Lakes District Health Board

A Report by the
Health and Disability Commissioner

(Case 18HDC01768)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Contents

Executive summary

1. This report concerns the care provided by Lakes District Health Board (DHB) and a public hospital, in particular the coordination of care by different teams at the hospital, and the management of sepsis.

2. A man arrived at the Emergency Department (ED) at the public hospital by ambulance at 7.18am on 19 May 2018 and was triaged by nursing staff. The man has a history of Crohn's disease first diagnosed in 2010. He had been increasingly unwell in the days leading up to this ED presentation, with his condition deteriorating further in the early hours of 19 May 2018. ED medical staff examined the man and sought a review by the General Surgery team. A General Surgery consultant reviewed the man and discussed his case with a General Medicine consultant. The man met the sepsis criteria, but no antibiotics were charted by either the ED team or the General Surgery team. The ED, General Surgery, and General Medicine teams all had a different understanding as to which team was responsible for the man's care.

3. The man remained in the ED until around 1pm, when he was transferred to the Medial Assessment and Planning Unit (MAPU). Following his admission to MAPU he was not assessed by a medical registrar, as per Lakes DHB's policy. At this time, the General Medicine team's understanding was that the man was under the care of the General Surgery team.

4. The man deteriorated in MAPU, but did not receive a medical review until his family contacted the medical consultant at 4.15pm. The consultant reviewed the man at 5pm and noted his obvious features of sepsis, and immediately commenced IV fluids and antibiotics.

Findings

5. The Deputy Commissioner found that after the General Surgery review at around 10.30am, no team took responsibility for the man's care until 5.00pm. The clinical staff at Lakes DHB did not co-operate effectively with each other to ensure that the man received quality and continuity of services. Accordingly, the Deputy Commissioner found that Lakes DHB breached Right 4(5) of the Code.

6. The Deputy Commissioner also found that Lakes DHB breached Right 4(1) of the Code, as the man did not receive timely medical review, the sepsis policy was not followed, written policy for MAPU was lacking, the admission process to MAPU was not followed, and the documentation by nursing staff was poor.

Recommendations

7. The Deputy Commissioner recommended that Lakes DHB randomly audit compliance with the new MAPU policy and admission process; audit compliance with its sepsis policy within the ED and the Assessment Planning Unit (previously MAPU); provide evidence that education about the sepsis pathway and documentation has been provided to nursing staff; report back to HDC on the outcome of the discussion between ED SMOs regarding patients awaiting review by primary teams and the process of escalation of patients who

deteriorate before formal handover of care to different teams; use this report as a basis for staff training at Lakes DHB; and apologise to the man.

Complaint and investigation

8. The Health and Disability Commissioner (HDC) received a complaint from Mrs B about the services provided by Lakes District Health Board (Lakes DHB) at the public hospital to her son, Mr A. The following issue was identified for investigation:

- *Whether Lakes District Health Board provided Mr A with an appropriate standard of care on 19 May 2018.*

9. This report is the opinion of Deputy Health and Disability Commissioner Rose Wall, and is made in accordance with the power delegated to her by the Commissioner.

10. The parties directly involved in the investigation were:

Mrs B	Complainant
Mr A	Consumer
Lakes DHB	Provider
Dr C	General Surgery consultant

11. Also mentioned in this report:

Dr D	Gastroenterologist
Dr E	Surgical registrar
Dr F	Surgical house officer
RN G	ED Registered Nurse (RN)
Dr H	ED senior house officer
Dr I	ED Clinical Director
Dr J	Quality, Risk and Clinical Governance Director
RN K	Registered nurse
Dr L	Medical registrar
RN M	Registered nurse
Dr N	General surgeon

12. Independent expert advice was obtained from Dr John Keating, a colorectal and general surgeon (Appendix A), Dr Richard Stein, a consultant gastroenterologist (Appendix B), and Mr Craig Jenkin, an Emergency Department nurse practitioner (Appendix C).

Information gathered during investigation

Introduction

13. Mr A, aged in his twenties at the time of this incident, has a history of Crohn's disease[1] first diagnosed in 2010. He had received care for his Crohn's disease from Dr D, a gastroenterologist at the public hospital.

14. Mrs B told HDC:

> "Having had multiple hospital admissions and surgeries for his Crohn's over the last 8 years, [my son] is well in tune with his body, and the signs and symptoms to be aware of."

15. This opinion concerns the care provided by Lakes DHB on 19 May 2018 following Mr A's admission to the Emergency Department (ED), in particular the coordination of care by different teams at the hospital, and the management of Mr A's sepsis.[2]

Background — 15 May 2018 admission

16. Mrs B told HDC that her son had been feeling increasingly unwell for several days, and visited his GP on 15 May 2018. Mr A's GP referred him to the public hospital ED, where he arrived at around 10.30am. At 10.58am he was triaged[3] with a score of 3,[4] and he continued to receive care in the ED. He was reviewed by Dr E, a surgical registrar, at 11.35am, and reviewed again at 1.40pm by Dr F, a surgical house officer, who noted a plan to conduct an MRI[5] and for Mr A to be admitted and seen by the surgical team.

17. Mr A continued to be monitored in the ED. However, at 4.30pm he discharged himself. Mrs B told HDC:

> "Around 4pm … we formulated our own ongoing care plan, with [Mr A] advising staff he would be self-discharging. [He] was given his discharge summary, which included an instruction to return to CDU[6] at 7.30[am] the following day."

18. Mr A then contacted a private colo-rectal surgeon and booked an MRI appointment and a consultation the following week.

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[1] Crohn's disease is an inflammatory bowel disease that can cause abdominal pain, severe diarrhoea, fatigue, weight loss, and malnutrition.
[2] Sepsis is a potentially life-threatening condition caused by the body's response to an infection.
[3] Triage is the prioritisation of patient care according to the severity of illness or injury. New Zealand EDs use the Australasian triage scale, which has five categories — triage category 1 patients are very urgent, while triage category 5 patients are less urgent.
[4] Severe discomfort or distress, or a potentially life-threatening condition or potential adverse outcome from a delay of greater than 30 minutes.
[5] Magnetic Resonance Imaging (MRI) — a procedure that produces detailed cross-sectional images of the body using magnetic fields and radio waves.
[6] Clinical Decision Unit (CDU).

19. The discharge summary stated: "[Patient] feeling well and keen to go home. Discharge plan: Discharge home, Represent to ED tomorrow morning to be seen on consultant ward round to discuss plan." Dr F also noted in the clinical notes: "Plan: return to ED to be seen in C[linical] D[ecision] U[nit] tomorrow morning on C[onsultant] W[ard] R[ound]."

20. From 16–18 May 2018, Mr A did not seek further medical review or return to the public hospital.

19 May 2018 admission

Admission to ED

21. On 19 May 2018, Mr A's condition deteriorated. An ambulance was called and arrived at Mr A's home at 6.53am. The ambulance service told HDC:

> "[Mr A] stated he had been experiencing peri-rectal (PR) bleeding[7] for the last week and overnight had had an increased heart rate (sinus tachycardia) which resulted in [Mr A] experiencing non-radiating chest pain."

22. The ambulance arrived at the public hospital ED at 7.18am. At 7.26am, an ED registered nurse, RN G, assigned Mr A a triage score of 3 and a pain score of 8 out of 10. At 7.30am, an initial assessment was completed by a nurse, and Mr A's vital signs were recorded as: "Temp[erature] 38.1,[8] Pulse 105,[9] B[lood] p[ressure] 133/82,[10] [respiratory rate] 20,[11] O2 Sat[urations] 100%,[12] GCS 15.[13]" The Adult ED Assessment form noted that Mr A had been seen in the ED on 15 May 2018 by the surgical team, and the surgical team was made aware of Mr A's admission.

23. At 7.55am, Mr A was re-triaged, and his triage category was changed to 2.[14] The Adult ED Assessment form contains a sepsis screening tool, and the form for Mr A ticked "yes" for "Temp <36 or >38 Chills/ rigors" and "Heart rate >90". The form stated: "[T]wo tick[s] or more = continue with sepsis six below." As a result, Mr A met the sepsis test criteria, and sepsis tests as required on the form (including blood cultures,[15] venous lactate,[16] and blood tests) were sent to the laboratory. RN G also noted: "ED to see."

[7] Blood mixed with stool or blood leaking from the rectum.
[8] A raised body temperature.
[9] A normal resting heart rate for adults ranges from 60 to 100 beats per minute.
[10] Ideal blood pressure is considered to be between 90/60mmHg and 120/80mmHg. High blood pressure is considered to be 140/90mmHg or higher. Low blood pressure is considered to be 90/60mmHg or lower.
[11] Normal respiration rate for an adult person at rest ranges from 12 to 16 breaths per minute.
[12] Normal pulse oximeter readings usually range from 95–100%.
[13] The Glasgow Coma Scale (GCS) is the most common scoring system used to describe the level of consciousness in a person. A score of 15 indicates a fully awake patient.
[14] Imminently life-threatening or time-critical condition.
[15] A test to check for micro-organisms such as bacteria or fungi in the blood.
[16] A blood test used to determine whether the level of lactate is high enough to disrupt a person's acid–base (pH) balance. Lactic acid levels increase in the presence of sepsis.

24. RN G told HDC: "[I] escalated the concerns regarding possible SIRS[17] to an ED Doctor. Dr H then has proceeded to carry out the initial ED assessment ..."

25. Mr A was reviewed by Dr H, an ED senior house officer, at 8.29am. Dr H recorded in the ED discharge summary:

> "Impression: Flare-up of Crohn's disease, meets sepsis criteria …
>
> Progress during admission: Given IVF,[18] IV Paracetamol[19] and Fentanyl patch.[20] No further PR bleed while in ED … Discussed with General Surgery who have kindly agreed to review patient.
>
> Management Plan: 1. For review by General Surgery ? General Medicine input …"

26. At 8.45am, the EWS[21] chart noted that observations were taken, but the final score was not noted on the form.

27. The ED discharge summary noted "Discharge Type: Discharge to other services in this hosp[ital]", but the "Discharge to:" section was not filled in. Dr H told HDC: "I referred [Mr A] over the phone for review by the General Surgical team."

28. The ED notes at 9.00am document that Mr A was given IV fentanyl, IV paracetamol, and IV fluids. The medication chart notes that Mr A was administered Hartmann's fluid[22] 1 litre IV from 8.50am to 10.05am. At 10.30am, the EWS chart records that observations were taken, but again the final score was not noted on the form.

29. IV antibiotics were not commenced in the ED, and Dr I, the ED Clinical Director, told HDC:

> "Despite meeting the sepsis criteria review by the Surgical team was awaited prior to commencing IV antibiotics. [Dr F] was the surgical house officer and would not be initiating iv antibiotics without instructions from his Registrar or Consultant."

Review by General Surgery team

30. At 10.35am, Mr A was reviewed in the ED by Dr C, a General Surgery consultant. Her notes were transcribed by Dr F, who recorded the following plan:

> "1. [Abdominal X-ray]
> 2. [Chase] bloods/labs
> 3. Ref to [Dr D] gastroenterologist/on-call physician

[17] SIRS is a serious condition related to systemic inflammation, organ dysfunction, organ failure, and sepsis.
[18] Intravenous fluids.
[19] Paracetamol is a common pain medication also used to treat a high temperature. It can be administered orally or intravenously.
[20] Fentanyl is an opioid medication used to treat severe pain.
[21] The early warning score (EWS) is calculated from routine vital sign measurements, and increases as vital signs become increasingly abnormal. The EWS triggers an escalating clinical response to manage the patient's deterioration.
[22] Used for fluid and electrolyte replacement.

4. MRI booked in [at another DHB] for Tues[day] 22 May 2018
5. Surgery happy to have input when indicated but that does [not] appear to be the case currently …"

31. Dr C told HDC that Mr A advised her that he was under the care of Dr D. She stated: "My opinion was that Mr A should be managed by a gastroenterologist and further imaging should be obtained."

No IV antibiotics charted

32. Following the review by the General Surgery team, no antibiotics were charted or commenced. Dr C told HDC:

> "I have since looked at [Dr F's] note and can see that it omits my instruction to commence IV antibiotics. I can only assume that this omission resulted from some miscommunication between us, or possibly confusion arising from the fact that [Mr A] had discussed the fact that he was already on (oral) antibiotics. I am sorry that this error occurred. It is however worth noting that an error like this could have been picked up and remedied had subsequent observations noted that [Mr A] met the criteria for the Sepsis protocol but did not have IV antibiotics charted."

33. Dr F stated:

> "I cannot recall [Dr C] requesting that we should start IV antibiotics, which is expected as the event was close to 17 months ago. However, it is my usual practice to carefully annotate what is said by the consultant on a ward round, with particular attention to the plan. I feel that given the detail of my plan and notes on this ward round it would be uncharacteristic for me to omit this important detail … I do recognise that it is possible a miscommunication amongst the team may have occurred."

34. Mrs B told HDC: "[Dr C] was unable to fully examine [Mr A] rectally due to pain, but administering antibiotics was not suggested." In response to the provisional opinion, Mrs B disagreed that antibiotics were intended to be charted, and told HDC:

> "[Dr C] dismissed [my son's] concerns regarding sepsis, and spoke at length to the symptoms experienced by a patient during a Crohn's flare. At no point was administration of IV antibiotics discussed with him."

Communication between surgical and medical team

35. Around late morning, following Dr C's review, Dr C called Dr D about Mr A. The call was not documented, and no precise time of the call was recorded.

36. Dr C told HDC:

> "As hospital policy requires consultant to consultant referral, I spoke to [Dr D] as he happened to be the consultant physician on call, and verbally referred [Mr A] to him. I was pleased [Dr D] was the on-call physician as he knew [Mr A] and his medical history thoroughly."

37. In relation to her telephone discussion with Dr D, Dr C told HDC:

> "I cannot recall many details of my referring phone call with [Dr D], but I remember being grateful [Dr D] was on call … My understanding was that [Dr D] agreed he would need to review [Mr A] that day and he understood that [Mr A] had not been admitted under the surgical service."

38. Dr D told HDC:

> "I did not offer to take over [Mr A's] care and would not do so until I have made my own assessment of the situation. It would not be standard practice to take over the care of [a] patient until you have seen them to determine their clinical problem."

Team allocation

39. Following Dr C's review, Mr A continued to be stationed in the ED area. Doctors and nurses who were involved had different understandings as to the team to which Mr A had been allocated at this point.

40. Dr H told HDC: "After my discussion with a member of the General Surgical team, the patient will have been allocated to this service."

41. Dr C stated:

> "[Mr A] was an ED patient. My team was asked for a surgical consult. We did this but, decided not to admit [Mr A] under the surgical service. Instead, I referred [Mr A] to [Dr D] with the expectation that he would be admitted as a Gastroenterology patient following [Dr D's] review. In the meantime, I understood that [Mr A] would be cared for by the ED staff in the MAPU.[23]"

42. Dr F told HDC:

> "To my understanding, as we were performing a consultant ward round (CWR) for the surgical team, I was under the impression that [Mr A] was a general surgical patient at the time of review."

43. However, Dr F noted that he may be mistaken that the patient was under the surgical team's care.

44. Dr D stated: "[I]t was my understanding that [Mr A] was under the care of [Dr C]. It was not my understanding that [Mr A] was under the care of ED."

45. Dr J, the Quality, Risk and Clinical Governance Director at Lakes DHB, told HDC that from Lakes DHB's perspective it was the surgical team that was responsible for Mr A when he was reviewed by Dr C at 10.30am and while he was in the ED, until he was transferred to the MAPU.

[23] Medical Assessment and Planning Unit.

46. In response to the provisional opinion, Mrs B told HDC:

> "There had been no communication from [Dr C] to [my son] as patient regarding handover to [Dr D]. We were unsure who [he] would be reviewed by once we had been transferred to MAPU from ED. [He] was moved believing he would be reviewed again in MAPU, but unaware who that was designated to be."

Care in MAPU

MAPU and admission process

47. MAPU is a five-bed medical assessment unit situated within the ED and managed by the Clinical Nurse Manager of the Medical Unit. In the public hospital, the MAPU/CDU is one unit with no defined physical borders. Surgical referrals from the ED are admitted to the CDU while awaiting investigations, review, and admission to the surgical ward. MAPU serves the same function but generally is used for patients awaiting admission to the medical ward.

48. Lakes DHB told HDC that there is a flowchart of admission to MAPU, but at the time of the incident there was no written policy on transferring patients to MAPU from the ED. However, there was a written policy in relation to transferring patients from ED to CDU.

49. Lakes DHB told HDC that the process of transferring a patient to MAPU from the ED is as follows:

a) The ED registrar discusses the patient with the medical registrar, and the patient is accepted for a medical review.

b) Once the medical registrar has reviewed and accepted the patient for further medical input, the medical registrar liaises with the ED CNC to allocate the patient to MAPU. The patient's nurse completes the ED documentation and provides a verbal handover to the MAPU nurse. The patient is then re-located to a MAPU bed space.

c) Following admission to MAPU, it is expected best practice that a medical review by the registrar would occur within one hour.

Transfer to MAPU

50. Following Dr C's review, Mr A continued to receive care in the ED. The notes document that he continued to be administered IV fentanyl. At 11.30am, he was given an EWS of 0.[24] The notes document that at 12.20pm, Mr A was given IV fentanyl prior to being moved to MAPU and admitted to "MAPU 8", with Dr D noted as the consultant. At this time, Mr A had not received any further medical review.

51. RN K, the morning MAPU nurse, told HDC that Mr A arrived in MAPU at approximately 1pm. She recalls receiving a verbal handover from the ED nurse, which is current practice between the departments. She told HDC that her handover included information that IV fentanyl had been prescribed and administered, and that the patient was awaiting a

[24] EWS is ranked from 0 to 10+, with 0 being less serious and 10+ being an immediately life-threatening critical illness.

review by Dr D. RN K said that she completed a set of observations as per the MAPU admission process, and the EWS was 0. She administered IV pain relief at 1.05pm.

