Southern District Health Board

Emergency Physician, Dr B

Telehealth service company

Registered Nurse, RN D

A Report by the

Health and Disability Commissioner

(Case 14HDC01187)

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Executive summary

1. Miss A, aged nearly two years and eleven months, died in 2013 as a result of cerebellar herniation secondary to sepsis. At that time Miss A had no known medical problems, although an autopsy later discovered the presence of acute myeloid leukaemia.

2. Miss A's mother, Ms A, noticed that Miss A had a cough and a runny nose. Her condition worsened over the next few days. Shortly after midnight five days later on Friday, Miss A awoke hot and clammy with a fever, and Ms A took her to the Emergency Department at the public hospital.

3. On arrival, Miss A was triaged as category three (to be seen within 30 minutes). She had a cough, a temperature of 38.5°C (which soon increased to 39.3°C), and an increased heart rate. She was assessed by two doctors. Following cooling techniques and the administration of paracetamol and ibuprofen, Miss A's temperature reduced to 37.4°C and her heart rate also reduced. She was discharged home at 3.35am with the instruction that they should return if there were any concerns. The discharging doctor requested that the Paediatric Department call the family to follow up, but this did not occur.

4. Throughout Friday and Saturday Miss A was lethargic and slept frequently, and she refused food but continued to drink water. Her fever was managed with paracetamol and ibuprofen. On Saturday Miss A had three bouts of diarrhoea. She began to make a wheezing noise when exhaling. Her wheezing worsened and Ms A took her back to the Emergency Department. They arrived at 9.14pm, and Miss A's father, Mr A, arrived shortly afterwards.

5. On arrival, Miss A was triaged as category two (to be seen within 10 minutes). The paediatric registrar was not notified as required by the Memorandum of Understanding between the Emergency Department and the Paediatric Department. Miss A's temperature was 37.3°C, her heart rate was between 170 and 175 beats per minute, and her respiratory rate was 44 breaths per minute. House officer Dr C assessed Miss A and discussed her presentation with his supervising consultant, Dr B. Dr B did not assess Miss A personally. Dr C recorded an impression of a viral illness, and Miss A was discharged home at 10.07pm. Dr C did not document any discharge information provided to Miss A's parents, and he did not request a follow-up telephone call from the Paediatric Department.

6. At 7am on Sunday Miss A's temperature had increased to 40.2°C and Ms A called the Emergency Department for advice. She was transferred to the telehealth service. Ms A spoke with registered nurse (RN) D. She told him Miss A's temperature, and said that they had been to the Emergency Department twice in two days. Miss A's breathing can be heard throughout the call. Ms A ended the call after 3 minutes and 12 seconds, telling RN D that she was "going to go". RN D did not call back Ms A or contact the telehealth service's Resource Nurse for advice.

HDC

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7. At approximately 1pm on Sunday Miss A stopped breathing. Ms A called an ambulance and Miss A was taken to the Emergency Department. Attempts to resuscitate her were unsuccessful.

Findings

8. By approving Miss A's discharge home on Saturday without first taking sufficient steps to investigate the cause of her presenting symptoms, Dr B breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code).[1]

9. Adverse comment is made about Dr C for discharging Miss A home without further investigation, and for the quality of his documentation.

10. Southern District Health Board (SDHB) staff inappropriately discharged Miss A home on Saturday without first taking sufficient steps to consider her history and investigate the cause of her presenting symptoms; staff failed on two occasions to provide adequate discharge information to Miss A's family; SDHB's system for paediatric follow-up was not sufficiently robust to ensure that follow-up would occur when requested; SDHB failed to encourage a culture where staff felt comfortable questioning or challenging decisions; and it lacked a multidisciplinary approach to Miss A's care.

11. The SDHB team had sufficient information to provide Miss A with appropriate care. However, a series of judgement and communication failures meant that it did not do so. Accordingly, SDHB failed to provide services to Miss A with reasonable care and skill, and breached Right 4(1) of the Code.

12. RN D did not rule out all of Miss A's relevant emergent symptoms, nor did he triage Miss A's clinical presentation within an acceptable timeframe, and therefore did not provide appropriate advice to Ms A. Furthermore, he did not advise Ms A to take Miss A back to the Emergency Department or verify that she intended to do so, and he failed to take appropriate steps when Ms A ended the call. For these reasons, RN D breached Right 4(1) of the Code.

13. The telehealth service company is not found in breach of the Code.

14. The Commissioner's recommendations to SDHB included that SDHB:

a) In relation to patients under 5 years, conduct an audit of all unplanned re-presentations to the Emergency Department within 48 hours of discharge, to measure compliance with:

— the requirement for assessment by a consultant or senior registrar prior to discharge;

— the requirement for nursing/medical consultation prior to discharge; and

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

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— the requirement for a follow-up telephone call from paediatric staff to families following referral (following both the first and second discharge).

b) Commission an independent review of senior/junior staff rostering to establish whether sufficient levels of supervision are available for junior staff working in the Emergency Department.

c) Include in its training and induction for all staff, information that the practice in SDHB is that the asking of questions and reporting of concerns is expected and accepted from all members of the multidisciplinary team.

d) Update HDC on the completion of outstanding recommendations from its SAE review, and monitoring of ongoing changes made.

e) Review its Memorandum of Understanding — Emergency Department and Child Health Services and its policy for transfer to the telehealth service.

15. The Commissioner recommended that Dr C undergo training on effective communication, paediatric care, and documentation.

16. Dr B, Dr C, SDHB and RN D were each asked to provide a written apology to Ms A and Mr A.

17. A partially anonymised copy of this report was sent to the Medical Council of New Zealand and the [relevant overseas regulatory authority], and they were advised of Dr B's name. A partially anonymised copy of this report was sent to the Nursing Council of New Zealand and the [relevant overseas regulatory authority], and they were advised of RN D's name.

Complaint and investigation

18. The Commissioner received a complaint from Ms A about the services provided to her daughter, Miss A, by Southern District Health Board and the telehealth service.

19. An investigation was commenced on 30 April 2015. The following issues were identified for investigation:

- *The appropriateness of the care provided by Southern District Health Board to Miss A.*
- *The appropriateness of the care provided by Dr B to Miss A.*

20. On 29 July 2015 the investigation was extended to include the following issues:

- *The appropriateness of the care provided by the company (the telehealth service) to Miss A on Sunday.*
- *The appropriateness of the care provided by RN D to Miss A on Sunday.*

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21. The parties directly involved in the investigation were:

Ms A	Complainant/consumer's mother
Mr A	Consumer's father
Dr B	Provider/emergency physician
Dr C	Provider/house officer
Southern District Health Board	Provider
RN D	Provider/registered nurse
Telehealth service company	Provider

Also mentioned in this report:

Dr E	House officer
Dr F	Registrar
RN G	Registered nurse
Ms H	Receptionist
RN I	Registered nurse

22. Information from the Coroner was also reviewed.

23. Independent expert advice was obtained from registered nurse Ms Dawn Carey (**Appendix A**) and emergency physician Dr Shameem Safih (**Appendix B**).

Information gathered during investigation

Introduction

24. Miss A was aged nearly two years and eleven months at the time of these events. Miss A had no known significant medical problems,[2] was up to date with her immunisations, and was not on any regular medications. Sadly, Miss A died in 2013. The facts relevant to the care she received in the days leading up to her death are set out below.

Background

25. Ms A, Miss A's mother, told HDC that Miss A had a "wee cough and a runny nose" on Sunday but "her mood was still good, she was eating normally and her urinating and bowel movements had not changed". The following day Ms A began giving Miss A paracetamol and cough syrup morning and night (which she continued to do over the next few days). Ms A said that she took Miss A to preschool for the day on Wednesday but recalls that she was very tired when she collected her at 5pm, and later did not settle to sleep until after 9pm.

26. On Thursday, Miss A woke up as normal and ate breakfast, morning tea and lunch. She was scheduled to attend preschool from 1pm to 5pm on a Thursday but fell asleep in the car on the way, and Ms A decided to keep her at home. Miss A woke about

[2] An autopsy later found that Miss A had acute myeloid leukaemia.

