18] her abdomen was a little bloated but soft, and her bowel sounds were normal. Dr D said that she told Ms A that in light of where the pain was situated, it was most likely due to the ovary having been sutured to a ligament to hold it up out of the pelvis.

58. Dr D told HDC that when Ms A presented for the consultation, she (Dr D) did not consider Ms A to be in shock, and she had no rebound or guarding of the abdomen, and normal bowel sounds. Dr D noted that a CT scan may have been helpful in enabling a diagnosis if she had been suspicious of a perforated bowel (but she was not).

59. Dr D said that she did consider the alternative diagnoses of pelvic inflammatory disease and bowel injury when Ms A presented. However, given Dr D's clinical assessment of Ms A and the background of Ms A's first operation, Dr D concluded that these were less likely diagnoses.

[18] Normal body temperature ranges from 36.5°C to 37.2°C.

60. Dr D stated that she told Ms A that the treatment options were either to manage the symptoms conservatively, or to undertake surgery. As Ms A was in pain and wanted an urgent resolution, Dr D offered her surgery the following day because there was space on her elective list. Dr D said that she told Ms A that an ultrasound scan should be conducted and a blood test taken to check for loss of blood or infection.

61. Dr D stated that she consented Ms A for further surgery. The "Agreement to Treatment" form dated 18 May 2015 states the treatment description on the first two lines as "laparoscopic relocation of ovaries +/- salpingectomy[19] +/- [removal of] Mirena". Written on the second line is "? Left".

62. Dr D stated:

> "[T]his consent did not specifically state by me which tube would be removed although I suspected it of being the left side from experience from previous scans. You cannot tell completely until direct visualisation of the pathology whether it is a left sided or a right sided lesion."

63. Dr D said that she would not expect a patient to know what a salpingectomy was, so she explained that she might need to take out the left tube, and that "+/-" meant that the procedure would be diagnostic and she was not 100% sure what she was going to find. Dr D stated that there was no point in removing the Mirena if it was in a normal position, and whether it was removed would depend on what was found. In response to the "information gathered", Ms A also stated that she is adamant that the removal of her left fallopian tube was not discussed with her at this time. Ms A stated that Dr D communicated to her that the problem was the sutured ovary, and that the operation would entail her going in to snip the suture. Ms A said that there was never a discussion to remove the Mirena.

64. Dr D said that she does not think she wrote "? Left" on the form. She stated that normally she would not specify a particular side, and she does not think that it is her writing. Dr D stated:

> "Whether or not somebody has just written on it or maybe I did, but I don't recall it and it doesn't look like my writing and normally I wouldn't specify a side unless I was 100% sure that that was what I was going to do. Even with the ultrasound result, once that came back to me it doesn't specify, it can be a little bit non specific, like there is some blood or potentially pus inside the abdomen but you never know."

65. Dr D stated that she would be concerned if staff had added writing to the form after it was signed. She said that normally she looks at the form prior to the surgery, but cannot recall whether "? Left" was on the form at that time.

66. Dr D told HDC that she told Ms A that she was to have another laparoscopy, "so the same standard risks [applied] as previously". Dr D stated that she did not go through

[19] The surgical removal of a fallopian tube.

all the risks of the surgery again because she would have expected that Ms A would recall what she was told from the previous time.

67. Dr D said that she told Ms A that if her fallopian tube was damaged, she (Dr D) would have to remove it because it was better for Ms A's long-term fertility to remove a damaged tube rather than leave it. In response to the "information gathered", Ms A disputes that Dr D advised this. Dr D stated that there was no conversation about the possibility of removing both tubes. She said that she did not discuss the possible removal of both fallopian tubes because she "felt this was a highly unlikely outcome".

68. Ms A told HDC that no one sat down with her to explain what was happening, and she was in so much pain that she could not focus on what she was signing when she signed the consent form. Ms A stated that there was no mention on the form of anything to do with her fallopian tubes or her ovaries.

69. Ms A recalls that the description of the surgery was written on the form when she signed it and, although she cannot remember the words on the form, she recalls that there was only one line. She stated that the meaning of the word "salpingectomy" was never explained to her, and there was no discussion about her fertility at that point. Ms A stated that Dr D did not say that there was an option for her to go to the public hospital, and appeared to think that her condition was not serious. Ms A said that if Dr D had told her that it was serious, she would have been willing to go straight to the public hospital.

70. Following the consultation with Dr D, Ms A had the blood test and ultrasound scan performed.

71. Ms A stated that she had a telephone call from Dr D later that day. Dr D told her that her white blood cell count was very high, which indicated that she had an infection, and mentioned "something about … my ovaries". Mrs C said that her daughter became very distressed because she thought Dr D had said that she was going to lose one of her ovaries. In response to the "information gathered", Ms A clarified that Dr D told her during this conversation that she would need to have her left fallopian tube removed.

72. Dr D told HDC that in the afternoon the radiologist telephoned her with the results of the ultrasound scan, and said she thought that there was probably a haematoma (blood collection) in the pelvis, or that it could be an infection. Dr D said that by that stage she had Ms A's blood test results, which showed signs of infection, so she rang Ms A and told her that the results of the blood tests were showing infection and that she believed it was most likely related to her left fallopian tube, and it was highly likely that Ms A would have to have that tube removed.

73. Mrs C said that Dr D rang back about a prescription for antibiotics to be picked up, so she spoke to Dr D and they confirmed that the problem could result in the loss of one of the fallopian tubes. Mrs C said she told Dr D that her daughter had misunderstood the earlier conversation. Dr D said that she arranged for Ms A to obtain antibiotics by faxing a prescription through to the after-hours pharmacy.

74. Dr D said that again there was no discussion about the possibility of removing both fallopian tubes or of the possibility of transferring Ms A to the public hospital.

75. Dr D stated that later that night, Mrs C called and left a message, and so Dr D called her back. Mrs C explained that her daughter had vomited and had a temperature. Dr D asked the level of Ms A's temperature, and Mrs C said she did not know because she did not have a thermometer. Dr D said that she asked whether Ms A had taken the antibiotics, and Mrs C confirmed that Ms A had done so about 30 minutes previously. Dr D suggested that Mrs C give her daughter Panadol, cooling cares, and comfort cares. Dr D said that she told Mrs C that she (Dr D) could send Ms A to the public hospital, but just to wait and see how she went.

76. Dr D stated: "I said, if you are concerned then call me back because I can then arrange admission to the hospital but she didn't call me back, so I just imagined things had improved overnight."

77. Mrs C told HDC that when Dr D rang back they had a conversation about how Ms A was feeling, and Dr D mentioned admitting Ms A to hospital and questioned her as to whether she was concerned about her daughter.

Second surgery — 19 May 2015

78. On 19 May at 8am, Mrs C took her daughter back to the surgical clinic.

Preoperative discussion

79. Mrs C said that she took Ms A into the preoperative area, and Dr D came in and spoke to them. Mrs C said that Dr D mentioned the possibility of Ms A losing a fallopian tube, but there was "no mention then of the second tube". Mrs C said that the anaesthetist came in and commented on how high Ms A's temperature was.

80. Dr D said that Ms A's condition had obviously deteriorated overnight. Dr D said that Ms A was more distressed than the previous day, and was obviously in a lot of discomfort. Dr D stated that Ms A had a high temperature (38.9°C) and was tachycardic.[20]

81. Dr D stated that at that stage she did not discuss the option of referring Ms A to the public hospital, because when a patient has sepsis,[21] acute abdominal surgery needs to occur without delay. Dr D said that she told Mrs C and Ms A that she did not know the cause of the pain, but suspected that it was pus or possibly a bowel issue. In response to the "information gathered", Ms A disputed that Dr D told her this.

82. Dr D told HDC:

> "Due to the marked deterioration in her condition overnight with an acute abdomen, despite oral antibiotics for over 18 hours I had great concern that the … [tubo-ovarian abscess][22] had ruptured or peritonitis from bowel or haemorrhage

[20] Tachycardia refers to a fast resting heart rate — usually at least 100 beats per minute. Ms A's heart rate was noted to be between 120 and 125 beats per minute.
[21] A serious illness that arises from the body's response to infection.
[22] Tubo-ovarian abscess (TOA) is a late complication of pelvic inflammatory disease.

> had occurred. If this was the case then delays in treatment would increase her mortality and morbidity … I discussed with her that we just need[ed] to get on and do the surgery and intravenous antibiotics need[ed] to be given."

83. Dr D said that she explained that if there was bowel involvement, she would need to call in specialists. In response to the "information gathered", Ms A disputed that Dr D advised her of the need to call in specialists.

84. Dr D stated that she reiterated the results from the previous day and said that it was highly likely that the problem was the left fallopian tube, which would have to be removed, but she did not specifically mention removal of both tubes. Dr D also said that she does not recall the conversation, but she would expect that she would have discussed removing the left tube, but cannot actually say that this is what she did.