52. RN K told HDC: "I do not recall if I was fully aware of the patient's previous temperature, rigours, blood results or that it had been documented the patient was on the SIRS pathway."

53. Lakes DHB told HDC:

> "On admission to MAPU … there was one set of observations completed by the morning nurse, however these were not repeated until the patient was received by the afternoon nurse who did observations hourly to 2 hourly."

54. Dr L was the medical registrar rostered on for 19 May 2018. Dr L told HDC:

> "[A]ccording to the reports provided to the HDC and available to me, [Mr A] was admitted to MAPU at 12.15pm. I was not advised of that and I would have expected to have been had [Mr A] been under the medical team."

55. Lakes DHB stated: "In this case the Surgical and Medical Registrars were not involved in the referral process into MAPU."

56. In response to the provisional report, Mrs B told HDC that following her son's admission to MAPU, the family repeatedly asked the nursing staff when he would be reviewed, but did not receive a clear answer. Mrs B said that they even attempted to get Dr H to re-examine Mr A, but "it was communicated to [her that it] is not permitted for ED Dr's to attend MAPU patients".

57. Lakes DHB stated:

> "Due to the Consultant to Consultant phone call and subsequent documentation outlining the expectation of a review by the Medical Consultant … MAPU nurses had received handover that the Medical Consultant would be reviewing the patient and we believe assumed the Medical Registrar was aware of this fact. This was causal in the delay of the MAPU nurses notifying either of the Medical Registrar's rostered for May 19 that the patient was in the department for review."

Team allocation

58. Dr J told HDC that at this time Mr A would have been allocated to the Medical team if accepted. She stated: "[U]ntil the patient has been clinically assessed by Medical [the] Patient is under duty of care of [the] surgical team who did original review."

59. In response to the provisional report, Mrs B stated:

> "[My son] was unaware of any confusion as to whose team he was under. Confusion over this matter was not communicated, although communication was indeed

> confused. As caregivers over this timeframe, it became increasingly frustrating not to be able to ascertain when further medical review would occur, let alone who by."

Handover to afternoon MAPU nurse

60. RN K told HDC that the afternoon MAPU nurse, RN M, arrived at 2.30pm and was given a verbal handover at the nursing station, including that Mr A had been prescribed PRN analgesia, and that his parents were concerned about the waiting time for Dr D's review.

61. At 2.30pm, RN K documented:

> "Arrived to ward via ED. [Mr A's parents are] in attendance. IV Fentanyl given as required, for pain 6/10 … repeat obs[ervations], [T]emperature of 36 [Celsius], [awaiting] Dr D's review."

62. This is the only documentation in the clinical notes while Mr A was in MAPU.

63. RN K told HDC:

> "I acknowledge that I have not documented information regarding my conversation with the Registrar, and that my documentation could have been clearer regarding [Mr A's] physical and emotional presentation during the 2 hours he was under my care."

64. RN M said that she received a verbal handover from RN K and then checked the observation chart, the patient's background, and the clinical notes for the plan.

Medical review

65. At 3.35pm, Mr A was given an EWS of 2.[25] RN M said that this EWS was because Mr A's family member rang the call bell, as Mr A was having rigors. No EWS sticker was used, and there is no documentation by RN M in the clinical notes. She told HDC:

> "After I took the observations, I immediately went to the Medical registrar's office in ED at [3.40pm] and I verbalised to her that patient was having rigors and had an EWS of 2 … I was told by the Medical Registrar that she [is] waiting for the Consultant to come and the two of them will review the patient."

66. In response to the provisional report, Mrs B told HDC: "[RN M] seemed unphased by [my son's] deteriorating condition … [RN M] showed no raised level of concern for the patient in clear distress under her care."

67. The medication chart records that Mr A was given 1g of paracetamol at 3.30pm.

68. When asked which team Mr A had been allocated to, RN M told HDC: "According to my understanding, Mr A was allocated to the Medical Team at the time of my shift."

69. Dr L was the medical registrar with whom RN M communicated. Initially, Dr L told HDC:

[25] An EWS of 1–5 indicates that the nurse should consider increasing the vital sign frequency, discuss the patient with a senior nurse, and manage any pain, fever, and distress.

> "[Mr A] was admitted under the surgical team … [A]s I was not involved in his care I thought it should be the surgical team looking after him who were advised of his current vitals and EWS."

70. Dr L also said: "I was of the understanding that [Mr A] was admitted under the surgical team, as there were often surgical patients in the MAPU ward."

71. In response to RN M's statement, Dr L told HDC:

> "I can say with absolute confidence I was not advised [Mr A] was in distress and required evaluation. I can also say there was no urgency in [RN M's] voice or anything to alert me to a distressed patient … I would have had no hesitation in attending such a patient, no matter what team he was deemed to be under …
>
> I honestly believed [RN M] had come to the wrong person or had me confused with someone from the surgical team as I had no information about [Mr A], and he had not been discussed with me or referred to me by the surgical team."

72. Dr L disagrees that RN M came to see her around 3.40pm, and instead believes it was after the family had telephoned Dr D around 4.15pm. Dr L stated: "[H]ad I been alerted to any patient in distress I would have attended to see the patient."

73. Dr D said that around 4.15pm he was contacted directly by Mr A's mother, who advised that Mr A was very unwell and asked whether he could come to review her son. Dr D told HDC that he advised Mrs B that he would come in straight away, and he arrived at the hospital around 4.45pm.

74. Lakes DHB told HDC that there is no documentation that a medical review occurred until Mr A was seen by Dr D at 5pm. Dr D said that when he arrived, Mr A had obvious features of sepsis, and IV fluids and IV antibiotics (gentamicin) were commenced, which improved the situation rapidly.

75. In response to the provisional report, Mrs B stated:

> "We as caregivers stood helpless in a primary care facility and watched failure to initiate sepsis protocol almost take our son's life. I feel certain had I not made the phone call I did, this would without question have been the case."

76. Mr A was then admitted by the General Medicine team. There are no concerns about the care he received subsequently.

Further information

ED

77. Dr I stated: "[I]t is correct that the management of a patient is the responsibility of the referring service until seen by the accepting team."

78. Dr I also told HDC:

> "ED SHO referred by phone to the Gen[eral] Surg[ical] team who saw the patient and then referred to the Medical Consultant. However there does seem to have been some confusion between the plan initiated on [the] 15th and [Mr A's] re-admission on 19th [May]. The responsible team on the 15th was the surgical team … [W]hen [Mr A] was re-admitted on 19th he was referred by the ED SHO to the Surgical team as they had formulated a plan of the 15th. However the Surgical Consultant requested a Medical admission on the basis that 'no surgical intervention was considered necessary at that stage'. He was therefore admitted to MAPU which is for medical patients as surgical admissions go to CDU …"

79. Subsequently, Dr I checked Lakes DHB's practice management software (PMS) and told HDC:

> "Interrogation of the Lakes DHB PMS shows that on the 19th May 2018 [Mr A] was registered in iPM[26] at 7.24am — under the specialty of Emergency Medicine … iPM show[s] that electronically the host team was transferred to General Medicine at 11.29am and that he was transferred to MAPU under General Medicine at 12.15pm. From an administrative and nursing point of view it appears that the admission was under General Medicine and that is why he was admitted to MAPU rather than CDU. Surgical admissions are to CDU not MAPU."

Medical team

80. Lakes DHB told HDC that "[the] Clinical Director of Medicine, agrees there was a severe departure of care between 12.15pm and 5.00pm" while Mr A was in MAPU.

81. Dr L told HDC:

> "[T]he MAPU/CDU is one unit, with no defined physical borders. Surgical referrals were admitted to the CDU while awaiting investigations, review and admission to the surgical ward, MAPU was generally medical but, just as there were no physical borders, the unit was a mix sometimes."

Surgical team

82. Dr C emphasised that the ED team remained responsible for Mr A following her review at 10.25am. She stated:

> "My role in [Mr A's] care was to provide a surgical opinion to ED staff. If I had considered [Mr A] needed surgical treatment, he would have been transferred to the surgical team and admitted under my care."

83. Dr C also said that the medical team who maintain MAPU were responsible for Mr A when he was transferred to MAPU.

[26] iPM is the hospital's patient administration system.

Mortality/morbidity review

84. Following this incident, Lakes DHB conducted a mortality/morbidity review of the care provided by Lakes DHB to Mr A on 15 and 19 May 2018. The review did not find any concerns about the care provided on 15 May 2018.

85. A copy of the minutes of the Mortality and Morbidity Committee meeting held on 25 October 2018 was provided to HDC. The minutes note that the Committee determined the following (in relation to the care provided on 19 May 2018):

a) There was a failure to follow the sepsis pathway, particularly around the starting of antibiotics as soon as possible (ideally in less than one hour).

b) There was a failure to follow up on antibiotics by the surgical team and nursing staff.

c) There was no clearly defined plan for the nurses to follow.

d) There appears to have been a communication breakdown between teams as to who had the responsibility of the patient.

e) The transfer of the patient to MAPU from ED occurred without clear allocation to the primary team.

f) There was a failure to escalate when the patient became more septic with the onset of new symptoms of confusion and delirium.

g) There was poor documentation throughout the admission from the surgical team review at 10.30am to the medical SMO review at 5pm.

86. The minutes state:

> "The Committee was of the view that patients should stay under the ED team until they are attended by the receiving team. Nurses too should also be made aware of escalation processes."

87. Lakes DHB told HDC: "[T]he 19 May 2018 review findings support the statement that there were deficiencies in nursing documentation following admission to [MAPU]."

88. The minutes also record that the Committee recommended the following:

a) Further education regarding the Sepsis Pathway be undertaken, with an emphasis on antibiotics. This is to be carried out at a Grand Round session in conjunction with the infection control team and microbiologists.

b) That discussion take place with ED SMOs in respect to patients awaiting review by primary teams and the process of escalation of patients in the event of deterioration before formal handover of care.

c) That the case be sent to ED, Medicine, and Surgical Services for formal review with a specific emphasis on the use of the Sepsis Pathway, communication and handover of care between specialities, and the importance of documentation.

d) That discussion occur with nurse educators and the deteriorating patient group regarding sepsis education training on new onset confusion/delirium.

e) That nurse educators emphasise the importance of documentation by nurses, and of escalation in the event of deterioration.

Relevant policies

Sepsis policy

89. Lakes DHB's "Management of Adult Patient with Sepsis Policy" (the Sepsis Policy) states:

> "C — Fluid therapy
>
> i. Fluids should be administered using fluid challenge technique for as long as haemodynamic[27] factors continue with repeated fluid boluses.[28]
>
> D — Antimicrobial therapy
>
> i. IV antimicrobials should commence within one hour of recognition of sepsis and septic shock. Faster is better — delays cost lives.
>
> ii. Failure to initiate appropriate empiric therapy in patients with sepsis and septic shock is associated with a substantial increase in morbidity and mortality …"

MAPU flowchart

90. As discussed above at paragraph 48, at the time of the incident there was no policy about transferring patients to MAPU, but Lakes DHB had a flowchart titled "Admission to MAPU", which was provided to HDC. The flowchart stated: "ED referrals -> ED work up[29] — expected Medical referral use medical admission document -> refer to medicine -> medicine work up …"

EWS policy

91. Lake DHB's "Early Warning Score Observation Chart Policy" (the EWS Policy) stated:

> "4 Procedure/Management
>
> 4.1 All adult patients admitted to hospital must have their vital signs documented in the EWS observation chart. This process starts in ED when the decision is made to admit or transfer the patient …
>
> 4.3 Vital signs default frequency is 4 hourly following admission to hospital. This is superseded by different care pathways …
>
> 4.4 Minimum frequency of observations for the following scores is not negotiable
>
> - 2 hourly for EWS score of 1
> - 1 hourly for EWS score of 2
> - 1/3 hourly for EWS score of 3 or more

[27] Relating to the flow of blood within the organs and tissues of the body.
[28] Therapy administered to patients with hypotension or severe sepsis.
[29] Procedures undertaken to reach a diagnosis, including history taking, laboratory tests, X-rays, etc.

4.5 Once vital signs are documented a score must be completed.

…

4.10 Once EWS score is 2 or more an EWS sticker must be placed in the clinical notes with appropriate documentation. This documentation will be used for follow-up audits and to assess response times."

Changes made since incident

92. Lakes DHB told HDC that as a result of this incident, in addition to the recommendations made following the Mortality and Morbidity Review (see paragraph 88), it identified other areas for improvement and undertook the following:

a) The documentation insufficiencies were addressed by the Clinical Nurse Manager with the staff who provided care. The Clinical Nurse Manager has had regular meetings to discuss the process for escalation when there is patient deterioration within MAPU;

b) Discussions between the ED and Medical specialities occurred, with agreement on how escalation should proceed within the shared space of the department.

c) A number of in-service sessions on documentation were delivered to nursing staff in the ED and MAPU settings.

d) The ED has been formulating an SBAR[30] handover sheet for both CDU and MAPU.

e) It issued a "Medical Assessment and Planning Unit (MAPU) Processes — incorporating the 24 hour observation unit" policy in January 2020. The policy provides information about the management of patients in MAPU and the admission criteria and process. The policy states: "[I]f at any time there is severe deterioration in a patient's condition and no doctor is immediately available in the unit, ED staff can assume default care for the patient …" A copy of the policy was provided to HDC.

f) It reviewed and issued an updated EWS Policy in December 2019. A copy of the updated policy was provided to HDC.

Responses to provisional opinion

Mrs B

93. Mrs B was provided with an opportunity to comment on the "information gathered" section of the provisional decision. Where appropriate her comments have been incorporated into this report. Mrs B said that this case has highlighted a systemic and multi-disciplinary failure. She told HDC:

> "Your detailing of the many and varied points of failure in [Lakes] DHB's system that day are damming, and vindication of the necessity to pursue this case to highlight these faults to the relevant parties involved. It would be of some comfort to believe the outcome of this would be the surety that no other family would ever have to go through what we did that day. However, the clinical documentation of events cannot

[30] SBAR (an acronym for Situation, Background, Assessment, Recommendation) is a technique used to facilitate prompt and appropriate communication.

> detail the trauma suffered at the hands of a primary health care provider whom we had gone to trusting that the care of our son would be carried out diligently, respectfully, professionally, and with his health and safety uppermost in the minds of all concerned."

Lakes DHB

94. Lakes DHB was provided with an opportunity to comment on the provisional opinion. It said that it has given all employees involved an opportunity to review the provisional report. Lakes DHB stated: "As a DHB we have accepted your decision …"

95. Lakes DHB said that currently its Mortality and Morbidity Committee is undertaking an audit of the sepsis pathway with ED staff, and work is being progressed on sepsis risk stratification and modification of the sepsis pathway to correlate with the relevant guidelines. Lakes DHB also stated that it is involved in the New Zealand Sepsis Action Plan, and intends to incorporate this work into Lakes DHB's pathways.

96. Lakes DHB told HDC:

> "[Dr I] indicated that ED while having clear processes for referral to other specialties in ED agrees that there was not a detailed policy for use of MAPU beds — just the flow diagram that the HDC included in their review. Lakes DHB agrees that this patient did not receive the timely care owed and that he did meet two of the SIRS criteria on admission … [Dr I] agrees that there was lack of clear transfer of clinical responsibility and delays to clinical review once [Mr A] was transferred from ED into the MAPU."

97. Lakes DHB also told HDC that in response to the events of COVID-19, MAPU and CDU were replaced by an Assessment Planning Unit (APU), to provide physical isolation beds in the ED. The APU beds are used in the same way as the MAPU/CDU beds, and it is working on agreed criteria principles for the responsibility of care when referrals are made from one speciality to another, as well as policy guidance for APU.

Opinion: Lakes District Health Board — breach

Introduction

98. This opinion concerns the standard of care provided to Mr A by Lakes DHB on 19 May 2018.

99. Mr A was admitted to the public hospital ED and then reviewed by the General Surgery team and transferred to MAPU. He received care from three different teams at Lakes DHB — the Emergency Department, the General Surgery team, and the General Medicine team.

100. Lakes DHB has an organisational duty to provide services of an appropriate standard. This includes providing adequate support to staff in respect of the application of relevant policies, and ensuring that all staff work together and communicate effectively.

101. The care provided to Mr A by Lakes DHB was suboptimal in a number of respects.

Co-ordination of care

102. Mr A had been seen in the ED on 15 May 2018 and reviewed by the General Surgery team. He self-discharged with a plan for him to return to the hospital the following day for admission. Mr A was informed of the plan and provided with a discharge summary that included this. However, Mr A did not return to the hospital, and instead arranged to see a private provider with an appointment scheduled for the following week.

103. On 19 May 2018, Mr A deteriorated and was transferred to hospital by ambulance. Initially he received care from the ED team, who noted that Mr A had been seen by the General Surgery team on 15 May 2018. The ED team requested a review of Mr A by the General Surgery team, and at 10.30am he was seen by the General Surgery consultant, Dr C. Dr C's plan for Mr A noted: "[Referred] to [Dr D] gastroenterologist … surgery happy to have input when indicated but that does not appear to be the case currently."

104. Following her review, Dr C called Dr D (from the General Medicine team) to discuss Mr A. Dr C told HDC that she referred Mr A to Dr D verbally, and that Dr D understood that Mr A had not been admitted under the surgical service. Dr D told HDC that he did not offer to take over Mr A's care, and would not have done so until he had made his own assessment of the situation. Mr A continued to be stationed in the ED.

105. At 12.20pm, Mr A was transferred to MAPU. The MAPU nurse received a verbal handover from the ED nurse that Mr A was awaiting a review by Dr D. The ED notes document that Mr A was admitted to "MAPU 8", and that the consultant was Dr D. MAPU is managed by the medical team but operated in the ED area. At the time of admission to MAPU, the medical registrar was not informed of Mr A's admission to MAPU.

106. Mr A remained in MAPU until Dr D reviewed him at around 5pm. During his time in MAPU, he was not reviewed by any doctor but was observed by MAPU nurses.