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3.30pm and did not eat afternoon tea or dinner. She appeared uninterested in food and did not seem “her chirpy self”. With some effort from Ms A, Miss A took paracetamol and cough syrup before bed at 7.30pm. Ms A recalls that her daughter was warm but not feverish.

27. Shortly after midnight on Friday, Miss A awoke and screamed out to her mother. Ms A said that Miss A was hot and clammy, with a temperature at 38.4°C.[3] Ms A gave Miss A paracetamol and some water and drove her to the Emergency Department at the public hospital.

First presentation to the Emergency Department — Friday

Staff on shift

28. The house officer caring for Miss A was Dr E.[4] Her supervising registrar was Dr F.

Miss A’s presentation

29. Miss A presented to the Emergency Department at 12.50am on Friday. At 12.55am, the triage nurse recorded that Miss A had had a cough for the previous three days, had woken that night crying and coughing, was alert and settled, but had a fever (38.5°C). The triage nurse triaged Miss A as category three, indicating that she was to be seen within 30 minutes.[5]

30. Miss A’s history and observations were taken by RN G at 1.20am. Miss A’s temperature was 39.3°C, her heart rate (HR) was 170 beats per minute (bpm),[6] her respiratory rate (RR) was 32 breaths per minute,[7] and her oxygen saturation was 98%. The notes record that Miss A was given paracetamol and an iceblock at 1.25am.

31. Approximately 65 minutes after her arrival, at 1.55am, Miss A was reviewed by Dr E, who recorded:

> “[Two] year old unwell over the weekend … been eating and drinking ok, [bowels and bladder] fine, had a big lunch this afternoon but not as much appetite for dinner, woke up from sleep sweaty, and was found to have a temp of 38.4. Mother anxious so brought her in. Cough sounds wet, no rash. Has been otherwise [well]. Has been taking panadol [morning and night] …
>
> Looks a bit flushed in the face, warm to touch, no increased [work of breathing]/respiratory distress

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[3] A normal temperature for a child aged 2–3 years is 36.5–37.5°C.

[4] Dr E told the Coroner that she had been working at the public hospital as a house officer for four years.

[5] New Zealand emergency departments use the Australasian triage scale, which has five triage categories ranging from category one for very urgent patients to category five for less urgent patients.

[6] The accepted normal heart rate for a child aged 2–3 years varies. Advanced Paediatric Life Support (APLS) guidelines advise that the normal range for a child aged 2–5 years is 95–140 beats per minute. Dr Safih advised HDC that anything over 160 is abnormal, citing Cameron et al, *Textbook of Paediatric Emergency Medicine,* London, 21 October 2011.

[7] The normal respiratory rate for a child aged 2–3 years is 25–30 breaths per minute.

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Dual [heart sounds], tachy[cardic][8]
Chest clear; Abdomen soft
Ears [no abnormalities detected]
Wouldn't let me examine the throat"

32. Miss A's temperature, heart rate and oxygen saturation remained the same as recorded by RN G. In her report for the Coroner, Dr E said she noted that Miss A's respiratory rate was 25, but this is not recorded in the notes. Dr E also said that Miss A was talkative, reactive and looked comfortable. Dr E's impression was that Miss A's symptoms were consistent with an upper respiratory tract infection (URTI) and she instructed Ms A to give Miss A paracetamol every four to six hours (maximum four doses per day) and to use cooling measures to bring down her temperature.

33. Dr E then left to discuss the findings and treatment options with Dr F. Dr E told the Coroner that their discussion was particularly around Miss A's tachycardia and the possibility that it was secondary to her being febrile and perhaps not drinking enough fluids.

34. Following the discussion with Dr E, Dr F reviewed Miss A.[9] In his report to the Coroner, Dr F stated that in consultation with Ms A, he established that Miss A was eating and drinking normally, had a cough that was not productive of sputum,[10] and that Ms A had noticed no rash or shortness of breath. Dr F recorded this in the notes, along with the following examination findings:

"Well child, bright, happy and interactive
[Oxygen saturation] 100%, RR 25, pulse 170bpm
[Temperature] 39 despite panadol
[Abdomen soft and non-tender]
[Ears, nose and throat as documented previously by Dr E]
Chest clear, no increased [work of breathing]."

35. Dr F prescribed an oral dose of ibuprofen, which was administered at 2.45am. At the same time, RN G recorded Miss A's temperature as 39°C, RR 38 and HR 158. The clinical records show that Miss A's temperature was rechecked by Dr F 30 minutes later and had dropped to 37.4°C. Dr F told the Coroner that Ms A said to him that they lived nearby and she was happy to take her daughter home. Dr F advised Ms A that they should return if there were any concerns, and documented this in his notes.

36. Miss A was discharged home at 3.35am. None of the "Discharge Home" section of the Paediatric Emergency Department Documentation was completed. This section includes a discharge assessment (including discharge risk screening) and a discharge checklist (which includes a space to fill out the discharge instructions or handout given). Ms A told HDC that she cannot recall what she was told on discharge.

[8] A rapid heartbeat.
[9] Dr F's clinical records were made at 3.32am.
[10] A mixture of saliva and mucous from the respiratory tract.

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37. Dr F wrote a request for a follow-up telephone call from the Paediatric Department. He told HDC that the agreed system in place at the time was to document these requests in the Clinical Comments section of the patient's electronic attendance record. Dr F understood that a paediatric nurse would later make a call to check on the patient and her family; however, this did not occur. SDHB told HDC:

> "Prior to this incident the Paediatric nursing staff in the [Paediatric Department] assessing the list of patients that attended ED the previous day and those that were discharged may have been given a follow-up phone call if deemed necessary. On occasions the ED staff would contact the [Paediatric Department] to ensure follow up was made. This service was dependent upon [Paediatric Department] workload and staffing."

38. On Saturday a copy of the clinical notes for this consultation was posted to Miss A's general practitioner.

Memorandum of Understanding — Emergency Department and Child Health Service

39. SDHB's Memorandum of Understanding[11] describes the agreed interface between the Emergency Department and the Paediatric Department at the public hospital. For children who have "self referred" or who have been referred by the Ambulance Service, the relevant sections state:

> "**If Triage 1 or 2**
>
> 1. Triage nurse calls triage code over ED intercom and notifies the Paediatric Registrar of the child's arrival and triage code
>
> 2. ED Team commences assessment and resuscitation as required under the ED Duty of Care within recommended triage waiting times (T1 — immediately, T2 — within 10 mins)
>
> …
>
> **If Triage 3, 4 or 5**
>
> 3. Child seen ED medical staff according to triage priority within recommended triage waiting time thresholds (T3 — within 30 mins, T4 — within 60 mins, T5 — within 120 mins)
>
> 4. ED medical staff will seek assistance from the Paediatric Service in the following circumstances:
>
>   - Any child who is medically very unwell. Such children may require simultaneous involvement with other inpatient teams or the intensivists.
>
>   - Where the child is likely to be admitted to Hospital. Paediatric involvement should occur as soon as possible and prior to the finalisation and institution of ongoing care plans

[11] Amended in 2005.

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- Prior to the institution of invasive procedures e.g. central line insertion and/or general anaesthesia for imaging
- Where there is a complex paediatric illness under continuing care of a paediatrician

…"

At home — Friday and Saturday

40. Ms A told HDC that Miss A would not settle in her own bed when they returned home from the Emergency Department in the early hours of Friday. She slept for short periods on the couch with her mother but woke every 10 to 15 minutes wanting water.

41. Ms A said that at breakfast time she gave her daughter a range of food but she only tasted it and spat it out again. Miss A's high temperature continued in the morning.[12] Ms A cooled her and gave her ibuprofen and paracetamol as directed, and her temperature came down.[13]

42. Ms A said that Miss A repeated the same sleeping pattern throughout the day. She refused food but continued to drink water. Miss A was distressed when her mother and father tried to settle her into her own bed that evening, and so she slept on the couch in the lounge with her mother that night, frequently waking up upset.

43. On Saturday Ms A gave Miss A ibuprofen morning and night but said that it was difficult to get her to take it. Ms A told HDC that Miss A's temperature remained "ok" throughout the day but she still would not eat and continued to take short sleeps and wake up distressed. Ms A said that when Miss A was awake, she began to make a humming noise when exhaling.

