University Student Health Service
Doctor, Dr D
Registered Nurse, RN C

A Report by the

Health and Disability Commissioner

(Case 15HDC01144)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

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Executive summary

1. On 19 May 2014, Ms A, a 20-year-old university student, presented to the Student Health Service (SHS). She had had a sore throat and tiredness for two days. She was seen by a nurse who took a throat swab, which returned a negative culture result, and Ms A was advised about sore throat management.

2. At 1pm on Wednesday 21 May 2014, Ms A telephoned SHS as she was feeling worse. She spoke to registered nurse (RN) RN E. RN E made the following notes of the telephone discussion: "Came in two days ago with sore throat. Now feeling much worse — headache, body aches, fever. Feeling miserable." RN E arranged a follow-up appointment with Dr D that afternoon.

3. Ms A tried to cancel the appointment as she felt too unwell to go to SHS. However, at 4pm her boyfriend telephoned SHS and spoke to RN F. RN F recorded that Ms A was "getting worse and unable ? to swallow, get out of bed". RN F made a new appointment for Ms A with Dr D for review.

4. Ms A and her boyfriend presented to SHS at around 4.30pm for the appointment with Dr D. Dr D made the following notes of the consultation:

   "Attended with worsening symptoms. noted feeling very hot and cold. Sweaty. runny nose. sore muscles. tearful ++. O/E [temperature] 39.5, [Pulse] 122, ears mildly red, throat red — no exudate — normal swab, no cervical glands palpable. [Impression] — Flu like illness. PLAN — supportive measures."

5. Dr D prescribed pain relief and anti-nausea medications for Ms A.

6. Ms A deteriorated further and at 3.10pm on 22 May 2014, her flatmate, Ms G, telephoned SHS and spoke to RN C. RN C documented:

   "TELEPHONE TRIAGE Friend phoned on her behalf. Has been unwell now for quite a few days and seen here x3 already. Bad headache — pale and not keeping food down — vomiting. Not particularly responsive to her friends apparently. Sounds miserable in the background and crying. Friends will bring her down as soon as they can and if they cannot get her up I suggested they call an ambulance but aware will cost."

7. RN C made the first available appointment for Ms A at SHS.

8. Before leaving to go to the appointment, Ms A collapsed at her flat. She was unable to walk or answer questions and became drowsy. Her flatmates then called an ambulance and Ms A was taken to the Emergency Department at the public hospital. Ms A was diagnosed with bacterial meningitis and treated for this in hospital.

Findings

9. Dr D failed to take an adequate history from Ms A, did not undertake an adequate physical assessment, and did not consider a broader differential diagnosis (including meningitis). In these circumstances, the Commissioner found that Dr D did not

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provide Ms A services with reasonable care and skill, and breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code).[1]

10. RN C failed to ask further focussed questions of Ms G relating to Ms A's symptoms, did not consider meningitis as a differential diagnosis, and did not advise Ms G to call an ambulance immediately. In these circumstances, the Commissioner found that RN C did not provide Ms A services with reasonable care and skill, and breached Right 4(1) of the Code.

11. The Commissioner made adverse comments about RN F's and RN E's documentation.

12. The Commissioner found that the University was not vicariously liable for RN C's or Dr D's breach of the Code.

Recommendations

13. In the provisional opinion, the Commissioner recommended that Dr D and RN C each provide a written apology to Ms A for their breach of the Code. These recommendations have now been met.

14. In the provisional opinion, the Commissioner recommended that the University provide an update to HDC on the use of its generic protocols to provide consistency of telephone triage and clinical record taking. The University has now met this recommendation.

Complaint and investigation

15. The Commissioner received a complaint from Ms A and her parents, Mr and Mrs B, about the services provided to Ms A by the University Student Health Services (SHS), Dr D, and RN C. The following issues were identified for investigation:

- *The appropriateness of the care provided to Ms A by the University in May 2014.*
- *The appropriateness of the care provided to Ms A by Dr D in May 2014.*
- *The appropriateness of the care provided to Ms A by RN C in May 2014.*

16. The parties directly involved in the investigation were:

Ms A	Complainant/consumer
Mr B	Complainant/consumer's father
Mrs B	Complainant/consumer's mother
RN C	Nurse/provider
Dr D	Doctor/provider
Student Health Services	Medical centre/provider

[1] Right 4(1) of the Code states that every consumer has the right to have services provided with reasonable care and skill.

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Also mentioned in this report:

RN E	Registered nurse
RN F	Registered nurse
Ms G	Ms A's flatmate
RN H	Registered nurse
Mr I	Ms A's boyfriend
Dr J	Clinical director of SHS

17. Further information was received from:

The District Health Board
Accident Compensation Corporation
Medical Council of New Zealand
New Zealand Nurses Organisation

18. In-house clinical advice was obtained from general practitioner (GP) Dr David Maplesden (**Appendix A**) and RN Dawn Carey (**Appendix B**).

Information gathered during investigation

Introduction

19. Ms A was a 20-year-old university student at the time of these events. This report relates to the care Ms A received at SHS prior to her admission to the public hospital, where she was diagnosed with bacterial meningitis[2] in 2014.

20. SHS is one of the welfare services provided by the University to its students. It is owned and operated directly by the University and not through any separate legal entity. Dr D[3] and RN C were employees of the University at the relevant time.

Monday 19 May 2014 — visit to SHS

21. On 19 May 2014, Ms A presented to SHS. She had had a sore throat and tiredness for two days. She was seen by RN H. RN H took a throat swab, which returned a negative culture result.[4] Ms A was advised about sore throat management. RN H documented in the clinical notes:

> "Sore throat x2 days. Throat red. [Symptoms] worse at night. … Feeling lethargic also.

[2] Acute inflammation of the protective membrane covering the brain and spinal cord, caused by a bacterial infection.
[3] At the time of these events, Dr D was not vocationally registered. He is now vocationally registered in General Practice.
[4] A negative culture result means no presence of bacterial infection.

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> Taking paracetamol. No med [history] O/E temp 35.9, pharynx mildly red, tonsils not enlarged, no exudate.[5] [Cervical] glands[6] not enlarged. Throat swab taken, wait for results.
> Advised rest, plenty of fluids, regular analgesia, throat gargles, soothing lozenges and steam inhalation. BPAC [best practice] leaflet — Colds."

Wednesday 21 May 2014

Telephone call to SHS — 1pm

22. At 1pm on Wednesday 21 May 2014, Ms A telephoned SHS as she was feeling worse. She spoke to RN E. RN E made the following notes of the telephone discussion: "Came in two days ago with sore throat. Now feeling much worse — headache, body aches, fever. Feeling miserable." RN E arranged a follow-up appointment with Dr D that afternoon.

23. RN E told HDC that she cannot recall the telephone consultation with Ms A. However, she stated: "I am confident that I would have adopted my usual practice in questioning for any symptoms or signs that might be suggestive of meningitis or meningococcal septicaemia."[7] RN E is adamant that she would have questioned Ms A about whether she was suffering any "red flags" for meningitis, including neck stiffness, photophobia,[8] nausea, vomiting, and the speed of onset of any worsening symptoms. RN E stated: "The fact that none of these specific issues that I would have questioned on are mentioned in the notes indicates to me that the answers I received to my enquiries about these symptoms were all negative."

24. RN E advised HDC that she felt that medical review approximately three hours later was acceptable as "the appearance as relayed to me was consistent with a worsening of a viral illness that required further medical review in a relatively prompt fashion, but not immediate treatment".

Telephone call to SHS — 4pm

25. Ms A later telephoned SHS and left a message trying to cancel the appointment that had been made with Dr D because she felt too unwell to go to SHS. RN F told HDC that at 3.57pm the appointment was cancelled. However, at 4pm Ms A's boyfriend, Mr I, telephoned SHS and spoke to RN F. RN F recorded that Ms A was "getting worse and unable ? to swallow, get out of bed". RN F made a new appointment for Ms A with Dr D for a review at 4.15pm.

26. RN F told HDC that she advised Mr I that if Ms A's throat was so bad that she could not swallow, or if there was any breathing restriction, he should call an ambulance, but that if Ms A was happy and safe to come to SHS she could be assessed by a triage nurse immediately, and then seen by Dr D.

27. RN F is unsure whether she asked further focussed questions of Mr I. She told HDC she considered that Ms A had "red flags", and that she "wasn't expecting [Mr I] to

[5] Fluid that oozes out of blood vessels owing to inflammation.
[6] Lymph nodes in the neck region.
[7] Blood poisoning.
[8] Discomfort or pain to the eyes due to light exposure.

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make a diagnosis, [but intended] to reinforce to him that [Ms A] definitely needed to see a doctor … in a safe and timely manner”.

28. In their complaint, the family stated that “the triage nurse recommended that an ambulance be called to bring [Ms A] to [SHS] if she was unable to get there otherwise”. However, RN F said that the option of calling an ambulance was not to bring Ms A to SHS, as ambulance officers make their own decisions about where they take patients. She added that, to her knowledge, an ambulance has brought a patient to SHS only once.

29. RN F told HDC that she understood that Mr I was not at Ms A’s house when he made the telephone call, but that he was nearby. RN F stated:

> “My impression was that [Mr I] understood the need for a review and that he was going to go to [Ms A’s] house and make a decision whether to come to see the doctor or call an ambulance from there. I had asked him to call me back to let me know what was happening or if I could be of further help. I alerted the other triage nurse about the nature of the call so she would know I was expecting a call or presentation from either [Ms A], or [Ms A and Mr I].”

30. RN F also said that she would almost certainly have alerted reception staff to Ms A’s imminent arrival.

31. Ms A told HDC: “[Mr I] was with me at my house making the phone call. I was just too sick and tearful to talk on the phone which is why he made the call — but he was definitely at my house.”

Visit to SHS — 4.30pm

32. Ms A and Mr I presented to SHS at around 4.30pm for a consultation with Dr D. Dr D told HDC that he does not have significant recollection of this consultation. His response to HDC was based on his contemporaneous notes, his usual practice, and a letter of apology he sent to Ms A (close to the time of these events), in which he made a number of comments about his consultation with Ms A.

33. The family told HDC that the symptoms that Ms A had at the time of this consultation included:

> “1. The most severe headache she had had in her life, which was preventing her from sleeping and this was one of the main reasons she presented on 21/5/14.
> 2. Fever with a history of sweats and chills over the preceding 2 nights.
> 3. Severe muscle aches.
> 4. Nausea and vomiting.
> 5. Sleepiness and increasing weakness.
> 6. Sore neck.”