107. Following Dr C's review of Mr A at 10.30am, it was not clear which team had primary responsibility for him. The relevant parties had different understandings, and told HDC the following:

a) Dr H, the ED House Officer, told HDC that after his discussion with the General Surgery team, Mr A would have been allocated to that service.

b) Dr C told HDC that Mr A was an ED patient, and her team was asked for a surgical consultation, which they provided, but decided not to admit Mr A under the surgical service. She said that the medical team was responsible for Mr A when he was transferred to MAPU.

c) Dr I, the ED Clinical Director, told HDC that the DHB's PMS showed that electronically the host team was transferred to the General Medicine team at 11.29am, and then to MAPU. Dr I said that from an administrative and nursing point of view, it appears that the admission was under the General Medicine team.

d) RN M, the afternoon MAPU nurse, stated that her understanding was that Mr A had been allocated to the medical team at the time of her shift.

e) Dr L, the medical registrar, said that Mr A was admitted under the surgical team.

f) Dr D's understanding was that Mr A was under the care of Dr C and the General Surgery team, and not under the care of ED.

108. The DHB told HDC that from its perspective, the surgical team was responsible for Mr A when he was reviewed by Dr C and while he was in the ED, until he was transferred to MAPU. The DHB said that if Mr A was reviewed by the medical team and accepted by the medical team for admission to MAPU, Mr A would be allocated to the medical team. Lakes DHB's mortality and morbidity review found that there appeared to have been a communication breakdown between teams as to who had responsibility for the patient, and that there was no clearly defined plan for the nurses to follow.

109. Expert advice was obtained from ED Nurse Practitioner Craig Jenkin, Dr Richard Stein (a gastroenterologist and internal medicine specialist), and Dr John Keating (a colorectal and general surgeon).

110. NP Jenkin considered the responses from the different parties and advised:

> "In regards to [Mr A] I do not believe one individual was responsible for any errors in his care. One of the key issues during the admission on the 19th May to the public hospital was the confusion of whom his treatment was being provided by at different time points … all the presumptions can be viewed as reasonable in different contexts, however this did not provide optimal care for [Mr A] leading to increased frustration to him and his family. This degree of confusion and no clear clinical lead in this case is a moderate departure from accepted practice.
>
> The systematic issue that underlies [Mr A's] presentation is not isolated to just Lakes DHB. Organisational governance over acute patient flow through the hospital is an issue for many DHBs over New Zealand … focusing efforts on development of governance documents could assist in clarifying this type of debate."

111. Dr Keating noted that the consultant responsible for the care of Mr A after he was transferred out of the ED is in doubt. He opined:

> "Reading through the notes, there did appear to be a lack of clarity as to which department was actually in charge of [Mr A's] care on the 19th once he left the [ED] … I believe that there was a systemic issue with the transfer of care of the patient on the morning of 19 May."

112. Initially, Dr Stein considered that Dr C would have been the doctor responsible for Mr A's care from the time he was reviewed by her. However, Dr Stein further advised:

> "My opinion is that this was due primarily to a systemic issue, rather than attributable to an individual. The importance of documenting who is in charge of a patient's care is, of course, of critical importance."

113. It is clear that on 19 May 2018 there was confusion and different understandings as to which team was primarily responsible for Mr A's care after he was reviewed by the General Surgery team. In my opinion, there were several opportunities when the management of Mr A could have been clarified by both nursing and medical staff, including when Mr A was reviewed by the General Surgery team at around 10.30am, when he was transferred from ED to MAPU, when he was admitted to MAPU, and while he was receiving care in MAPU. These opportunities were lost owing to poor communication between the ED team, the General Surgery team, and the General Medicine team, as well as poor communication between medical and nursing staff.

114. I have carefully considered the extent to which the deficiencies in Mr A's care occurred as a result of individual staff action or inaction, as opposed to systemic and organisational issues. The problems that arose with Mr A's care were not the result of isolated incidents involving one or two staff members — they began at the time Mr A was admitted to the ED, and involved a number of different doctors and nurses. All three expert advisors also consider that the issues in this case were systemic, and I accept their advice.

115. Admissions to ED and subsequent care at hospitals inherently involve interaction and overlap between multiple teams and departments, and therefore attention must be paid to the need to ensure continuity of care, and the issues that can arise when no single clinician takes overall responsibility for the patient. I am critical that Lakes DHB failed to ensure quality and continuity of services to Mr A on 19 May 2018. It was not clear which clinical team had primary responsibility for Mr A's care, and this led to further issues and a poor standard of care, as discussed below.

Failure to follow sepsis policy

116. On 19 May 2018 at 7.55am, Mr A was assessed for sepsis as required on the Adult ED Assessment form, and he met the sepsis criteria. This was communicated by the ED nurse to an ED doctor, and Dr H recorded it in his notes at 8.29am. The sepsis policy required that IV antimicrobials be commenced within one hour of the recognition of sepsis, and advised that IV fluids should be administered. Mr A was given IV fluids and IV paracetamol in the ED, but not IV antibiotics. The ED team told HDC that Mr A was awaiting review by the surgical team, so no IV antibiotics were charted, and that after Mr A was reviewed by the surgical team, he was awaiting review by the medical team.

117. Dr C reviewed Mr A around 10.30am, and Dr F documented Dr C's instructions. However, Dr F did not document that IV antibiotics were to be commenced. Dr C told HDC that she did instruct that IV antibiotics were to be commenced, and can only assume that Dr F's omission to record the instruction was the result of a miscommunication between them. Dr F told HDC that given the passage of time he cannot recall Dr C requesting that IV antibiotics should be started. He said that his usual practice is to annotate carefully what is

said by the consultant, but it is possible that a miscommunication amongst the team may have occurred.

118. As a result, following Dr C's review Mr A was not provided with IV antibiotics and further IV fluids while he was in the ED or when he was admitted to MAPU. IV antibiotics and IV fluids were commenced when Dr D reviewed Mr A at around 5.00pm. After the commencement of IV antibiotics, Mr A's condition improved rapidly.

119. Both NP Jenkin and Dr Keating advised that Lakes DHB's sepsis policy is appropriate. However, both experts advised that the sepsis policy was not followed in this case, and that there was a delay in commencing IV antibiotics.

120. NP Jenkin advised:

> "[Mr A] meet[s] the SIRS criteria. ED medical staff did not appear to act on protocol driven investigations initiated by ED nursing staff identifying possible sepsis by failing to start IV antibiotics according to the [sepsis policy]."

121. Dr Keating opined:

> "The delay in the provision of IV fluids and IV antibiotics resulted in a departure from the accepted standard of practice … [A]lthough appropriate bloods were taken and sepsis was diagnosed, appropriate treatment was clearly delayed and [the sepsis policy] sub-paragraph D.1 … was not followed."

122. Given the evidence available and the discrepancies between Dr C's and Dr F's recollections, I am unable to make a finding on whether Dr C instructed that IV antibiotics and fluids be commenced, or whether the instruction was omitted. The instruction was not documented by Dr F, and it is clear that IV antibiotics were not commenced until Mr A was reviewed by Dr D at 5pm. As stated above, this illustrates ineffective co-ordination and communication between clinicians, and is significantly inconsistent with the requirements of Lakes DHB's sepsis policy.

123. I accept the advice of my expert advisors, and am critical that Mr A was not given IV antibiotics and fluids in a timely manner despite meeting the sepsis criteria. I am also critical that the sepsis policy was not followed.

Care provided in MAPU

Lack of written policy

124. MAPU was a medical assessment unit situated within the ED for patients who were transferred from the ED to the medical team but were awaiting review or investigations. At the time of the incident, the only documentation about MAPU was a flowchart outlining the admission guide to MAPU. There was no written policy about MAPU. The surgical team had a similar unit, CDU, for patients to be transferred to the surgical ward from ED. However, unlike MAPU, there was a written policy about CDU.

125. NP Jenkin noted that the DHB where he works has a written document about MAPU, and advised:

> "I would see lack of a policies or governance documents for a MAPU unit as a rarity. Although the flow charts give an overarching flow process to the unit and how it would operate on a daily basis a governance document would bring into consideration strategic goals of the unit, ensure accountability and management of risk … [N]ot to have this type of document I would see as a moderate departure from accepted practice."

126. Dr Stein noted that the lack of a written policy about MAPU meant that it was not clear which team was responsible for Mr A while he was in MAPU. Dr Stein advised: "There should be a clearly written policy, specifically addressing admission procedures to MAPU, identification of the admitting team, and expectations of the admitting team."

127. I accept both experts' advice. In my opinion, units such as MAPU serve as a boundary ward between different teams and, as such, the line as to who is responsible may be blurred or unclear. I consider that MAPU as a unit had its own functions and the existence of the unit was appropriate. However, in this case there was a lack of clear written policy, and the proper admission process into MAPU was not followed. A clear written policy, effective communications, and ultimately agreement between teams is vital to ensure accountability and appropriate management of patients in such a unit, and to ensure that the unit can function as intended. I am critical that at the time of the incident Lakes DHB did not have a written policy or documentation about MAPU.

Lack of medical review in MAPU

128. Mr A was transferred to MAPU from ED at 12.20pm.

129. Dr L, the medical registrar on duty on 19 May 2018, told HDC that she was not informed about Mr A's admission to MAPU, which she "would have expected to have been had [Mr A] been under the care of the medical team".

130. Lakes DHB told HDC that normally when a patient is transferred to MAPU from ED, the process is that the ED registrar will discuss the patient with the medical registrar, the medical registrar will then review and accept the patient and liaise with ED to allocate the patient to MAPU, and the ED nurse will then hand over the care to a MAPU nurse. It is expected practice that a medical review by the registrar will occur within one hour.

131. The MAPU flowchart stated that there should be a referral to "Medicine" and a "Medicine work up" before a patient is admitted to MAPU.

132. NP Jenkin advised:

> "[A]ccording to this document, [Mr A] should not have been moved to MAPU prior to Medicine work up … he was stable at the time of this part of his patient journey so admission to MAPU to await medical assessment could have [been] deemed reasonable."

133. At 3.35pm, RN M noted that Mr A's EWS had changed from 0 to 2, and she sought medical assistance. She told HDC that she went to the medical registrar's office and advised Dr L that the patient was having rigors and had an EWS of 2. RN M said that Dr L told her that she was waiting for Dr D to come in, and that together they would review Mr A. As a result, no doctor reviewed Mr A until Dr D arrived at 5pm at the request of Mr A's concerned family.

134. Dr L told HDC that she was not advised that Mr A was in distress and required evaluation. She said she would have had no hesitation in attending the patient if she had been informed that Mr A was in a distressed state. Dr L believed that RN M had come to the wrong person, as her understanding was that Mr A was under the care of the surgical team. Dr L also believes that RN M came to see her around 4.15pm after the family called Dr D, not at 3.35pm. RN M's discussion with Dr L was not documented in the clinical notes.

135. Dr L said that her understanding was that Mr A was under the care of the surgical team during his time in MAPU. She explained that there were "no defined physical borders" between MAPU and the CDU, which is where surgical referrals are admitted. Dr L stated that because of the lack of borders between the two wards, MAPU, while generally medical, "was a mix sometimes".

136. Given the discrepancies between the accounts of RN M and Dr L, I am unable to make a factual finding about what was discussed between them. In any event, it is clear that following Mr A's transfer to MAPU, he did not receive a medical review until Dr D attended at 5pm.

137. Dr Stein advised:

> "[Mr A] was admitted to MAPU without any clear understanding by the staff who was responsible for his care. The necessity of clearly identifying the doctor in charge is obvious … Nurses were monitoring a patient who was clinically deteriorating, but there was no doctor actively managing his care. Documentation in the progress notes was absent. This represents a severe departure from the accepted standard of care …"

138. Lakes DHB's medical team told HDC that it agrees with Dr Stein's advice.

139. I also accept Dr Stein's advice, and am very critical that Mr A was not reviewed medically while he was in MAPU from 12.20pm to 5pm. In my opinion, in part the issue was a result of the inadequate co-ordination of care between the different teams on the day, and that the recording of transfers of care was inadequate. Other contributing factors were that the MAPU flowchart was not followed, and the medical registrar was not informed of Mr A's admission to MAPU — failures for which I am also critical. I note that these issues also arose owing to the lack of a clear written policy about MAPU. As a result, it was not clear who was responsible for reviewing Mr A. Consequently, Mr A deteriorated in MAPU over nearly five hours without a review by a doctor. In my opinion, this was unacceptable.

Nursing care

EWS in ED

140. While in the ED, Mr A's EWS chart documented that observations were recorded at 8.45am and 10.30am. However, the EWS for these observations was not noted on the EWS form.

141. The EWS policy states that once vital signs are documented, a score must be completed.

142. NP Jenkin advised:

> "The ED nursing staff appropriately monitored [Mr A's] condition. They initiated appropriate investigations and provided regular observations and documentation. I believe this meets with an appropriate standard of care …"

143. However, NP Jenkin was critical that the EWS was not recorded while Mr A was in the ED, even though the observations were taken and noted.

144. I am also critical that despite appropriate observations being taken and noted, Mr A's EWS was not documented at 8.45am and 10.30am.

Nursing care in MAPU

145. As discussed above, Mr A was monitored by nurses while he was in MAPU.

146. The EWS policy states that if a patient's EWS is 2 or more, an EWS sticker must be placed in the clinical notes with appropriate documentation to be used for follow-up audits and to assess response times. At 3.35pm, Mr A had an EWS of 2, but no EWS sticker was placed in the clinical notes.

147. NP Jenkin advised that the failure by nursing staff to place the EWS sticker into the notes was "a minor departure from accepted practice and would be viewed so by [his] peers".

148. RN M said that she sought further medical assistance at around 3.35pm, but this was not documented. RN M's clinical notes contain only one brief nursing record at 2.30pm.

149. NP Jenkin advised that in his opinion, "MAPU nursing staff appropriately monitored but failed to document escalation of [Mr A's] condition". NP Jenkin considers that the "lack of documentation is a minor departure from the standard of care".

150. I agree, and I am mildly critical of the documentation standard by MAPU nurses on 19 May 2018, and that the EWS sticker was not used as per the EWS policy.

Conclusion

151. When a patient is likely to be seen by multiple teams during the course of a hospital admission, it is essential that clear and effective communication occurs between all the teams involved, and that DHBs have processes to optimise the continuity of care. In Mr A's case, there were issues with the communication between Dr C and Dr F, and between the nursing staff and Dr L. As a result, on 19 May 2018, no team was responsible for Mr A's

care after the surgical team review at around 10.30am, until Dr D's review at 5pm. The clinical staff at Lakes DHB did not co-operate effectively with each other, and Mr A was not provided with quality and continuity of services. Accordingly, I find that Lakes DHB breached Right 4(5) of the Code.[31]

152. I also consider that Lakes DHB failed to provide appropriate care to Mr A for the following reasons:

a) The sepsis policy was not followed, and no IV antibiotics or further IV fluids were administered following Mr A's transfer to MAPU until he was reviewed by Dr D.

b) Mr A did not receive any medical review while he was in MAPU until 5pm when Dr D saw him.

c) There was no written policy or protocol about MAPU at the time of the incident.

d) The admission process to MAPU was not followed, as the medical registrar was not informed of Mr A's admission to MAPU.

e) There was poor documentation by MAPU nursing staff, MAPU nursing staff did not use the EWS sticker as per the EWS policy, and the EWS was not calculated and noted by ED nursing staff on some occasions.

153. Sepsis is a potentially life-threatening condition that necessitates prompt and at times aggressive treatment. As a consequence of the above failures, on 19 May 2018 Mr A was left in pain, with no specified person taking responsibility for his treatment, for a protracted period of time, and there was a significant delay in arranging medical review and appropriate treatment. It was fortunate for Mr A that his family took an active approach and sought a review from Dr D directly — otherwise Mr A may have deteriorated further. Taking into account these deficiencies, in my opinion Lakes DHB did not provide services to Mr A with reasonable care and skill, and breached Right 4(1) of the Code.[32]

Recommendations

154. I recommend that Lakes DHB:

a) Provide a written apology to Mr A for its breaches of the Code. The apology is to be sent to HDC, for forwarding to Mr A, within three weeks of the date of this report.

b) In the event that MAPU is reinstated, randomly audit whether the new MAPU policy and admission process has been complied with for 30 patients who were transferred from ED to MAPU in the three months following reinstatement, and report the results of the audit to HDC within 18 months of the date of this report. Where the audit

[31] Right 4(5) states: "Every consumer has the right to co-operation among providers to ensure quality and continuity of services."
[32] Right 4(1) states: "Every consumer has the right to have services provided with reasonable care and skill."

results do not show 100% compliance, Lakes DHB is to advise what further steps will be taken to address the issue. If the audit is unable to be carried out within the timeframe stated, Lakes DHB is to advise HDC of this.

c) Randomly audit whether the sepsis policy has been complied with within the ED and APU for 30 patients who met the sepsis criteria within the last six months, and report the results of the audit to HDC within ten months of the date of this report. Where the audit results do not show 100% compliance, Lakes DHB is to advise what further steps will be taken to address the issue.

d) Within five months of the date of this report, provide evidence to HDC that further education about the sepsis pathway and documentation has been provided to nursing staff, as per the recommendations of the mortality and morbidity review.

e) Report back to HDC on the outcome of the discussion between different teams as per paragraph 88(b) above, and whether any improvements have been made following that discussion, within five months of the date of this report.

f) Use this report as a basis for staff training at Lakes DHB, focusing on the breaches of the Code identified, and disseminate the learning and changes following this case via Lakes DHB's existing forums for nursing and medical teams, and provide HDC with evidence that this has been completed, within five months of the date of this report.

Follow-up actions

155. A copy of this report with details identifying the parties removed, except the experts who advised on this case and Lakes DHB, will be sent to the Ministry of Health.