85. Dr D stated that she did not discuss removal of the right tube because she never expected it to be a high probability. Dr D said:

> "Further discussions were had with respect to possibility of peritonitis associated with bowel injury and increased risk also of laparotomy[23] if the intra operative findings were unable to be dealt with laparoscopically. I feel an informed consent was made between [Ms A] and her mother for me to operate depending on the potential findings in the pelvis as per our discussions."

86. In response to the "information gathered", Ms A said that she disagrees with this statement. Ms A said: "What we were agreeing to on the morning of the 19th of May was the possible removal of the left fallopian tube; there was no consent given to do anything but the removal of the left fallopian tube."

87. Dr D said that she had complete confidence in the surgical clinic to deal with any surgical findings on 19 May 2015, and that had a bowel perforation occurred, then a general surgeon would have been called.

Surgery

88. Dr D stated that Ms A was obviously unstable and when she began the laparoscopic surgery:

> "[T]he first thing I saw, going through the bellybutton was free pus coming out of the abdomen so I knew that this wasn't as straight forward as what perhaps we were expecting from the results of the scan the day before."

89. Dr D said that the left fallopian tube was grossly distorted because of infection. She removed the left fallopian tube in several pieces and checked the left ovary, then turned her attention to the right tube, which was also swollen with free pus coming out of the end of it.

90. Dr D stated that a "painstaking decision [was] made" to remove the right fallopian tube as well, once careful consideration had been made of the implications for Ms A's

[23] A surgical procedure involving a large incision through the abdominal wall to gain access to the abdominal cavity.

future fertility and current septicaemia. Dr D said that she considered the risks of leaving the right fallopian tube in situ as well as removing it. She stated that she did consider leaving the lesser affected tube behind and continuing with IV antibiotics, but the main risk of doing so in the short term would be the need for re-operation for ongoing pelvic abscess/infection, which would hinder Ms A's recovery from sepsis. Dr D noted that had the right fallopian tube been left in, there would have been a significant risk, as it would have been an ongoing source of infection and could possibly have turned into a tubo-ovarian abscess with ongoing issues with pain.

91. Dr D told HDC that she was concerned that if she left the right fallopian tube it would be a nidus[24] for ongoing infection and sepsis, and Ms A might require further surgery acutely in the following few days if it did not resolve. Dr D noted that potentially Ms A might have needed treatment for sepsis in an intensive care unit. Dr D also told HDC: "I believed that I was acting in [Ms A's] best interests faced with a patient who was severely septic (with associated risks of morbidity and mortality)."

92. Dr D stated that she formed the view that there was a very small chance that the right tube would function well enough to allow Ms A to have an intrauterine pregnancy. Dr D said that if the tube was damaged and did not function, it would have to be removed before Ms A underwent an IVF cycle, and if it was working partially, she could have an ectopic pregnancy.[25]

93. Dr D stated that she made the decision with the background of thinking, "Well, if I remove this tube it is highly likely that I'm going to get a complaint against me but I am doing what is best for the patient."

94. Dr D said that she did not consider allowing Ms A to wake up from the anaesthetic to discuss the findings with her, because of the "emergency sort of situation", and that if Ms A were to have further surgery to remove the tube she would require another anaesthetic. In response to the provisional opinion, Dr D stated that there was certainly some urgency in relation to the surgery, based on Ms A's presentation and on the intra-operative findings, which influenced her decision making.

95. Dr D stated that, although they had not specifically discussed the removal of both tubes, Ms A was aware that they did not know what they were going to find, and that Dr D would do the best that she could for Ms A's health. Dr D said that she thought about contacting Ms A's mother and discussing it with her, but felt it would be an unfair position to put the mother in. Dr D confirmed to HDC that she considered that Mrs C could give legally valid consent on behalf of her daughter, but felt that she would not be able to be fully informed because she was a mother and not a specialist, and did not have the same grasp of information as she (Dr D) had.

96. Ms A stated that when she woke from the surgery, Dr D said, "I am so sorry we had to take both of your fallopian tubes," and that at that time she did not register what had happened and said, "Okay, that is fine, that is all good."

[24] A place in which bacteria may multiply; a focus of infection.
[25] A complication of pregnancy where the embryo attaches outside the uterus, most often in the fallopian tube.

97. Dr D did not send samples from the operation for microbiological examination. She admitted that doing so may have been helpful, but noted that often samples taken from an acute pelvic infection will be unrevealing and show results[26] for which antibiotic treatment has already been instituted. She also noted that microbiological samples would not have altered the management or treatment plan for Ms A.

98. Following surgery, Ms A was transferred to the public hospital by ambulance, and remained there for recovery for four days.

Further information — Ms A

99. Ms A said that she and her parents had a meeting later with Dr D, who said that she thought that Ms A had suffered a hospital-acquired infection.

100. Ms A said that she would have liked to have been woken up before both her fallopian tubes were removed, to have had an opportunity to discuss the matter with her family. Ms A stated:

> "I don't think they would have been able to save my tubes regardless of what they could have done but I just wasn't involved in the process at all, it was just taken and something I had nothing to do with either."

101. Ms A's view is that Dr D should have spoken to her in more detail before the second surgery and explained the possibilities.

Subsequent events

102. On 11 June 2015, Dr D saw Ms A and her parents. In her letter reporting to Dr B, Dr D states that she referred Ms A to a colorectal surgeon to investigate her with a colonoscopy and plan surgery to address her stage four endometriosis at a later stage. The letter states: "We are also investigating from an infection point of view her records at the hospital."

103. In August 2015, Dr D took swabs from Ms A and tested her for sexually transmitted diseases (STDs). The tests came back negative for any STDs and any other abnormalities in her vagina.

104. On 10 December 2015, Dr D wrote to Dr B noting that Zoladex was working well for Ms A's pain, and stating that Ms A was planning to have surgery with the colorectal surgeon in February 2016. Dr D stated that she had discussed with Ms A that if she did not feel comfortable having the colorectal surgeon as her surgeon she would be happy to refer her to a colleague. The letter states: "At this stage she is feeling a little stressed out by the whole thing and will give that some thought also."

105. On 22 January 2016, Dr D wrote to Ms A and stated:

> "As I am involved in the HDC complaint I feel uncomfortable operating upon you and I strongly suggest you come and meet with one of my colleagues […] so that

[26] Gram negative rods and positive cocci.

> he can discuss with you surgery and further plans to treat your stage [four] endometriosis."

106. Subsequently, Ms A transferred her care to another gynaecologist.

107. Ms A told HDC that following these events she was diagnosed with post traumatic stress disorder.

Further information — medical centre

108. The medical centre said that it had nothing to do with Dr D's removal of Ms A's fallopian tubes on 19 May 2015, or Dr D's decision not to send samples for microbiological examination.

109. The medical centre stated that it has considerable sympathy for Ms A given what she has gone through.

Medical centre's Informed Consent Policy

110. The medical centre's Informed Consent Policy provides that the patient must be given sufficient information to make an informed choice and "should be given sufficient time to consider the information provided to them". The policy states that written consent is required for all procedures carried out in the procedure rooms.

Further information — surgical clinic

111. The surgical clinic advised HDC that Ms A's infection must be regarded as a hospital-acquired infection, as it meets the definition of:

> "[h]aving occurred within 30 days of the procedure and involving any part of the body that is opened or manipulated during the operative procedure and there being other evidence of infection involving the organ/space that is detected on direct examination during invasive procedure or by histological examination or imaging test".

112. However, the surgical clinic stated that the validity of that is difficult to check because at no point were swabs or cultures taken. The surgical clinic said that the decision to take a swab or culture is that of the surgeon and, in this case, also the acute admitting service at the public hospital. The surgical clinic stated: "Therefore, it is impossible to refute that this was a hospital acquired infection, even though cultures may have helped clarify this better."

113. The surgical clinic stated that its role is to provide a sterile environment for safe surgical procedures, and that there are a number of quality control procedures around the maintenance of sterility with instruments. The surgical clinic said that there was no breach of these quality controls. The surgical clinic undertook an infection prevention and control review, which included a case review by Dr F, a medical microbiologist.

114. The surgical clinic conducted the review to determine whether the infection was a healthcare acquired infection, whether there were any breaches of infection prevention practices, and whether there could have been any other actions taken in relation to

prevention of infection. The surgical clinic stated that no bad practice or lapse in procedure had been identified.

115. Dr F asked two colleagues to review the histopathology sections from the operations of 12 and 19 May 2015. He noted that there was "[n]o evidence of an infection at the operative site (removal of endometrioma) in the specimen from the 12th May", and that the mild chronic inflammatory change noted on the surface of one of the fallopian tubes removed on 19 May 2015 was consistent with endometriosis and not indicative of prior infection.

116. The surgical clinic noted that the insertion of a Mirena may have increased the risk of infection, as it is inserted via the vaginal tract. Dr F noted that women with endometriosis are at increased risk of infection owing to the bacteria colonisation, which can be triggered by surgical intervention. Dr F said that there may be an indication for prophylactic antibiotics for this group of patients.

117. The report concluded that there were no breaches in sterility processes identified during either admission to the surgical clinic.