34. The family said that Ms A had spent the preceding two days lying in bed in a darkened room with the curtains drawn, and that she had commented to her flatmate that the lights were bright. The family acknowledged that when Ms A presented to Dr D she had a severe headache and may have been slightly confused. She was crying

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during the consultation, and the family said that she may have had difficulty expressing herself because of her unwellness.

35. Ms A had recently returned from an overseas trip on 5 May 2014, but Dr D did not ask her about any recent overseas travel.

36. Dr D stated: "I would have called [Ms A] in from our well lit waiting room and she would have stood up from the chairs and walked into the consultation alone." In response to the "information gathered" section of my provisional opinion, Ms A stated that she was holding onto the wall trying not to pass out as she walked to the consultation room. Dr D added that he would have had Ms A's notes from her previous consultation, and that generally he initiates all consultations with open questions and proceeds to specific ones for further clarification. Dr D recorded the following notes of his consultation with Ms A:

> "Attended with worsening symptoms. noted feeling very hot and cold. Sweaty. runny nose. sore muscles. tearful ++. O/E [temperature] 39.5, [Pulse] 122, ears mildly red, throat red — no exudate — normal swab, no cervical glands palpable. [Impression] — Flu like illness. PLAN — supportive measures. Health Declaration Completed."

37. Dr D prescribed paracetamol,[9] ibuprofen,[10] and metoclopramide[11] for Ms A.

38. Dr D told HDC that he is unable to recall whether he took his usual headache history (which would include site, onset, duration, and exacerbating and relieving factors). However, he noted that in his apology letter to Ms A, he had stated that because her symptoms fitted so well with flu-like illness he did not specifically enquire about headache, cough, vomiting, or neck stiffness.

39. In his apology letter, Dr D also stated:

> "You were tearful at the time of your consult … your throat looked red still with no exudate and no enlarged submandibular nodes. Again I did not check for signs such as … photophobia or rash as your presentation fitted well with a flu-like illness."

40. Dr D acknowledged that he did not record in his contemporaneous notes any of the systematic questions that he may or would usually have asked. He told HDC that these would usually include open questions about change in bowels or bladder, or the presence of a cough. Dr D also acknowledged that he did not document a respiratory examination or a detailed examination of Ms A's skin.

41. Dr D stated in his apology letter that, because the throat swab had been normal, and Ms A had no raised cervical glands suggesting glandular fever, he did not consider that blood tests would add to his clinical care at the time. Dr D told HDC that he did not document Ms A's level of consciousness, as he would document this only if there was a change.

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[9] A pain relief medication.
[10] A non-steroidal anti-inflammatory medication.
[11] An anti-nausea medication.

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42. Dr D told HDC that at the time of the consultation he felt confident that Ms A was suffering from a viral infection of her upper airways, and "therefore [he] did not have a differential diagnosis". Dr D noted that, anecdotally at SHS, especially close to exam time, viral infections are extremely common. He stated that the negative throat swab would have influenced his decision that Ms A's illness was likely a viral illness. Dr D stated in his apology letter: "I felt [Ms A's] diagnosis was clear and therefore did not ask for specific symptoms or look for specific signs of meningitis."

43. While Dr D did not make a note about oral intake or nausea, he noted that he prescribed metoclopramide, an antiemetic, so he considered that this must have been discussed during the consultation. Dr D cannot recall whether he advised Ms A of the side effects of metoclopramide.

44. Dr D declined Ms A's request for an antibiotic because he believed she had a viral infection. Dr D stated that his management plan was "based around symptom control over the next few days". He said that although he has not documented a follow-up plan, he would "always give verbal advice to every patient that they should return if symptoms are worsening or if they have any concerns".

45. Dr D told HDC that his opinion at that point in time was that Ms A did not require acute transfer to hospital for assessment because she was alert and heading home to a flat with friends, along with symptomatic treatment and a verbal plan for follow-up if there were any concerns or deterioration. Dr D stated:

> "I did not offer [Ms A] transfer or review in hospital as I would not routinely offer a patient review in hospital unless I felt it was clinically indicated. I am unable to recall if I advised [Ms A] of the hospital as a point of entry if [she experienced] any deterioration in her symptoms."

Thursday 22 May 2014

Telephone call to SHS — 3.10pm

46. The family told HDC that Ms A sent a message to her mother at 12.14pm on 22 May 2014 stating: "[I feel] pretty sick … went to the doctor yesterday and I've got the flu … I have all these little red spots on my skin is that normal?" However, [Mrs B] did not see the message until later that evening.

47. Ms A deteriorated further that afternoon and, at 3.10pm, her flatmate, Ms G, telephoned SHS and spoke to RN C.

48. RN C told HDC that while she was speaking to Ms G she accessed RN F's notes, and saw that Ms A had been given the BPAC leaflet three days earlier, which describes what to do if the patient is not improving. RN C made the following notes of the conversation:

> "TELEPHONE TRIAGE Friend phoned on her behalf. Has been unwell now for quite a few days and seen here x3 already. Bad headache — pale and not keeping food down — vomiting. Not particularly responsive to her friends apparently. Sounds miserable in the background and crying. Friends will bring her down as

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soon as they can and if they cannot get her up I suggested they call an ambulance but aware will cost."

49. RN C stated that Ms G told her that Ms A was not improving, and asked if she could be seen. RN C said that Ms G reported that Ms A had a bad headache, but did not advise that Ms A had been in a darkened room for the past two days with a rash, sore neck, and the most severe headache she had ever had. RN C stated that if she had been told these things, she would have told Ms G to call an ambulance immediately. RN C said: "[I]n the absence of that information I did not ask further questions."

50. RN C made Ms A the first available appointment at SHS, at 4pm, because she was concerned that Ms A should be assessed as soon as possible. RN C said that she suggested that Ms A be brought down as soon as possible, and she could be put into the nurse triage room for assessment before the appointment. RN C stated:

> "I also told [Ms G] that if they could not get [Ms A] up and down the stairs to a car then they should call an ambulance. I did not say that she should come to [SHS] in an ambulance. The ambulance would have taken [Ms A] straight to the Emergency Department at [the public hospital]."

51. RN C told HDC that she did not ask further questions of Ms G, as she was aware that Ms A needed to be brought to SHS for assessment. RN C noted that she was receiving information second hand from Ms G, who seemed distressed.

Taken to Emergency Department, the public hospital

52. In their complaint, the family advised that it took Ms G at least 30 minutes to organise a friend with a car to collect Ms A to take her to SHS. When Ms A was descending the stairs from her bedroom, being supported by two of her flatmates, she collapsed. Subsequently she was unable to walk or answer questions and became drowsy. Her flatmates then called an ambulance and Ms A was taken to the Emergency Department at the public hospital.

53. Ms A arrived at the Emergency Department at 4.05pm. When she first arrived, her presenting problem was noted as "flu-like illness 3–4 [days], [Glasgow Coma Scale][12] 12", and the primary diagnosis given to her condition was meningitis and encephalitis.[13] She was then reviewed medically, and it was noted that her GCS was "10–12", with the impression of meningitis. Differential diagnoses of a subarachnoid haemorrhage or tropical disease were queried.

54. Ms A was commenced on antibiotics, underwent a CT scan, and was reviewed by the Intensive Care Unit (ICU) team. She was then intubated[14] and admitted to ICU at 6.15pm, where further investigations were undertaken and she received broader spectrum antibiotics.

[12] A neurological scale that aims to give a reliable and objective way of recording the conscious state of a person for initial as well as subsequent assessment. A patient is assessed against the criteria of the scale, and the resulting points give a patient score between 3 (indicating deep unconsciousness) and 15.

[13] Acute inflammation of the brain.

[14] Inserting a tube into the trachea so that a patient can be placed on a ventilator to assist with breathing.

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Subsequent events

55. On 23 May 2014, a the public hospital clinician wrote to SHS to advise of Ms A's admission to hospital and her diagnosis.

56. On 24 May 2014, ICU clinicians attempted to reduce Ms A's sedation and extubate her, but this was unsuccessful so she was re-intubated. She also experienced a period of bradycardia.[15]

57. On 26 May 2014, Ms A was air-evacuated to another hospital's ICU for further treatment, and to be closer to her immediate family. The clinicians at the public hospital wrote a detailed handover note, which specified the diagnosis "Bacterial Meningitis (no organism identified)".

58. Also on 26 May 2014, RN F updated the SHS clinical note from her telephone call with Mr I to include the statement: "[N]otes not completed at time of phone call and added at a later date. Advised needs to come for [review], if can't get out of bed, needs ambulance. I made [appointment] for review with Dr." RN F explained that once SHS was aware of Ms A's diagnosis, and after discussion with the clinical group leader, she added to her notes so that there would be a clearer record as to what had transpired.

59. Ms A was discharged on 3 June 2014. She stated: "As a direct result of the meningitis I have ongoing neurological disability and adverse consequences which include significant sensorineural hearing loss, arthritis, daily headache, extreme fatigue, memory impairment and concentration problems."

Further information

Dr D

60. Dr D acknowledged that his history-taking in respect of Ms A was deficient, as he did not ascertain her recent travel history and headaches. However, Dr D stated that he does not acknowledge a deficiency in his assessment for meningeal irritation, because he would not have ignored combined symptoms of headache, nausea, and photophobia.

61. Dr D also accepts that the clinical notes for his consultation with Ms A fell below his usual standards. He said that he does not normally write notes while a patient is in the room (other than clinical numbers such as temperature and pulse), but completes the notes once the patient has left. Dr D's usual practice when a patient is upset is to stop what he is doing, offer a box of tissues, and give the patient time to compose him- or herself before proceeding. Dr D does not have a specific recollection of doing this in Ms A's case, but noted that this may have compromised his record-keeping — to minimise the waiting time for the next patient.

62. Dr D acknowledged that his initial apology letter to Ms A contained errors (eg, it did not have a date, and it used Ms A's initials rather than her name). Dr D explained that these errors are not to be taken as a reflection of a lack of caring or a lack of

[15] Low heart rate.

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acknowledgement of the severity of Ms A's illness; rather, they are a reflection of his inexperience in dealing with a complaint such as this.