156. A copy of this report with details identifying the parties removed, except the experts who advised on this case and Lakes DHB, will be sent to all other DHBs and the Health Quality & Safety Commission, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A: Independent advice to the Commissioner

The following expert advice was obtained from Dr John Keating, a colorectal and general surgeon:

"18 July 2019

…

Re: [Mr A]

DOB: …

Place: [Public hospital] (Lakes District Health Board)

Ref: C18HDC01768

Brief Timeline of History

[Mr A] had a history of Crohn's disease of at least eight years and had previously had an ileocaecal resection for ileal Crohn's disease. He presented to [the public hospital] as an initial presentation on 15 May 2018 with a history of rectal bleeding, perianal pain and a general feeling of being unwell and having had fevers. He was assessed by the surgical registrar and was noted to be afebrile with a temperature of 35.5, heart rate of 86 and blood pressure of 133/71. It was noted that there was no external erythema or fistula in the perianal region although digital rectal examination was tender and was not tolerated. The initial surgical assessment was associated with a provisional diagnosis of perianal pain possibly related to (ischio-anal) sepsis. Bloods were ordered and a thought was given to an MRI assessment.

[Mr A] was then clerked in by the house surgeon, [Dr F], at 01.40 pm on the 15th. The history of his treatment with anti-MAP treatment was noted and his regular immunosuppression with intravenous infusion of Infliximab was duly noted. It was also recorded that he stopped Mercaptopurine some three weeks previously at his last visit with [Dr D], his local gastroenterologist. The plan from that surgical admission was one for an MRI scan, but it was noted that although it might happen on the day following admission it had not been confirmed. Plan at this stage was not to give antibiotics or IV fluids, that regular analgesia be supplied and the patient be admitted. Further discussion between the house surgeon and the registrar and the patient resulted in the patient being discharged home on the evening of the 15th at the patient's request and the plan was then modified so that the patient should return to the Emergency Department to be seen on the consultant ward round on the following morning of the 16th.

For reasons that are not entirely clear, the patient did not attend that planned assessment on the morning of the 16th but re-presented on the 19th May early in the morning having been transported to hospital by ambulance with a continuation and exacerbation of his pain. He was noted, when seen on the morning of the 19th on the consultant ward round by [Dr C], to be febrile at 38.8, to have a heart rate of 105 and it was noted that he had an MRI examination [of] 'the pelvis booked in [another

district health board] for Tuesday, 22nd May'. There is an entry in the patient's notes from that consultant ward round on the morning of the 19th that 'surgery would be happy to have input into the patient's care when surgery was indicated but that does not appear to be the case currently.'

The patient was reviewed at 5 o'clock in the evening on the 19th by [Dr D], his gastroenterologist, after a call to him from the patient's mother. [Dr D] diagnosed sepsis and intravenous fluids and broad-spectrum antibiotics were administered with a prompt response in the patient's condition with a fall in his temperature and his pulse rate by later in the evening on the 19th.

[Mr A] had an abdominal and pelvis CT scan at 7.00 pm on the 19th which demonstrated thickening and oedema of the rectum and sigmoid but no intraperitoneal collection and no free gas.

Subsequently, an MRI of the pelvis was performed on the 21st May which showed similar signs of oedema and thickening of the sigmoid and rectum but no ischioanal or perianal abscess. Although not specifically stated, I think it is likely that [Mr A] subsequently had a proctocolectomy with a permanent end ileostomy for his Crohn's disease.

In answer to the questions raised in the letter of complaint and to be addressed:

1. The appropriateness of the assessment carried out on the 15th May 2018 and the associated management plan including the decision to discharge.

The patient was assessed by a surgical registrar and a surgical houseman and the initial surgical plan was for [Mr A] to be admitted to the ward with a view to having an MRI scan potentially organised during that admission. At that stage, on the 15th, [Mr A] was not septic and no antibiotics were deemed appropriate beyond what he was taking as his anti-MAP treatment. The decision to discharge was initiated by the patient but agreed to in consultation with the surgical team and arrangements were made for [Mr A] to be reviewed on the consultant ward round the following morning and he was to present to the Emergency Department to be assessed.

The patient did not follow through with this arrangement and then re-presented with evidence of sepsis on the morning of the 19th May.

I believe that the appropriate assessment was made at the time by the surgical team and the plan to be reviewed on the consultant ward round the following morning was appropriate.

2. Should a senior medical officer have reviewed [Mr A] on the 15th May 2018?

I believe that an assessment by the house surgeon and with review by a middle grade surgical registrar was an appropriate assessment and that the plan was discussed with senior members of the team and I do not believe that it was mandatory that [Mr A]

would be seen by a senior medical officer on the 15th May. I believe the plan that was made prior to his discharge was appropriate.

3. Was appropriate care provided to [Mr A] on the 19th May 2018?

When [Mr A] re-presented on the 19th May in 2018 he was seen initially in the Emergency Department. Sepsis was considered to be the likely diagnosis and appropriate bloods were taken and the patient was transferred at or around midday to the MAPU unit. It is unclear reading through the notes which consultant team was in charge of the patient. The patient was reviewed at 10:35 on the consultant ward round by [Dr C], the duty surgeon. It is noted that [Mr A] had a fever of 38.8 and a heart rate of 105. It was recorded that an MRI had been booked in [another DHB] for Tuesday, 22nd May and a comment was made that 'Surgery would be happy to have input when indicated but that does not appear to be the case currently'. It would therefore appear to me that the surgical team thought that the physicians were in charge of [Mr A] at that stage. Intravenous fluid resuscitation and broad-spectrum intravenous antibiotics were not administered until [Dr D] reviewed the patient shortly after 5.00 pm on the afternoon of the 19th.

4. Was timely care provided to [Mr A] on the 19th May 2018?

I believe once sepsis had been diagnosed on the morning of the 19th May, the patient should have been promptly treated with broad-spectrum antibiotics and intravenous fluid resuscitation rather than the delay until he was actively treated in this manner at about 5.00 pm on the 19th.

The delay in the provision of IV fluids and IV antibiotics resulted in a departure from the accepted standard of practice (moderate departure that would be viewed as a failure in the patient's care if he had not responded as quickly as he did. It falls outside the Sepsis guideline of the DHB).

5. Coordination of care between departments and specialities.

I believe that a better coordination of care between the Surgical Department and the Gastroenterology Department on the 19th would have facilitated a more timely delivery of fluid and intravenous antibiotics on the 19th. Reading through the notes, there did appear to be a lack of clarity as to which department was actually in charge of [Mr A's] care on the 19th once he left the emergency department. The surgeons appeared to think the gastroenterologists were in charge (the patient was on MAPU) and [Dr D] appeared to believe that the surgeons were primarily in charge of [Mr A's] care (he had been assessed by the surgeons on the 15th).

6. Whether the management of the adult patient with sepsis policy was followed?

The policy on the management of the adult patient with sepsis policy is clearly laid out in the supplied document. Although appropriate bloods were taken and sepsis was diagnosed, appropriate treatment was clearly delayed and the Lakes District Health Board guidelines sub-paragraph D.1 'IV antimicrobials should commence within one

hour of the recognition of sepsis and septic shock, faster is better, delays costs lives' was not followed.

(Please see comments on point 4).

In summary, although there were patient initiated delays in treatment, particularly after the failure to attend as planned on the morning of the 16th May, there was a deviation from the accepted standard of care in the treatment of the septic patient on the 19th May. Once treatment was initiated there was a rapid improvement in [Mr A's] condition. I understand he subsequently did require surgery. I do not believe that the delay in initiating antibiotic therapy on the 19th had any impact on the eventual outcome of the patient requiring major colonic surgery for his Crohn's disease.

Yours sincerely

Mr John Keating MBBS FRCS FRACS
Colorectal and General Surgeon"

The following further expert advice was obtained from Dr Keating:

"**Brief Timeline of History**

[Mr A] had a history of Crohn's disease of at least eight years and had previously had an ileocaecal resection for ileal Crohn's disease. He presented to [the public hospital] as an initial presentation on 15 May 2018 with a history of rectal bleeding, perianal pain and a general feeling of being unwell and having had fevers. He was assessed by the surgical registrar and was noted to be afebrile with a temperature of 35.5, heart rate of 86 and blood pressure of 133/71. It was noted that there was no external erythema or fistula in the perianal region although digital rectal examination was tender and was not tolerated. The initial surgical assessment was associated with a provisional diagnosis of perianal pain possibly related to (ischio-anal) sepsis. Bloods were ordered and a thought was given to an MRI assessment.

[Mr A] was then clerked in by the house surgeon, [Dr F], at 01.40 pm on the 15th. The history of his treatment with anti-MAP treatment was noted and his regular immunosuppression with intravenous infusion of Infliximab was duly recorded. It was also recorded that he stopped Mercaptopurine some three weeks previously at his last visit with [Dr D], his local gastroenterologist. The plan from that surgical admission was one for an MRI scan, but it was noted that although it might happen on the day following admission it had not been confirmed. The treatment plan at this stage was not to give antibiotics or IV fluids, that regular analgesia be supplied and the patient be admitted. Further discussion between the house surgeon and the registrar and the patient (initiated by the patient) resulted in the patient being discharged home on the evening of the 15th and the plan was then modified so that the patient would return to the Emergency Department to be seen on the surgical consultant ward round on the following morning of the 16th.

For reasons that are not entirely clear, the patient did not attend that planned assessment on the morning of the 16th but re-presented to the emergency department of the hospital on the 19th May early in the morning having been transported to hospital by ambulance with a continuation and exacerbation of his pain. The patient was assessed by the emergency department physicians and was assessed as being potentially septic and requisite bloods including a blood gas and blood cultures were taken. Intravenous fluids, but not antibiotics, were administered. He was noted, when seen on the morning of the 19th on the consultant ward round by [Dr C], to be febrile at 38.8, to have a heart rate of 105 and it was noted that he had an MRI examination of the pelvis booked in [at another DHB] for Tuesday, 22nd May. There is an entry in the patient's notes from that consultant ward round on the morning of 19th that 'surgery would be happy to have input into the patient's care when surgery was indicated but that does not appear to be the case currently'.

The patient was reviewed at 5 o'clock in the evening on the 19th by [Dr D], his gastroenterologist, after a call to him from the patient's mother. [Dr D] diagnosed sepsis and intravenous fluids and broad-spectrum antibiotics were administered with a prompt response in the patient's condition with a fall in his temperature and his pulse rate by later in the evening on the 19th.

[Mr A] had an abdominal and pelvis CT scan at 7.00 pm on the 19th which demonstrated thickening and oedema of the rectum and sigmoid but no intraperitoneal collection and no free gas.

Subsequently, an MRI of the pelvis was performed on the 21st May which showed similar signs of oedema and thickening of the sigmoid and rectum but no ischioanal or perianal abscess. Although not specifically stated, I think it is likely that [Mr A] subsequently had a proctocolectomy with a permanent end ileostomy for his Crohn's disease.

In answer to the questions raised in the letter of complaint and to be addressed:

1. The appropriateness of the assessment carried out on the 15th May 2018 and the associated management plan including the decision to discharge.

The patient was assessed by a surgical registrar and a surgical houseman and the initial surgical plan was for [Mr A] to be admitted to the ward with a view to having an MRI scan potentially organised during that admission. At that stage, on the 15th, [Mr A] was not septic and no antibiotics were deemed appropriate beyond what he was taking as his anti-MAP treatment. The decision to discharge was initiated by the patient but agreed to in consultation with the surgical team and arrangements were made for [Mr A] to be reviewed on the consultant ward round the following morning and he was to present to the Emergency Department to be assessed.

The patient did not follow through with this arrangement and then re-presented with evidence of sepsis on the morning of the 19th May.

I believe that the appropriate assessment was made at the time by the surgical team and the plan to be reviewed on the consultant ward round the following morning was appropriate.

2. Should a senior medical officer have reviewed [Mr A] on the 15th May 2018?

I believe that an assessment by the house surgeon and with review by a middle grade surgical registrar was an appropriate assessment and that the plan was discussed with senior members of the team and I do not believe that it was mandatory that [Mr A] would be seen by a senior medical officer on the 15th May. I believe the plan that was made prior to his discharge was appropriate.

3. Was appropriate care provided to [Mr A] on the 19th May 2018?

When [Mr A] re-presented on the 19th May in 2018 he was seen initially in the Emergency Department. Sepsis was considered to be the likely diagnosis and appropriate bloods were taken and the patient was transferred at or around midday to the MAPU unit. While being assessed in the emergency room the patient was under the care of the emergency dept physicians who contacted the general surgical team for a surgical review. The patient was reviewed at 10:35 on the consultant ward round by [Dr C], the duty surgeon. It is noted that [Mr A] had a fever of 38.8 and a heart rate of 105. It was recorded that an MRI had been booked in [another DHB] for Tuesday, 22nd May and a comment was made that 'Surgery would be happy to have input when indicated but that does not appear to be the case currently'. [Dr C] phoned [Dr D], the physician on call, who coincidentally was [Mr A's] gastroenterologist. It would therefore appear to me that the surgical team thought that the physicians were in charge of [Mr A] at that stage from that time onward and he was admitted to MAPU. Intravenous fluid resuscitation and broad-spectrum intravenous antibiotics were not administered until [Dr D] reviewed the patient shortly after 5.00 pm on the afternoon of the 19th.

4. Was timely care provided to [Mr A] on the 19th May 2018?

I believe once sepsis had been diagnosed on the morning of the 19th May, the patient should have been promptly treated with broad-spectrum intravenous antibiotics and intravenous fluid resuscitation rather than the delay until he was actively treated in this manner at about 5.00 pm on the 19th.

The delay in the provision of IV fluids and IV antibiotics resulted in a departure from the accepted standard of practice (moderate departure that would be viewed as a failure in the patient's care had he not responded as quickly as he did. It falls outside the Sepsis guideline of the DHB). [Dr F] recorded over two pages of hand-written notes on the surgical consultant ward round (CWR) at 1030 on the 19th but the written plan did not include further IV fluid resuscitation or IV antibiotics. Given that [Dr F] carefully recorded the details of the consultant ward round I think it unlikely that he would've omitted to record an instruction to commence intravenous antibiotics and

for the intravenous fluids had this been requested by [Dr C]. The details of the content of the phone call between [Dr C] and [Dr D] are unclear.

Given that [Mr A] was heavily immunosuppressed the presence of tachycardia and a fever of over 38 indicated that sepsis was likely and that it was unsafe to ascribe his tachycardia and pyrexia to Crohn's disease activity alone.

5. Coordination of care between departments and specialities.

I believe that a better coordination of care between the Emergency Department, the Surgical Department and the Gastroenterology Department on the 19th would have facilitated a timely delivery of fluid and intravenous antibiotics on the 19th. Reading through the notes, there did appear to be a lack of clarity as to which department was actually in charge of [Mr A's] care on the 19th once he left the emergency department (ED). While in the ED the emergency physicians were responsible for his care. [Dr C] clearly did not accept ongoing care for the patient on the 19th given the entry in the notes from the surgical CWR timed at 1030. The surgeons appeared to think the gastroenterologists were in charge (the patient was transferred to MAPU and not the CDU) and [Dr D] appeared to believe that he was not primarily in charge of [Mr A's] care 'until he had reviewed the patient' later in the day.

I believe that there was a systemic issue with the transfer of care of the patient on the morning of 19 May. This issue in large part resulted in a delay in the institution of intravenous fluids and intravenous antibiotics after the patient was admitted to MAPU.

The Lakes DHB clinical decision unit (CDU) has a paragraph on Clinical responsibility 'The consultant under which team patient is admitted carries ultimate clinical responsibility for the patient. The admitting and treating doctors are responsible for the duty of care to the patient and appropriate handover and discharge'. Such a paragraph would do well to feature in the MAPU documentation.

6. Whether the management of the adult patient with sepsis policy was followed?

The policy on the management of the adult patient with sepsis policy is clearly laid out in the supplied documents. Although appropriate bloods were taken and sepsis was diagnosed, appropriate treatment was clearly delayed and the Lakes District Health Board guidelines sub-paragraph D.1 'IV antimicrobials should commence within one hour of the recognition of sepsis and septic shock, faster is better, delays costs lives' was not followed.

(Please see comments on point 4).

In summary, although there were patient initiated delays in treatment, particularly after the failure to attend as planned on the morning of the 16th May, there was a deviation from the accepted standard of care in the treatment of the septic patient on the 19th May. Given that [Mr A] was heavily immunosuppressed and was tachycardic and febrile I believe intravenous antibiotics and intravenous fluids should have been

commenced when he was reviewed by the surgical team at 10:30 on May 19th. Due to the confusion as to the admitting consultant there was a further time delay before appropriate treatment was undertaken on the afternoon of the 19th. Once treatment was initiated there was a rapid improvement in [Mr A's] condition. I understand he subsequently did require surgery. I do not believe that the delay in initiating antibiotic therapy on the 19th had any impact on the eventual outcome of the patient requiring major colonic surgery for his Crohn's disease as this was largely determined by the extent and severity of the underlying inflammatory process in his Crohn's disease.

Yours sincerely

Mr John Keating MBBS FRCS FRACS
Colorectal and General Surgeon"

Addendum to Dr Keating's advice:

"[P]lease find the enclosed response to the questions raised in your email.

1) I believe that the MAPU could benefit from a brief policy document along the lines of the Lakes DHB CDU that would circumvent any ambiguity as to which team was responsible for the care of a patient who is transferred out of the emergency department to MAPU.

2) The Lakes DHB sepsis policy is appropriate and fit for purpose.

3) The consultant responsible for the care of [Mr A] after he was transferred out of the ED after noon on the 19th is in doubt. [Dr C's] surgical team did not accept responsibility for the patient as noted in the clinical record. Without knowing the content of the phone call from [Dr C] to [Dr D] it is impossible to say if responsibility was formally transferred from the ED department physicians to [Dr D]. My impression is [Dr C] thought that the medical team were responsible as [Dr D] was both the on call admitting physician on the day and [Mr A's] gastroenterologist and she had declined to take over the care of the patient. The administrative staff at the hospital should be able to clarify as to which admitting SMO/consultant [Mr A] was admitted under.

4) As the most junior member of the team it was not [Dr F's] place to institute antibiotic therapy on the consultant ward round at 1030 on the 19th. I would have expected [Dr C] to have considered/suggested antibiotic therapy for [Mr A] on the morning of the 19th as he was febrile, tachycardic and immunosupressed (infliximab).