Responses to provisional opinion

118. Dr D provided a response to the provisional opinion, and Ms A provided a response to the "information gathered" section during the investigation. Where appropriate, responses have been incorporated into the information above.

119. Dr D stated that from her perspective, there was most certainly some urgency in relation to the surgery on 19 May 2015, based inter alia on Ms A's presentation and on the intra-operative findings, which influenced decisions made by Dr D.

Relevant professional standards

120. The Medical Council of New Zealand publication "Information, choice of treatment and informed consent" (March 2011) states:

> "**Background**
>
> 1. Trust is a vital element in the patient–doctor relationship and for trust to exist, patients and doctors must believe that the other party is honest and willing to provide all necessary information that may influence the treatment or advice. The doctor needs to inform the patient about the potential risks and benefits of the options available and support the patient to make an informed choice.
> 2. Informed consent is an interactive process between a doctor and patient where the patient gains an understanding of his or her condition and receives an explanation of the options available including an assessment of the expected risks, side effects, benefits and costs of each option and thus is able to make an informed choice and give their informed consent."

Opinion: Dr D — breach

Standard of care — adverse comment

Preoperative swabs

121. Dr D first saw Ms A on 7 May 2015. At that consultation, Dr D booked Ms A to have a diagnostic laparoscopy, resection of endometriosis, hysteroscopy, D&C, and insertion of a Mirena, with the surgery to take place on 12 May 2015. Dr D did not obtain genital swabs or request that genital swab tests be undertaken prior to surgery as part of the preoperative preparation. She stated that this was because she deemed Ms A to be low risk for PID or sexually transmitted disease.

122. My expert advisor gynaecologist, Professor Neil Johnson, advised that some gynaecologists would have requested genital swab tests to be undertaken to check that pelvic sepsis was not contributing to Ms A's pelvic pain symptoms, and to confirm that there was no microbial carrier status that would predispose her to acute pelvic inflammatory disease at the time of the surgical procedure. However, he also stated that some gynaecologists would not have undertaken swab tests routinely in the absence of indicators to suggest an infective cause of pelvic pain and in the context of strong pointers towards endometriosis as a cause for the symptoms. Professor Johnson accepts Dr D's justification for not taking genital swabs prior to surgery. I accept his advice and, accordingly, I am not critical that Dr D did not take genital swab tests prior to surgery.

Prophylactic antibiotics

123. Ms A's first surgery was conducted on 12 May 2015. Dr D did not administer prophylactic intravenous antibiotics at the time of the surgery, and explained that this was in accordance with the RANZCOG position, and that at that time, Ms A was assessed at low risk of pelvic inflammatory disease. Professor Johnson advised:

> "[A]ll my gynaecologists colleagues recommend the administration of intravenous antibiotics at the time of laparoscopic surgery for stage 4 endometriosis, especially when an endometrioma has been removed and when a fallopian tube has an abnormal appearance with thickening."

124. There is conflicting evidence as to whether the endometrioma was drained during the surgery. The operation report states that the left ovary was moderately adhered to the back of the uterus, sharp dissection was used to free it, and underlying it was a small endometrioma. The operation report does not state whether the endometrioma was drained. Dr D told HDC that the endometrioma was not drained during the surgery. However, following the operation, Dr D wrote to Ms A and told her that an endometrioma had been drained.

125. Having considered the evidence, in my view, it is more likely than not that an endometrioma was not drained during the surgery. In any event, Professor Johnson advised that, even if it is accepted that an endometrioma was not drained or removed, it remains debatable whether not giving antibiotics on 12 May 2015 was reasonable.

126. Professor Johnson noted that the RANZCOG statement on antibiotic prophylaxis does not recommend the routine administration of antibiotics for laparoscopic procedures, but does recommend that antibiotic therapy should be instituted for any procedures if there is reason to suspect an infection risk or the findings from the procedure indicate a risk of infection (for example, dilated fallopian tubes). The operation report from 12 May 2015 states that the left fallopian tube was markedly thickened and contained several small cysts. Professor Johnson stated:

> "Whilst debatable, I consider that [Dr D] has given a satisfactory justification, based on current guidelines, that the approach of not giving antibiotics was within the limits of reasonable practice (on the assumption that an endometrioma was not drained or removed)."

127. Accordingly, I am satisfied that it was reasonable in the circumstances that Dr D did not administer prophylactic antibiotics to Ms A during the first surgery.

Follow-up 14 May 2015

128. Ms A was discharged from the surgical clinic on Wednesday, 13 May 2015. The following day, she was feeling unwell, had vomited, and could not stand up straight, so she telephoned the surgical clinic and spoke to RN E. RN E advised Ms A to continue taking codeine and to call back if her condition did not settle. No arrangement was made for Ms A to be reviewed by Dr D, who confirmed the advice that RN E had given.

129. Professor Johnson advised that it was reasonable for Dr D to confirm RN E's advice and, although it would have been ideal for Dr D to have reviewed Ms A, based on the information available to Dr D at the time, Professor Johnson does not consider that not arranging to review Ms A was a departure from a reasonable standard of practice. I accept this advice, and I am satisfied that it was reasonable for Dr D not to review Ms A at that time.

Decision to undertake further surgery

130. On 17 May 2015, Ms A became much more unwell. She was experiencing cold sweats, was feverish, and felt hot and cold. By 18 May 2015, she could not move her left leg. Ms A was seen by Dr D. At that time, Ms A's temperature was 37.6°C, and she told Dr D that she was in excruciating pain. Dr D told Ms A that the reason she could not move her leg and was in so much pain was that her ovaries had been put in slings, which could be pulling on one of her leg ligaments.

131. Dr D offered to do further diagnostic surgery the following day (19 May 2015). Dr D told Ms A that she required an ultrasound scan and a blood test.

132. Professor Johnson advised that some gynaecologists would have undertaken more investigations to determine the cause of the symptoms that led to the need for a second surgical procedure, as information from ultrasound in these circumstances is limited. He noted that a CT scan would have given more insight into the possibility of a bowel injury from the primary surgery. However, he said that the best judge of whether a CT scan should have been ordered would be the clinician making the assessment at that time. Dr D agreed that a CT scan would have been useful for

diagnosis if she had been suspicious of a bowel perforation, but she was not. Professor Johnson stated: "I cannot say, based on the information available, that not ordering a CT scan was a departure from a reasonable standard of care." I accept this advice.

133. Dr D prescribed antibiotics to Ms A on 18 May 2015. Professor Johnson advised that if acute pelvic inflammation/infection alone had been suspected, most gynaecologist peers would consider that the antibiotics prescribed on 18 May 2015 were not given adequate time to take effect. Professor Johnson advised that most gynaecologists would assess the response to oral or intravenous antibiotic therapy after 48 hours, and almost all would have deferred further surgery until the response to intravenous antibiotics had been assessed at 24 hours, unless the condition of the patient deteriorated so quickly as to necessitate more urgent surgical intervention.

134. Professor Johnson stated:

> "It could be argued that such a deterioration had taken place, however under these circumstances, a surgical opinion would have been sought by most gynaecologists, with the option of further pre-operative investigation and of an 'as required' plan for bowel surgery being in place in case the more serious complication of bowel injury was diagnosed."

135. Dr D told HDC that because of Ms A's marked deterioration in her condition overnight, despite oral antibiotics for 18 hours, she (Dr D) had great concern that a tubo-ovarian abscess had ruptured or peritonitis from the bowel or a haemorrhage had occurred, and she did not want to delay Ms A's treatment. Dr D said that she had complete confidence in the surgical clinic to deal with any surgical findings on 19 May 2015, and that if bowel perforation had occurred, then a general surgeon would have been called.

136. Professor Johnson also noted:

> "Those best placed to make the judgement of whether surgery should have been deferred to assess the response to antibiotics would be the clinicians assessing the patient at the time, as sepsis was clearly a pressing issue and prompt surgery is often the best way of managing this. Hence, I am unable to say that surgery should have been delayed to assess the response to antibiotics."

137. I accept Professor Johnson's advice. While I note his comment that most gynaecologists would assess the response to oral or intravenous antibiotic therapy after 48 hours, and that almost all would have deferred further surgery until the response to intravenous antibiotics had been assessed, I accept Dr D's explanation that she was concerned about Ms A's condition, did not want to delay treatment, and was able to call a general surgeon if required.

138. Professor Johnson stated that, although Dr D considered that the likely cause of Ms A's symptoms was the surgical suspension of her ovary during the first procedure, that diagnosis did not take into account two other important diagnoses that should have been considered at that time. Those diagnoses were acute pelvic inflammatory disease consequent upon the first procedure (in which case more discussion regarding

the issue of fallopian tube surgery should have taken place), and bowel injury. Professor Johnson stated: "Most, but not all, gynaecologist peers would consider this a departure from standard practice; I consider this a mild departure."

139. Dr D said that she did consider the alternative diagnoses of pelvic inflammatory disease and bowel injury when Ms A presented on 18 May 2015. However, given Dr D's clinical assessment of Ms A and the background of Ms A's first operation, Dr D concluded that these were less likely diagnoses. Accordingly, I am satisfied that Dr D did consider these diagnoses, although she considered them unlikely.