63. Dr D told HDC that, since the time of these events, he has re-read the Best Practice article regarding meningitis and flu-like illness, has undertaken a learning module regarding meningitis, and has improved his documentation. He has also undertaken a two-cycle clinical notes audit at SHS, and attended a Medical Protection Society workshop on medical record standards. Subsequent to this complaint, Dr D received an update from the New Zealand Formulary stating that metoclopramide is no longer a first-line choice of antiemetic, and he has altered his practice accordingly.

64. Since these events, Dr D has changed employer. As part of his new role he has been responsible for trainee interns, and incorporates learnings from this experience into the training.

65. Dr D stated:

> "I am genuinely sorry for everything [Ms A] has been through and I am extremely sorry that [Ms A] felt she was not treated with dignity and respect. That most certainly was not my intention. This experience has had a significant effect on me and on the team at [SHS]. I will never forget this case for the rest of my life."

RN C

66. RN C told HDC that at the time of Ms G's telephone call on 22 May 2014, staff had no triage or telephone guideline training, and there were no relevant guidelines or protocols in place at SHS. She stated that it was an "on the job learning" situation. RN C advised that staff have since undertaken an online triage course, and the documentation system has changed to include many more questions when undertaking a telephone assessment.

67. RN C acknowledged that with the benefit of hindsight (and a diagnosis), there were other questions she should have asked Ms G about Ms A, but noted that her focus was on getting Ms A reviewed as soon as possible.

68. RN C told HDC that, since the time of these events, she has reviewed her practice and undertaken training, including the following:

a) An in-house review of responding to febrile patients;

b) A meeting on best practice documentation facilitated by the New Zealand Nurses Organisation;

c) Online training in telephone assessment, and presentation of a report based on the training to nurse colleagues; and

d) Over a two-month period, regular peer review of her telephone calls.

69. RN C said that she now has a much lower threshold for advising patients to call an ambulance to attend the Emergency Department if there is a history at all suggestive of meningitis. She is now mindful that mentioning the cost of calling an ambulance can be a barrier to students calling an ambulance when one is needed.

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70. RN C has since retired.

University

71. The clinical director of SHS, Dr J, told HDC that SHS was "disappointed with what appear to have been some deficiencies in [Dr D's] consultation in terms of his history taking, examination and information conveyed to [Ms A]". Dr J further stated: "I have also accepted that the telephone triage advice on 21 May 2014 fell short of expectations in terms of how the information was perceived." Dr J advised that RN C had many years of experience dealing with students, and was a highly regarded member of the SHS team.

72. Dr J told HDC that at the time of these events, the triage room always had available a copy of the Telephone Guidelines in General Practice Setting (January 2005), which is produced by the New Zealand College of Practice Nurses (New Zealand Nurses Organisation). These guidelines set out a way of providing advice to the community via telephone, and include different queries that should be asked and actions that should be taken in relation to various presenting conditions. For example, the page relating to presentations with the common cold requires questions to be asked about sore throat, headaches/body aches, eyes, temperature, and rash. The page for headaches requires questions to be asked about temperature, rash, neck pain or stiffness, and photophobia. The headaches page states that the provider should refer to the meningitis page if the patient has a temperature above 38.5°C. The page for meningitis states that the provider should ask about headache, vomiting, neck stiffness, dislike of bright lights, and rash and, if meningitis is suspected, should telephone an ambulance. The page also states that the provider should advise the caller to telephone an ambulance if the patient is unable to talk.

73. Dr J said that the University is confident that all of the nurses working in the triage area knew that the guidelines were there, and were familiar with them.

74. Dr J also advised that compulsory training occurs as part of nurse induction, which includes close observation and supervision in the triage setting until it is determined by the nurse and the nurse's supervisor that the nurse is competent to perform both in-person and telephone triage assessment. Further, nurses are required to participate in a professional development framework informed by Nursing Council of New Zealand guidelines, including the Telephone Guidelines in General Practice Setting. Individual nurse progress within this framework is assessed quarterly by the Clinical Group Leader of nursing, and formally at an annual review.

75. Dr J advised that considerable training was provided to staff around triage, specifically in relation to upper respiratory tract infections/meningitis and the necessity of being aware of all possible causes for a patient's symptoms. Training sessions were provided on these issues in 2009, 2011, 2013, and 2014.[16] Dr J also advised that RN C attended a conference in 2012, where a specific presentation on triage was given.

[16] The University stated that RN C attended all of these training sessions.

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76. Since 2006, SHS has had Royal New Zealand College of General Practitioners Cornerstone Practice Accreditation. Dr J stated that SHS is oriented towards continuous quality improvement, and that regular in-house education and peer group supervision occurs. The most recent Cornerstone accreditation report (September 2014) states the overall impression that the SHS team "have established sound systems to ensure the delivery of high quality care to a student population … They have developed effective triage systems." SHS had all criteria of the accreditation "met" except for all medical staff being vocationally registered, which was "partially met".

77. Dr J stated:

> "All of the members of [SHS] are concerned and distressed at [Ms A's] eventual diagnosis, the suffering that she endured, and any lasting consequences of her illness. Our thoughts have been with her and her family ever since we first learned of the unfortunate events that occurred … Since that time we have been doing all we can to address matters for [Ms A] and her family."

Internal review

78. On 30 March 2015, SHS completed an internal review of the care provided to Ms A. The review report sets out a chronology of events, and conclusions based on patient feedback, clinician interviews, and general discussion. The report also outlines the remedial actions and service quality improvements that have been executed or considered. The review found that the workload at the time of Dr D's consultation and RN C's telephone call was not unusually high, nor were there adverse factors in terms of availability or function of physical resources.

79. SHS has undertaken the following quality improvement measures:

a) SHS provided a clinical workshop regarding the approach to the febrile patient.

b) SHS staff visited a health advice telephone service[17] and made improvements to the SHS system of nursing assessment of acute and unscheduled presentations. SHS has now developed generic protocols to provide consistency of telephone triage and clinical record taking. These include standardised scripts and a process to exclude life-threatening emergencies on all calls.

c) SHS has developed new clinical guidelines for the approach to the "toxic" or febrile patient.

d) SHS required all nurses at the centre to undertake a postgraduate patient assessment course and a three-hour telephone triage online training session.

e) SHS required Dr D to complete an internal audit of other SHS GPs' clinical records to learn from their records and enhance his own practice. Dr D also attended a workshop on medical record standards and undertook regular case reviews as part of one-on-one peer supervision. Random audits of Dr D's clinical notes were undertaken.

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[17] A free health advice telephone service, operated by the government, which is staffed by registered nurses.

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f) RN C had one-on-one telephone supervision for approximately two months, and after completing on-line telephone triage training she returned to telephone duties initially with supervision.

RN F

80. RN F told HDC that she is well aware of the ramifications of meningitis, as she has had experience working with patients with meningitis at a large public hospital and has held roles relating to meningicoccal vaccination/immunisation programmes.

81. RN F stated:

> "I would like to extend to [Ms A] and her family and friends my feelings of empathy and sorrow for the trauma they have been through, and the difficulties they all continue to face. It is my heartfelt wish that all of this had turned out better for [Ms A]. Please accept my sincerest best wishes for the future."

Responses to the provisional opinion

82. Ms A responded to the "information gathered" section of the provisional opinion. Her comment is incorporated above.

83. Dr D had no comments to make in response to the content of the provisional opinion. In response to the recommendation made in my provisional opinion, he provided a written apology for forwarding to Ms A.

84. RN C had no comments to make in response to the content of my provisional opinion. In response to the recommendation made in my provisional opinion, she provided a written apology for forwarding to Ms A.

85. RN F and RN E had no comments to make in response to my provisional opinion.

86. In response to the recommendation made in my provisional opinion, the University provided HDC with copies of the following documents, and advised that they are now an embedded feature of the triage process at SHS:

1. The telephone triage documentation tool (a framework for obtaining and recording relevant information during a telephone triage consultation).
2. Written guidance on ruling out a life-threatening emergency (which is displayed in triage areas to remind nurses of this important element of triage).
3. Triage protocol giving policy guidance in regard to the clinical activity of nurse triage.
4. Written guidance on management of the acutely unwell patient (which is part of the service protocol manual).
5. Written guidance for nurses on the threshold for referral to GPs.

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Opinion: Dr D — Breach

87. On Wednesday 21 May 2014 at 4.30pm, Ms A saw Dr D at SHS owing to her worsening symptoms. She had had three previous interactions with SHS in the preceding three days. In the clinical notes from a telephone call to SHS earlier in the afternoon on 21 May 2014, it states that Ms A was "feeling much worse" and had a headache.

88. The family told HDC that the symptoms Ms A had at the time of her consultation with Dr D included the most severe headache she had ever suffered, fever, severe muscle aches, nausea, vomiting, sleepiness, increasing weakness, and a sore neck. However, they acknowledged that when Ms A presented to Dr D she may have been slightly confused and, because of her unwellness and the fact that she was crying, may have had difficulty expressing herself.

89. Dr D's impression was that Ms A had a "flu-like illness", and he prescribed her paracetamol, ibuprofen, and metoclopramide. He told HDC that at the time of the consultation he felt confident that Ms A was suffering from a viral infection of her upper airways, and therefore he did not have a differential diagnosis. Dr D recorded in the clinical notes:

> "Attended with worsening symptoms. noted feeling very hot and cold. Sweaty. runny nose. sore muscles. tearful ++. O/E [temperature] 39.5, [Pulse] 122, ears mildly red, throat red — no exudate — normal swab, no cervical glands palpable. [Impression] — Flu like illness. PLAN — supportive measures. Health Declaration Completed."

90. Dr D told HDC that he is unable to recall whether he took his usual headache history (which would include site, onset, duration, and exacerbating and relieving factors). However, in an apology letter he sent to Ms A closer to the time of these events, he stated that because her symptoms fitted so well with flu-like illness he did not specifically enquire about headache, cough, vomiting, or neck stiffness. Dr D told HDC that he did not ask about recent travel, and acknowledged that he did not check for a rash or photophobia.

91. Dr D accepted that he did not record in his contemporaneous notes any of the systematic questions that he may or would usually have asked. He told HDC that these would usually include open questions about change in bowels or bladder, or the presence of a cough. Dr D also acknowledged that he did not document a respiratory examination or a detailed examination of Ms A's skin.

92. I consider that there must have been some discussion about nausea, given that Dr D prescribed medication for it. However, I am concerned about the deficiencies in Dr D's history taking, and that some of his enquiries may not have been documented.