Regards

Mr John Keating
Colorectal and General Surgeon"

Appendix B: Independent advice to the Commissioner

The following expert advice was obtained from Dr Richard Stein, a gastroenterologist and physician:

> "I have been asked to provide an opinion by the Health and Disability Commissioner on Case number 18HDC01768. I have read and agree to the Commissioner's Guidelines for Independent Advisors.
>
> I am a gastroenterologist, trained in the United States at the University of Illinois Hospital and Emory University. I have vocational registration in New Zealand where I have practiced since July 2007. I am a Fellow of the Royal Australasian College of Physicians, the American College of Gastroenterology, and the American Gastroenterological Association. I am on the Executive Committee of the National IBD Care Working Group and Chairman of Crohn's and Colitis NZ Charitable Trust. I have worked as a consultant gastroenterologist at Hutt Valley DHB (nine years), Wairarapa DHB (nine years), and Northland DHB (3 years).
>
> I was asked by the Commissioner to review the following documents and provide an opinion on several questions (listed below):
>
> 1. Letter of complaint dated […]
> 2. Lakes DHB's response dated 6 December 2018 including input from … dated 30 November 2018 and [Dr D] dated 4 December 2018
> 3. Clinical records from Lakes DHB from 14–22 May 2018
> 4. Management of Adult Patient with Sepsis policy
> 5. Early Warning System (EWS) Observation Chart policy.
> 6. Laboratory result.
> 7. Lakes DHB's letter dated 27 August 2019 including its annexures and statements from individual staff
> 8. [Dr C's] response dated 24 September 2019
> 9. Lakes DHB's letter dated 22 October 2019 including its annexures and statements from individual staff.
>
> Questions on which I was asked by the Commission to provide an opinion as to whether I consider the care provided to [Mr A] was reasonable in the circumstances. I was asked to limit my advice to the event on 19 May 2018 only and limited to the MAPU and general medical staff:
>
> 1. The appropriateness of the care [Mr A] received while he was in MAPU unit from around 12:15 until 5pm when he was reviewed by [Dr D].
> 2. Which team held responsibility for [Mr A's] care at the following times: (a) when [Dr C] reviewed [Mr A] in the ED around 10:35 am, (b) After [Dr C's] review and

while [Mr A] was in the ED until he was transferred to the MAPU, and (c) When [Mr A] was transferred to the MAPU after around 12:15 pm.

3. The adequacy of Lakes DHB's MAPU flowcharts and the lack of written policy about the MAPU Unit.
4. Any systemic issues about the utilisation of MAPU at Lakes DHB identified from this case.
5. The appropriateness of the care provided by [Dr D], in particular: (a) the appropriateness of [Dr D's] actions following his phone call with [Dr C] around late morning and (b) the timeliness of [Dr D's] review of [Mr A] around 5 pm.
6. The appropriateness of the care provided by [Dr L], in particular the appropriateness of her actions following [RN M's] request for a review around 3:35 pm while [Mr A] was in the MAPU.
7. Any other matters in the case that you consider warrant comment.

1. The appropriateness of the care [Mr A] received while he was in MAPU unit from around 12:15 until 5pm when he was reviewed by [Dr D].

[Mr A] was admitted to MAPU without any clear understanding by the staff who was responsible for his care. The necessity of clearly identifying the doctor in charge is obvious. Nurses need to know whom to contact in the event of a patient's change in clinical status and there needs to be a proscribed chain of command. The patient's care was severely compromised. Even after [RN M] personally notified the Medical Registrar that [Mr A's] situation was deteriorating, no doctor evaluated the patient until [Dr D] arrived at 5pm. Nurses were monitoring a patient who was clinically deteriorating, but there was no doctor actively managing his care. Documentation in the progress notes was absent. This represents a severe departure from the standard of care and would be viewed as such by any medical professional.

2. Which team held responsibility for [Mr A's] care at the following times: (a) when [Dr C] reviewed [Mr A] in the ED around 10:35 am, (b) After [Dr C's] review and while [Mr A] was in the ED until he was transferred to the MAPU, and (c) When [Mr A] was transferred to the MAPU after around 12:15 pm.

[Dr C] would have been the doctor responsible for [Mr A's] care from the time he was reviewed by her team in the ED until and after the time he was transferred to MAPU. Her team was consulted by the ED staff as the admitting team and there is no documentation that [Dr D] accepted responsibility for [Mr A's] care prior to his seeing the patient at around 5pm. [Dr C] also initiated management of the patient by ordering I.V. antibiotics (but said this was not done due to miscommunication with her house surgeon).

That said, from the progress note of 19 May 2018 at 10:35, it does appear that [Dr C] did not view herself as the admitting doctor: 'Surgery happy to have input when indicated, but that doesn't seem to be the case currently'. However, if she made arrangements at the time to formally transfer the care to [Dr D] or did not plan on

accepting the patient herself, this should have been clearly documented in the records and, more importantly, the plan communicated to the ED staff. [Dr H], the ED doctor noted, 'After my discussion with a member of the General Surgical team, the patient will have been allocated to this service. I do not recall talking with [Dr C] during this admission.' [Dr C] was also the doctor who managed the patient in the hospital only four days earlier. It is standard of care for the admitting doctor to continue management of the patient until another doctor has seen and formally accepted the patient in transfer. If there is another plan made for the care of the patient, it is critical that this be communicated to others involved in his/her care (in this case the ED staff). She notes that she expected that [Mr A] would be followed in MAPU by the ED staff until [Dr D's] evaluation. If this was her expectation, the ED staff should have been made aware and agreed to this plan. This represents a major departure from standard of care. It resulted in the patient being transferred to MAPU with no doctor assuming responsibility for his care.

3. The adequacy of Lakes DHB's MAPU flowcharts and the lack of written policy about the MAPU Unit.

There should be a clearly written policy, specifically addressing admission procedures to MAPU, identification of the admitting team, and expectations of the admitting team. [Dr C] wrote that she 'understood that [Mr A] would be cared for by the ED staff in the MAPU'. This was clearly not the case as noted in the letter written by [Mrs B]. (Out of frustration she asked if her son could be seen by the ED doctor and was told by a nurse that the ED doctor 'could not cross the line from ED to MAPU'). There should be a policy regarding documentation of events, especially when the EWS is activated and there should be a pathway to have a default doctor evaluate a patient in the event that the admitting team is not responding. This represents a significant departure from standard of care.

4. Any systemic issues about the utilisation of MAPU at Lakes DHB identified from this case.

Admission of [Mr A] to MAPU was appropriate. There is also reference in the information provided that the patient's transfer to MAPU may have been expedited/rushed to meet targets set by the Health Ministry (to meet the six hour target time in the ED). If this was the case or is the culture in the ED, it may have contributed to the confusion and poor documentation, and would be a severe departure from standard of care.

5. The appropriateness of the care provided by [Dr D], in particular: (a) the appropriateness of [Dr D's] actions following his phone call with [Dr C] around late morning and (b) the timeliness of [Dr D's] review of [Mr A] around 5 pm.

From the information documented in the progress notes, a referral was made to [Dr D] to see patient the morning on 19 May 2018. It is not unusual for a consultant to provide that consultation at the end of the day due to his/her other responsibilities during the day unless the referring doctor specifically requests that the patient be seen urgently. [Dr D] states that he was not asked to accept the patient, but only to

provide an opinion. A consultant would also not typically accept transfer of a patient without first evaluating him/her. Furthermore, if it was [Dr D's] understanding that the patient was being transferred to his care, he likely would have asked his registrar to evaluate the patient early in the day. [Dr D] saw the patient very promptly after he was made aware of the seriousness of the patient's condition (unfortunately, this had to be communicated by a call from the patient's family). My only issue with [Dr D's] care was that, when he was called by the family and made aware of the situation, he asked the family to tell the nursing staff to have a doctor on site see the patient urgently. [Dr D] should have done this himself or called his registrar. Overall, I think [Dr D's] actions and care met standard of care.

6. The appropriateness of the care provided by [Dr L], in particular the appropriateness of her actions following [RN M's] request for a review around 3:35 pm while [Mr A] was in the MAPU.

[RN M] notes that at 1535 [Mr A] was having rigors and a temperature of 38.4 and was tachycardic. She went immediately at 1540 to the Medical Registrars' office in the ED. She related the findings and was told by the Registrar that she would evaluate the patient with her consultant when he arrived. [Dr L] writes that 'As far as I knew he was admitted under the surgical team, and [Dr C] had requested [Dr D] to review him. As I was not involved in his care I thought it should be the surgical team looking after him who were advised of his current vitals and EWS'.

This represents a significant departure from standard of care. After being appraised of the situation by [RN M], [Dr L] should have promptly evaluated the patient. Not only was she aware that [Dr D] had been formally consulted, but, as [Dr D's] Registrar, she was an integral member of the consultant team. Most importantly, she was being asked by a Registered Nurse to evaluate a patient in distress. The fact that she thought 'it should be the surgical team looking after him' should have had no bearing on her decision to evaluate [Mr A].

Richard Stein, MD, FRACP, FACG"

The following further expert advice was obtained from Dr Stein:

"I have been asked by the Health and Disability Commissioner, after reviewing additional documents:

1. Lakes DHB's letter dated 21 April 2020
2. [Dr L's] statement dated 26 March 2020
3. Further response from [Dr C] dated 19 March 2020
4. Lakes DHB attachments including Adult Early Warning System (EWS) Observation Chart and Escalation Pathway, EWS Escalation Guide and MAPU Admission

to answer the following questions:

1. Whether it causes you to amend the conclusions drawn in your initial advice, or make any additional comments.

After reviewing the above documents, I would like to amend my conclusions regarding [Dr L's] actions, based on her response of 26 March 2020 (see response to question 2). My other conclusions remain unchanged, but I would like to comment on statements made by [a lawyer] on [Dr C's] behalf in her letter dated 19 March 2020.

Firstly, my conclusions are based on many factors: review of the medical records, statements provided from practitioners, as well as my experience of what is standard of care for that clinical situation. In some cases, deficiencies in the medical records themselves constitute a breach of standard of care practices. As pointed out in the Health and Disability Commission's Guidelines for Independent Advisors:

> 'When asked to provide your opinion on a specific case, the Commissioner will provide you with copies of clinical records and statements from the parties together with any other relevant material obtained by HDC.
>
> You may be asked a list of specific questions that the Commissioner considers relevant from an analysis of the information obtained.'

The following are the specific comments in [the lawyer's] response on [Dr C's] behalf to which I would like to respond:

A. 'Dr Stein appears to have given some weight to the statement provided to the HDC by [Dr H] …'

I consider all the information provided to me in forming my opinion. [Dr H's] statement was one of many, many documents provided to me. In the interest of clarifying this issue, [Dr H's] statement was not a significant factor in my opinion.

B. '[Dr C] is clear that had [Mr A] needed surgical care from her team, he would have been admitted under her care. To deem [Mr A] to be under the care of the surgical team despite [Dr C] having determined he did not require surgical intervention would create practical issues for specialists. It would result in patients being admitted under teams whose care is not required.'

Firstly, it is not unusual for a hospital surgical service to manage patients who do not have an acute surgical problem, especially in the context of that patient returning only four days after he was under that same surgeon's care. This is often done in the interest of continuity of care. Furthermore, the management of patients with Crohn's disease is often done collaboratively between surgeons and physicians, irrespective of whether surgery is urgently being considered.

[Dr C] also asked her team to 'chase his labs' and start antibiotics, indicating that she intended to be involved in [Mr A's] management. Finally, if she did not intend on admitting [Mr A] to her service, it was incumbent on her to let the ED doctor know

and document this in the chart. The importance of such communication and documentation cannot be overstated. The Medical Council of NZ, in their bulletin from October 2019, writes, 'Patient records are a crucial part of medical practice. They help ensure good care of patients and clear communication between doctors and other health practitioners.' If this had been done, the entire chain of events would likely have been avoided.

C. 'Dr Stein's opinion is also at odds with the expert advice provided to the Commissioner by Dr John Keating and RN Craig Jenkin in this regard. Both practitioners recognised that it was not clear from information available to them which consultant or department was in charge of [Mr A] during his admission on 19 May.'

I do not have access to the advice of the above two practitioners. I was asked for my opinion as a practicing hospital gastroenterologist with an interest in inflammatory bowel disease and many years' experience as a hospital-based physician in the New Zealand public system. My opinion was based on a careful review of all the provided documents. If there are differing opinions, these will need to be reconciled by the Health and Disability Commissioner. To clarify again, the surgical team saw the patient in the ED and initiated treatment. If it was their immediate plan to not accept the patient or to transfer care to the medical team, it would (or should) have been documented in the medical records.

D. 'In our submission, no weight ought to be given to Dr Stein's opinion that [Dr C] was responsible for [Mr A] at the relevant time. It is apparent from the practitioners' differing accounts that there was a lack of understanding as to who (sic) responsible for [Mr A].'

Again, the reasons for my opinion that it was the surgical team who was ultimately responsible for [Mr A's] care once he was transferred to MAPU are outlined in detail in my original submission. I fully acknowledge that there was a lack of understanding as to who was responsible for his care. But that lack of clarity can be traced directly to a lack of communication and documentation in the medical records. If it was the intent of the surgeons not to continue caring for [Mr A], they needed to document this in the medical records and communicate the information to the ED staff. There is no evidence that this was done. There was a plan to obtain a stool sample for calprotectin, an abdominal xray, and 'referral to [Dr D], gastroenterologist/on-call physician'.

E. 'Dr Stein has given a formative opinion when there is insufficient information for him to have done so. The Commissioner's Guidance for Independent Advisors is clear that any limitation to an opinion, including a lack of information, should be acknowledged and speculation should be avoided.'

I would not have rendered an opinion if there was insufficient information. There is good documentation of the surgical team formulating a management plan that

included a referral to [Dr D]. There is, however, no mention or documentation in the medical records by the surgical team that [Dr D] was assuming or agreed to take over the management of [Mr A]. The surgical team initiated treatment (following up on his labs and intending to start IV antibiotics). From all the objective documentation in the medical records (on which I rely most heavily in rendering my advice) my opinion was that the surgical team was responsible for [Mr A] until [Dr D] evaluated the patient and agreed to assume his care.

2. Any further comments about the care provided by [Dr L], general medicine registrar, following her response.

I am grateful to having received [Dr L's] statement from 26 March 2020. Her more detailed recollections of the scenario surrounding the events in question are very different from those described in [RN M's] statement. I was unaware that when she wrote her original statement, she did not have the opportunity to review [RN M's] statement. As I have no way of reconciling the different scenarios in the absence of any other documentation, my opinion of [Dr L's] scenario, is that there was no departure from standard of care.

3. Whether the error identified by you was due to systemic issues at Lakes DHB or whether it was more attributable to an individual. If there are systemic issues, please elaborate on these with reference to how other DHBs operate in this area.

My opinion is that this was due primarily to a systemic issue, rather than attributable to an individual. The importance of documenting who is in charge of a patient's care is, of course, of critical importance. If [Dr C] did not plan to accept [Mr A], she should have made this clear in the medical records and communicated this to the ED staff. If that had happened, [Dr D's] registrar would likely have been called to see [Mr A] in the ED and would have been monitoring him throughout his first few hours in the MAPU under her consultant's supervision. The nurses would have known exactly whom to ring if the patient was deteriorating, and [Dr D] would have known much earlier that the patient was septic and in distress. In every hospital I have worked (Wellington, Hutt Valley, and Wairarapa), there is direct communication between the ED doctor and the admitting doctor before the patient is discharged from the emergency room to the ward. There is also documentation in the ED note of a consultant's review in the ED as well as its outcome. In the event that there is a question of who is primarily managing a patient (i.e. consultant or admitting doctor), the nurses will call the doctor on record to clarify. If this cannot be clarified, there is a chain of command to determine who is in charge, usually ending with Chief Medical Officer.

4. Any other matters in this case that you consider warrant comment, including whether the remedial actions/further changes being implemented by Lakes DHB are consistent with how other DHBs respond to similar issues or whether there are other actions that could be taken.

This case is further complicated by the fact that the electronic admission document lists [Dr D] as the admitting doctor (although it is unclear who authorised this). Also

causing some confusion is that surgical patients are sometimes boarded in the MAPU unit.

I think Lakes DHB has adequately addressed these issues and has updated its policies. The importance of good documentation in the medical records always needs to be stressed and circulating a copy of this scenario among the staff (with names redacted of course) could be considered.

Richard E. Stein, MD, FRACP, FACG, AGAF

…"

Appendix C: Independent advice to the Commissioner

The following expert advice was obtained from Mr Craig Jenkin, an ED nurse practitioner:

"1.I, Craig Jenkin, have been asked to provide an opinion to the Commissioner on case number C18HDC01768. I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

2. I currently hold the position of Nurse Practitioner with the Department of Emergency Medicine at Wellington Regional Hospital. I have 15 years of Emergency Nursing experience.