Decision to remove both fallopian tubes during surgery

140. During the surgery of 19 May 2015, Dr D removed both of Ms A's fallopian tubes. Dr D stated that the left fallopian tube was grossly distorted because of infection, and the right tube was also swollen with free pus draining from its end. Dr D told HDC that she was concerned that if she left the right fallopian tube, it would be a nidus for ongoing infection and sepsis, and Ms A might require further surgery acutely in the following few days if it did not resolve. Dr D noted that potentially Ms A might have needed treatment in an intensive care unit for sepsis.

141. Dr D stated that she formed the view that there was a very small chance that the right tube would function well enough to allow Ms A to have an intrauterine pregnancy. Dr D said that if the tube was damaged and did not function, it would have to be removed before Ms A underwent an IVF cycle, and if it was working partially, she could have an ectopic pregnancy.

142. Regarding the decision to remove both fallopian tubes during surgery, Professor Johnson advised:

> "In most cases such as this, most gynaecologists would consider it a reasonable course of action to drain pus and infective material from the pelvic cavity and fallopian tubes and to treat intensively with intravenous antibiotics without removing the fallopian tubes at this procedure (especially as it appears that consent for bilateral salpingectomy had not been gained). It would have been reasonable to conserve at least one of the fallopian tubes, as the left tube was less severely affected by infection …
>
> Whilst it is true that a severe pelvic inflammatory episode, on a background of stage 4 endometriosis, would have meant that the chance of natural conception for [Ms A] in the future would have been very low. It is also true that women with severely damaged fallopian tubes (hydrosalpinges) have improved IVF outcomes if those fallopian tubes are removed or clipped laparoscopically prior to IVF. However these are issues that might reasonably have been addressed later. It is also true that conservation of one (or both) of [Ms A's] fallopian tubes in the surgical procedure on 19 May 2015 would have increased the chance of further complications from the acute pelvic infection, increased the chance of further surgery being required either in the short term (to assist resolution of severe acute pelvic inflammation) or in the long term (to improve the chance of successful IVF).

> Nonetheless, most gynaecologists would have attempted to conserve one or both fallopian tubes in this situation, when the possibility of removal of both fallopian tubes had not been discussed with the patient prior to surgery."

143. I accept Professor Johnson's advice. In my view, by removing both of Ms A's fallopian tubes, instead of removing only one and providing antibiotic treatment, Dr D did not take the least invasive treatment option available to her.

Microbiological samples

144. Dr D did not take microbiological samples during the surgery on 19 May 2015. She acknowledged that doing so may have been useful, but noted that it would not have changed the management or treatment plan for Ms A.

145. Professor Johnson advised that in the absence of microbiological samples, it is not possible to know precisely what contributed to Ms A's episode of severe acute PID. He stated that sending diagnostic samples for microbiology assessment would be regarded as standard practice. This includes genital swabs and blood cultures prior to the commencement of antibiotics and the second surgical procedure, in addition to fluid, pus or tissue samples that potentially were available from the second surgical procedure. Professor Johnson considered that this failure represents a mild departure from the accepted standard of care.

146. I accept the views of Professor Johnson, and I consider that microbiological samples should have been taken.

Informed consent — breach

Consultation 7 May 2015

147. Dr D cannot recall what information she provided to Ms A before the procedure on 12 May 2015, but said that her standard process was to discuss the anaesthetic; the risk of bleeding; blood loss and the potential need for transfusions; clotting issues; deep vein thrombosis; clots in the lung; damage to other structures inside the abdomen; bowel, bladder and uterus infection, and that antibiotics are not given unless there is increased risk of infection; the possibility of failure of the procedure; and to have a general discussion about fertility.

148. Dr D stated that at the appointment of 7 May 2015, she handed Ms A information booklets on the laparoscopic treatment of endometriosis. Ms A said that she was given a pamphlet about endometriosis, but stated that she was given no information about the risk of infection, and that the only risk she was told about by Dr D was that her bowel could be punctured. The RANZCOG brochure Ms A was given states, under the heading of "General risks of surgery": "Infection of a skin incision, the uterus, the bladder, chest or blood stream may require antibiotic treatment. Rarely, a pelvic abscess may occur." Under the heading of "Specific risks of laparoscopy", among other risks, the brochure states: "[P]eritonitis, an infection of the inside of the abdomen, may occur due to a small hole or burn to the bowel."

149. Ms A's mother, Mrs C, who was also at the appointment, stated that the focus of the discussion on risk was possible damage to the bowel. Mrs C recalls that after the consultation Ms A was given documentation, which included a folder of documents

and a couple of leaflets, and that Ms A signed the consent form at that time. Mrs C said that there was no discussion about the risk of infection.

150. Dr D's clinical record of the consultation is in the form of a reporting letter to Dr B, which has no reference to any risks discussed.

151. There are no risks listed on the Agreement to Treatment form, although it does state: "I confirm that I have received a satisfactory explanation of the reasons for risks and likely outcomes of the procedure/operations/treatment and the possibility and nature of further related treatment, should any complications arise including a return to theatre." Ms A signed the form on 7 May 2015.

152. I note that the RANZCOG brochure does set out an infection risk in relation to laparoscopic surgery to treat endometriosis. However, I consider that given the lack of documentation of the risks discussed, and Ms A and Mrs C's accounts that the discussion regarding risks focused on damage to the bowel, I consider that infection as a possible risk of the surgery was not covered adequately by Dr D.

Consultation 18 May 2015 — public hospital option not discussed

153. Ms A became unwell following her first surgery, and experienced pain and could not move her left leg. She returned to see Dr D on 18 May 2015. A plan was made to undertake further surgery the following day for "laparoscopic relocation of ovaries +/- salpingectomy +/- [removal of] Mirena". Ms A stated that Dr D did not say that there was an option for her to go to the public hospital for further treatment.

154. Dr D said that she did not transfer Ms A to the public hospital on 18 May 2015 because she considered that Ms A would have a more timely procedure by remaining at the surgical clinic. Dr D told HDC that she had complete confidence in the surgical clinic hospital to deal with any surgical findings on 19 May 2015, and said that if bowel perforation had occurred, then a general surgeon would have been called. Professor Johnson advised me that transfer to a public hospital may have resulted in a better outcome but, in his view, Dr D has offered a satisfactory justification for not transferring Ms A.

155. Professor Johnson stated that other gynaecologists would have insisted on the second surgical procedure being undertaken in a setting best equipped to deal with more serious complications such as bowel injury, which typically would have been the public hospital setting. He noted that many gynaecologists would have asked for an opinion from a general surgical colleague in the context of these complications within the first week post-laparoscopic surgery, and would have considered transfer to a facility more equipped to deal with the complications of laparoscopic surgery.

156. Although Professor Johnson advised that Dr D's rationale for not transferring Ms A was reasonable, I am concerned that there is no evidence that this decision was discussed with Ms A. In my view, Ms A should have been informed of the options available to her, and the risks and benefits of each option. Without this information, Ms A was not in a position to give informed consent to further surgery taking place at the surgical clinic.

Failure to inform of risk and obtain consent for removal of both fallopian tubes

157. On 18 May 2015, Dr D told Ms A that she would have another laparoscopy, "so the same standard risks [applied] as previously". Dr D stated that she did not go through all the risks of the surgery again because she expected that Ms A would recall what she was told the previous time. In my view, Dr D should have informed Ms A of the risks of the surgery to be performed on 19 May 2015. It was not sufficient to rely on the previous information, both because Ms A might not have recalled it, and because this surgery was for a different purpose than the first surgery.

158. Dr D said that she told Ms A that if her fallopian tube was damaged she (Dr D) would have to remove it because it was better for Ms A's long-term fertility to remove a damaged tube rather than leave it. The "Agreement to Treat" form, dated 18 May 2015, states that the treatment was "laparoscopic relocation of ovaries +/- salpingectomy +/- [removal of] Mirena". Written on the second line is "? Left".

159. Dr D has advised that she does not think she wrote "? Left" on the form, as it is not her usual practice to write the side, and it is not in her handwriting. Dr D said that there was no conversation with Ms A about the possibility of removing both fallopian tubes. Dr D cannot remember whether "? Left" was written on the form when she checked it prior to the surgery.

160. Dr D said that she would not expect a patient to know what a salpingectomy was, so she explained that she might need to remove the left fallopian tube. Ms A does not recall the word "salpingectomy" being explained to her, but said that she was in so much pain that she could not focus on what she was signing. Ms A stated that at that time there was no discussion about her fertility or the possibility of a transfer to the public hospital.

161. Later that day, Dr D telephoned Ms A to tell her that her white blood cell count was very high, which indicated that she had an infection. Ms A became very distressed. Dr D telephoned back later with regard to a prescription to be picked up, and spoke to Mrs C. During that conversation, Dr D told Mrs C that Ms A might lose one of her fallopian tubes.