93. My in-house clinical advisor, Dr David Maplesden, noted that at the time of the consultation, influenza rates had not met the seasonal threshold,[18] and in the absence

[18] The seasonal threshold is the level of influenza activity that signals the start and end of the annual influenza season.

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of a cough symptom, these factors should have decreased Dr D's threshold for considering alterative diagnoses. Dr Maplesden also noted that Ms A's age and demographic placed her in a higher than average risk group for meningococcal disease. In these circumstances, Dr Maplesden considered that Dr D's symptom history review should have included "direct questioning regarding meningococcal disease 'red flags' including headache, vomiting, rash, confusion and photophobia". Dr Maplesden also noted that enquiry about recent overseas travel is an important part of assessment of pyrexia (fever) of unknown origin.

94. Dr Maplesden advised:

> "I feel there were deficiencies in [Dr D's] history taking (noting particularly the history of headache had been gained and recorded by the triage nurse but was evidently not further explored or noted by [Dr D]) and physical assessment (particularly failure to assess blood pressure, and to assess for signs of meningeal irritation if [Ms A] was complaining of photophobia, headache and vomiting) that appear to have contributed to him underestimating the severity of [Ms A's] illness on 21 May 2014. While I am not critical of his failure to diagnose [Ms A] as having meningococcal disease on 21 May 2014, I am critical a broader differential diagnosis (including meningitis) was not considered given her degree of unwellness. Such consideration might have led to hospital admission for further assessment, or a longer period of observation in the clinic, or at least to more specific 'safety netting' advice with a low threshold for attending ED or seeking review. Under the circumstances, I feel [Dr D's] management of [Ms A] on 21 May 2014 departed from expected standards to at least a moderate degree, with the degree of departure probably being severe if [Ms A] had complained of symptoms of photophobia (together with vomiting and headache) … [Dr D's] standard of clinical documentation was mildly deficient."

95. I accept Dr Maplesden's advice. In the circumstances, I consider it more likely than not that Ms A did not openly volunteer her symptoms of photophobia, headache, vomiting, and neck stiffness to Dr D, and acknowledge that this was because she was unwell, upset, and confused at the consultation. However, I consider that in the circumstances, and given the information that Dr D did have available to him, he had a responsibility to enquire about these symptoms. I am critical that Dr D did not take an adequate history including questioning about headache, vomiting, rash, confusion, photophobia, and recent travel.

96. I am also critical that Dr D did not undertake an adequate physical assessment of Ms A, including taking her blood pressure and examining her for signs of meningeal irritation. I am highly concerned that, given Ms A's symptoms, Dr D did not consider a broader differential diagnosis (including meningitis).

Conclusion

97. Ms A had the right to receive services provided with reasonable care and skill by Dr D. Dr D failed to take an adequate history from Ms A, did not undertake an adequate physical assessment, and did not consider a broader differential diagnosis (including meningitis). In these circumstances, I consider that Dr D did not provide Ms A services with reasonable care and skill, and breached Right 4(1) of the Code.

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98. I acknowledge that Dr D has reflected on his practice since these events, and has undertaken further training with regard to meningitis and documentation. I consider that this is appropriate in the circumstances.

Opinion: RN C — breach

99. On Thursday 22 May 2014 at 3.10pm, Ms G telephoned SHS seeking assistance for Ms A, whose symptoms were worsening. Ms A had been seen by Dr D the previous day, and had had three other interactions with SHS in the preceding three days.

100. Ms G spoke to RN C, who recorded the following notes of the conversation:

> "Has been unwell now for quite a few days and seen here x3 already. Bad headache — pale and not keeping food down — vomiting. Not particularly responsive to her friends apparently. Sounds miserable in the background and crying. Friends will bring her down as soon as they can and if they cannot get her up I suggested they call an ambulance but aware will cost."

101. RN C made an appointment for Ms A at SHS at 4pm. RN C said that she did not ask further questions of Ms G as she was aware that Ms A needed to be brought to SHS for assessment.

102. Ms A had been in a darkened room for the previous two days with a rash, sore neck, and the most severe headache she had ever suffered. RN C told HDC that if she had been given that information, she would have told Ms G to call an ambulance immediately.

103. My in-house clinical advisor, RN Dawn Carey, advised:

> "I consider that the documentation [from Ms A's previous interactions with SHS] refers to symptoms that are 'red flags' — bad headache, vomiting, not particularly responsive — and should have prompted focussed questioning from [RN C]. There is no evidence that this occurred and I am moderately critical of this. While I would expect such questioning to be part of any triage nursing assessment of this presentation, I note that this contact was twenty four hours after a consultation where [Ms A] was noted to be pyrexial and tachycardic …
>
> Based on the documented symptoms, I would also have expected [RN C] to have considered meningococcal disease as a differential and have questioned accordingly — any neck stiffness, photophobia, presence of rash, confusion. I am somewhat concerned that there is no evidence of such questioning or of meningococcal disease being considered. In my opinion, the assessment by [RN C] moderately departed from accepted nursing standards."

104. In my view, RN C noted symptoms that were concerning, and the advice that she gave in response to those symptoms was insufficient. I consider that RN C should have asked further focussed questions of Ms G relating to Ms A's symptoms, considered

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meningitis as a differential diagnosis, and advised Ms G to call an ambulance immediately to take Ms A to hospital.

Conclusion

105. Ms A had the right to receive services provided with reasonable care and skill by RN C. RN C failed to ask further focussed questions of Ms G relating to Ms A's symptoms, did not consider meningitis as a differential diagnosis, and did not advise Ms G to call an ambulance immediately. In these circumstances, I consider that RN C did not provide Ms A services with reasonable care and skill, and breached Right 4(1) of the Code.

106. I acknowledge that RN C has undertaken further training with regard to the febrile patient, documentation, and telephone triage. I consider that this is appropriate in the circumstances.

Opinion: RN E — adverse comment

107. On 21 May 2014 at 1pm, Ms A telephoned SHS as she was feeling worse than she had felt at her SHS assessment two days previously. She spoke to RN E, who recorded in the clinical notes: "Came in two days ago with sore throat. Now feeling much worse — headache, body aches, fever. Feeling miserable." RN E arranged a follow-up appointment with Dr D that afternoon.

108. My in-house clinical advisor, RN Dawn Carey, advised:

> "Effective clinical assessment requires focussed questioning and is used to determine whether the patient has any 'red flag' symptoms present or not. While I consider this necessary for all health consultations the limitations of telephone assessment make it even more so. In my opinion, all patients who report influenza-like symptoms need to be questioned further. Such an approach acknowledges that non specific symptoms such as fever and lethargy are also symptoms experienced during the prodromal phase of meningococcal disease. Relevant health literature advocates that meningococcal disease is routinely considered as a differential when influenza-like symptoms are reported.
>
> In my opinion, the nursing assessment as detailed was inadequate and I am also critical of the lack of safety netting advice."

109. RN E is adamant that she would have questioned Ms A about whether she was suffering any "red flags" for meningitis, including neck stiffness, photophobia, nausea, vomiting, and the speed of onset of any worsening symptoms. RN E stated: "The fact that none of these specific issues that I would have questioned on are mentioned in the notes indicates to me that the answers I received to my enquiries about these symptoms were all negative."

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110. RN E advised HDC that she felt that medical review approximately three hours later was acceptable as "the appearance as relayed to me was consistent with a worsening of a viral illness that required further medical review in a relatively prompt fashion, but not immediate treatment".

111. RN Carey advised that if red flag symptoms were enquired about, the answers should have been documented regardless of whether the answers were positive or negative, as this is important information to communicate to peers who may subsequently be caring for the patient.

112. I am unable to make a finding as to whether RN E asked Ms A focussed questions about red flags for meningitis during this telephone call. If she did not do so, I am critical of that omission. However, even if she did ask such questions, I am critical that RN E did not document the questions and Ms A's responses, even if the answers were negative. Taking into account RN Carey's advice that the answers to queries about red flag symptoms should have been documented regardless, I consider that RN E should have made a more detailed record of her conversation with Ms A. I acknowledge that RN E arranged a medical review for follow-up later that day.

Opinion: RN F — adverse comment

113. On 21 May 2014 at 4pm, Mr I telephoned SHS on behalf of Ms A. He spoke to RN F, who recorded in the clinical notes: "[G]etting worse and unable ? to swallow, get out of bed." RN F arranged an appointment for Ms A with Dr D at 4.15pm.

114. RN F told HDC that she advised Mr I that if Ms A's throat was so bad that she could not swallow, or if there was any breathing restriction, he should call an ambulance, but that if Ms A was happy and safe to come to SHS she could be assessed by a triage nurse immediately, and then seen by Dr D. RN F updated her clinical notes on 26 May 2014 to include the following: "[N]otes not completed at time of phone call and added at a later date. Advised needs to come for [review], if can't get out of bed, needs ambulance. I made [appointment] for review with Dr."

115. RN F is unsure whether she asked further focussed questions of Mr I. She told HDC she considered that Ms A had "red flags" and that she "wasn't expecting [Mr I] to make a diagnosis, [but intended to] reinforce to him that [Ms A] definitely needed to see a doctor … in a safe and timely manner".

116. RN F told HDC that she understood that Mr I was not at Ms A's house when he made the telephone call, but was nearby. However, Ms A told HDC that Mr I was with her at her house making the telephone call, and she was just too sick and tearful to talk on the telephone. In my view, it is more likely than not that Mr I was with Ms A at the time that he made the telephone call to RN F.

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117. My in-house clinical advisor, RN Dawn Carey, advised:

> "In my opinion, reportage of getting worse and swallowing difficulties need further focussed questioning to ensure that 'red flag' symptoms that would necessitate urgent transfer to secondary level care are not present. There is no evidence that this was done and I am critical of this. While I acknowledge that [RN F] raised the need to call an ambulance should [Ms A] not be able to get out of bed, I remain critical of the lack of focussed questioning and consider that this was an inadequate nursing assessment."

118. RN Carey further advised that if red flag symptoms were enquired about, the answers should have been documented regardless of whether the answers were positive or negative, as this is important information to communicate to peers who may subsequently be caring for the patient.

119. I am unable to make a finding as to whether RN F asked focussed questions of Mr I regarding red flag symptoms. If she did not do so, I am critical of that omission. However, even if she did ask such questions, I am critical that RN F did not document the questions and Mr I's responses. Taking into account RN Carey's advice that the answers to queries about red flag symptoms should have been documented regardless, I consider that RN E should have made a more detailed record of her conversation with Mr I. I acknowledge that RN F arranged medical review at SHS for shortly after the telephone call.