44. Ms A told HDC that Miss A had three bouts of diarrhoea that day, two of which were light brown in colour, and one was a "forest green colour with clear like snot". Ms A heard her daughter wheezing as she was putting her to bed that evening. As an asthmatic herself, Ms A thought she had identified what was wrong with her daughter. She gave Miss A a puff of her Ventolin inhaler[14] and decided to take her to the Emergency Department again. Ms A arranged for Mr A to meet them there.

Second presentation to the Emergency Department — Saturday

Staff on shift

45. The doctor caring for Miss A was second-year house officer Dr C. SDHB told HDC that Dr C did not undertake any specific paediatric training in his first or second postgraduate years, and there was no specific paediatric training in the Emergency Department registered medical officers teaching programme. Dr C had completed two

[12] A text message from Ms A to Mr A at 10.31am stated: "[Miss A's] still got a temperature 38.9 am working on bringing it down, ice blocks, cold cloth, cold water, no heater in my room …"

[13] Ms A did not state what the temperature reduced to, but she told HDC that she would have been "panicky if it didn't".

[14] A Ventolin inhaler provides relief from the symptoms of asthma. The active ingredient is salbutamol sulphate.

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rotations in specialist paediatric departments (approximately one month each) during his fifth and sixth year of medical training.

46. Dr B was Dr C's supervising consultant in the Emergency Department that shift.[15] Dr B was employed by SDHB as a locum senior medical officer (SMO) in the Emergency Department. SDHB advised HDC that its induction process for locum consultants who are employed for six months or less involves:

a) Approximately 1.5 hours of network IT training prior to clinical duties;
b) Usually two days of orientation to the clinical area and associated duties, including familiarisation with equipment, policies and processes; and
c) The first clinical shift is usually a day shift and supernumerary, meaning the staff member being inducted is additional to the usual number of staff on the shift.

Miss A's presentation

47. Miss A presented to the Emergency Department at 9.14pm. The triage nurse recorded Miss A's clinical history as: "INCREASED [WORK OF BREATHING] SHALLOW VERY UPSET AND DISTRESSED RR 48 …" (emphasis in original). The nurse triaged Miss A as category two.

48. In accordance with the Memorandum of Understanding, the triage nurse should also call out the triage category two over the Emergency Department intercom and notify the paediatric registrar of the child's arrival and triage code. There is no evidence in the clinical notes that the paediatric registrar was notified. SDHB also told HDC that it could not find evidence to indicate that this occurred.

49. Miss A and her mother were taken into an Emergency Department cubicle, where they were met by RN I. RN I told HDC that when Miss A arrived, she was crying and asking for her father. RN I recalls that Ms A was anxious and made a comment that she felt she was wasting their time. RN I reassured her that she was not, and told her that they wanted parents to bring their children back to the Emergency Department if they were concerned. The bed in the cubicle was unmade at the time, and Ms A sat with her daughter in the chair while RN I moved the unmade bed out of the room. RN I said that Mr A arrived as she was returning with the new bed.

50. RN I recorded in the clinical notes[16] at 9.30pm that Miss A's presenting complaints were "irritable, lethargy, cough, grunting, not eating and diarrhoea x 2". RN I told HDC that she left the room to obtain equipment[17] to take Miss A's observations. During this time she advised an RN that Miss A had diarrhoea, and discussed the need to move her to an isolation room. When RN I returned to the cubicle, she completed her observations. RN I said that Miss A was "grizzly" at first but settled on Mr A's knee and then on the bed. RN I recorded Miss A's observations as temperature 37.3°C, HR 175, RR 44 and oxygen saturation 97%. RN I said that the respiratory rate

[15] Dr B's shift was 4pm–12am. There was one other consultant rostered from 2pm–10pm.
[16] RN I told HDC that she recorded Miss A's history and observations on scrap paper in the first instance and then transferred them to the nursing documentation.
[17] Scales and a paediatric oxygen saturation probe.

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of 44 was taken for a full minute while Miss A was on the bed, and she observed that Miss A was using her abdominal muscles for breathing.

51. RN I told HDC that Dr C arrived while she was recording the respiratory rate. Once she had finished, he introduced himself and commenced his examination. RN I said that at that time she left the room to obtain the nursing documentation and the notes from Miss A's previous admission.

52. Dr C recorded that Miss A's parents were concerned about her breathing, and documented the following clinical history:

"[History presenting complaint]
- presented 48 hrs ago to ED with fever and coryzal symptoms[18]
- a diagnosis of viral illness made and sent home
- presented today as Mother was concerned that [Miss A] not breathing well and worried she would sleep and not wake up
- coughing
- diarrhoea today
- off food
- drinking good
- no concerns regarding reduced urine output"

53. Mr A said that he asked Dr C why Miss A was "making that noise" with her breathing. Miss A's parents recall that Dr C looked confused and said, "[I]t's like when you have something stuck in your throat[,] she's just trying to clear that."

54. RN I told HDC that she returned when Dr C had completed his assessment, and he came to look at the observations she had taken. She said she "drew his attention to the HR 170, RR 44, the medical notes relating to the previous presentation and the triage presentation sheet". According to RN I, Dr C asked if he could take the notes and her nursing documentation, to which she agreed. RN I went to the central station to discuss the treatment plan with Dr C. She told HDC that she observed him with the notes talking to Dr B and, as the area was crowded, she did not interrupt.

55. Dr C discussed the case with Dr B. Dr C told HDC that he "highlighted [Miss A's] abnormal vital signs and told [Dr B] about her mother's main concern that [Miss A] was not breathing well and that she was worried she would sleep and not wake up". Dr C said that Dr B looked at the nursing assessment from that night and the assessment from Miss A's previous presentation to the Emergency Department and reassured him by saying that "she will wax and wane". According to Dr C, "the diagnosis of a viral upper respiratory tract infection was advised by [Dr B]".

56. Dr C said that he thought further investigation (including chest X-ray, full blood count, IV antibiotics and referral to paediatrics) was warranted but he did not challenge Dr B's decision, as it was not then his practice to challenge a consultant. Dr C said: "In my clinical training at medical school challenging a senior doctor was not

[18] Symptoms of a common cold.

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encouraged. As a junior House Officer it was not easy to challenge a senior doctor." Dr C acknowledged that he did not document his discussion with Dr B fully in the clinical notes.

57. Dr B told HDC that he recalls the Emergency Department was quite busy on the night of Saturday. Dr B was seeing patients himself as well as supervising the junior doctors on duty. Dr B said that in some situations a junior doctor would expressly ask him to review a patient, and he would always assess the patient. When junior doctors were not particularly concerned they would typically summarise the patient information and their intended plan. Dr B told HDC that this is what occurred in relation to Miss A. He said that Dr C spoke to him at around 9.30pm in the Emergency Department central station, which overlooks the cubicle where Miss A was situated with a nurse and her parents, and that Dr C indicated that this was Miss A's second visit to the Emergency Department in 48 hours, and the chief complaint was shortness of breath.

58. Dr B stated that he was aware of Miss A's abnormal vital signs, but he did not see the observation chart or nursing comments regarding irritability, grunting and loss of appetite, and does not recall being told that the triage category was two. Dr B told HDC that it is not correct that a number of red flags were presented to him. He stated:

> "[Dr C's] presentation was that he thought [Miss A] did not clinically appear to be unwell with a viral illness and that she would be safe for discharge home which he indicated the parents also wanted; he did not query a further period of observation."

59. Dr B told HDC that he could see Miss A from the Emergency Department work station, and she appeared to be "well and happy". He said that based on what he had been advised, he agreed with Dr C's plan to discharge her home.

60. At 9.52pm, Dr C completed an electronic record of his examination of Miss A. He recorded that Miss A was afebrile,[19] her oxygen saturation was 97%, HR 175 and RR 44, and that her heart sounds, lungs, ears and abdomen were normal, and she had no rash.[20] Dr C wrote:

> "[Impression] viral illness
> since child settled, parents were not concerned any more and happy to go home
> [Plan]
> home
> been [discussed with] SMO"

61. Dr C told the Coroner that Miss A's heart rate and respiratory rate concerned him; however, that is not reflected in the clinical notes.