162. On 19 May 2015, Dr D saw Ms A immediately prior to her surgery. Dr D said that again, she did not discuss the possibility of removal of the right fallopian tube because she never expected it to be a high probability. Dr D stated:

> "Further discussions were had with respect to possibility of peritonitis associated with bowel injury and increased risk also of laparotomy if the intra operative findings were unable to be dealt with laparoscopically. I feel an informed consent was made between [Ms A] and her mother for me to operate pending on the potential findings in the pelvis as per our discussions."

163. Professor Johnson advised:

> "Even in the context of urgent surgery, in a situation such as this, in which one possible outcome is that both fallopian tubes may require removal, it would be

usual practice to discuss the risk that this could eventuate. It would also be usual practice to discuss the fertility implication of this."

164. Professor Johnson also advised: "Most gynaecologists would seek to obtain consent for removal of both fallopian tubes in the event of this being considered essential by the surgeon when the operation took place."

165. Except for cases of emergency or necessity, all medical treatment should be preceded by the patient's choice to undergo it. This choice is meaningless unless it is made on the basis of relevant information and advice. A medical practitioner has a duty to warn a patient of a material risk inherent in the proposed treatment. The risk that both fallopian tubes might be removed is clearly material to a 20-year-old making a decision to undergo surgery.

166. In my view, Ms A should have been informed of the possible outcome that both fallopian tubes might require removal in the circumstances of the surgery, and I am concerned that she was not.

Removal of right fallopian tube without consent

167. The principle of informed consent is at the heart of the Code of Health and Disability Services Consumers' Rights. Pursuant to Right 7(1) of the Code, services may be provided to a consumer only if that consumer makes an informed choice and gives informed consent. It is the consumer's right to decide and, in the absence of an emergency or certain other legal requirements, clinical judgement regarding best interests does not apply. If the consumer will be under general anaesthetic, the Code provides an additional safeguard that consent must be in writing.[27]

168. Dr D was responsible for ensuring that she had obtained Ms A's consent to any procedure she carried out on 19 May 2015. Further, as Ms A was under general anaesthetic during the operation, her consent needed to be in writing. The "Agreement to Treat" form that Ms A signed included "laparoscopic relocation of ovaries +/- salpingectomy". It did not specify a bilateral salpingectomy (ie, removal of both fallopian tubes).

169. During the surgery on 19 May 2015, Dr D decided that it was necessary to remove both of Ms A's fallopian tubes, despite Ms A not having given consent to the removal of the right tube. In an emergency situation, if the consumer is unable to consent, the defence of necessity is a justification for proceeding with a procedure despite inadequate opportunity to obtain consent, because of the patient's pressing need. The onus is always on the professional to balance the risks with the necessity, and the doctor should be very wary of making unilateral judgements.

170. Dr D said she was concerned that, if she left the right fallopian tube, it would be a nidus for ongoing infection and sepsis, and Ms A might require further surgery acutely in the following few days. Further, if she was septic, potentially she might need treatment in an intensive care unit. Dr D also told HDC: "I believed that I was

[27] Right 7(6)(c) of the Code.

acting in [Ms A's] best interests faced with a patient who was severely septic (with associated risks of morbidity and mortality)."

171. Professor Johnson advised that the findings at the second procedure were a dilemma to a surgeon, and that this was a fine line judgement. Professor Johnson stated:

> "In this circumstance if the fallopian tubes are not removed, there would be an increased risk of the condition worsening or taking longer to settle, of a requirement for further surgery in the short term or long term, and there would have been a chance that the fallopian tubes would have been irreparably damaged from the infection associated with pyosalpinx[28] to the extent that future infertility owing to blocked or damaged fallopian tubes would have been likely, and the risk of ectopic pregnancy would have been significantly increased."

172. Professor Johnson noted that in cases such as this, gynaecologists usually avoid the need to remove both fallopian tubes. He stated that in the absence of prior discussion and/or consent and, particularly in the case of such a young woman who has not yet had children, most gynaecologists would not remove both fallopian tubes. Professor Johnson advised:

> "In most cases such as this, most gynaecologists would consider it a reasonable course of action to drain pus and infective material from the pelvic cavity and fallopian tubes and to treat intensively with intravenous antibiotics without removing the fallopian tubes at this procedure (especially as it appears that consent for bilateral salpingectomy had not been gained). It would have been reasonable to conserve at least one of the fallopian tubes, as the left tube was less severely affected by infection."

173. Dr D stated that she did not consider allowing Ms A to wake up from the anaesthetic to discuss the findings with her because of the "emergency sort of situation", and that if Ms A were to have further surgery to remove the tube, she would require another anaesthetic. I accept that in Ms A's case, it was not elective surgery, and that if the need to remove the second fallopian tube had been an emergency then it would have been appropriate for Dr D to proceed without consent.

174. However, it is not apparent that the removal of the right fallopian tube was an emergency, given the possible approach discussed by Professor Johnson. A medical emergency is an acute injury or illness that poses an immediate risk to a person's life or long-term health. I have no doubt that the decisions Dr D made in relation to Ms A were made with the best possible intentions, and there is no evidence that the operation itself was not performed competently. However, it is clear that Ms A did not give consent for the removal of her right fallopian tube. In these circumstances, I consider that Dr D should have undertaken the less invasive treatment option as outlined by Professor Johnson, in order to provide the opportunity to discuss her findings with Ms A before taking the action that she did. Once Ms A had recovered from the anaesthetic, the options for further treatment and risks of each option should have been discussed with her.

[28] The presence of pus in a fallopian tube.

175. Although Ms A may have required further surgery or intensive care treatment in the near future, it is plainly unacceptable that Dr D removed the right fallopian tube without Ms A's consent. The right to decide was Ms A's, and she was deprived of it.

Conclusion

176. In my view, prior to the surgery of 19 May 2015, Dr D failed to provide Ms A with the information that a reasonable consumer would need in order to give informed consent. Accordingly, I find that Dr D breached Right 6(2) of the Code.

177. It follows that Ms A was not in a position to give informed consent to the surgery. In addition, Dr D removed Ms A's right fallopian tube without informed consent. Accordingly, Dr D also breached Right 7(1) of the Code.

Other comment

178. I am very concerned about Dr D's lack of understanding of her legal responsibilities. She said that during the surgery on 19 May 2015, she thought about contacting Ms A's mother to discuss the removal of Ms A's right tube, but felt it would be an unfair position in which to place Mrs C. Dr D stated that she considered that Mrs C could give legally valid consent on behalf of her daughter, but felt she would not be able to be fully informed, because she was a mother not a specialist, and did not have the same grasp of information as she (Dr D) had.

179. This is not a matter of medical expertise. Mrs C could not give informed consent for the removal of her 20-year-old daughter's fallopian tube. I acknowledge that, from Dr D's perspective, there was most certainly some urgency in relation to the surgery on 19 May 2015, based inter alia on Ms A's presentation and on the intra-operative findings, which influenced decisions made by Dr D. However, as set out above, it is not apparent that the removal of the right fallopian tube was an emergency. Accordingly, the surgery to remove the right fallopian tube could take place only with consent from Ms A herself.

The surgical clinic

180. Following these events, the surgical clinic undertook an investigation to ascertain whether Ms A's infection resulted from a failure in sterility processes. That investigation did not discover any failing of the surgical clinic. I accept that there is no evidence that Ms A's infection resulted from any processes at the surgical clinic.

181. Professor Johnson advised me that the surgical clinic's admission criteria and policies and procedures are extensive and comprehensive. I accept this advice.

Recommendations

182. I recommend that within six months of the date of this report, Dr D undertake further training on informed consent, and report back to HDC with evidence of the content of the training and her attendance.

183. I recommend that within three weeks of the date of this report, Dr D provide a written apology to Ms A for the failings identified in this report. The apology is to be sent to HDC for forwarding to Ms A.

Follow-up actions

184. A copy of this report with details identifying the parties removed, except the expert who advised on this case, will be sent to the Medical Council of New Zealand, the Royal Australian and New Zealand College of Obstetricians and Gynaecologists, and the district health board, and they will be advised of Dr D's name.

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

Appendix A: Independent expert advice to the Commissioner

The following expert advice was obtained from gynaecologist Professor Neil Johnson:

"Thank you for the invitation to provide expert advice regarding the care provided to [Ms A] by [Dr D], at [the medical centre] and [the surgical clinic] in relation to the identified issues.