Opinion: University — No breach

120. Dr D and RN C were employees of the University at the time of these events. Under section 72(2) of the Health and Disability Commissioner Act 1994, an employing authority is vicariously liable for any act or omission by an employee. However, a defence is available to the employing authority under section 72(5) if it can prove that it took such steps as were reasonably practicable to prevent the act or omission.

Dr D

121. I accept the Cornerstone review findings that SHS had established sound systems to ensure the delivery of high quality care to a student population. I consider that Dr D's failure to provide appropriate services to Ms A was a matter of individual clinical decision-making. The University was entitled to rely on Dr D to provide care in accordance with well-established clinical guidelines, and with reasonable care and skill. I do not consider that there were any additional steps that it would have been reasonably practicable for the University to take in order to prevent Dr D's breach of the Code. Accordingly, I do not find the University vicariously liable for Dr D's breach of Right 4(1).

RN C

122. RN C told HDC that at the time of Ms G's telephone call on 22 May 2014, staff had no triage or telephone guideline training, and there were no guidelines or protocols in place at SHS regarding this. She stated that it was an "on the job learning" situation.

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123. Dr J advised HDC that RN C had many years of experience dealing with students and was a highly regarded member of the SHS team. Dr J told HDC that at the time of these events, the triage room always had available a copy of the Telephone Guidelines in General Practice Setting, which is produced by the New Zealand College of Practice Nurses (New Zealand Nurses Organisation). The page in the guidelines for headaches requires questions to be asked about temperature, rash, neck pain or stiffness, and photophobia. The headaches page also states to refer to the meningitis page if the patient has a temperature above 38.5ºC. The page for meningitis states that if the patient is unable to talk, the provider should advise the caller to contact the ambulance service. It also states that the provider should ask about headache, vomiting, neck stiffness, dislike of bright lights, rash, etc, and, if meningitis is suspected, to telephone an ambulance. Dr J said that the University is confident that all of the nurses working in the triage area knew that the guidelines were there, and were familiar with them. Dr J stated that this clinical guideline has informed the training of nurses working at SHS.

124. Dr J also stated that compulsory training occurs as part of nurse induction, which includes close observation and supervision in the triage setting until it is determined by the nurse and the nurse's supervisor that the nurse is competent to perform both in-person and telephone triage assessment. Further, nurses are required to participate in a professional development framework informed by Nursing Council of New Zealand guidelines.

125. Dr J also advised that considerable training was provided to staff around triage, specifically in relation to respiratory tract infections/meningitis and the necessity of being aware of all possible causes for a patient's symptoms. Training sessions were provided on these issues in 2009, 2011, 2013, and 2014, and the University advised that RN C attended these sessions. Dr J noted that RN C also attended a conference in 2012, where a specific presentation on triage was given.

126. I note that the information provided by the University regarding the resources and training available to nursing staff is supported by the Cornerstone accreditation report, but is inconsistent with RN C's statement that staff had no triage or telephone guideline training and there were no relevant guidelines or protocols in place at SHS. On balance, I am satisfied that the University had appropriate resources and training available to its staff undertaking triage in person and via telephone, and accordingly took such steps as were reasonably practicable to prevent RN C's breach of the Code. Accordingly, I do not find the University vicariously liable for RN C's breach of Right 4(1).

127. I note that SHS has undertaken an internal review and implemented numerous quality improvement initiatives to improve the service it provides in light of Ms A's case. I consider those actions to be appropriate.

Recommendations

128. In the provisional opinion, I recommended that Dr D provide a written apology to Ms A for his breach of the Code. Dr D has now met this recommendation.

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129. In the provisional opinion, I recommended that RN C provide a written apology to Ms A for her breach of the Code. RN C has now met this recommendation.

130. In the provisional opinion, I recommended that the University provide an update to HDC on the use of its generic protocols to provide consistency of telephone triage and clinical record taking (namely, the standardised scripts and process to exclude life-threatening emergencies on all calls, and the clinical guidelines for the approach to the "toxic" or febrile patient). The University has now met this recommendation.

Follow-up actions

131. A copy of this report with details identifying the parties removed, except the experts who advised on this case, will be sent to the Medical Council of New Zealand, and it will be advised of Dr D's name in covering correspondence.

132. A copy of this report with details identifying the parties removed, except the experts who advised on this case, will be sent to the Nursing Council of New Zealand, and it will be advised of RN C's name in covering correspondence.

133. A copy of this report with details identifying the parties removed, except the experts who advised on this case, will be sent to the district health board, and it will be advised of the names of Dr D and RN C.

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

Appendix A: In-house clinical advice to the Commissioner

The following expert advice was obtained from general practitioner Dr David Maplesden:

"1. Thank you for the request that I provide clinical advice in relation to the complaint from the parents of [Ms A] about the care provided to [Ms A] by [the University's] Student Health Service (SHS). In preparing the advice on this case to the best of my knowledge I have no personal or professional conflict of interest. I agree to follow the Commissioner's Guidelines for Independent Advisors. I have reviewed the information on file: complaint to HDC from the parents of [Ms A]; response to HDC from the director of SHS; various correspondence between the parents of [Ms A] and SHS; letter from [the] mother of one of [Ms A's] flatmates) regarding concerns at the telephone triage her daughter was involved with on behalf of [Ms A]; SHS response to [flatmate's mother]; SHS Internal Review Report (IRR); SHS clinical notes; [public hospital] clinical notes.

2. The complaint relates to the clinical management of [Ms A] on 21 and 22 May 2014. [Ms A] had attended SHS on 19 May 2014 with sore throat symptoms and a swab was taken (negative culture). Her condition worsened markedly over the next two days and she re-presented to SHS ([Dr D]) on 21 May 2014. Symptoms included (according to the complainants) severe myalgia, fever, severe headache, sore neck, nausea and intolerance of bright lights. [Ms A] had also recently returned from a trip [overseas]. [Ms A] was diagnosed with flu and prescribed ibuprofen, paracetamol and metoclopramide. Her condition continued to worsen with increasingly severe headache, vomiting, confusion and rash and her flatmates contacted SHS for advice in the early afternoon of 22 May 2015 by which time [Ms A] had become unresponsive. Nursing advice was to come in to the clinic in an hour and if transport could not be arranged, an ambulance could be called (at cost) to bring [Ms A] to the clinic. [Ms A's] flatmates spent half an hour arranging transport but [Ms A] collapsed while trying to get to the car and an ambulance was then called. She was transported to [the public hospital] where she was diagnosed with meningitis (cerebrospinal fluid culture later positive for meningococcal disease), intubated and admitted to ICU. She experienced neurological complications as a consequence of her disease including permanent hearing loss, and an ACC claim for Treatment Injury was accepted in light of the delayed diagnosis. [Ms A's] parents have several concerns:

(i) there were deficiencies in the medical history taken from [Ms A] on 21 May 2014 so that the presence of important symptoms (including light sensitivity, severity of headache) were missed and potentially important historical features (such as recent travel to [a country] where dengue fever is endemic) were not elucidated.

(ii) there were deficiencies in the clinical examination including failure to assess for signs of meningeal irritation or other neurological abnormalities, and no check for skin rash.

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(iii) there was a failure to appropriately consider diagnoses outside of 'flu-like illness' in a patient who was in a high-risk group for meningococcal disease and who was also at risk of some tropical diseases.

(iv) there was inadequate provision of follow-up and safety-netting advice to the patient and her carers (boyfriend and flatmate) despite the boyfriend being available (in the waiting room) at the consultation of 21 May 2014.

(v) the nurse phone triage on 22 May was inadequate with a failure to attach appropriate significance to [Ms A's] symptoms including her unresponsiveness, and with inappropriate clinical advice given.

(vi) [Ms A's] parents are concerned that the management deficiencies they have identified led to unnecessary delay in the diagnosis and treatment of their daughter's condition, placed her life at risk and contributed to the permanent complications she has suffered.

3. SHS response to HDC

There is no direct response from [Dr D] on file and while he is aware of the complaint he has not contributed directly to the SHS response. He is no longer employed by SHS, and the response notes the service is *disappointed with what appears to have been some deficiencies in [Dr D's] consultation in terms of his history taking, examination and information conveyed to [Ms A] ... I have also accepted that the telephone triage advice on 21 May 2014 fell short of expectations in terms of how the information was perceived.* The response notes the nurse had no intention that an ambulance should be called to transport [Ms A] to SHS, and she was not aware [Ms A] was unresponsive. Her documented advice was to *call an ambulance if they were unable to get [Ms A] up* … In a letter to [Ms A] dated 23 September 2014, SHS has discussed the issue of the telephone triage in more detail noting that a reflective investigation had been undertaken and that the nurse concerned *accepts that had she asked more or different questions of* [the flatmate] *she would have made a different decision regarding the calling of an ambulance and might well have called an ambulance herself.*

4. Internal Review Report

(i) The report summarises the events of 19–22 May 2014 and outlines the investigation process undertaken. All staff involved were interviewed. A refresher education session on appropriate management of the febrile patient was held on 27 August 2015, and service specific issues (including facility for observing unwell patients) were discussed. General areas noted for continuous quality improvement included provision of explicit 'safety-netting' advice, clinical documentation and inter-provider communication. Regular auditing of provider clinical records was to be undertaken, and [Dr D] attended an MPS workshop on clinical documentation.

(ii) Practice amendments were put in place in regard to telephone triage processes following a visit to [a dedicated health enquiry and triage service] and these have been outlined in the report.

(iii) Clinical demands/workload was not felt to be a significant contributing factor with respect to any deficiency in [Dr D's] management.

5. Background information on epidemiology of meningococcal disease in New Zealand[1]

(i) Invasive meningococcal disease is a serious disease caused by infection with the bacterium *Neisseria meningitidis* that can rapidly progress from a mild flu-like illness to death. A large epidemic of meningococcal disease due to a single group B strain, occurred in New Zealand between 1991 and 2007. This led to the development of a strain-specific vaccine, MeNZBTM, and a vaccination programme between 2004 and 2008. Smaller, localised outbreaks of meningococcal disease have also occurred in New Zealand, including a group A disease outbreak in Auckland in 1985/86 and several group C regional outbreaks, most recently in Northland in 2012.