3. Background of case (detailed and chronological as discovered from the supplied documents):

a. [Mr A] has had a history of Crohn's disease first diagnosed in 2010.

b. 14th May — He had been feeling increasingly unwell for several days.

c. 15th May — Made an appointment with [Mr A's regular GP]. Their assessment led to a referral to the [public hospital] Emergency Department (ED).

   i. 10:58 — Arrived at [the public hospital] ED and triaged as a category 3, with a presenting complaint of per rectal (PR) bleeding. His observations were respiratory rate (RR) of 20 (reference range 12–20)/oxygen saturations (02 sats) 96% (reference range >or = to 96%) on room air/Heart Rate 110 (reference range 60–95 beats per minute)/Blood pressure 141/81 (reference range >110/X)/Temp 36 degrees C (reference range 36–37.5) Glasgow Coma Scale (GCS) 15. Appropriate laboratory investigations were initiated.

   ii. 11:30 — observations RR 17/02 sats 99% on room air/HR 89/BP 133/71 / T 35.5. Early Warning Score documented as a 2 however on review of the observation chart it is in fact an EWS of 1. Under the *Early Warning System (EWS) Observation Chart Policy* this equates to 2hrly observations.

   iii. **11:35** — seen by the Surgical Reg [Dr E]. Their impression was — Perianal pain ? abscess. Plan chase bloods ? MRI

   iv. 13:40 — House Officer [Dr F] clerks [Mr A] for admission. Their impression echoing [Dr E] ? Perianal abscess. Plan:

   - MRI discussed and hopefully for tomorrow
   - Encourage E&D
   - Not for ABx or IVF at this stage
   - Regular meds and analgesia (Regular meds did include Anti MAP therapy of the antibiotics rifabutin, metronidazole and clofazimine)
   - (Allergies alert)
   - Admit.

   v. 13:45 — observations RR 18/02 sats 100% on room air/HR 94/BP 120/75/T not recorded. Observations approximately 2hrs following previous. Nursing

documentation noted plan to admit, SBAR (Pt transfer from ED form) sent. Requesting analgesia and administered at 1400.

vi. 1430–1530 likely shift change over. 15:30 observations RR 16/02 sats 100% on room air/HR 86/BP 127/84/T not recorded. Observations approximately 2hrs following previous. Nursing documentation stated '*awaiting bed'.*

vii. 16:00 — '*around 4pm, in frustration at the total lack of progress we had made to receive medical assessment at the behest of our GP, we formulated our ongoing care plan, with [Mr A] advising staff he would be self discharging.'* (copied from Letter of complaint dated […])

viii 16:30 — Discharge home with discharge advice:

- Represent to ED tomorrow morning to be seen on consultant ward round to discuss plan
- Await MRI appointment time
- No antibiotics at on discharge (copied from [the public hospital] Discharge Advice dated 15th May 2018).

'Our GP was also contacted and was given details of the day. It was her opinion that antibiotics were required, (copied from Letter of complaint dated […]) *so a script for [Augmentin] was [retrieved and begun].*

d. 16th/17th/18th May gradual deterioration while at home.

e. 19th May — 06:30 ambulance called.

ix. 07:24 — triaged at [the public hospital] ED Triage code 3. Observations RR 20/02 sats 100%/HR 105/BP 133/82/T 38.1/GCS 15/pain score 8/10. Appropriate laboratory investigations started as meet possible sepsis criteria.

x. 07:54–09:00 — IV fentanyl prescribed and regular administration according to drug chart. Nursing documentation states '*ED to see'.*

xi. 08:45 — Observations completed EWS 2.

xii. 08:50 — IV fluids prescribed and started.

xiii. 09:00 — Nursing documentation re cooling cares, analgesia, and IV fluids.

xiv. 10:05 — regular administration of IV fentanyl. Transdermal Fentanyl patch prescribed and administered.

xv. 10:30 — Observations completed EWS 1, nursing documentation stated '*2nd VBG, still in pain'.* This is a protocol based investigation not a physician led one.

xvi. 10:35 — Seen by House Officer [Dr F]. Noted temperature of 38.8 and mild tachycardia 105. Impression:

- ? Crohn's flare — needs gastro opinion
- ? Perianal abscess

xvii. Plan:

- AxR
- Chase blood tests
- Ref to [Dr D] gastroenterologist [consultant]/on-call physician. (Also very familiar with [Mr A's] condition from previous interactions)
- MR (booked in [another DHB])
- Surgery happy to have input when indicated but that does not appear to be case currently
- Stool spec

xviii. 10:20–11:45 — regular administration of IV fentanyl.

xix. 11:30 — Observations completed EWS 0.

xx. 12:20 — Transfer to MAPU.

xxi. 12:20 — 1535 — regular administration of IV fentanyl.

xxii. 14:30 — MAPU nursing notes, '*Await [Dr D] Rv'.*

xxiii. 15:35 — Observations completed EWS 2.

xxiv. 16:15 — [Dr D] contacted directly by the patient's family over [Mr A's] condition.

xxv. 16:30 — Observations completed EWS 1.

xxvi. 17:00 — Observations completed EWS 3. [Dr D] assessment showed T 39/having rigors (uncontrollably shaking due to fevers) HR 120/BP 120/70. His impression was of septicemia. Plan:

- Assume immunocompromised
  - For IV Tazocin and Gentamicin
- Resuscitation as per sepsis protocol
  - 2L of N. Saline stat

4. Documents provided:

5. A bound copy of:
   a. Letter of complaint dated […]
   b. Lakes DHB's response dated 6 December 2018 including:
      i. Input from [Dr N] dated 30 November2018
      ii. Input from [Dr D] dated 4 December 2018
   c. Clinical Records from Lakes DHB covering the period of 14 May 2018 to 22 May 2018
   d. *Management of Adult Patient with Sepsis* policy
   e. *Early Warning System (EWS) Observation Chart Policy*
   f. Requested/not included:
      i. Laboratory investigations results from the 15th and 19th of May
      ii. ED clinician notes from the 19th of May.

6. Expert advice requested:

7. *The adequacy of the overall care provided to [Mr A]*

8. This is a TWO part answer:

9. Part One. On the first presentation day, the 15th of May, [Mr A] was assessed and triaged accordingly and given a score of 3. The description of a triage 3 score is *Potentially life-threatening, potential adverse outcomes from >30min, or severe discomfort or distress.* The maximum clinically appropriate triage time is 30 minutes with a performance benchmark of 75% (https://www.health.govt.nz/our-work/hospitals-and-specialistcare/emergency-departments/emergency-department-triage). His initial assessment and observations did not indicate that he was septic nor needed a higher triage score. His arrival time was 10:58 and his initial assessment was completed and documented by the surgical service by 11:35. At this time a possible diagnosis of perianal abscess was considered. The plan to admit was documented by 13:40, three hours from presentation. During this time frame reviewing any ordered investigations discussion with radiology service regarding ordering an MRI and discussion with admitting consultant would have taken place. This is accepted standard of care and would be considered so by my peers.

10. Regular nursing observations/analgesia administration and nursing documentation was completed appropriately throughout the presentation. This was done to an appropriate level and would be considered accepted practice.

11. According to the letter of complaint dated … '*around 4pm, in frustration at the total lack of progress we formulated our ongoing care plan, with [Mr A] advising staff he would be self-discharging.'* This statement appears to be incongruent with my expert assessment of the documentation provided highlighting the chronological progression of events I have outlined above.

12. I can only surmise that comments from [Dr N], general surgeon and clinical director of surgical services at [the public hospital] (supplied), may have been the reason for the discourse. '*During this admission there is no specific documentation indicating whether [Mr A] was or was not specifically informed of these management plans.'* If this was the case the breakdown in communication between admitting staff and [Mr A] may have led to a feeling of frustration.

13. In the written discharge advice the plan was to return the following day for consultant review. This was an important step mitigating the risk of early discharge without specialist assessment. This plan is accepted practice and would be considered an appropriate plan by my peers in managing early discharge.

14. At the time of this clinical presentation there was not a clear indication for antibiotic prescribing, especially as there was to be an expected review the next day.

15. It is my expert opinion that [Mr A's] care was exemplary on the first presentation to [the public hospital]. It meets all accepted practice and standards of care, including the discharge planning. With the exception of the possible lack of communication between the admitting surgical service to [Mr A] and family.

16. Part Two.

17. On the second presentation 19th of May at 07:24, [Mr A] was assessed as triage score of 3. According to [Mr A's] observations and presenting complaint '*Multiple PR bleeds for past wk Last night passing clots. Fevers for past wk.'*

18. Observations RR 20/02 sats 100%/HR 105/BP 133/82/T 38.1/GCS 15/pain score 8/10.

19. A Triage score of 3 is inadequate for this history and level of pain and should have been a triage score 2. This is a moderate departure from standard of care and would be viewed as such by my nursing peers.

20. At 07:55 he was reassessed and escalated to Triage score 2. This is accepted practice and would be viewed similarly by my peers.

21. At approximately 08:00 [Mr A] had analgesia IV Fentanyl prescribed by [HO] (likely an ED HO) and administered by nursing staff. At 08:50 fluids were prescribed and administered.

22. From the Triage time of 07:24 and till 10:35 when the first physician assessment note by [Dr F] was written, there were no notes provided to indicate that an ED physician had assessed [Mr A].

23. This would mean that, according to the documents provided, that [Mr A] waited approximately THREE hours to be assessed by a doctor. This would indicate that [Mr A] was far outside his triage 2 score defined as imminently life-threatening, or important time-critical with a maximum clinically appropriate time to be assessed of 10 mins (https://www.health.govt.nz/our-work/hospitals-and-specialist-care/emergency-departments/emergency-department-triage).

    This is a significant departure from standard of care and would be seen so by my peers.

24. It is noted in the in the letter of complaint that '*He was seen in ED by Drs "[Dr H] and […]"'.* There are no documented medical notes of this, there are no ED nursing notes of an ED medical assessment.

25. It is my view that an assessment most likely occurred as there had been IV opioids/paracetamol and fluids prescribed and administered prior to the time stamp.

26. I contacted the HDC office and asked for any documentation of ED clinician notes from the 19th of May. No new documentation was provided. Although there was no written record of an ED assessment there is evidence of ED physician input by prescribing medication and fluid. Not documenting the assessment is a significant departure from accepted practice and would be viewed similarly by my peers.

27. At 08:45 — Observations completed EWS 2 (tachycardia and fever). The hematology results were available at this time (see appendix 1) and stipulated on the results as report produced 08:39 (requested from the HDC office) showing a raised White Blood Count (WBC) and Neutrophils. This meant he met *Probable Sepsis* definition and as part of the *Sepsis 6: Complete ASAP* pathway he should have had 'Broad spectrum antibiotics within the first hour' (*Management of Adult Patient with Sepsis* policy, Lakes DHB).

28. [Mr A] had been taking oral Augmentin, a broad-spectrum antibiotic, however, [Mr A] had clinical signs of sepsis despite oral antibiotics and should have been assessed and started on broad spectrum IV antibiotics within the first hour of presentation. Not to do this is a significant departure from accepted practice. This would be viewed similarly by my peers.

29. At 10:35 [Mr A] was assessed by [Dr F] HO for the surgical service. In their assessment they noted a raised temperature and tachycardia and full blood count results being available would have clinically indicated a likely sepsis.

30. In the documentation [Dr F] noted to *chase bloods* indicating that they had likely not been viewed. The surgical service did not initiate antibiotics when all available information indicated sepsis. Not to do this is a significant departure from accepted practice. This would be viewed similarly by my peers.

31. Between transfer to the MAPU (approximately 1300 — time only an indication), the nursing documentation at 14:30 and observations at 15:30 with an EWS 2 there was no evidence provided in the clinical record that [Mr A's] condition was escalated.

32. The only indication that this occurred was by the patient's family contacting the on call Consultant Physician [Dr D] late in the afternoon, whom then came to assess [Mr A] and found him to have sepsis and started appropriate antibiotics and resuscitation.

33. The lack of nursing documentation around escalation is a significant departure from the standard of care and would be viewed so by my nursing peers.

34. It is noted by [Dr J], Quality, Risk, and Clinical Governance Director, '*The afternoon nurse informed the Medical Registrar of the observations and that [Mr A] was having rigours and requested medical review'*. This would be a good standard of care.

35. However, the current practice of the facility that I work in, is that it is not the receiving service's responsibility to provide ongoing care until assessed and accepted by that service.

36. Management of the patient would still lie with the referring service, in this instance the surgical service to be contacted regarding [Mr A's] declining condition. This is a mild to moderate departure from accepted practice.

37. It is noted in [Dr D's] letter dated 4th December that he was '*contacted late morning by [Dr C] (consultant surgeon) to say that [Mr A] had experienced a flare of his Crohns disease please could I review him. I was not given the information that [Mr A] had a temperature of 38.8 degrees centigrade or that he had a perineum that was "too painful to examine". I was not told that he had presented earlier in the week with perianal pain.'* [Dr D] goes on to say '*It would not be standard practice to take over the care of [a] patient until you have seen them to determine their clinical problem'.* The surgical notes listed possible differential diagnoses to include ?Crohns flare/?perianal abscess, the latter being typically a surgical diagnosis. I concur with [Dr D's] comments.

38. In the letter of complaint it was noted *'As this person (Dr on call) appeared to be unavailable, we asked if [Dr H] from ED could re-assess and were told "No".'* This is normal practice for ED clinicians not to reassess another service's patient in an area outside of ED as there is likely further undifferentiated patients presenting to ED for ED staff to continue assessing. This is accepted practice and would be viewed so by my peers.

39. It is my personal experience as an ED nurse 15 years that one of the more common communication breakdowns that leads to patient discourse and at times harm is when it is unclear which service is the primary team looking after the patient.

40. On the second presentation to [the public hospital], in my expert opinion, [Mr A's] care was not exemplary. In my assessment of the documentation provided the emergency, surgical and medical service failed to identify the unwell patient. There were failings to appropriately follow the *Management of Adult patient with Sepsis* policy and initiate antibiotics or document why they were not started. This is a significant departure of accepted practice and would be viewed so by my peers.

41. In a brief and cursory review of the literature in regards of early antibiotic therapy in patients with possible sepsis it is noted that those in septic shock are easier to align with pathway based therapies. Septic shock is identified with confusion or a lowered GCS or drowsiness, a systolic blood pressure of less than 90mmHg or 40mmHg from base line or a new or increased oxygen criteria to maintain oxygen saturations above 90%. It was noted that patients not showing signs of shock but initial systemic inflammatory response syndrome (SIRS) can be missed from early

initiation of antibiotics. This could be due to clinician responsiveness to patients with signs of septic shock being greater and those without signs of shock not always aligning with protocols from the initial assessment.

42. [Mr A] did not meet a septic shock state but did meet SIRS criteria. This was acknowledged by the triage nurse right from triage reassessment stage but appears to have been failed to be acknowledged by the medical practitioners going forward.

43. A recommendation for improvement to address this issue could be the use of a designated protocol that is on a separate document, such as used in my practice area and DHB. This identifies various streams that patients can present with and would identify the pathway clearly within medical documentation. (See appendix 2).

44. *The monitoring of [Mr A's] condition and whether this was in line with current nursing best practice*

45. On the first presentation day there was regular nursing observations completed at approximately a 2hrly interval. The observations were within normal limits and did not lead to escalation. There was some detail missing such as a regular temperature. The nursing documentation was completed in conjunction to the observations. It was succinct and appropriate. It was noted that the 13:45 stated the patient was requesting analgesia. Tramadol and possibly paracetamol were administered shortly following this. There is a hole punch mark in the documents provided obscuring the exact time paracetamol was given. [Mr A] was assessed by the surgical service admitting registrar in a timely manner following presentation. He was clerked by the surgical house officer approximately 2 hrs later [in the] day with the plan to admit occurring at this time. The nursing documentation identifies this and bed request processes occur concurrently.

46. In my expert opinion the monitoring of [Mr A's] condition was satisfactory and documented accordingly on the presentation to [the public hospital] ED on the 15th of May. I believe this meets with an appropriate standard of care that would be viewed similarly by my medical and nursing peers.

47. On the second presentation [Mr A] was triaged initially inappropriately, however, reassessed within an appropriate time frame. The initial triage score did not stop identification and initiation of the sepsis screening tool.

48. Blood was drawn according to protocol and [Mr A] had regular observations completed while in the ED.

49. The EWS process was not followed on the initial observations following triage at 08:45 (EWS 2) as observations were not repeated within one hour as per the EWS policy. However, the initiation of IV fluids at approximately the same time suggesting escalation could have occurred. Regular analgesia (nine IV boluses and

a one transdermal patch) were administered to [Mr A] while in ED over a 6hr time frame. Hourly or less than hourly nursing documentation was completed during this time also.

50. The ED nursing staff appropriately monitored [Mr A's] condition. They initiated appropriate investigations and provided regular observations and documentation. I believe this meets with an appropriate standard of care that would be viewed similarly by my nursing peers.

51. From transfer to MAPU at approximately 13:00 until the assessment by [Dr D] at 17:00 there is no written nursing documentation to suggest monitoring of [Mr A's] condition.

52. During this time appropriate observations recorded and following the EWS policy however no written documentation of escalation. Also IV analgesia was administered less frequently, which may have indicated better pain management at this time compared to earlier.

53. MAPU nursing staff appropriately monitored but failed to document escalation of the [Mr A's] condition. Please refer to paragraph 35–37.

54. *The escalation of [Mr A's] care and whether this was timely and in line with current nursing best practice*

55. Please refer to paragraph 31–33.

56. *The coordination of [Mr A's] care with other Departments and specialties and whether this was appropriate*

57. For the 15th of May presentation the coordination of [Mr A's] care was exemplary. This would be the accepted standard of care and I believe would be viewed by so by my peers.

58. For the 19th of May presentation there is little evidence to show that between ED, the surgical service or the medical service there was co-ordination of care. No evidence provided that an ED clinician appropriately assessed [Mr A] for signs of sepsis.

59. Surgical service failed to identify signs of sepsis and according to [Dr D] left out pertinent information in the handover. Please refer to paragraph 37. This is a moderate departure from the standard of care and would be viewed by my peers.

60. Please refer to paragraph 40.

61. A recommendation for improvement could be a clear memorandum of understanding between the two services (this may already exist) identifying where in the patient journey care has been taken over by the other service. This should not be based on location for example a surgical patient in a medical ward

is still under the surgical service. Clear documentation of hand over to a service is needed as it appears ambiguous in the provided documentation.

62. It is my belief it would be expected that if a patient is sent to a Medical assessment and planning unit (MAPU) for assessment, that the medical team have accepted care of the individual. The EWS prior to the move was 0 so would not have alerted ED staff that the patient was unstable prior to transfer.