Your letter to me dated 24 February 2016 provides a good summary of the background to the case, that involved an initial hysteroscopy, D&C, Mirena insertion, and laparoscopic diathermy to endometriosis, evacuation of a small endometrioma from beneath the left ovary, resection of stage 4 endometriosis from the back of the uterus and suspension of the ovaries. [Ms A] experienced problems in the week that followed this operation that included abdominal pain and vomiting. Having contacted the clinic on the second postoperative day, she was advised by the clinic nurse to continue taking codeine, advice with which [Dr D] agreed. [Ms A] was reviewed by [Dr D] on the sixth postoperative day with ongoing left sided pain, in addition to pelvic pain, abdominal bloating and inability to straighten the left leg. No signs of acute abdomen were elicited and the temperature was normal. [Dr D] recommended a further operation for the following day to free the re-located ovary, check for further adhesions or haematoma, Mirena removal +/- salpingectomy. A further blood test and ultrasound scan respectively, organized for later that day, showed a likely collection of blood or pus on the left side of the pelvis and the blood test showed an elevated white blood cell count and elevated C-reactive protein. On review of these findings [Dr D] contacted [Ms A] by phone and asked her to commence Augmentin and Metronidazole. In the early evening [Ms A's] mother contacted [Dr D] to advise that [Ms A] had a high temperature and was vomiting. Advice was for paracetamol to be taken and to call again if the condition worsened to consider arranging admission to the public hospital via the Emergency department. When [Dr D] reviewed [Ms A] pre-operatively the next day, her condition had worsened, with a rapid pulse and elevated temperature apparent. Discussion centred on a high likelihood of needing to remove the left fallopian tube and consent was taken for laparoscopic relocation of ovaries +/- salpingectomy +/- removal of Mirena. The operative findings on that day were of severe pelvic inflammatory disease (PID), with left tubo-ovarian abscess, right pyosalpinx and free pus in the pelvis. A decision for bilateral salpingectomy was taken intraoperatively and this was completed, along with division of adhesions and Mirena removal. Transfer to the public hospital was arranged as postoperative treatment would likely involve intravenous fluids for 24 to 48 hours followed by continuation of oral antibiotics.

This report is based upon the relevant documents provided to me.

The issues that I have been asked to address in my report form the headings below.

Based on the information provided, was the first surgery, conducted on 12 May 2015, reasonable for the condition? If so, was it undertaken with due skill?

Some gynaecologists would have requested genital swab tests to be undertaken within a reasonable time frame prior to surgery as part of pre-operative preparation, particularly as this involved a hysteroscopy, curettage and Mirena insertion. First to check that pelvic sepsis was not contributing to the cause of pelvic pain symptoms. Second to confirm that there was no microbial carrier status that would predispose to acute PID at the time of the surgical procedure. The retrospective notes state that [Ms A] had swab tests confirmed as negative at the beginning of 2014, presumably over 12 months prior to the laparoscopic surgery and prior to her entering into the sexual relationship that remained current up to August 2015. Some gynaecologists would not have undertaken further swab tests routinely in the absence of indicators to suggest an infective cause for pelvic pain and in the context of strong pointers towards endometriosis as a cause for the symptoms. Thus I consider it debatable as to whether the absence of a recent genital microbiology test was a mild departure from accepted practice or not.

Prophylactic intravenous antibiotics were not administered at the time of laparoscopic surgery on 12 May 2015. All my gynaecologist colleagues recommend the administration of intravenous antibiotics at the time of laparoscopic surgery for stage 4 endometriosis, especially when an endometrioma has been removed and when a fallopian tube has an abnormal appearance with thickening. In my view, the imperative for antibiotic administration would be increased in the context of a young woman who has not had genital swab tests undertaken in the last 12 months, who had entered a new relationship since swab tests were confirmed as negative and who underwent insertion of Mirena in conjunction with laparoscopic removal of endometriosis including evacuation of a small endometrioma. It must be acknowledged that there are practice guidelines that do not state that prophylactic antibiotics should be given to women undergoing routine laparoscopic surgery.[1–4] However, it is recognized that infection risk and severity from interventional procedures is increased in women with endometriosis[5–7] and it is likely that procedures involving endometrioma drainage are associated with particularly increased infection risk.[8] Although the RANZCOG statement on antibiotic prophylaxis does not recommend administration of antibiotics for laparoscopic procedures routinely, it does recommend that ‘antibiotic therapy should be instituted in any [such] procedures if there is reason to suspect infection risk or if the findings at the procedure indicate risk of infection, eg dilated fallopian tubes’.[1] As standard practice is for the administration of intravenous antibiotics in this context and as all my gynaecological peers would recommend this, I consider the absence of prophylactic antibiotics to be a moderate departure from accepted practice.

Otherwise the available information suggests that the first surgery conducted on 12 May 2015 was reasonable for the condition. There is no indication that this surgical procedure itself was not undertaken with due skill.

A plan to carry out a laparoscopic adhesiolysis +/- salpingectomy was made on 18 May 2015. Was this proposal reasonable, or would it have been more appropriate to wait for the blood test results before making this decision?

Opinion amongst a group of gynaecologist peers would be divided as to whether this plan was reasonable or not.

Some gynaecologists would have undertaken more investigation to determine the cause for the symptoms that led to the need for the second surgical procedure, as the information from ultrasound in these circumstances is limited. Computed tomography (CT) would have given more insight into the possibility of bowel injury from the primary surgery, albeit that this subsequently proved not to be the diagnosis. Other gynaecologists would have insisted on the second surgical procedure being undertaken in a setting best equipped to deal with more serious complications such as bowel injury, which typically would have been the public hospital setting. Many gynaecologists would have asked for an opinion from a general surgical colleague in the context of these complications within the first week post-laparoscopic surgery and would have considered transfer to a facility more equipped to deal with complications of laparoscopic surgery.

Nonetheless, [Dr D's] decision to undertake surgery in the private hospital setting was to some extent vindicated by the findings at the second surgical procedure, those of acute PID with no other underlying cause (such as bowel injury) apparent.

Blood test results would not be expected to alter a decision of the timing or setting in which to undertake urgent surgery. This decision hinges on the condition of the patient and the facilities available in the different settings in which surgery can be undertaken.

I do not consider that not waiting for blood test results per se represents a departure from accepted practice.

Were the Augmentin and Metronidazole prescribed to [Ms A] on 18 May 2015 given adequate time to take effect?

No. If purely acute pelvic inflammation/infection had been suspected, most gynaecologist peers would consider that the Augmentin and Metronidazole prescribed on 18 May 2015 were not given adequate time to take effect.

Most gynaecologists would assess the response to oral or intravenous antibiotic therapy after 48 hours ideally, and almost all would have deferred further surgery until the response to intravenous antibiotics had been assessed at 24 hours, unless the condition of the patient deteriorated so quickly as to necessitate more urgent surgical intervention. It could be argued that such a deterioration had taken place, however under these circumstances, a surgical opinion would have been sought by most gynaecologists, with the option of further pre-operative investigation and of an 'as required' plan for bowel surgery being in place in case the more serious complication of bowel injury was diagnosed.

For acute PID secondary to gynaecological surgery, the plan that would have been instigated by most gynaecologists is of assessment of the response to intravenous antibiotics for 48 hours, followed by surgery if the clinical condition had not

improved at that stage, with recourse to multi-disciplinary collaborative surgery if the condition had deteriorated sufficiently within that 48 hour period.

The justification by [Dr D] to undertake surgery at that precise time and in the private hospital setting without consultation with surgical colleagues was that she considered the likely cause for the symptoms was the surgical suspension of the ovary in the first procedure, hence the plan to release the ovary in the second procedure. However this plan did not consider fully two other important diagnoses that should have been considered at that time, firstly acute PID consequent upon the first procedure (in which case more discussion regarding the issue of fallopian tube surgery should have taken place) and secondly bowel injury. Most, but not all, gynaecologist peers would consider this a departure from standard practice; I consider this a mild departure.

When [Ms A's] mother rang [Dr D] on the evening of 18 May 2015, reporting that [Ms A] had a raised temperature and was vomiting, was there indication that [Ms A] be admitted to [the public hospital] at this time?

It may have been prudent for [Dr D] to have arranged for [Ms A] to be admitted to a facility in which close observation and more extensive investigation could be undertaken, when [Ms A's] mother rang [Dr D] to advise that [Ms A] had a raised temperature and vomiting on the evening of 18 May 2015. The majority of, but not all, gynaecologists would, by this stage, have arranged for such an admission. Some private hospitals have extensive services in which this type of observation and investigation can be undertaken, however there is more certainty and safety in managing such a situation in a public hospital such as [the public hospital]. The documentation states that '[the surgical clinic] provides services for short stay and day stay' and that ultimately transfer to [the public hospital] was for 'a higher level of care'.

Opinion would be divided amongst gynaecologists as to whether [Ms A] should have been admitted to [the public hospital] at this time, and as to whether this constituted a mild departure from accepted practice or not.

When [Ms A] re-presented to [the surgical clinic] on 19 May 2015 in a worse state, was it reasonable to proceed with the surgery in a private hospital, or should she have been transferred to a public hospital for treatment?

This is another decision that would divide opinion amongst gynaecologist peers. Some gynaecologists would already have transferred [Ms A] to a public hospital for treatment. Others would, at this point, have arranged for transfer. I gauge that a minority of gynaecologists would have proceeded with surgery in a private hospital setting independent of collaboration with a general surgeon. Of itself, this decision would be assessed by some, but not all, gynaecologists to be a mild departure from accepted practice.

Would it be usual practice, during discussions of this nature with a 20-year old, to obtain consent for the removal of both fallopian tubes, or discuss the risk that both may require removal and the effect that this would have on fertility?