(ii) Invasive meningococcal disease is notifiable and annual epidemiological reports are produced, the most recently available being that for 2013. In that year 68 cases of meningococcal disease were notified. This equates to a notification rate of 1.5 per 100 000 population, the lowest rate of meningococcal disease in New Zealand in more than two decades.

(iii) The highest age-specific rates of meningococcal disease continued to occur in children younger than five years: 18.4 per 100 000 population for those aged less than one year and 5.2 per 100 000 population for those aged 1–4 years. As in previous years, a secondary peak in the notification rate was observed for the 15–19 years age group (3.9 per 100 000 population).

(iv) Hospitalisation status was recorded for all notified cases, and 67 of the 68 cases (98.5%) were hospitalised. For the hospitalised cases, 28 cases (43.8%) were seen by a doctor prior to hospital admission and four (6.3%) were given intravenous or intramuscular antibiotics before admission. Four fatalities occurred, giving a case-fatality rate of 5.9%.

(v) I have included the information above to emphasise the reasonably high profile meningococcal disease has in this country and I would expect all GPs to be aware of those groups most at risk of the disease, to be aware of the 'classic' presenting signs and symptoms, and to include meningococcal disease in their differential diagnosis when clinically indicated.

6. The March 2014 issue of Best Practice Journal (provided free to most NZ GPs) included an article on meningococcal disease titled: *Meningococcal disease: Always consider in a patient with flu-like illness*[2]. Excerpts from the article are included below to provide a basis for my subsequent comments on [Ms A's] management.

(i) Patients with meningococcal disease can initially present with non-specific influenza-like symptoms. More specific signs and symptoms may develop as the

[1] Lopez, L. and Sherwood, J. *The Epidemiology of Meningococcal Disease in New Zealand in 2013* 2014, Institute of Environmental Science and Research Ltd (ESR) Wellington, New Zealand.

[2] BPAC. Meningococcal disease: Always consider in a patient with flu-like illness. Best Practice Journal. March 2014 (Issue 59).

HDC

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illness progresses. Symptoms can rapidly progress from mild to life-threatening, therefore suspected meningococcal disease is a medical emergency.

(ii) **The first stage of meningococcal disease** (prodromal stage) is associated with non-specific symptoms, which may persist throughout the illness. These symptoms include acute fever, vomiting, nausea, lethargy, irritability, refusing food or drink, headache, muscle and joint pain and respiratory symptoms. Cough, particularly dry cough, is more indicative of influenza than meningococcal disease.

(iii) **Classical signs of meningococcal disease may be absent.** Most patients will not display specific signs within with first four to six hours of illness (up to eight hours for adolescents), and infants may not display typical signs at all. Specific signs and symptoms of bacterial meningitis include:

Photophobia

Severe headache

Neck stiffness

Focal neural deficit

Drowsiness, confusion

Seizures

Kernig's sign (low sensitivity, but high specificity)

Brudzinski's sign (low sensitivity, but high specificity)

(iv) Meningococcal septicaemia should be suspected if the patient has signs and symptoms including:

Rash anywhere on the body, particularly if it is a non-blanching rash

Rapidly deteriorating condition

Limb and joint pain

Cold hands or feet

Capillary refill time greater than two seconds

Unusual skin colour, e.g. pale, mottled, blue

Tachycardia

Rigors

(v) Other factors that should be considered when assessing whether meningococcal disease is present, include:

How quickly the illness is progressing — people with meningitis can progress from asymptomatic to unwell enough to require hospitalisation within 24 hours.

Clinical judgement, i.e. does this illness seem more severe than you would expect?

The level of parental/caregiver concern

(vi) What to do if meningococcal disease cannot be ruled out — If it is unclear whether the patient has meningitis but their present clinical condition does not support immediate referral, 'safety netting' is recommended, which involves:

Plan a review of the patient in four to six hours — if there is any deterioration, refer to hospital

Advise the patient to return to the practice (or to an emergency clinic) in twelve to 24 hours or at any time if there is concern

Between reviews, advise parents or caregivers to check the patient every hour for the next six to 12 hours and then every two hours (the parents should be advised on the signs and symptoms of meningitis)

Ensure the patient is not being sent home alone or without support, e.g. young adults

If it is not possible to guarantee that the patient will be reliably observed at home, consider referral to hospital.

7. The WHO definition of 'influenza-like illness'[3] for the purposes of influenza surveillance is: *An acute respiratory infection with:*

measured fever of ≥ 38 C°

and cough;

with onset within the last 10 days

8. A 2009 Best Practice Journal article on influenza[4] included the following information:

(i) Influenza is characterised by the sudden onset of symptoms including: fever (may be absent in elderly people), malaise, myalgia, headache, chills and cough. A wider range of symptoms may be seen in infants and children including lethargy, poor feeding and vomiting.

(ii) A diagnosis of influenza is more likely when influenza is circulating. During periods of increased influenza prevalence, the acute onset of fever and cough makes a diagnosis of influenza more likely. When prevalence is low, the presence of influenza-like symptoms is less accurate for diagnosing influenza.

(iii) When a patient presents with symptoms and signs of influenza, four questions are useful to distinguish between influenza and influenza-like illness:

Are influenza viruses known to be circulating in the area?

Did the patient experience a sudden onset of symptoms?

Is the patient's temperature significantly raised (> 38°C)?

Does the patient have both systemic and respiratory symptoms, particularly cough?

[3] See: http://www.who.int/influenza/surveillance_monitoring/ili_sari_surveillance_case_definition/en/ Accessed 14 September 2015

[4] BPAC. Diagnosing and managing influenza. Best Practice Journal. June 2009; Issue 21

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If the answer is "yes" to all of these questions, influenza is the likely diagnosis.

(iv) Differential diagnoses include:

Other respiratory viral infections, e.g. respiratory syncytial virus, coronavirus, rhinovirus
Meningitis
Pneumonia

Although rare consider malaria in people who have recently travelled to an area where malaria is endemic.

9. Clinical notes review [SHS staff unless otherwise identified] and comments

(i) 15 April 2014 [initials] — nursing advice given after [Ms A] reported symptoms of vomiting the previous day but currently improving. Self cares discussed and *Discussed S&S of red flags and meningitis and when to review if needed again. Pt aware of […] & ED if we are unavailable …*

Comment: Although this consultation is unrelated to subsequent events I note it appears that fairly comprehensive 'safety-netting' advice, including warning regarding signs and symptoms of meningitis, was provided to [Ms A] on this occasion.

(ii) 19 May 2014 [initials of RN H] — notes include: *Sore throat x 2 days. Throat red. Sx worse at night … Feeling lethargic also, taking paracetamol. No med hx. O/E temp 35.9, pharynx mildly red, tonsils not enlarged, no exudate, cx glands not enlarged. Throat swab taken, wait for results. Advised rest, plenty of fluids, regular analgaesia, throat gargles, soothing lozenges and steam inhalation. BPAC leaflet — colds.*

Comment: I think this represents a standard focussed GP assessment, appropriate to the clinical scenario (usually well patient with recent onset sore throat symptom, afebrile, examination findings most suggestive of mild viral pharyngitis rather than group A strep). Clinical management was consistent with expected standards. Appropriate supportive advice was provided.

(iii) 21 May 2015 [RN F] — nurse triage notes (not completed at time of call but completed prior to GP assessment) refer to discussion with [Ms A's] boyfriend calling on her behalf: *Getting worse and unable ?to swallow, get out of bed … advised needs to come for r/v, if can't get out of bed needs ambulance. I made apt for review with Dr.*

Comment: [Ms A] had evidently deteriorated significantly since her GP review two days previously. She was unable to get out of bed. I think it would have been prudent, as part of the triage process, for enquiry to have been made regarding presence of any 'red flag' symptoms such as headache, vomiting, rash or confusion in order to give appropriately prioritised management advice. I would be somewhat critical if such enquiry had not been made but note I am not a nursing peer and further comment on the nurse triage process on 21 and 22 May 2015 might best be provided by a nursing expert.

(iv) 21 May 2014 [initials of RN E] — *Came in two days ago with sore throat. Now feeling much worse — headaches, body aches, fever. Feeling miserable. To* [GP].

Comment: I have assumed [initials of RN E] is a practice nurse. I am not aware of the 'on-site' triage process in place at SHS at this time. In my own practice, I would expect 'on-site' nurse triage to include, for a patient presenting as [Ms A] did, a record of vital signs (pulse, blood pressure, temperature and if patient has respiratory symptoms or is very unwell, a measure of respiratory rate and oxygen saturations).

(v) 21 May 2015 [initials of Dr D] — Notes are:

Attended with worsening symptoms, noted feeling very hot and cold, sweaty, runny nose, sore muscles, tearful++

O/E T 39.5 P 122

Ears mildly red

Throat red — no exudate — normal swab

No cervical glands palpable

Imp: Flu-like illness

Plan: Supportive measures, health declaration completed.

Prescriptions were provided for paracetamol, ibuprofen and metoclopramide. There is no 'safety-netting' advice documented.

Comments
a. At the time of the consultation, influenza rates were not elevated from background summer rates and did not meet the seasonal threshold[5]. While there were some features to suggest an influenza like illness (fever, myalgia), the absence of cough symptom I think should have decreased the threshold for considering alternative diagnoses, although I note there were some respiratory tract symptoms present (sore throat, runny nose). I note [Ms A's] demographic age and occupation (20-year old university student) placed her in a higher than average risk group for meningococcal disease. In this situation (and clinical signs are discussed further below) I think symptom history review should have included direct questioning regarding meningococcal disease 'red flags' including headache, vomiting, rash, confusion and photophobia. I note the complaint suggests [Ms A] was suffering from significant headache, photophobia and nausea/vomiting at the time of this assessment yet these important symptoms are not apparent in the recorded history (see also ED note summary below). However, the prescribing of metoclopramide would imply [Ms A] had presented at least the symptom of nausea. Enquiry regarding recent overseas travel is an important part of assessment of pyrexia of unknown origin (PUO), as is interrogation regarding possible sites of infection. However, as discussed further below, [Dr D] did not regard [Ms A] as having a PUO but attributed her symptoms to a viral illness — influenza or an influenza-like infection.