62. Mr A told HDC that he was not happy about being told to take Miss A home, as he felt that she should stay overnight in the hospital to be monitored. Mr A said that he

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[19] Without fever.

[20] The clinical notes state: "[D]ual HS + nil chest clear. nil wheeze. nil noisy breathing. nil intercostal recession abdo snt nil rash ears normal."

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never expressed this feeling as both he and Ms A felt as if they were imposing. Mr A said that, before they left the Emergency Department, he asked why Miss A's breathing was so fast. He cannot recall the doctor's exact response, but said it was along the lines of "because she is sick". Mr A asked: "[W]hat are you going to do if something happens to her because of her breathing?" At this stage, Ms A interjected and said to Mr A that the doctor had said that Miss A would be fine.

63. Dr C told HDC that he did not consider the above account to be an entirely accurate description of his discussions with Mr A. However, Dr C acknowledged that Mr A and Ms A's concern for their daughter was evident and heartfelt. Dr C said that he was focused on providing the family with reassurance about Miss A's breathing "and communicating [Dr B's] diagnosis despite [his] … reservations relating to this diagnosis". Dr C said that he recalls Ms A saying to him, "[S]he is fine now, I should not have brought her into the ED," and responding, "[W]e are always happy to see her again at any time if she worsens or other concerns arise."

64. The records show that Miss A was discharged at 10.07pm. No discharge information was recorded by Dr C in the electronic records. Under "Discharge Assessment" in the Paediatric Emergency Department Documentation, there is a handwritten note that states: "[Discharged home] with parents. Advised to return to ED if symptoms do not settle." This section also contains a "discharge risk screening" list. Next to "Is the patient's presenting problem a discharge risk?", "No" is ticked. Ms A told HDC that she cannot recall what she was told on discharge.

65. RN I was in another room when Miss A's discharge took place. RN I told HDC:

> "I was surprised by the decision to discharge [Miss A] given this was her second presentation, her heart rate, respiration rate and that her mother had also expressed concern. I attempted to locate the medical staff to enquire further about the reasoning for discharging [Miss A]."

66. RN I said that she failed to locate Dr B and Dr C, and assumed they had finished their shift as she did not see them for the remainder of her shift. Dr B was rostered on until midnight. RN I said that she reviewed the notes and saw that Miss A had not been seen by the consultant prior to discharge (which she assumed would have taken place) and that Miss A's parents were no longer concerned.

67. On Sunday a copy of the clinical notes for this consultation were posted to Miss A's general practitioner.

Miss A deteriorates — Sunday

68. Ms A told HDC that at 7am on Sunday, Miss A's temperature was 40.3°C so Ms A called the Emergency Department for advice and spoke with receptionist Ms H. Ms H transferred Ms A to a nurse led telehealth service for assessment and advice. At the time of these events, a company was contracted to provide this service.[21]

[21] The telehealth service is now operated by another company.

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69. SDHB advised that it is the DHB's policy to transfer calls received requesting health advice to the telehealth service, and that this is consistent with national practice. The company also advised HDC that the practice of referring callers to the telehealth service is common across a number of hospital emergency departments.

70. The SDHB policy (undated) states:

> "There must be exceptional reasons for referring calls through to the Triage Nurse and/or the [Acting Charge Nurse Manager] or Nurse in Charge on night duty."[22]

71. Ms H told HDC that she has no recollection of these events. However, she said: "On occasions where a caller identifies that they have had a recent visit to ED and have been advised to return if there is no improvement, I would tell them to come back to ED." In response to the "information gathered" section of the provisional opinion, Ms A said that Ms H did not do this and would not listen to her.

Telephone call between RN D and Ms A

72. Ms A was transferred to the telehealth service at 7.04am on Sunday. RN D's shift had begun at 7am, and this was his first call of the day.[23] The account of this call has been taken from the audio recording provided to HDC by the company.

73. After RN D introduced himself, Ms A told him that her daughter had previously had a fever that was 39°C, and she had taken her to the hospital. Ms A said she was giving her daughter ibuprofen and Panadol, which the doctors had told her would reduce the fever but it had increased, and was 40.2°C right now. Ms A told RN D that Miss A seemed to be "a little delirious almost" and asked whether she needed to take Miss A back to the hospital. RN D asked what Miss A's breathing was like at the moment, and was told: "[I]t's quick and shallow, because she's had the flu — she's had a cough and stuff. That noise that you can hear is her — she's got a … she's asleep with her eyes open …"

74. RN D then advised that he wanted to ask some more questions and give her some advice after that. He gathered Ms A's full name and date of birth, along with her daughter's name and date of birth. Following a pause, Ms A interrupted and said:

> "I've been to the hospital tonight as well and I went because I thought that she was … I didn't know if she was breathing too shallow or whatever, and they said she was okay. I went on Thursday night because she had a mild temperature — her temperature was 39 — and they sent her home with the ibuprofen but they waited until she cooled down. But she is 40.2 now so that means a high fever doesn't it?"

75. RN D said: "It is — I mean, it's slightly more than what it was when you …" He asked Ms A what the doctor at the Emergency Department had said, and she responded: "They just said it was a viral infection and they tested her and stuff, but stuff can change can't it and she's just beside herself." RN D then clarified with Ms A

[22] The SDHB policy does not describe what might be exceptional reasons.
[23] RN D was employed by the company to work in his own home.

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that she had been into the Emergency Department the previous night (Saturday) for shallow breathing and on Thursday for an increased temperature.

76. At this point, the volume of Miss A's breathing increased and she began to cry. Ms A attempted to calm Miss A and said to RN D: "Look I'm sorry, I'm just going to go, I'm going to go. Thanks, bye." RN D said "okay" and the call ended.

77. The call between RN D and Ms A lasted 3 minutes 12 seconds.[24] Miss A's noisy, rapid breathing is audible throughout the call. Of the total call time, 1 minute 5 seconds was spent ascertaining the names and dates of birth for Miss A and Ms A.

78. RN D documented in the assessment detail report:

> "[Rule out emergent symptoms (roes)]; fever/seen last night in ED/temp now 40.2; caller hung up/said she was going to."

79. His documentation does not detail Miss A's breathing.

80. Ms A told HDC that she ended the call with the telehealth service as she did not think they were assisting her. RN D did not return Ms A's call. The company said that generally staff do not telephone back callers who have elected to terminate the call, although the nurse has the clinical discretion to do so.

At home — Sunday

81. Ms A told HDC that following the telephone call with the telehealth service she attempted to calm down Miss A and reduce her temperature. Ms A said that Mr A came round and cared for Miss A while Ms A tried to sleep.

82. At approximately 1pm Miss A stopped breathing. Ms A called an ambulance and Miss A was taken to the Emergency Department at the public hospital.

Third presentation to the Emergency Department — Sunday

83. An Emergency Department consultant told the Coroner that the Emergency Department received a call from the ambulance crew stating that they were attempting to resuscitate a two-year-old child in cardiac arrest. The consultant and a senior registrar prepared the resuscitation room for her arrival.

84. The Emergency Department team was aware that the child had presented to the Emergency Department the previous day, but did not know Miss A's name at this stage, and were unable to look up clinical notes. SDHB clinical notes show that Miss A arrived at 1.52pm with cardiopulmonary resuscitation (CPR) in progress. The consultant said:

> "[Miss A] arrived without any vital signs, mottled, with stiff/rigid legs, and her pupils were fixed and dilated. The initial rhythm on her ECG was pulseless electrical activity. We continued her resuscitation for approximately 40 minutes."

[24] The company said that the average call duration for triage is 9 minutes 30 seconds.

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85. Sadly, Miss A died at 2.50pm.

Coronial Autopsy Report

86. An autopsy found that Miss A died from cerebellar herniation[25] as a result of demonstrated widespread group A Streptococcal sepsis[26] including pneumonia, as well as underlying acute myeloid leukaemia (AML).[27] Miss A's diagnosis of AML was unknown prior to her death.

The telehealth service's triage process

87. The telehealth service uses decision support software which contains over 400 computer-based triage guidelines that guide the triage process.