Yes it would. Even in the context of urgent surgery, in a situation such as this, in which one possible outcome is that both fallopian tubes may require removal, it would be usual practice to discuss the risk that this could eventuate. It would also be usual practice to discuss the fertility implication of this.

Most gynaecologists would seek to obtain consent for removal of both fallopian tubes in the event of this being considered essential by the surgeon when the operation took place.

It must be acknowledged that the situation of the operative findings at the second procedure does present a dilemma to a surgeon and this is a fine line judgment call that most surgeons face occasionally, when surgical findings such as these are unexpected. In this circumstance where the fallopian tubes are not removed, there would be an increased risk of the condition worsening or taking longer to settle, of a requirement for further surgery in the short term or long term, and there would have been a chance that the fallopian tubes would have been irreparably damaged from the infection associated with pyosalpinx to the extent that future infertility owing to blocked or damaged fallopian tubes would have been likely, and the risk of ectopic pregnancy would have been significantly increased. It had also been recognized in the first operation that the left fallopian tube did not have a normal appearance (albeit that there was an indication that this fallopian tube would need to be evaluated further before any decision to remove it surgically), although the right fallopian tube was considered to be normal in the first procedure.

However in a case such as this, gynaecologists usually go to all lengths to avoid the need to remove both fallopian tubes. In the absence of prior discussion and/or consent, and particularly in the case of such a young woman who has not yet had children, most gynaecologists would not remove both fallopian tubes. The chance that fallopian tubes can recover from a pyosalpinx through antibiotic treatment, and then subsequently function normally to yield an intrauterine pregnancy is likely to be small. The fallopian tube may be blocked and become a hydrosalpinx (fluid within a blocked fallopian tube) and even if the fallopian tube is not blocked, the sensitive inner lining of the fallopian tube is likely to be damaged and may not function normally. I am unaware of any published studies of fertility outcome specifically after bilateral pyosalpinges (at the severe end of the spectrum of acute pelvic inflammation). There are few good studies of the incidence of infertility following acute PID, with estimates of the likelihood of infertility following acute PID ranging from 5.8% to 60% depending on severity of infection, number of infections, and age of the woman, albeit based on data published in 1980.[9] I have taken a spectrum of opinion from several gynaecologist colleagues, some of whom are fertility specialists and some not, and there was unanimous consensus that the most appropriate course of action would be to undertake a laparoscopic drainage of pus from the pelvis, from the pyosalpinges and tubo ovarian abscess, send microbiological samples (pus and, if removed, tissue), then treat with antibiotics to see whether the infection could settle down without the need for removal of both fallopian tubes. I consider that undertaking bilateral salpingectomy in this context and not sending microbiological diagnostic samples to be at least a moderate departure from standard practice.

There do not appear to have been any samples sent for microbiological analysis at any stage, thus, even retrospectively it is not possible to know precisely what contributed to this episode of severe acute PID. Sending diagnostic samples for microbiology assessment would be regarded as standard practice. This includes genital swabs and blood cultures prior to the commencement of antibiotics and the second surgical procedure, in addition to fluid, pus or tissue samples that were potentially available from the second surgical procedure.

Summary

In their own right, whilst there are a number of aspects of this case, highlighted above, that could be considered as departures from accepted practice, and that none in their own right are necessarily severe, I consider that the combination of these departures in the same case contributes overall to a moderate to severe departure from accepted practice.

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Disclosure

I disclose no personal or professional conflict of interest in this case. I have read and followed the Guidelines for Independent Advisors from the Office of the Health and Disability Commissioner. I will be happy to answer further specific questions if required.

Professor Neil Johnson MD FRANZCOG FRCOG CREI
Independent Advisor for Health and Disability Commissioner."

The following further expert advice was received from Professor Johnson:

"Thank you for the invitation to provide further expert advice regarding the care provided to [Ms A] by [Dr D], at [the medical centre] and [the surgical clinic] in May 2015.

Your letter to me dated 15 December 2016, along with the enclosures highlighted in that letter, form the basis for my response to your request for my expert advice below. This report supplements the advice that I provided in my report dated 24 March 2016. Before providing this further advice, I have reviewed the HDC's Guidelines for Independent Advisors.

Relatives of [Ms A] have also provided additional information that bring into sharp focus what turned out to be a very distressing outcome for a young woman who initially presented for routine laparoscopic surgery for endometriosis, highlighting some of what they consider to be deficiencies in communication around the ultimate decision to remove both of [Ms A's] fallopian tubes at the second surgical procedure.

[Dr D] has provided a thoughtful response that justifies much of the decision making behind the clinical management for [Ms A]. It is clear from this evidence that there were many aspects of [Ms A's] care that were managed optimally, given the alternatives available. Some of this decision making has likely contributed to an outcome better than might have eventuated for [Ms A] under the circumstances of her severe pelvic infection diagnosed laparoscopically on 19 May 2015. The report reflects that [Dr D] endeavoured to act in [Ms A's] best interests at each stage.

After reviewing the documentation forwarded to me on 15 December 2016, my view is that the aspects of care that were not reasonable under the circumstances were:

1) The absence of discussion regarding possible removal of both fallopian tubes prior to the operation dated 19 May, combined with the decision to remove both fallopian tubes in that operation;
2) Not sending samples for microbiological examination from that operative procedure ([Dr D] has acknowledged this).

I consider each of these departures from accepted practice to be mild.

It remains debatable as to whether the absence of prophylactic antibiotic administration for the primary laparoscopic procedure on 12 May 2015 was reasonable under the circumstances and, to some extent, this depends on whether or not an endometrioma was in fact removed or drained in that procedure, as there is conflicting information in the documentation as to whether this was undertaken or not.

In relation to the specific queries raised, I make the following comments.

[Dr D]

1) Was is reasonable for swabs not to have been taken prior to surgery on 12 May 2105?

As stated in my previous report, I consider it debatable as to whether the absence of a recent genital microbiology test was a mild departure from accepted practice or not. [Dr D] has justified not taking swabs prior to surgery and I have a level of acceptance of this viewpoint, as some gynaecologists would not have undertaken swab tests routinely in the absence of indicators to suggest an infective cause of pelvic pain and in the context of strong pointers towards endometriosis as a cause for the symptoms. I accept this justification.

2) Was it reasonable not to assess for tubal patency using blue dye on 12 May 2015?

Yes, it was reasonable not to have tested for tubal patency using blue dye on 12 May 2015, as the indication for surgery was not infertility. The majority of gynaecologists would not have tested for tubal patency in these circumstances.

3) Was it reasonable not to give antibiotic prophylaxis on 12 May 2015, given an endometrioma was not drained?

In my view, it is debatable whether not giving antibiotics on 12 May 2015 was reasonable. First, there are varying reports in the information that I have received as to whether an endometrioma was drained. The initial information that I received in order to compete my previous report led me to believe that an endometrioma was drained. For the purposes of this report, I did not have access to that information. Even though [Dr D] maintains in her subsequent advice to HDC that an endometrioma was seen but not drained, I note that [Dr F's] report dated 2 August 2015 stated that [there was] 'no evidence of an infection at the operative site (removal of endometrioma)'. This suggests to me 'no evidence of infection' rather than 'no evidence of removal of endometrioma', however this could be easily verified by referring to the original operation report and the histology report of the tissue samples from this procedure on 12 May 2015.

If it is accepted that an endometrioma was not drained or removed, it remains debatable in my view whether not giving antibiotics on 12 May was reasonable. This reflects the variance between the current guidelines and newer evidence now available in the literature since these guidelines were developed, and the fact that I and most of my gynaecologist colleagues in Auckland would recommend that

antibiotics are given to women undergoing laparoscopic surgery for endometriosis (especially if tubal thickening due to endometriosis and an endometrioma is present, notwithstanding whether or not an endometrioma is drained). I note also from [Dr D's] statement that she has reviewed this decision with colleagues, so I suspect that this also reflects the different interpretation that my colleagues in Auckland place on the available evidence compared to [Dr D's] colleagues in […]. I do not concur that the emerging evidence that women with endometriosis are at greater risk of infection from surgical intervention (highlighted in my previous report) can be easily dismissed. However, putting aside my own viewpoint that women with endometriosis who undergo laparoscopic surgery should all receive antibiotics (this imperative being particularly relevant for women with more severe endometriosis), I accept that opinions of experts will sometimes differ when interpreting the same evidence base. Hence, whilst debatable, I consider that [Dr D] has given a satisfactory justification, based on current guidelines, that the approach of not giving antibiotics was within the limits of reasonable practice (on the assumption that an endometrioma was not drained or removed).

4) Was it reasonable for [Dr D] to confirm her nurse's advice on 14 May 2015, including whether she should have arranged for [Ms A] to be reviewed?

It was reasonable for [Dr D] to confirm her nurse's advice on 14 May. Whilst in retrospect it would have been ideal for [Dr D] to have reviewed [Ms A], based on the information available to [Dr D] at that time, I do not consider that not arranging to review [Ms A] at that time was a departure from a reasonable standard of practice.

5) Were appropriate investigations undertaken at the consultation on 18 May 2015?