[5] https://surv.esr.cri.nz/PDF_surveillance/Virology/FluWeekRpt/2014/FluWeekRpt201426.pdf
Accessed 14 September 2015

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b. [Ms A] was significantly unwell. Her elevated pulse and temperature fulfilled the criteria for systemic inflammatory response syndrome (SIRS) and I think should have led to a more extensive physical assessment including blood pressure, respiratory rate and lung auscultation even if no additional historical information had been obtained. If headache and photophobia were noted to be prominent symptoms, I would expect some assessment and comment on patient alertness and on signs of cerebral irritation (positive or negative) and presence or absence of skin rash. The extent and focus of physical assessment is directed to some extent by the history obtained and by the sequential physical findings. I can see that if a deficient history was obtained (assuming the presence of symptoms noted in the complaint to HDC), [Dr D] might have been reassured [Ms A] was suffering a flu-like illness in light of the recorded symptoms and finding of (presumably viral) pharyngitis. However, it appears to me that possible deficiencies in both history taking and preliminary assessment might have led to a failure by [Dr D] to recognise how unwell [Ms A] actually was, and to consider diagnoses other than flu-like illness in his differential. This had a significant impact on his management plan.

c. The documented management plan was probably reasonable for a patient with a mild to moderate flu-like illness in whom the history and assessment findings did not suggest more serious disease. However, as stated previously [Ms A's] recorded physical parameters were consistent with SIRS and I think should have led to a greater degree of caution regarding observation and follow-up than exhibited in [Dr D's] management plan, irrespective of any apparent deficiencies in his history taking and physical assessment (and see section 6(vi)). Such follow-up (if hospital admission was not considered by him to be indicated) might have included a period of observation on-site (and the clinic had the facility for this), oral or IV rehydration if the patient was dehydrated, urine dipstick and possibly blood count if the cause of the SIRS remained uncertain, and clarification as to who was providing care for [Ms A] (flatting), with explicit 'safety-netting' advice provided to both [Dr D] and her carer(s). Had the symptoms of headache, photophobia and vomiting been obtained, I feel this history in combination with [Ms A's] recorded physical findings should have led to consideration of immediate hospital admission to exclude meningitis. Had [Ms A] exhibited signs of meningeal irritation, immediate hospital admission was mandatory and pre-hospital parenteral antibiotic therapy might have been considered.

d. Metoclopramide was prescribed at a modest dose of 10mg twice daily. I think at this dose it was reasonable to provide 'generic' side effect advice rather than warning specifically regarding the potential risk of extrapyramidal side effects (which are uncommon at normal doses). With respect to use of ibuprofen at 1600mg per day, I would expect the patient to be warned regarding the potential risk of gastric side effects and to stop the medication if there were symptoms of gastric irritation. I would be critical if no such advice was given.

e. The standard of clinical documentation might be acceptable if it accurately reflects the content of the consultation in this case. However, if that is the case, I would regard the standard of clinical assessment (history and examination) as having some deficiencies as discussed above. If the clinical documentation has omitted significant historical and assessment content which was provided or

elicited (eg presence of nausea, vomiting, headache, photophobia etc) I would be critical of such omissions.

f. Taking into account the discussion above, my assessment as to the degree to which [Dr D's] management of [Ms A] might have departed from expected practice varies depending on the information provided to him by, or elicited from, [Ms A] at the consultation of 21 May 2014. If symptoms of nausea/vomiting, headache and light sensitivity (collectively) were conveyed to him at that consultation I would regard his subsequent assessment and management of [Ms A] as departing from expected standards to a severe degree. If such symptoms were enquired about but denied, or nausea was the only symptom elicited, I feel his management was probably mildly to moderately deficient, mainly with respect to planned follow-up and 'safety-netting' advice noting [Ms A's] degree of unwellness. If there was no attempt to confirm the presence or absence of such symptoms I would be at least moderately critical of [Dr D's] overall management of [Ms A]. However, I am aware [Dr D] has not provided a response to HDC and suggest such a response be sought if this complaint is to be further investigated.

g. Addendum 28 October 2015
I have reviewed a response provided to HDC by [Dr D]. [Dr D] pre-empts his response by noting [circumstances that] affected his recall of the consultation in question and he has relied on contemporaneous notes and his 'usual practice' when formulating his response. With regard to the consultation in question, he notes [Ms A] walked into the consultation room. He would normally comment on level of consciousness if the patient was other than alert. He accepts he did not enquire specifically about headache, cough, vomiting or neck stiffness but notes the triage nurse had recorded a history of headache. He accepts nausea must have been discussed during the consultation. He did not ask about a history of travel but would have made a general 'functional enquiry' covering bowel and bladder function or presence of cough. It is his usual practice to conduct a respiratory examination and to view the skin for rashes when querying a diagnosis of viral infection. [Dr D] accepts his standard of clinical documentation on this occasion was below his usual standard and feels this may have been due to pressure of work on the day and he is likely to have stopped making notes during the consultation when [Ms A] appeared upset. [Dr D] feels the clinical picture [Ms A] presented was most consistent with a viral or flu-type infection which is a common presentation and diagnosis in students presenting around exam time, and his management was aimed at this diagnosis. He felt it was safe for [Ms A] to be at home with her flatmates while she recovered, and that on the basis of his assessment there was no indication for hospital admission. He states he would always give verbal follow-up advice to patients such as [Ms A] but is unable to recall the details of such discussion on this occasion. It is his usual practice to discuss common side effects of medication when prescribing. Since this incident, [Dr D] has undertaken some remedial measures: he has reviewed his use of metoclopramide and no longer uses it as first choice of anti-emetic; he has improved his standard of clinical documentation and undertaken a two-pass audit of his clinical notes; he has reviewed in detail the cited BPAC article on meningitis.

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In line with my comments in section (f) above, and taking into account the additional information provided by [Dr D], I feel there were deficiencies in [Dr D's] history taking (noting particularly the history of headache had been gained and recorded by the triage nurse but was evidently not further explored or noted by [Dr D]) and physical assessment (particularly failure to assess blood pressure, and to assess for signs of meningeal irritation if [Ms A] was complaining of photophobia, headache and vomiting) that appear to have contributed to him underestimating the severity of [Ms A's] illness on 21 May 2014. While I am not critical of his failure to diagnose [Ms A] as having meningococcal disease on 21 May 2014, I am critical a broader differential diagnosis (including meningitis) was not considered given her degree of unwellness. Such consideration might have led to hospital admission for further assessment, or a longer period of observation in the clinic, or at least to more specific 'safety netting' advice with a low threshold for attending ED or seeking review. Under the circumstances, I feel [Dr D's] management of [Ms A] on 21 May 2014 departed from expected standards to at least a moderate degree, with the degree of departure probably being severe if [Ms A] had complained of symptoms of photophobia (together with vomiting and headache) as noted in the complaint. [Dr D's] standard of clinical documentation was mildly deficient. Remedial measures undertaken by him are appropriate and I note he has apologised to [Ms A].

(vi) 22 May 2014 [initials of RN C] — nurse triage notes: *Friend phoned on her behalf. Has been unwell now for quite a few days and seen here x3 already. Bad headache — pale and not keeping food down. Not particularly responsive to her friends apparently. Sounds miserable in the background and crying. Friends will try and bring her down as soon as they can and if they cannot get her up I suggested they call an ambulance but aware will cost.*

Comment: I would expect this telephone triage to have been undertaken with regard to the consultation findings the previous day and the current history conveyed to [RN C]. As such, [Ms A] had been significantly unwell the previous day and had now apparently deteriorated further with severe headache (not documented at the consultation the previous day), vomiting and altered level of consciousness. I think the clinical scenario was deserving of focussed questioning to assess possibility of meningitis/meningococcal sepsis (was there photophobia, neck stiffness, rash, precise level of consciousness for example) and, assuming positive answers to at least one of these questions (see notes below) facilitation of emergency transfer to hospital. My nursing colleague may be better placed to comment on the standard of telephone triage in this case.

(vii) [Ambulance Service] Patient Report Form (PRF) dated 22 May 2014 (ambulance located 1505hrs) includes: *unwell past 3/7 — flu-like symptoms, Seen by GP Student Health yesterday with fever. Today collapsed unresponsive at flat. Prior to collapse exhausted, lethargic, headache, photophobic, neck stiffness … recent trip [overseas] — returned to NZ 2 weeks ago … O/E Non-responsive, Nil rash seen on torso, Posturising — decorticate movements, GCS 12 …*

Comment: Note is taken of symptoms [Ms A] was experiencing prior to her collapse (and presumably prior to the telephone call to SHS an hour or so previously). I note a history of recent overseas travel was also obtained.

Ambulance staff did not identify a rash although according to the complaint [Ms A] had self-identified a rash earlier in the day.

(viii) [Public hospital] ED medical officer notes 1615hrs 22 May 2014 include:

PC collapse, been unwell past few days.

Hx PC: Returned from [overseas] 2/52 ago … Since Saturday 5/7 ago has been unwell with flu-like symptoms, feeling hot and cold. Saw student health yesterday and apparently had high temp 39.5 (no notes available, was informed this by boyfriend here with patient). Today c/o bad headache this morning. This afternoon felt very unwell, flatmates wanted to take her back to student health. Had difficulty walking down stairs, had to sit down … progressively less able to answer questions and became very drowsy, couldn't walk with her any further. Did mumble to friends she had a severe headache. Has had a few vomits today, no diarrhoea … Informed by ambo staff/boyfriend had a rash yesterday when went to student health …

OE GCS 10–12 (eyes open spont, groaning inaudibly, localising pain but also note some extensor posturing)
Sweating
Temp 36.2 HR 80-90/min, BP 120/80, Sats 100% on air. Warm, perfused HS dual PEARL sluggish, Tone normal, reflexes + lower limbs, Nuchal stiffness on head flexion … CRP 245, WCC normal
Imp: ?meningitis Ddx subarachnoid haemorrhage … tropical disease ?dengue/typhoid/HSV/malaria

IV antibiotics were commenced prior to further investigations (CT/lumbar puncture) and [Ms A] was transferred to ICU where treatment was maintained for provisional diagnosis of bacterial meningitis which was later confirmed (*Neisseria meningitides*). Med Reg notes dated 22 May 2014 include: *no markers of systemic infection except 1x possible petechial haemorrhage L conjunctiva. No rash …* Around 0230hrs 23 May 2014 the ICU nursing staff noted appearance of petechial lesions on [Ms A's] feet/legs although later MO notes record absence of any petechial/purpuric rash. It appears significant weight was placed on [Ms A's] recent overseas travel with respect to possible infective agents.