63. *The adequacy of the Management of Adult Patient with Sepsis policy and whether this was followed*

64. The Management of Adult Patient with Sepsis Policy '*purpose is to provide guidance to clinicians for the identification and management of sepsis and septic shock'.* The definitions used in the policy that are universally used:

    a. Sepsis: life-threatening organ dysfunction due to a dysregulated host response to infection.
    b. Septic Shock: is a subset of sepsis with circulatory and cellular/metabolic dysfunction associated with a higher risk of mortality.
    c. SIRS: Systemic Inflammatory Response syndrome in an inflammatory state affecting the whole body, frequently in response to infection or trauma.

65. As mentioned earlier [Mr A] met the SIRS criteria. ED medical staff did not appear to act on protocol driven investigations initiated by ED nursing staff identifying possible sepsis by failing to start IV antibiotics according to the Management of Adult patient with sepsis policy (see appendix 3). This is a significant departure from accepted practice. This would be viewed similarly by my peers.

66. The surgical service assessed [Mr A] 10:35. This assessment noted fever with tachycardia and stipulated to chase bloods, which were available at the time of assessment (see appendix 1). Not to identify that fever, tachycardia, raised white cell count and a clinical exam that indicates severe perianal pain could be evidence of sepsis and not initiate IV antibiotics is a significant departure from accepted practice. This would be viewed similarly by my peers.

67. Please refer also to paragraph 40–43.

68. *The adequacy of the Early Warning System (EWS) Observation chart policy and whether this was followed*

69. According to the *Early Warning System (EWS) Observation chart policy,* the '*Early Warning System observation chart is a tool designed to identify patients at risk of deterioration. It also contains an algorithm outlying a pathway that must be followed once a patient has been identified as being at risk'*.

70. Vital signs default frequency is 4 hourly following admission to hospital. Minimum frequency of observations (according to the policy) that are not negotiable

    a. 2hrly for EWS score of 1

b. 1 hrly for EWS score of 2
c. ½ hrly for EWS score of 3 or more.

71. Once vital signs are documented a score must be completed. In my judgement the frequency of the observations were within the scope of the EWS and the policy. This is accepted practice and would be viewed accordingly by my peers.

72. According to the policy '*once vital signs are documented a score must be completed'.* With the evidence judgement the EWS score was not always calculated nor were the observations complete. This would indicate that the complete EWS was not able to be calculated. This would be a moderate departure from accepted practice and viewed accordingly by my nursing peers.

73. *'Nursing staff must use the SBAR communication tool to report … deteriorating patients to doctors'.* There is no evidence in the nursing documentation provided that this tool was used. If it had been then a timelier assessment of the patient's condition may have occurred when the EWS first was raised at 08:45 on the morning of the 19th of May, eight hours prior [Dr D's] review and initiation of IV antibiotics. This is a significant departure from the standard of care and would be viewed so by my nursing peers.

74. In the policy it is noted that '*It is the responsibility of primary medical/surgical/ obstetrician to manage patient care. Calls for assistance should be met with a patient focused response, which supports front-line staff.'* Again, I refer to [Dr J] '*The afternoon nurse informed the Medical Registrar of the observations and that [Mr A] was having rigours and requested medical review'.* There is no time stamp for this conversation however if it did occur then again the medical service failed to address the nursing staff concerns, did not come to see the patient as required and stipulated in the EWS policy. This is a significant departure from accepted practice and would be viewed by my peers.

75. A recommendation for improvement could be divided into a short term and long term recommendations:

    a. Short term — an addition to the policy to documenting the escalation of patients with an EWS of 2 using established SBAR report framework. This documentation can be in the format of a preformed document (such as appears as appendix 1 of the EWS policy) or as an A5 size adhesive sticker placed into the patient's progress notes that has the SBAR format and predetermined information that is required to be reported to the primary medical team (see appendix 4 as an example of equivalent/similar in my organisation).

    b. Long term — without having familiarity with the Lakes DHB IT systems use of text paging in combination with the short term recommendation would assist in communication with the primary team and have a compulsory component of closed loop communication with the primary team holding the on call phone

required to communicate back to the front line staff. Secondly and in addition establishment of a Medical Emergency Team or equivalent that includes critical care and medical personnel to come to the patient when their EWS is at X (see appendix 4). These processes may already be in place. I deem them longer term options as they would require further resource and considerations to be implemented.

76. *Any other matters that you may consider amount to a departure from accepted standards.*

77. I have mainly focused on the initial TWO presentations and not the ongoing care provided by Lakes DHB as this was the focus of the complaint. There was no other matter considered as a departure from accepted standards.

78. In conclusion there appears to be evidence of a departure from normal practice leading to sub-optimal care on the second presentation. With the key clinical issue being a delay to intravenous antibiotics despite clear indications under the existing sepsis pathway.

79. Key non-clinical issues appear to be a lack adequate documentation within the ED of clinician review and a lack of adequate communication between specialties when handing a patient from one service to another.

80. In addition to this there appears to be a break-down in communication between the patient and treatment services. Despite excellent care and assessment on the first presentation the patient felt as if there was no progress and arranged self-discharge. Then despite documented evidence of an adequate discharge plan this was not followed and the patient did not present for re-examination.

81. Had he done so then the second presentation may not have eventuated and his disease may not have progressed. Is this because of a lack of trust/ communication between the surgical service and the patient? It is clear from the notes that the patient and his family have a degree of trust in [Dr D].

82. While there is evidence that there is a departure from the normal level of care on the second presentation there was overall only a moderate delay in the provision of IV antibiotics, there was no evidence of septic shock and it is not clear whether this delay had any effect on the later surgical outcomes as this may have been an inevitable part of the progress of Crohn's disease."

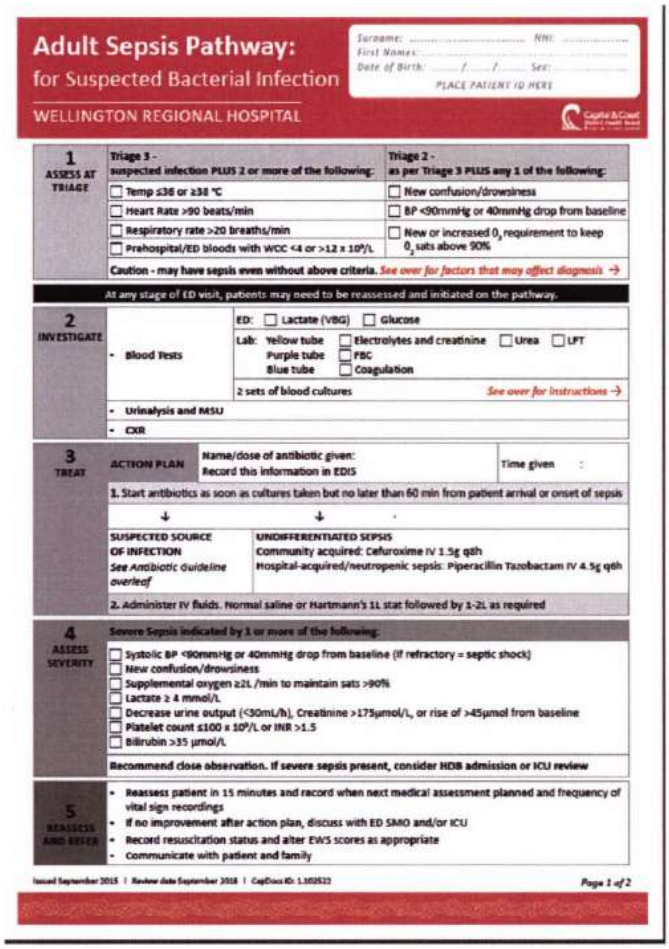
Appendix 1

HAEMATOLOGY..... *Accepted by Dr*

Department HM	Filler's Order #	Placer Group #	Priority R	Order Location RED (RED)	Requestor Grace Dougl[illegible]	Specimen Collected 07:30	Specimen Received 07:56	Report produced 08:39

HAEMOGLOBIN	145	g/L		130-175
HCT	0.42	L/L		0.40-0.52
MCV	94	fL		80-99
MCH	32	pg		27-33
WBC	**13.5**	**x10E9/L**	**H**	**4.0-11.0**
Neut Seg	**9.6**	**x10E9/L**	**H**	**1.9-7.5**
Lymphocyte	1.9	x10E9/L		1.0-4.0
Monocyte	**1.8**	**x10E9/L**	**H**	**0.2-1.0**
Eosinophil	0.1	x10E9/L		0.0-0.5
Basophil	0.1	x10E9/L		0-0.2
PLATELET COUNT	305	x10E9/L		150-400

Appendix 2



Adult Sepsis Pathway:
for Suspected Bacterial Infection

WELLINGTON REGIONAL HOSPITAL

Surname: ..... NHI: .....
First Names: .....
Date of Birth: ...../...../..... Sex: .....
PLACE PATIENT ID HERE

1 ASSESS AT TRIAGE

Triage 3 - suspected infection PLUS 2 or more of the following:	Triage 2 - as per Triage 3 PLUS any 1 of the following:
☐ Temp ≤36 or ≥38 °C	☐ New confusion/drowsiness
☐ Heart Rate >90 beats/min	☐ BP <90mmHg or 40mmHg drop from baseline
☐ Respiratory rate >20 breaths/min	☐ New or increased O_2 requirement to keep O_2 sats above 90%
☐ Prehospital/ED bloods with WCC <4 or >12 x 10^9/L	

Caution - may have sepsis even without above criteria. *See over for factors that may affect diagnosis →*

At any stage of ED visit, patients may need to be reassessed and initiated on the pathway.

2 INVESTIGATE

- **Blood Tests**
  - ED: ☐ Lactate (VBG) ☐ Glucose
  - Lab: Yellow tube ☐ Electrolytes and creatinine ☐ Urea ☐ LFT; Purple tube ☐ FBC; Blue tube ☐ Coagulation
  - 2 sets of blood cultures *See over for instructions →*
- **Urinalysis and MSU**
- **CXR**

3 TREAT — ACTION PLAN — Name/dose of antibiotic given: Record this information in EDIS — Time given :

1. Start antibiotics as soon as cultures taken but no later than 60 min from patient arrival or onset of sepsis

SUSPECTED SOURCE OF INFECTION *See Antibiotic Guideline overleaf*	UNDIFFERENTIATED SEPSIS
	Community acquired: Cefuroxime IV 1.5g q8h
	Hospital-acquired/neutropenic sepsis: Piperacillin Tazobactam IV 4.5g q6h

2. Administer IV fluids. Normal saline or Hartmann's 1L stat followed by 1-2L as required

4 ASSESS SEVERITY

Severe Sepsis indicated by 1 or more of the following:

- ☐ Systolic BP <90mmHg or 40mmHg drop from baseline (if refractory = septic shock)
- ☐ New confusion/drowsiness
- ☐ Supplemental oxygen ≥2L /min to maintain sats >90%
- ☐ Lactate ≥ 4 mmol/L
- ☐ Decrease urine output (<30mL/h), Creatinine >175μmol/L, or rise of >45μmol from baseline
- ☐ Platelet count ≤100 x 10^9/L or INR >1.5
- ☐ Bilirubin >35 μmol/L

Recommend close observation. If severe sepsis present, consider HDB admission or ICU review

5 REASSESS AND REFER

- Reassess patient in 15 minutes and record when next medical assessment planned and frequency of vital sign recordings
- If no improvement after action plan, discuss with ED SMO and/or ICU
- Record resuscitation status and alter EWS scores as appropriate
- Communicate with patient and family

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Additional notes:

1 ASSESS

Patients with sepsis who may not manifest SIRS criteria:

- Elderly or patients receiving renal dialysis may not manifest fever
- Heart rate limiting medications may blunt the tachycardic response
- Immunosuppressed patients (including those receiving high dose steroids or monoclonal antibodies)

2 INVESTIGATE

- Take at least one set of blood cultures (BC) (1 x anaerobic bottle - 10ml, 1 x aerobic bottle - 10ml)
- Suspected severe sepsis - take 2 sets of BCs (1 from cannula, 1 from peripheral venepuncture)
- Your patient does NOT need to have a fever ≥38°C to be able to take blood cultures
- If endocarditis suspected (especially prosthetic valve) - discuss with ED SMO. Take 3 sets of BCs each from a different site. The first 2 sets are taken immediately, and the third set 1 hour later. Antibiotics are delayed until after the third set is taken

3 TREAT

Community acquired pneumonia:

- For CURB-65 2: Amoxicillin IV 1g q8h AND Azithromycin PO 500mg q24h
- For CURB-65 3-5: Ceftriaxone IV 2g q24h AND Azithromycin PO 500mg q24h

Skin and soft tissue:

- Flucloxacillin IV 2g q6h

Urinary:

- Cefuroxime IV 1.5g q8h

Intra-abdominal:

- Cefuroxime IV 1.5g q8h AND Metronidazole IV 500mg q12h

Meningitis:

Dexamethasone - early treatment, ideally starting before or with the first dose of antibiotics – improves outcomes in pneumococcal meningitis:

- Give dexamethasone IV 10mg STAT, then every 6 hours for 4 days.
- Ceftriaxone IV 2g q12h

If elderly, alcohol dependent, immunocompromised or pregnant; add Amoxicillin IV 2g q4h to cover for Listeria.

Always check for Multi-Drug Resistant Organism (MDRO) alerts on MAP/Concerto. Different empiric antibiotics may be indicated.

Conditions that may require non-standard antibiotic treatment → contact Infectious Disease oncall

- ☐ Antibiotic allergies
- ☐ Infection control alert for MDRO
- ☐ Recent travel or admission to overseas hospital
- ☐ A rash
- ☐ Immunocompromised
- ☐ Recent surgery
- ☐ Recent antibiotics
- ☐ Recent hospital admission

4 ASSESS SEVERITY

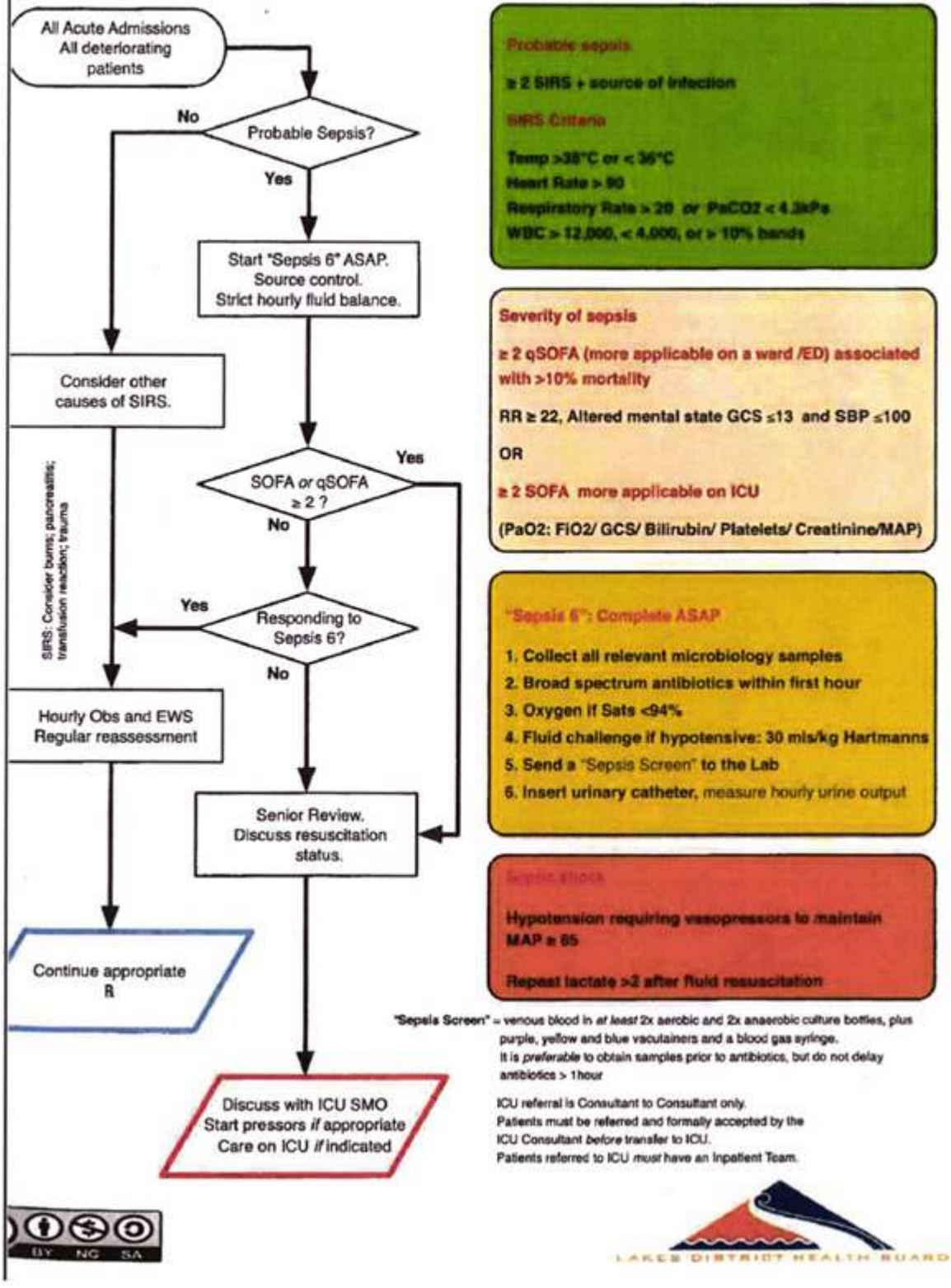
- Fever + Hypotension unresponsive to fluids is a medical emergency. Refer promptly to ICU
- While lactate ≥4 mmol/L is a marker of severe sepsis, any elevation ≥1 mmol/L is associated with a progressively increased risk. However, it may occur from prolonged tourniquet use (>2 minutes) when taking blood. If in doubt, repeat sampling without tourniquet
- Urinary catheter may be necessary to monitor hourly output accurately
- Beware of the patient who initially responds to rescusitation and then deteriorates

Names have been removed (except Lakes DHB and the expert who advised on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

Appendix 3

Acute Management of Sepsis in Adults

This flowchart supports EDMS 1225972 "The management of the adult patient with sepsis". It should be used in conjunction with the guideline as it assumes some familiarity with the contents and lacks full detail. The guideline is available on EDMS and under 'Clinical Documents' on the DHB website Homepage.