(i) Was it reasonable for swabs not to have been taken?

It was reasonable for swabs not to have been taken, mainly because with this urgent presentation and the plan for further surgery within 24 hours, there would have been insufficient time for the swab results to have altered the clinical course of action required.

(ii) Was it reasonable for blood cultures not to have been ordered?

It was reasonable for blood cultures not to have been ordered, again mainly because with this urgent presentation and the plan for further surgery within 24 hours, there would have been insufficient time for the blood culture results to have altered the clinical course of action required.

(iii) Was it reasonable for a CT scan not to have been ordered?

It is difficult to comment authoritatively on whether a CT scan should have been ordered. Of course, this may have provided relevant information (which we know with the benefit of hindsight), but the best judge of whether a CT scan should have been ordered would be the clinician making the assessment

at the time. I cannot say, based on the information available, that not ordering a CT scan was a departure from a reasonable standard of care.

6) Was an appropriate management plan devised at the consultation on 18 May 2015?

(i) Was it reasonable not to have requested a general surgical opinion?

Whilst a general surgical opinion on 18 May might have been helpful, [Dr D], based on her relationship with general surgeons and their availability, if needed, in the surgical setting that was planned, has offered satisfactory rationale for not requesting a general surgical opinion at that time, hence I consider it was reasonable not to have requested a general surgical opinion on 18 May.

(ii) Should [Ms A] have been transferred to a public hospital?

Whilst transfer of [Ms A] to a public hospital might have resulted in a better outcome, [Dr D] has offered satisfactory justification that not transferring [Ms A] to a public hospital, in the circumstances at that time, was reasonable.

(iii) Should antibiotics have been prescribed to be commenced immediately?

Whilst the immediate prescription of antibiotic might, in hindsight, have contributed to a different outcome, many clinicians would support the viewpoint that immediate prescription of antibiotics in this type of circumstance is not necessarily warranted.

(iv) Should the risk that both fallopian tubes might be removed have been discussed at this point?

Given that [Dr D], in the context of the subsequent surgical procedure, took the view that the best course of action was to remove both fallopian tubes, I consider that the risk that both fallopian tubes might be removed should have been discussed at this point, or at some point. Nonetheless, it can be difficult to anticipate all eventualities and at a certain point in any surgeon's career, unexpected findings at surgery are inevitable.

7) Should the risk that both fallopian tubes might require removal have been discussed with [Ms A] after [Dr D] received the blood test and ultrasound results on 18 May 2015?

Again, given that [Dr D], in the context of the subsequent surgical procedure, took the view that the best course of action was to remove both fallopian tubes, I consider that the risk that both fallopian tubes might be removed should have been discussed at this point, or at some point.

8) Was [Dr D's] telephone advice to [Ms A] on 18 May 2015 appropriate, including whether she should have recommended or arranged for [Ms A] to be reviewed?

With the benefit of hindsight, advice from [Dr D] that [Ms A] should have been reviewed on 18 May 2015 might have contributed to a different outcome.

However, given the information available to [Dr D] at that time, the telephone advice appears reasonable in the circumstances.

9) Was it reasonable to proceed with surgery on 19 May 2015?

(i) Should a general surgical opinion have been sought prior to surgery?

Whilst a general surgical opinion prior to surgery on 19 May might have been helpful, [Dr D], based on her relationship with general surgeons and their availability, if needed, in the surgical setting that was planned, offers satisfactory rationale for not requesting a general surgical opinion at that time, hence I would not consider a general surgical opinion mandatory in these circumstances prior to surgery. Ultimately the gynaecological diagnosis validates [Dr D's] decision to proceed with gynaecological surgery with urgency and not to seek a general surgical opinion prior to surgery.

(ii) Should [Ms A] have been transferred to a public hospital?

There is good justification from [Dr D] and her anaesthetist to proceed to surgery, in the circumstances, on 19 May, rather than to arrange for [Ms A] to be transferred pre-operatively to a public hospital. The action taken would have reduced the time taken for [Ms A] to reach the operating theatre in what was judged at that stage to be an urgent situation.

(iii) Should surgery have been deferred to assess the response to antibiotics?

While it is possible that further time to allow an assessment of the response to antibiotics might, in retrospect, have been beneficial for [Ms A], there is a fine-line judgment as to whether this was a safe course of action or whether, through delaying what at this point was deemed to be emergency surgery, there may have been undue risk involved. Those best placed to make the judgment of whether surgery should have been deferred to assess the response to antibiotics would be the clinicians assessing the patient at the time, as sepsis was clearly a pressing issue and prompt surgery is often the best way of managing this. Hence, I am unable to say that surgery should have been delayed to assess the response to antibiotics.

(iv) Should the risk that both fallopian tubes might be removed have been discussed prior to surgery?

Yes, in my opinion, given that [Dr D] found a circumstance at the surgical procedure on 19 May in which she considered that she had little choice but to remove both fallopian tubes, the risk that both fallopian tubes might be removed should have been discussed prior to surgery, at some point. Omission of this discussion at some point represents a mild departure from accepted practice.

10) Was it clinically appropriate to remove both of [Ms A's] fallopian tubes during surgery on 19 May 2015?

(i) Should the decision to remove both fallopian tubes have been deferred to assess response to antibiotics?

Yes, in my opinion, given that no discussion had taken place about the risk that both fallopian tubes might be removed, the decision to remove both fallopian tubes should have been deferred intraoperatively to assess response to antibiotics. Whilst it is highly likely that the fallopian tubes would not recover from severe infection to resume normal function, we do not have sufficient information to say that this is definitely the case on every occasion. Gynaecologists and fertility specialists are aware anecdotally of occasional cases of women who suffer from severe pelvic inflammatory episodes and severe sepsis of the fallopian tubes and ovaries who, against all odds, do subsequently become pregnant naturally. [Dr D] mentions in her report the recognition of the likely impact on [Ms A] in the context of being unprepared psychologically for removal of both fallopian tubes.

Removal of both of [Ms A's] fallopian tubes in the absence of prior discussion about this possibility represents a mild departure from accepted practice.

(ii) Did [Ms A's] fallopian tubes require urgent removal, such that it was not possible to allow [Ms A] to wake up from anaesthesia and discuss this course of action with her?

In most cases such as this, most gynaecologists would consider it a reasonable course of action to drain pus and infective material from the pelvic cavity and fallopian tubes and to treat intensively with intravenous antibiotics without removing the fallopian tubes at this procedure (especially as it appears that consent for bilateral salpingectomy had not been gained). It would have been reasonable to conserve at least one of the fallopian tubes, as the left tube was less severely affected by infection ([Dr D] commented in her report dated 8 August 2016 that the left fallopian tube 'most definitely needed removal').

[I]t is true that a severe pelvic inflammatory episode, on a background of stage 4 endometriosis, would have meant that the chance of natural conception for [Ms A] in the future would have been very low. It is also true that women with severely damaged fallopian tubes (hydrosalpinges) have improved IVF outcomes if those fallopian tubes are removed or clipped laparoscopically prior to IVF. However these are issues that might reasonably have been addressed later. It is also true that conservation of one (or both) of [Ms A's] fallopian tubes in the surgical procedure on 19 May 2015 would have increased the chance of further complications from the acute pelvic infection, increased the chance of further surgery being required either in the short term (to assist resolution of severe acute pelvic inflammation) or in the long term (to improve the chance of successful IVF).

Nonetheless, most gynaecologists would have attempted to conserve one or both fallopian tubes in this situation, when the possibility of removal of both fallopian tubes had not been discussed with the patient prior to surgery.

11) Was it reasonable for microbiological samples not to have been taken during surgery on 19 May 2015?

No, in my view, microbiological samples should have been taken and sent to the laboratory during surgery on 19 May 2015. [Dr D] has acknowledged that this might have been helpful. This represents a mild departure from the expected standard of care.

12) Any other matters that warrant comment?

There is evidently some uncertainty as to who was responsible for writing '?Left' on the consent form (which I assume would relate to the left fallopian tube). [Dr D] appears to be confident that she did not write this; yet [the surgical clinic] have clarified that they do not believe that a [the surgical clinic] staff member would have written this. It thus remains unclear who was responsible for writing '?Left' on the consent form, which remains an issue of concern.

[The medical centre]

1) Are the relevant policies and procedures of [the medical centre] adequate?

Yes.

2) Any other matters that warrant comment in this case?

No.

[The surgical clinic]

1) Are the admission criteria of [the surgical clinic] adequate?

Yes.

2) Are the relevant policies and procedures of [the surgical clinic] adequate?

Yes, they are extensive and comprehensive.

3) Any other matters that warrant comment in this case?

No.

Disclosure

I disclose no personal or professional conflict of interest in this case. I have read and followed the Guidelines for Independent Advisors from the Office of the Health and Disability Commissioner — before providing this further advice, I reviewed the HDC's Guidelines for Independent Advisors. I will be happy to answer further specific questions if required.

Yours sincerely

Professor Neil Johnson MD FRANZCOG FRCOG CREI
Independent Advisor for Health and Disability Commissioner"