88. When the initial telephone call commences, the registered nurse opens a "new encounter" on the computer screen, which generates a screen that allows the nurse to select the relevant DHB from which the call is coming. If the individual is calling from a cell phone, the nurse greets the caller and asks where he or she is calling from. The nurse is required to click on the appropriate DHB before proceeding to enter further information.[28]

89. At the time these events took place, a "Rule Out Emergent Symptoms" (ROES) assessment process was in place at the telehealth service, whereby the triage nurse was expected to rule out emergent symptoms (requiring immediate 111 transfer) within 60 seconds.[29] This requires an assessment of immediate physical danger, responsiveness, airways/breathing and circulation. The nurse must ascertain the following:[30]

> "Danger — where is the patient, what are they doing, is the patient in any immediate danger
>
> Responsiveness — is the patient awake, are they interacting and responding normally, looking at you, talking to you, do they know who you are
>
> Airway — any difficulty breathing, noisy breathing, what colour are the lips and the area surrounding the lips
>
> Circulation — any bleeding? (from where, how much), are they pale and sweaty, are they able to stand up"

---

[25] Movement of brain tissue caused by an increase in pressure within the skull.
[26] A bacterial infection that has spread throughout the bloodstream causing shock and multi-organ failure.
[27] A type of blood cancer in which the bone marrow produces abnormal blood cells.
[28] However, if an incorrect DHB is entered this can be changed at a later time.
[29] Since that time, the telephone service has revised this process. The current process is "Rule Out a Life-Threatening Emergency" (ROLTE).
[30] The telehealth service's Nurse Triage Training Manual.

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90. Once any immediately life-threatening emergencies have been ruled out, the nurse provides a plan to the caller[31] and then collects demographics for the call. The company told HDC that the telehealth service requires a record of where the person is calling from and the telephone number in case the call is disconnected (for reasons other than intentional termination by the caller) so that the nurse is able to return the call, or refer to emergency services if clinically warranted. The telehealth service also collects demographic information for continuity if callers use its service regularly, and because the company is contractually required to collect such information.[32]

91. The nurse is required to listen to the caller, select the right guideline for the concerns presented, and then consider the guideline and follow the instructions as to subsequent questions.

92. The Nurse Triage Training Manual (14 August 2013) provides guidance for the disposition of calls. It states:

> "Following triage a referral is made for all dispositions except Self Care and Activate 111. The telenurse should ascertain the provider the patient intends to visit and offer to supply the phone number.
>
> …
>
> A fax will … be generated for all GP/ED Immediately, Attend Emergency Department Immediately and See Doctor Immediately Dispositions in DHB's where Emergency Departments have requested a Fax to be sent."

RN D's experience and training

93. RN D commenced employment as a telenurse at the telehealth service in 2013. His induction included two weeks of full-time training (40 hours per week). He was then monitored on a one-to-one basis by a senior nurse for five shifts, as was expected practice. The company also said that a Resource Nurse is always available to the telenurses to provide support and advice.

94. The telehealth service has a supervision process where random calls are reviewed by the team leader, who then provides coaching for improvements. Prior to the telephone call with Ms A, 12 of RN D's calls had been reviewed. All of these calls were classed as clinically safe by the team leader. However, on three of the reviewed calls, the team leader commented that RN D either did not clearly rule out emergent symptoms or did not complete the ROES process thoroughly. The company said that the calls reviewed on two later occasions indicated that RN D had taken note of the team leader's recommendation to focus on ruling out emergent symptoms.

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[31] An example provided in the telehealth service's Nurse Triage Training Manual is, "I can help you with this, but before we go any further I will quickly get your details, assess what is happening and give you advice on what to do".

[32] The company stated: "If detailed demographic information is left for the end of the call our past experience is that many callers will decline to stay on the line, thus leaving us with clinical risk in terms of records continuity and also in breach of [contract]."

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95. Prior to employment at the telehealth service, RN D had over 15 years' experience as a nurse in both paediatric and emergency departments.

Telehealth service guidelines

96. The telehealth service's Breathing Difficulty — Severe (Paediatric) guidelines[33] at the time of the telephone call recommended the following:

> "MILD RESPIRATORY DISTRESS: usually manifested by a rapid respiratory rate (tachypnoea)[34] … Mild stridor[35] or wheezing or wheezing may also be present. (Urgency of referral varies.)
>
> MODERATE RESPIRATORY DISTRESS: manifested by laboured breathing with retractions, nasal flaring, and expiratory grunting. If present, stridor and wheezing are now very audible, tight and persistent (i.e. can hear over the telephone). Attend Emergency Department.
>
> SEVERE RESPIRATORY DISTRESS: marked respiratory effort (struggling to breathe) and severe retractions. Cyanosis[36] may occur. Breathing may stop (apnoea)[37]. The other extreme is the slow, weak breathing (agonal breathing) that precedes apnoea. (Activate 111). The abrupt onset of severe respiratory distress may be due to a tension pneumothorax which requires immediate needle decompression."

97. The company told HDC that the telehealth service has another guideline, Seen Doctor/Health Care Provided, that RN D could have followed, and this would have given RN D the same guidance — attend the Emergency Department.

RN D's reflections on the call

98. The company provided HDC with RN D's reflection of his practice following this call, which he completed prior to being informed of the subsequent events. RN D wrote the following:

> "This is a call I do remember and I have listened to it and I do not think I handled the call very well at all. I remember this being my first call on a Sunday morning shift just after 7.00am. I was admittedly startled when I first received this call. There is so much that I can identify now that was completely wrong in the way I handled the call.
>
> I did not immediately assess the condition of the child, it is obvious to me now that … the child was potentially very unwell and that I did not take prompt action …

[33] Reviewed August 2011.
[34] Rapid respiratory rate.
[35] A harsh, high-pitched respiratory sound caused by obstruction of the air passages.
[36] A blueish discolouration of the skin associated with poor circulation or a lack of oxygen in the blood.
[37] Breathing stops for 15 seconds or longer.

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I did not rule out emergent symptoms, which I know to be a very vital part of the call process.

I can remember my initial feelings of the call, is that I was caught off guard. It was a shock to have receive[d] a call like this for the first call in the morning. On listening to the call it is obvious the child is distressed, the mother told me that her daughter's temperature was 40.2 and that the child's breathing rate was rapid and labored. I also remember the mother saying that her daughter had been assessed the night before in the emergency department. Looking back this information was not as relevant as ruling out emergent symptoms. I should have been more focused on that.

Another fault in the way I handled the call was … how it ended, the mother ended the call before I had assessed her daughter. Ideally [I] should have taken more control of the situation and responded to the mother promptly when she was ending the call … Also immediately after the call had ended I should have at least discussed the call with the Resource Nurse."

99. In his response to HDC, RN D said that he took Ms A's statement, "I'm just going to go, I'm going to go", to mean that she was taking her daughter straight back to the Emergency Department, and therefore thought it would not help to call her straight back. In response to the provisional opinion, RN D added that it was reasonable for him to decide that calling Ms A back might delay her return to the Emergency Department.

100. RN D said that if the call had continued he would have advised Ms A to return to the Emergency Department immediately, and advised that Miss A's temperature of more than 40°C is in itself reason to seek immediate medical attention.

101. In response to the provisional opinion, RN D submitted that he was entitled to think that the Emergency Department transferred the call to the telehealth service because it was not urgent, and that the transfer was done with the knowledge that Miss A had visited the Emergency Department the previous night.

Subsequent events

Southern District Health Board

102. On 2 April 2014, SDHB completed a serious adverse event (SAE) review into the care provided to Miss A at the public hospital.

103. The SAE review identified the following root causes:

"**1) Lack of multidisciplinary approach**

The team as a whole was in possession of enough information to indicate that this was a very unwell child, but there was no meeting of minds between the nursing and medical perspectives. This was a result of attitudes and opportunities. Staff were moderately busy with other patients and medical decisions were made while the nurse was out of the room. However an

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attitude of valuing the nursing perspective would have overcome that and ensured that there was adequate communication of concerns and opinions.