Names have been removed (except Lakes DHB and the expert who advised on this case) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

Appendix 4

Document facilitator: Clinical Recognition and Response Committee (CRaRC)

Senior document owner: Clinical Governance Executive

Document number: ID 1.2411 **Issue Date** 12 Feb 2018 **Review Date** 12 Feb 2021
Version 6

Appendix 1 d) MET Activation Sticker

Medical Emergency Team ACTIVATION

This patient had a '777' MET CALL at

Time: _____ (24 hour) on Date: ____/____/_____

Attended by: (write names)

❑ ICU Reg:_____ ❑ Medical Reg:_____

❑ PAR Nurse:_____

Reasons for MET call:

1.
2.
3.
4.

Early Warning Score

or tick if any parameter in BLUE ZONE

Plan - Transfer to ICU / HDB / 6S (please circle)
- Remain on ward for follow up by:
Dr: _____ Position: _____

Primary Team notified:
Dr: _____

Issues to be addressed by Primary Team:

1.
2.
3.
4.

Please see full MET Call record in notes below

The in-hospital mortality of any patient who requires a MET call is approximately ***25%***

From the Clinical Emergency Policy CCDHB

The following further expert advice was obtained from NP Jenkin:

"December 6, 2019
…

Office of the Health and Disability Commissioner
PO Box 1791
Auckland 1140

1. I, Craig Jenkin, have been asked to provide an opinion to the Commissioner on case number C18HDC01768. I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

2. I currently hold the position of Nurse Practitioner with the Department of Emergency Medicine at Wellington Regional Hospital. I have 15 years of Emergency Nursing experience.

3. **Background of case (Summarised from the supplied documents and previous report):**

4. [Mr A] has had a history of Crohn's disease first diagnosed in 2010. On the 14th May he had been feeling increasingly unwell and saw his GP the following day upon where he was referred to [the public hospital] Emergency Department (ED).

5. He was appropriately assessed and plan formulated by the surgical service for admission and pending further investigations however later in the day [Mr A] chose to discharge himself home with the Surgical advising a plan to return the next day (16th May) for consultant review. At that time it was deemed he did not need antibiotics by the surgical service. [Mr A's] GP organized a script for antibiotics and over the next three days. [Mr A's] condition deteriorated while at home.

6. On the 19th May an ambulance was called and took [Mr A] to [the public hospital] ED. On arrival he was triaged as a category 3, shortly later being further assessed and triaged as a category 2. He was seen by the ED SHO and referred back to the surgical service.

7. [Mr A] was reviewed by the Surgeon on call [Dr C] and their team later that morning and a plan was formulated. Their impression copied from the clinical notes was:

7.1 a. Impression:
   i. ? Crohn's flare — needs gastro opinion
   ii. ? Perianal abscess

   b. Plan:
   i. AxR
   ii. Chase blood tests

iii. Ref to [Dr D] gastroenterologist (consultant)/on-call physician. (Also very familiar with [Mr A's] condition from previous interactions)
iv. MR (booked in [another DHB])
v. Surgery happy to have input when indicated but that does not appear to be case currently
vi. Stool spec

8. [Dr C] discussed [Mr A] with [Dr D] the on call physician. [Mr A] was transferred to MAPU at approximately 1300.

9. At 16:15 [Dr D] was contacted directly by the patient's family over [Mr A's] condition. When [Dr D] assessed [Mr A] at approximately 17:00 his impression was of septicemia. Plan:

- Assume immunocompromised
  - For IV Tazocin and Gentamicin
- Resuscitation as per sepsis protocol
  - 2L of N. Saline stat

10. **Documents provided:** A bound copy of:

10.1 Letter of complaint dated …
10.2 Lakes DHB's response dated 6 December 2018 including:
- Copy of the Management of adult patient with Sepsis Policy
- Copy of Acute Management of Sepsis in Adults flowchart
- Copy of minutes of Organisational Mortality and morbidity committee meeting
- Copy of Early Warning System Observation Chart Documentation
- Statement provided by [Dr D] — Head of Department of Medicine Services
- Statement provided by [Dr N] — Clinical Director, Surgical Services

10.3 Clinical Records from Lakes DHB covering the period of 14 May 2018 to 22 May 2018
10.4 *Management of Adult Patient with Sepsis* policy
10.5 *Early Warning System (EWS) Observation Chart Policy*
10.6 Laboratory results
10.7 Lakes District Health Board's letter dated 27th August 2019 including
- Statements provided by
  - 10.7.1 Senior House Officer — [Dr F]
  - 10.7.2 Triage Nurse 1 — [RN G]
  - 10.7.3 [Triage Nurse 2]
  - 10.7.4 MAPU nurse AM — [RN K]
  - 10.7.5 MAPU Nurse PM — [RN M]
  - 10.7.6 [ED Nurse AM]
  - 10.7.7 [ED Specialist]

10.7.8 Clinical Director ED — [Dr I]

- Supporting Documents
  - 10.7.9 Internal Professional Standards policy in ED
  - 10.7.10 Clinical Decision Unit — incorporating the 24 hour Observation Unit. A model of Care for Acute admissions policy.
  - 10.7.11 Copy of the Roster relevant to the complaint
  - 10.7.12 Copy of Lab result previously provided 11 June 2019
  - 10.7.13 Guidelines on the implementation of the Australasian Triage Scale in ED currently in use at Lakes DHB
  - 10.7.14 Management of Adult patient with Sepsis policy
  - 10.7.15 Early Warning System (EWS) observation chart
  - 10.7.16 Patient Transfer from PACU to unit/ward guideline
  - 10.7.17 Nursing/Midwifery Orientation Handbook

10.8 [Dr C's] response dated 24 September

10.9 Lakes DHB's response letter dated 22 October 2019

11. **Expert advice requested:**

Review the enclosed documentation and advise whether it leads to an amendment on the initial advice, or to make additional comments. This could be in the form of re-issue the advice with changes incorporated or write a separate addendum. Your advice is to be limited to the nursing care provided.

Please also comment on:

12. *The appropriateness of Lake DHB's:*

12.1 Policies including *Sepsis policy*, *EWS policy*, *Internal Professional standards in the Emergency Department policy*

12.2 **Sepsis policy** — Lakes DHB sepsis policy is a comprehensive guide to clinicians for the identification and management of sepsis and septic shock. The flow chart included in the document as appendix one 'Acute management of sepsis in adults' is adequately descriptive to clearly define the process for identification and management of the patient with sepsis.

12.3 One comment to the document is the use of qSOFA in the diagnosis of sepsis. As stipulated in section four *Diagnosis of Sepsis* 'There are no gold standard criteria for the diagnosis of sepsis.' This makes it difficult to pin to a single tool.

12.4 Freund Y, Lemachatti N, Krastinova E, et al (2017) found 'among patients presenting to the emergency department with suspected infection, the use of qSOFA resulted in greater prognostic accuracy for in-hospital mortality than did either SIRS or severe sepsis'. This indicates qSOFA is better used as a prognostic tool rather than a diagnostic tool. The flow chart of the policy supports this using SOFA and qSOFA as an indicator for the *Severity of sepsis.*

12.5 In the MD + CLAC a commonly used online source for medical equations, algorithms, scores, and guidelines, qSOFA is for 'Use to predict mortality, NOT to diagnose sepsis, per Surviving Sepsis Guidelines'. (https://www.mdcalc.com/qsofa-quick-sofa-score-sepsis & Seymour CW, Liu VX, Iwashyna TJ, et al, 2016).

12.6 I do not believe that Lakes DHB intended qSOFA to be used in isolation for diagnosis of sepsis as the document stated 'The presence of Sepsis may be inferred by [SIRS criteria + source of infection OR qSOFA OR SOFA]'. Seymour CW, Liu VX, Iwashyna TJ, et al, (2016) also suggest this in their conclusion from the consensus document '*Among encounters with suspected infection outside of the ICU, the predictive validity for in-hospital mortality of qSOFA was statistically greater than SOFA and SIRS, supporting its use as a prompt to consider possible sepsis.'*

12.7 My comment regarding qSOFA is based on another HDC case where the tool was used in isolation for identifying sepsis and sepsis was missed leading to adverse health outcomes for a patient.

12.8 Overall this document would be considered accepted practice and would be viewed similarly by my peers.

12.9 **EWS policy** — Lakes DHB EWS policy is a comprehensive document highlighting the use of the Early Warning System (EWS) Observation chart. It parallels what is used in my DHB and would be considered accepted practice and would be viewed similarly by my peers. Through looking at the documents provided the EWS was used according to the policy. When [Mr A's] score was elevated appropriate nursing interventions were completed such as administration of pain relief and observations were increased.

12.10 I do note there was no use of the EWS sticker placed into the notes by nursing staff in ED or MAPU when the EWS is 2 or more (refer to section 4–10 of the EWS policy). This sticker would be used for 'follow up audits and to assess response times'. Not to do this is a minor departure from accepted practice and would be viewed so by my peers.

12.11 Internal Professional standards in the Emergency Department policy — Lakes DHB Internal Standards in the Emergency Department policy is a comprehensive document that gives guidance to clinical staff at Lakes DHB who impact on the Acute Patient Journey. It echoes the Responsibility for patient care — Emergency Department policy used in my DHB. The policy would be considered accepted practice and would be viewed similarly by my peers.

13. *MAPU flowcharts*

13.1 *Admission to MAPU* and *Discharge from MAPU* were the flowcharts supplied. The admission flowchart provides a comprehensive process for patients to access to Medical Assessment and Planning Unit (MAPU).

Focusing on the admission process, direct access to MAPU requires GP referral of a stable patient. From ED the flow chart requires → ED work up → refer to medicine → medicine work up → MAPU admission. In [Mr A's] case the flow chart did not have his process, a presumed Surgical to Medicine referral. An email from [the Manager of Medicines Service] dated the 15th July 2016 expressed the caveats to such a document 'in my experience it is hard to cover all scenarios on paper'.

13.2 According to this document [Mr A] should not have been moved to MAPU prior to Medicine work up. To juxtapose to this comment you have to consider that [Mr A] had been seen by an ED medical staff and referred to the surgical service. He had been seen by a surgical consultant deemed to need a medical assessment. He was stable at the time of this part of his patient journey so admission to MAPU to await medical assessment could have been deemed reasonable.

13.3 Inclusive of this was the plan from the Surgical consultant stipulating 'Surgery happy to have input when indicated but that does not appear to be case currently'.

13.4 In my expert opinion as a MAPU flowchart it provides adequate information and process to facilitate the patient journey. Overall this document would be considered accepted practice and would be viewed similarly by my peers.

13.5 The document expresses the key principles of a MAPU to facilitate the patient journey however they do not have the necessary background to facilitate any deviation from the process. This issue leads into the next question from the commissioner

13.6 *The lack of written policy in relation to MAPU unit*

I would see lack of a policies or governance documents for a MAPU unit as a rarity. Although the flow charts give an overarching flow process to the unit and how it would operate on a daily basis a governance document would bring into consideration strategic goals of the unit, ensure accountability and management of risk. There is such a document within my DHB — *Medical Assessment and Planning Unit (MAPU) Operating Principles.*

13.7 Not to have this type of document I would see as a moderate departure from accepted practice.

14. *Whether the error identified by you was due to systematic issues at Lakes DHB or whether it was more attributable to an individual. If there are systematic issues, please elaborate on these with reference to how other DHBs operate in this area.*

15. In regards to [Mr A] I do not believe ONE individual was responsible for any errors in his care. One of the key issues during the admission on the 19th of May to [the

public hospital] was the confusion of whom his treatment was being provided by at different time points.

16. [Mr A] presented to the ED on the morning of the 19th of May and was triaged accordingly. He was promptly assessed and managed appropriately by ED SHO [Dr H] (Please see response from [Dr H] dated October 10th).

17. He was referred to the surgical service as he had had a recent presentation and admission under that service only days earlier.

18. He was assessed by the surgical team as needing a Gastroenterology assessment. [Dr C] Surgical consultant called and verbally referred [Mr A] to [Dr D] Gastroenterologist and physician on call. [Dr C] considered that she had provided a surgical opinion and [Mr A] was still under ED (please see [Dr C's] response dated 24th September). [Dr F], Surgical SHO for [Dr C] considered [Mr A] a surgical patient at time of the team's review (please see [Dr F's] response dated 18th October).

19. [Dr D] did not consider he had taken over care of [Mr A] until a clinical assessment had taken place, 'It was my understanding that [Mr A] was under the care of [Dr C]. It was not my understanding that [Mr A] was under the care of ED.' Please see response from [Dr D] dated 14th October.

20. [Dr I], Emergency Department Clinical Director, notes 'the surgical consultant requested a medical admission on the basis that *no surgical intervention was considered necessary at that stage*. [Mr A] was therefore admitted to MAPU which is for medical patients as surgical admissions go to CDU [adjacent beds but different governance and nursing].' (Please see response from [Dr I].)

21. [Dr L] Medical Registrar at Lakes DHB, 'was of the understanding that [Mr A] was admitted under the surgical team, as there were often surgical patients in the MAPU ward'.

22. All the presumptions can be viewed as reasonable in different contexts, however this did not provide optimal care for [Mr A] leading to increasing frustration to him and his family. This degree of confusion and no clear clinical lead in the case is a moderate departure from accepted practice.

23. The systematic issue that underlies [Mr A's] presentation is not isolated to just Lakes DHB. Organisational governance over acute patient flow through the hospital is an issue for many DHBs over New Zealand. Even in the DHB I work in the process remains muddied. Focusing efforts on development of governance documents could assist in clarifying this type of debate. It is noted in the response from [Dr J] Quality, Risk and Clinical Governance Director Lakes DHB 'Following reflection of this case the service Manager for Medical Services has committed to developing a document similar to that which is used for the Clinical Decision Unit'. This will go some way in decreasing this happening again in the future.

24. *If any departures identified by you concerned a particular nurse, please state which nurse, their involvement, and the level of departure from an accepted standard of care.*

25. In regards to the nursing staff and reviewing the nursing documentation provided I reissue my findings from the first report.

    25.1 The ED nursing staff appropriately monitored [Mr A's] condition. They initiated appropriate investigations and provided regular observations and documentation. I believe this meets with an appropriate standard of care that would be viewed similarly by my nursing peers.

    25.2 MAPU nursing staff appropriately monitored but failed to document escalation of [Mr A's] condition.

26. There is no single RN whose care deviated from accepted standards. It is noted that the MAPU RNs [RN K] the AM shift (response dated 25th August) and [RN M] the PM shift (response dated 24th August) verbally discussed [Mr A] with the Registrar. As they were MAPU nurses they would have discussed the patient with the Medical registrar. The Medical Registrar as stipulated above felt the patient was under the surgical team. There was no evidence that the RNs were directed to contact that service. Finally these discussions were not documented. I initially stated

    26.1 The lack of nursing documentation around escalation is a significant departure from the standard of care and would be viewed so by my nursing peers.

27. I would like to make an addendum to this as there is corresponding evidence from the Medical Registrar that discussions did take place implying ongoing monitoring and care did occur. Lack of documentation is a minor departure from the standard of care and would be viewed so by my nursing peers.

28. Lastly I stipulated in my original report 'A Triage score of 3 is inadequate for this history and level of pain and should have be a triage score 2. This is a moderate departure from standard of care and would be viewed as such by my nursing peers'.

29. I would like to make an addendum to this and agree with [Dr I] that this is an appropriate assessment. This is based on the two part triage process Lakes DHB adheres to of *primary and secondary triage.* Following the initial triage '[Mr A] was immediately taken to a cubicle … vital signs and a complete full triage assessment/history [occurred]'. This whole assessment led to the appropriate triage category allocation.

30. *Any other matters in this case that you consider warrant comment, including whether the remedial actions/further changes being implemented by Lakes DHB are consistent with how other DHBs respond to similar issues or whether there are other actions that could be taken.*

31. According to the Minutes of the Organisational Mortality and Morbidity Committee date 25th October 2018 recommendations were made. These include:

    31.1 Further education regarding the sepsis pathway be undertaken, with emphasis on antibiotics.

31.2 Discussion take place with ED SMOs in respect to patients awaiting review by primary teams with ED SMOs and the process of escalation of patients in the event of deterioration before formal hand-over of care.

31.3 That the case be sent to ED, Medicine, and surgical services for formal review with a specific emphasis on:

- Use of the Sepsis pathway
- Communication and hand-over of care between specialties
- Importance of documentation

31.4 Discussion occur with nurse educators and deteriorating patient group re sepsis education training on new onset confusion/delirium

31.5 Nurse educators emphasise the importance of nurse documentation and escalation in the event of deterioration.

32. Paragraph 31.1–31.5 are all appropriate remedial actions to address the concerns raised in this report and my previous one over escalation and documentation of the unwell patient.

33. In my expert opinion the mortality and morbidity review process and the points that were raised through this process are consistent with how other DHBs respond to similar issues.

34. In my initial report I made an assumption that no ED physician had assessed [Mr A] leading to a three hour wait to be seen. This is INCORRECT. [Dr H], ED SHO assessed [Mr A] shortly after 0800 on the morning of 19th of May.

35. There are no other matters in this case that I feel warrant comment.

References:

Freund Y, Lemachatti N, Krastinova E, et al. Prognostic Accuracy of Sepsis-3 Criteria for In-Hospital Mortality Among Patients With Suspected Infection Presenting to the Emergency Department. *JAMA.* 2017;317(3):301–308. doi:https://doi.org/10.1001/jama.2016.20329

Seymour CW, Liu VX, Iwashyna TJ, et al. Assessment of Clinical Criteria for Sepsis: For the Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). *JAMA.* 2016;315(8):762–774. doi:https://doi.org/10.1001/jama.2016.0288

Regards,

Craig Jenkin
NP I MN (Clin) I PG Cert Trauma and Emergency I BN
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Department Emergency Medicine
Capital and Coast District Health Board"