Comment: The history obtained by the ED MO suggests [Ms A's] headache and altered level of consciousness became prominent as symptoms on 22 May 2014 and she obviously had a rapid deterioration in her general condition on this day. Whether or not she had a significant rash remains unclear with some conflicting information in the clinical notes. However, it does not seem likely a significant rash (suggestive of meningococcal septicaemia) was present at the consultation of 21 May 2014 noting the paucity of any such rash 24 hours later and the generally rapid progression of such a rash in the presence of meningococcal septicaemia. I note [Ms A's] vital signs and blood count in ED were not consistent with a diagnosis of SIRS (respiratory rate recorded as 16 in ED nurse triage notes). However, by this stage she had obvious signs of meningeal irritation and reduced level of consciousness consistent with a diagnosis of meningitis."

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Appendix B: In-house nursing advice to the Commissioner

The following advice was received from registered nurse Dawn Carey:

"1.Thank you for the request that I provide clinical nursing advice in relation to the complaint from the parents of [Ms A] about the care provided by [the University] Student Health Service (SHS). In preparing the advice on this case to the best of my knowledge I have no personal or professional conflict of interest. I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

2. I have reviewed the following documentation: complaint from the parents of [Ms A]; response from the Director of SHS including [Ms A's] relevant clinical notes, correspondence with [Ms A's] parents, internal review report (IRR), letter from [the] parent of one of [Ms A's] flat mates who contacted SHS on her behalf — and response from SHS; [public hospital] clinical notes.

3. In May 2014, [Ms A] was a 20 year old student who presented to SHS on two occasions with flu' like symptoms before being transported by ambulance to [the public hospital] where she was diagnosed with meningococcal meningitis.

[Ms A's] parents have raised several concerns about the care provided to their daughter including:

- The medical history taken when [Ms A] presented to SHS on 21 May 2014.
- Deficiencies in clinical examination leading to important symptoms being missed.
- Inadequate 'safety netting' advice to [Ms A] and her boyfriend.
- Inadequate nurse phone triage on 22 May 2014 with failure to consider some symptoms and inappropriate clinical advice being provided.

In response to these concerns, I have been asked to provide clinical advice regarding the nursing care provided to [Ms A] at SHS 19–22 May inclusive. I have been specifically asked to comment on the following:

i. The quality of the advice given by [RN H] when [Ms A] presented to Student Health on 19 May 2015.

ii. The assessment and advice given over the phone by [RN F] when [Ms A's] boyfriend called on 21 May 2014 advising that [Ms A] had deteriorated.

iii. The medical history taken and advice given by [RN E] on 21 May 2014.

iv. The telephone triage and advice provided by RN C when [Ms A's] flatmate phoned the practice on 22 May 2014.

4. SHS response and IRR.

i. The response from SHS reports an acceptance that the telephone triage advice on 22 May fell short of expectations in terms of how the information was perceived by [Ms A's] friend. The RN is reported to deeply regret that this

perception was gained. SHS notes that the RN is experienced with no previous concerns being raised about her communication and advice during telephone triage.

ii. The IRR sets out the chronology of events and included face to face interviews with all the clinicians involved in [Ms A's] care at SHS. It details the remedial actions including quality improvement initiatives undertaken. These included educational presentation on the management of a febrile patient and consultation with [the] National provider of telephone health advice.

iii. Practice amendments in relation to telephone triage processes and regular auditing of clinical records were undertaken.

Comment: I consider the detailed amendments and quality measures to be appropriate.

iv. The review concluded that clinical workload was not a contributing factor in this case.

v. Performance related actions were instigated for some of the clinicians involved. These included completion of further relevant education, supervision and coaching.

5. Review of clinical records that pertain to nursing consultations

Comment: I have referred to the IRR chronology to identify the time of consultations and whether they were face-to-face or via telephone.

i. 19 May 2014 face to face consultation with [RN H]

Sore throat x2 days. Throat red. Sx worse at night. Taking paracetamol. No med hx. O/E temp 35.9, pharynx mildly red, tonsils not enlarged, no exudate. Cx glands not enlarged. Throat swab taken, wait for results.

Advised rest, plenty of fluids, regular analgesia, throat gargles, soothing lozenges and steam inhalation. BPAC leaflet — Colds.

Comment: In my opinion, the clinical documentation, consultation assessment and advice are consistent with accepted nursing standards. Reported symptoms, assessment and clinical advice including 'safety netting' are all detailed. I note that [Ms A] would not fulfil the criteria necessitating a throat swab based on the National Heart Foundation (2011) algorithm for sore throat management and I would not have considered it a departure if a throat swab had not been taken.

ii. 21 May 2014 1pm, telephone consultation with [RN E]

Came in two days ago with sore throat. Now feeling much worse — headache, body aches, fever. Feeling miserable. To [Dr D].

Comment: Effective clinical assessment requires focussed questioning and is used to determine whether the patient has any 'red flag' symptoms present or not. While I consider this necessary for all health consultations the limitations of telephone assessment make it even more so. In my opinion, all patients who report

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influenza-like symptoms need to be questioned further. Such an approach acknowledges that non specific symptoms such as fever and lethargy are also symptoms experienced during the prodromal phase of meningococcal disease. Relevant health literature, advocates that meningococcal disease is routinely considered as a differential when influenza-like symptoms are reported.

In my opinion, the nursing assessment as detailed was inadequate and I am also critical of the lack of safety netting advice.

iii. 21 May 2014 4pm, telephone consultation with [RN F]

TELEPHONE TRIAGE. [Mr I] calling on her behalf. Getting worse and unable ?to swallow, get out of bed. Notes not completed at time of phone call and added at later date. Advised needs to come for r/v, if can't get out of bed, needs ambulance. I made an appointment with DR.

Comment: In my opinion, reportage of getting worse and swallowing difficulties need further focussed questioning to ensure that 'red flag' symptoms that would necessitate urgent transfer to secondary level care are not present. There is no evidence that this was done and I am critical of this. While I acknowledge that [RN F] raised the need to call an ambulance should [Ms A] not be able to get out of bed, I remain critical of the lack of focused questioning and consider that this was an inadequate nursing assessment.

iv. 22 May 2014 3.10pm, telephone consultation with [RN C]

TELEPHONE TRIAGE. Friend phoned on her behalf. Has been unwell now for quite a few days and seen here x3 already. Bad headaches — pale and not keeping food down — vomiting. Not particularly responsive to her friends apparently. Sounds miserable in the background and crying. Friends will bring her down as soon as they can and if cannot get her up I suggested they call an ambulance but aware will cost.

Comment: I consider that the documentation refers to symptoms that are 'red flags' — bad headache, vomiting, not particularly responsive — and should have prompted focussed questioning from [RN C]. There is no evidence that this occurred and I am moderately critical of this. While I would expect such questioning to be part of any triage nursing assessment of this presentation; I note that this contact was twenty four hours after a consultation where [Ms A] was noted to be pyrexial and tachycardic — T 39.5 P 122.

Based on the documented symptoms, I would also have expected [RN C] to have considered meningococcal disease as a differential and have questioned accordingly — any neck stiffness, photophobia, presence of rash, confusion. I am somewhat concerned that there is no evidence of such questioning or of meningococcal disease being considered. In my opinion, the assessment by [RN C] moderately departed from accepted nursing standards.

6. Clinical advice

i. The quality of the advice given by [RN H] when [Ms A] presented to Student Health on 19 May 2015 was consistent with accepted nursing standards.

ii. The assessment and advice given over the phone by [RN F] when [Ms A's] boyfriend called on 21 May 2014 advising that [Ms A] had deteriorated was a mild–moderate departure from accepted nursing standards.

iii. The medical history taken and advice given by [RN E] on 21 May 2014 was a mild–moderate departure from accepted nursing standards.

iv. The telephone triage and advice provided by [RN C] when [Ms A's] flatmate phoned the practice on 22 May 2014 moderately departed from accepted nursing standards. In my opinion, the actions taken by SHS in relation to [RN C] are appropriate.

7. Addendum [19 September 2016]

i. Thank you for the opportunity to review the additional two responses received from [RN C] plus the additional response from University SHS which includes statements from [RN F] and [RN E].

ii. Following a review of [RN E's] response, I continue to hold the opinion that the nursing assessment as detailed was inadequate and have determined no cause to amend my original criticism — (6iii).

iii. [RN F's] statement reports that [Ms A's] boyfriend was in a different residence to [Ms A] when he spoke with [RN F] on 21 May 2014 at 4pm. In my opinion, this would have significantly reduced the effectiveness of any focused questioning to rule out or confirm 'red flag' symptomology and if true, would mitigate my original criticism. Should the Commissioner make a finding of fact that [Ms A's] boyfriend was in another residence when he called [RN F], I would consider her actions — advised to attend student health or call an ambulance — to be adequate in the circumstances.

iv. [RN C's] response reports … At the time of [Ms G's] call on 22 May 2014 staff had had no triage or telephone guideline training. There were no guidelines/protocols in place at the time at Student Health and it was 'on the job learning' situation … While I find this statement concerning, I note that the responses from SHS refer to [RN C] having [many years] experience [working with students]. In my opinion, on 22 March 2014, [RN C] documented symptoms that were concerning and the standard of advice that she gave in response to those symptoms was inappropriate. I continue to hold the opinion that [RN C's] assessment and advice was a moderate departure from accepted standards — 5(iv) and 6(iv).

v. The response from SHS reports that in March 2014 the triage room held a copy of the Telephone Guidelines in General Practice Setting which is produced by [the] New Zealand College of Practice Nurses, New Zealand Nurses Organisation. This contrasts with [RN C's] statement. In addition to the Telephone Guidelines resource, SHS reports that training, close observation and supervision is provided to new practice nurses. While I note that the reportage of resources and training is consistent across the SHS responses to the Commissioner and supported by the submitted Cornerstone

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accreditation report, this information is inconsistent with [RN C's] statement. In my opinion, it was expected and appropriate that SHS considered their systems and processes as part of their internal review into the care and advice provided to [Ms A] in March 2014. I also consider the subsequent education focus and development of generic protocols to be part of an appropriate organisational response and have no further recommendations."

RN Carey further advised:

"If red flag symptoms were enquired about [by RN E and/or RN F], the answers should have been documented regardless of whether the answers were positive or negative, as this is important information to communicate to peers who may subsequently be caring for the patient."