2) **Inexperience**
The poor assessment of [Miss A] reveals inexperience. Some clues were ignored and others were not sought. There was little attempt to build up a picture of the responsiveness of the child throughout the day. Despite quite significant parental protestations of concern about the child, the picture of a sick, lethargic child with small cough and some grunting was not built up and therefore the presence and/or significance of many of the child's symptoms and signs was not appreciated. The doctor's inexperience meant that when parental concerns were raised, they were never properly addressed.

3) **Inadequate supervision of inexperienced house surgeon**
[Dr C] was a second-year (postgraduate year 2) doctor and the patient was presenting for the second time with the same illness within a 48 hour period. Several of the reported facts should have raised concern about the possibility of serious illness (triage assessment, heart rate, respiratory rate, parental concern), and discharge to home was contemplated. For all these reasons it would be imperative to have an independent review by the supervising senior doctor. This was not forthcoming.

4) **Inadequate safety net procedures**
There is little indication of appropriate medical advice given to the parents on what to expect and how to respond if the clinical course was poor. Because there was no nursing input into the discharge process there was no nursing advice. When [Ms A] phoned ED in the morning the response led to disillusionment with the services on offer and the child was not re-presented until she had collapsed requiring cardiopulmonary resuscitation."

104. The report also comments:

"Currently there is no requirement for special overview of children re-presenting for the same medical problem. Such patients should be seen by consultant or senior registrar or alternatively reviewed by the paediatric service. There should be a low threshold for admission …

… At the time of this incident the Paediatric Early Warning Scale (PEWS) was not available for use in the Department, although age related normal values were on the chart in use. PEWS is intended for inpatient use where repeated observations are made over time. Consideration needs to be given to how abnormal vital signs in children are recorded, communicated and displayed for ED patients. Appropriate education is needed to ensure that the significance of abnormal vital signs is appreciated by nursing and medical staff."

105. The following recommendations were made:

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1. Ensure paediatric assessment topics are delivered in Emergency Department teaching sessions on a regular basis.
2. Provide supervision of junior medical staff appropriate to their level of competence.
3. Optimise on-the-job clinical training of junior medical staff including observed examination, supervised examination and role model examination by senior staff.
4. No Emergency Department patient should be discharged until there is discussion between nursing and medical staff.
5. Communication between nursing and medical staff in the Emergency Department needs to be effective and highly valued at all times and this should be included in regular Emergency Department clinical audit. Work to assess and if necessary to improve medical/nursing communication and teamwork within the department is appropriate at this time.
6. Initiate a communication workshop with the focus on how to challenge the decisions of others appropriately, how to respond to challenge, and how to promote a culture where appropriate challenge is valued.
7. Develop a written policy for safety netting.
8. Review policies and develop clarity for all medical and nursing staff regarding indications and mechanisms for paediatric follow-up calls from the Paediatric Department for children discharged from the Emergency Department.
9. Provide both spoken and written advice for patients/parents/caregivers regarding when to return to the Emergency Department.
10. Children re-presenting to the Emergency Department with ongoing symptoms relating to the same illness should be assessed thoroughly by a senior registrar or consultant.
11. Ensure a low threshold for paediatric (or other specialist) referral for re-presenters.

106. SDHB advised that it has made the following changes resulting from the SAE review and recommendations:

1. It has implemented a mandatory teaching session about paediatric assessment for all Emergency Department RMOs scheduled three monthly (at the start of each new intake of house surgeons).
2. It has made optimisation of on-the-job clinical training of junior staff an ongoing agenda item at SMO meetings. The maturity and abilities of house surgeons are also communicated between SMOs at these meetings.
3. All house surgeons have a nominated supervisor and comply with regular meetings and updates with their Emergency Department supervisor.
4. It is encouraging effective communication between nursing and medical staff. SDHB said that this is difficult to monitor within visiting teams but all reported issues are actioned by the Emergency Department management team.
5. Emergency Department SMOs and the paediatric team are regularly discussing paediatric presentations at a monthly Emergency Department/paediatric interface meeting.
6. An information pamphlet is now available on the DHB's electronic information system (MIDAS) and in hard copy in the Emergency Department to be provided

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on discharge of children who have presented to the Emergency Department with fever. It includes the instruction to return to the Emergency Department immediately if fever continues.

7. Investigation is underway to see if an electronic alert can be placed on the Emergency Department system to alert staff that a patient is re-presenting to the Emergency Department within 48 hours of being seen previously.
8. A memo was completed, and SDHB advised HDC that it is distributed to all clinical staff in the Emergency Department three monthly (at the start of each new RMO run) to ensure that staff are aware of the following requirements:[38]

"— No ED paediatric patient should be discharged until there is discussion between nursing and medical staff when appropriate.

— Patients re-presenting with ongoing symptoms related to the same illness should be thoroughly assessed by a senior registrar or Consultant. There should be a low threshold for paediatric (or other specialist) referral for re-presenters.

— Any paediatric patient that requires a next day follow-up phone call requires an internal referral faxed to the Paediatric Departmentoutlining any concerns and reasons for follow-up. A handout for parents informing of the pending follow-up phone call is being developed.

— Any clinician has the right to challenge decisions to discharge and concerns must be brought to the attention of the [acting charge nurse manager] and ED SMO or senior RN or Registrar if occurs overnight."

107. SDHB said it intends to initiate a communication workshop that will focus on how to challenge appropriately, how to respond to challenge, and how to promote a culture where appropriate challenge is valued. SDHB told HDC that it is having difficulty finding an appropriate facilitator who is able to run the workshop on a regular basis.

Dr C

108. Dr C told HDC:

"I am very sorry for any omissions or actions on my part that were part of the chain of events that saw [Miss A] discharged from hospital and culminated in [her] death."

109. Dr C said that Miss A's death has had a huge impact on him personally and professionally, and advised that he now always challenges a provisional diagnosis that may overlook an important differential diagnosis, and is open to listening to all members of a hospital multidisciplinary team.

[38] Copy of memo dated 16 July 2014 provided to HDC. The minutes of an ED/Paediatric Interface Meeting dated 19 May 2015 records that the internal referral system between the Emergency Department and the Paediatric Department is working well.

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Dr B

110. Dr B told HDC that he accepts that his decision not to assess Miss A personally did not take account of Dr C's lack of paediatric knowledge. Dr B said that he is sorry he did not influence Miss A's care in a different way, and he has reflected on his practice and made changes as a result. He is now much more mindful about the level of training and expertise of junior staff, in particular where paediatric patients are concerned, and the need to scrutinise junior doctors' presentation of cases more carefully. Dr B said that he now makes it his practice to ensure that he discusses nursing observations and concerns with those presenting to him.

111. Dr B is presently working overseas.

The telehealth service

112. The company wrote a letter of apology to Ms A on 20 May 2015 acknowledging that her experience with the telehealth service was not as supportive as it could have been. In this letter, the company said:

> "Although [RN D] was attempting to assist you, we agree with you that his manner did not demonstrate a sense of urgency and that this caused you to be frustrated and end the call. Had the call proceeded, we are confident that we would have been able to offer you correct advice on the urgency of [Miss A's] symptoms."

113. The company reviewed the incident, which led it to identify issues in the ROES process. The company said that nurses had become used to asking stock questions without deeper probing, and the questions asked were not being tailored to the information gathered during the first few seconds of a conversation. In addition, the company noted a very high rate of 111 transfers where there was low clinical risk (which is both medically unhelpful and puts pressure on the resources of emergency departments). The telehealth service process was refined and renamed "Rule Out Life Threatening Emergency" (ROLTE). Rather than being *completed* within 60 seconds, the ROLTE process must be *commenced* within 60 seconds, and involves either identifying imminent risk of collapse of the caller, or establishing that the subject of the call is clearly moribund.[39]

114. The company no longer provides the service, as the relevant contract expired. In addition, the company was sold and was re-named. The new company continues to deliver health-related services.

RN D

115. RN D told HDC that he accepts that he did not document Miss A's breathing in the assessment detail report, and is now more thorough in his documentation. RN D said that since the incident, he has realised the importance of assessing immediately life-threatening symptoms, and of keeping calm when he finds a call stressful. He further said that he would now seek help from a colleague if he needed it.

[39] Near death.

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116. RN D is not presently working as a registered nurse.

Responses to provisional opinion

117. A response to the provisional opinion was received from Dr B. Dr B said:

> "In [the country where I am currently working] I would expect a house officer to have paediatric experience in such a department. That said, I do not by that statement wish to shift blame. I accept that my lack of knowledge about the house officer's prior experience led me to take his plan as final and I accept the criticism made of me in that regard …"

118. Dr B said that Miss A's case is something he carries with him in practice and he is now much more aware of his practice, especially when dealing with more junior members of the team. Dr B provided a letter of apology for forwarding to Miss A's parents.

119. A response to the provisional opinion was received from Dr C. Dr C said that he accepts the findings in the report, along with the proposed follow-up actions and recommendations.

120. A response to the provisional opinion was received from SDHB. SDHB said that it accepts the findings and will undertake the recommendations.

121. A response to the provisional opinion was received from RN D. Where appropriate, RN D's comments have been incorporated into my report. In addition, RN D said that he would like to express his sincere condolences to Ms A and Mr A for the tragic loss of their daughter. RN D said he "deeply regrets not appreciating in the short time he had of less than 4 minutes, that [Miss A's] clinical situation was so urgent". RN D said he intends to write a letter of apology to Miss A's parents.

122. A response to the provisional opinion was received from the company. Where appropriate, the company's comments have been incorporated into the report.

123. A response to the "information gathered" section of the provisional opinion was received from Ms A. Where appropriate, Ms A's comments have been incorporated into the report.

Opinion: Introduction

124. The focus of this investigation was the care provided to Miss A by SDHB when presenting to the Emergency Department on Friday and Saturday, and by the company when Miss A's mother called the telehealth service for advice on Sunday.

125. At the outset, I would like to acknowledge the fact that following Miss A's death she was diagnosed with acute myeloid leukaemia. This finding has no bearing on my

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assessment of the quality of the care provided to her. My role is to investigate whether or not there was a breach of the Code. It does not extend to establishing the cause of death. Accordingly, any findings I make should not be interpreted as having any implication as to the cause of Miss A's death.

126. Overall, guided by advice from my expert advisor, emergency physician Dr Shameem Safih, I am satisfied that the care Miss A received on her first presentation to the Emergency Department on Friday was of an appropriate standard. However, I have concerns about the standard of care she received from SDHB, and also Dr C and Dr B, during her second presentation to the Emergency Department on Saturday, and from RN D at the telehealth service on Sunday.

Opinion: Dr B — Breach

127. Dr B was the supervising consultant in the Emergency Department at the time of Miss A's second presentation on Saturday. Dr B had overall responsibility for Miss A's care and management, including her discharge. SDHB does not require that its consultants personally examine every patient in the Emergency Department, as often this is not possible in a busy emergency environment.

128. The SDHB system enabled consultant review through junior doctors verbally presenting each case to the consultant. There was no specific requirement that a senior doctor personally review a child re-presenting for the same medical problem.

129. Dr C assessed Miss A and presented her case to Dr B. However, Dr C and Dr B provide differing accounts about the information that was presented.

130. Dr B told HDC that he knew Miss A had presented to the Emergency Department 48 hours earlier and that her current presenting complaint included shortness of breath. He also told HDC that he was aware of Miss A's abnormal vital signs. These were HR 175 and RR 44. Dr B said that he does not recall being told that Miss A had been triaged as category two. Dr Safih advised that a supervising consultant should not rely on being informed of all triage one and two patients in the Emergency Department, and should be proactively checking this information on the electronic work screen. I accept that advice and consider that Dr B should have known that Miss A had been triaged as category two.

131. Dr B denies seeing the observation chart and nursing assessment, which states that Miss A was irritable, grunting and had a loss of appetite. Conversely, Dr C told HDC that Dr B viewed the documented nursing assessment, along with the Emergency Department assessment from the previous night. RN I also stated that she gave Dr C her nursing notes at his request, and shortly afterwards she observed him with these notes speaking with Dr B. In my view, RN I's statement adds weight to Dr C's recollection that Dr B viewed the nursing notes. However, on balance, and taking into account Dr B's version of events, I am unable to make a finding about whether Dr B

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was aware of the nursing assessment or the details of Miss A's previous Emergency Department admission.

132. Dr B said that Dr C presented him with the clinical picture of a child who "did not clinically appear to be unwell with a viral illness and … would be safe for discharge home which he indicated the parents also wanted …". Dr B also said that his decision not to assess Miss A personally did not take account of Dr C's lack of paediatric knowledge. Dr B told HDC that it is not correct that a number of red flags were presented to him.

133. Dr Safih advised that Miss A's heart rate and respiratory rate were abnormal and mandated further investigation and intervention, including a chest X-ray, full blood count, IV antibiotics, and a paediatric referral.

134. When considering the account provided by Dr B, Dr Safih also said:

> "[W]e have to take into account the fact that [Miss A] was presented as a well infant with a viral infection whose parents were happy to take her home, no other concerns were presented, [Dr B] could see a well child from afar, the department was busy and he had his own case load to deal with. There is no clear set standard around this. As such, although not without risk, his decision to not review [Miss A] would not be regarded as significantly different from common peer practice."

135. Regarding supervision, the Medical Council of New Zealand (MCNZ) publication *Good medical practice* (April 2013) states:

> "If you are responsible for supervising staff, you should make sure you supervise at an appropriate level taking into account the work situation and the level of competence of those being supervised."

136. Dr B did not take account of Dr C's inexperience and lack of paediatric knowledge. As the senior doctor, if Dr B considered salient features were left out by Dr C, he should have asked probing questions to elicit that information. As noted by Dr Safih: "This is an essential part of the risk management role of any shift consultant in an ED."

137. Nonetheless, Dr B was aware of Miss A's heart rate and respiratory rate. In my view, these factors, combined with Miss A's age and re-presentation to the Emergency Department within 48 hours with similar symptoms, were sufficient red flags to prompt Dr B to investigate the possibility of a serious illness. If Dr B felt that immediate personal review was not possible because of time constraints, it was available to him to request further investigation and/or referral to the Paediatric Department.

138. Miss A was discharged less than one hour after presenting to the Emergency Department. Dr Safih considered the Emergency Department observation time to be "woefully short". I agree. As the senior doctor supervising a house officer, and as the clinician with overall responsibility for Miss A's care, I am of the view that it was Dr

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B's duty to ensure that he had all relevant information about her condition before agreeing with the decision to discharge her. By approving Miss A's discharge home without first taking sufficient steps to investigate the cause of her presenting symptoms, Dr B failed to provide care to Miss A with reasonable care and skill. Accordingly, Dr B breached Right 4(1) of the Code.

Opinion: Dr C — Adverse comment

139. At the time of Miss A's presentation, Dr C was employed as a second-year house officer at SDHB. He therefore had limited experience in a clinical setting. Dr C also lacked specific experience with paediatric patients, having spent approximately two months in specialist paediatric departments during the final two years of his medical training, and having had no specific paediatric training at SDHB during his first two years as a house officer.

140. Dr C completed an examination of Miss A and recorded her observations in the clinical records, noting that Miss A was afebrile, her oxygen saturation was 97%, HR 175 and RR 44, that her heart sounds, lungs, ears and abdomen were normal, and she had no rash. He also recorded Ms A's concern about Miss A's breathing, and that Ms A was worried that Miss A would sleep and not wake up.

141. Dr C sought advice from Dr B, which was appropriate in the circumstances. However, it is not clear what information he shared with Dr B, as both doctors provided HDC with differing accounts, and Dr C's written record provides no detail. It states:

> "[Impression] viral illness
> since child settled, parents were not concerned any more and happy to go home
> [Plan]
> home
> been [discussed with] SMO"

142. The clinical records show no indication that Dr C was aware of the significance of the documented findings and explored these further. In Dr Safih's opinion, Dr C "ignored clues and red flags". Dr Safih advised:

> "The presenting complaint of shortness of breath and the mother's serious concern about breathing was documented by [Dr C] but he ignored these, not exploring them any further. It appears he was biased by the earlier made diagnosis. This fixation to the earlier diagnosis coupled with his lack of experience meant that he failed to recognise that this child was quite sick … The nurse had noted pallor, tachypnoea with grunting breaths and tachycardia. A heart rate of 175 and a respiratory rate of 44 is abnormal and should have raised alarm."

143. Healthcare providers must remain alert to the possibility of being fixated on one diagnosis, and it is partly for this reason that junior doctors are encouraged to come up

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with a provisional diagnosis and a differential diagnosis when presenting a case for discussion or review by the consultant. It is not clear that this occurred in Miss A's case.

144. Dr C told HDC that Miss A's heart rate and respiratory rate concerned him. However, I note that this concern is not reflected in his documentation. Dr C said that he thought further investigations (including chest X-ray, full blood count, IV antibiotics and referral to paediatrics) were warranted but he did not challenge Dr B's decision, as it was not then his practice to challenge a consultant, and it is not easy for a junior doctor to challenge a senior doctor. Irrespective of any difficulty, part of the privilege of registration as a doctor is accepting responsibility for the care of patients.

145. All members of the clinical team should be willing to step up and advocate for their patients. Dr C's primary responsibility was Miss A. In my view, if Dr C was concerned about Miss A's condition he should have advocated strongly for her when discussing her with Dr B. There is no evidence that he did so.

146. I am critical that Dr C either did not advocate for Miss A when discussing the case with Dr B, or did not recognise the seriousness of the symptoms that Miss A presented with. Whichever the case, it is concerning that Miss A was discharged home on Saturday without further investigation, and less than one hour after presenting to the Emergency Department. Dr Safih considered the Emergency Department observation time to be "woefully short". I agree. However, my criticism is mitigated by Dr C's junior position at SDHB, and his inexperience as a clinician, and because he had discussed Miss A's presentation with Dr B, who agreed with the plan to discharge her.

147. I consider that Mr A questioned Dr C about Miss A's rapid breathing and the seriousness of this breathing shortly before discharge. Dr C told HDC that he did not consider Mr A's account to be entirely accurate; however, Dr C also said that he was focused on providing the family with reassurance about Miss A's breathing and communicating the diagnosis of viral upper respiratory tract infection despite his own reservations about this diagnosis. Handling unexpected challenges is a difficult skill that requires experience. In these circumstances, Mr A's questions should have prompted Dr C to seek assistance from senior medical or nursing staff.

148. Dr C recorded: "[S]ince child settled, parents were not concerned any more and happy to go home." I acknowledge that Miss A's parents agreed to take Miss A home, and Dr C recalls Ms A saying, "[S]he is fine now, I should not have brought her into the ED." However, Mr A's questions show that Miss A's parents remained concerned about their daughter at the time of discharge. With this in mind, Dr C's written record did not reflect the situation accurately.

149. Professional and legal standards for clinical documentation are clearly established. The MCNZ publication *Good Medical Practice* notes the importance of clinical records for ensuring good care for patients, and requires doctors to keep "clear and accurate patient records that report: relevant clinical information; options discussed; decisions made and the reasons for them; information given to patients; the proposed

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management plan; any drugs or other treatment provided".[40] Dr C recorded Miss A's observations and relevant clinical information. However, he failed to document the details of his discussion with Dr B or any information he shared with Miss A's parents, including discharge information. He also failed to reflect ongoing parental concern accurately. I am critical of the quality of his documentation.

Opinion: Southern District Health Board — Breach

150. District health boards are responsible for the operation of the clinical services they provide, and are responsible for any service failures. In my view, it was the responsibility of SDHB to have adequate systems in place and appropriate oversight of staff in order to ensure that Miss A received appropriate care. I consider that there were service failures that are directly attributable to SDHB as the service operator. The failures by SDHB, outlined below, exhibit a pattern of suboptimal care.

Discharge and follow-up

First presentation

151. Miss A first presented to the Emergency Department in the early hours of Friday. At this time, she was febrile (temperature 39.3°C) and her heart rate was increased at 170 beats per minute. Dr Safih advised that fever and dehydration will increase a person's heart rate, and one would like to see the heart rate settle down with reduction of fever and adequate hydration prior to discharge from the Emergency Department. On this occasion, Miss A's temperature reduced to 37.4°C following cooling techniques, paracetamol and ibuprofen, and her heart rate reduced to 158 beats per minute. In these circumstances, it was appropriate that Miss A was discharged, and I agree with Dr Safih's advice that the overall care provided met accepted practice.

152. The discharge advice Dr F documented was "return if any concerns". Ms A does not recall what information she was told on discharge that morning. Dr Safih commented that the discharge advice could have been improved by identifying specific symptoms for Ms A to look for, such as lethargy, abnormal respiratory pattern, inability to eat and drink, vomiting, rash, irritability and decreased urine output, and by identifying methods to manage fever. Written information could also have been provided to Ms A with information about symptoms that would justify seeking further medical attention. This is particularly useful when providing detailed advice that may be difficult to remember, and when the person is likely to be in a distressed state. Dr Safih advised that one would also expect it to include the recommendation for a time specific review by another care provider, such as suggesting Miss A be seen by her general practitioner in 24 or 48 hours.

153. Dr F also requested a follow-up telephone call from the Paediatric Department, but this did not occur.

[40] See also, "The Maintenance and Retention of Patient Records" (August 2008, MCNZ).

HDC

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154. As Dr Safih noted, the practice of follow-up telephone calls to the family of a paediatric patient is not a nationwide practice in New Zealand, and is commendable. However, the system involved a nurse in the Paediatric Department assessing the list of patients who had attended the Emergency Department the previous day, and calling the family of paediatric patients who had been discharged if they thought it was necessary, or if the Emergency Department staff had made a special request to do so. It was reliant on the nursing workload in the Paediatric Department each day, and was not sufficiently robust to ensure that every patient whose discharging doctor had requested follow-up would be called.

155. Dr Safih advised that there are a number of additional factors to consider when discharging or admitting a child, including the availability of appropriate follow-up. Dr Safih said:

> "My opinion is that the discharge instructions and the follow up plan had shortcomings, and represent a moderate departure from standard. I would add that this was the failure of a specific system set up in this hospital, probably between the departments of Emergency Medicine and Paediatric Medicine."

156. Dr F expected his request to be actioned. In my view, if an employer has in place a system upon which its employees will rely in their decision-making, then that system must be sufficiently robust to ensure appropriate care. In this case, SDHB's system for paediatric follow-up could not be relied upon safely by its Emergency Department medical staff.

157. To address the issue, SDHB now requires an internal referral to be faxed to the Paediatric Department outlining any concerns and the reasons for follow-up.

Second presentation

158. Miss A's second presentation was Saturday night. Miss A was discharged home after an initial assessment, less than one hour after presenting to the Emergency Department. Dr Safih considered the Emergency Department observation time to be "woefully short". I agree.

159. Miss A should not have been discharged on this occasion. The SDHB team had sufficient information to provide Miss A with appropriate care, but failed to do so.

160. Dr C made no written record of a discharge plan. Under "Discharge Assessment" in the Paediatric Emergency Department Documentation, there is a handwritten record that states: "[Discharge home] with parents. Advised to return to ED if symptoms do not settle." "No" has been ticked next to "Is the patient's presenting problem a discharge risk?".

161. Given that Miss A was being discharged home for the second time in 48 hours, in my view it was also important that Miss A's parents were provided clear and specific discharge instructions (verbal and written) identifying specific symptoms to look for, and recommending time-specific review.

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162. A follow-up call from the Paediatric Department would also have been appropriate. However, a request for this was not made, and the call did not occur. SDHB's SAE report noted that RN I had presumed that someone from the Paediatric Department would call Miss A's family the following morning because this had become "quite routine". As stated, the system was reliant on nursing workload in the Paediatric Department each day, and could not be relied upon safely.

163. I accept Dr Safih's opinion that, on Miss A's second presentation, the "discharge, discharge advice, and an improper follow up system fell seriously below [the] standard of care".

Culture

164. RN I and Dr C both said that they had concerns about Miss A's presentation on Saturday. RN I said that she was surprised that Miss A was discharged that night. She went to find Dr B and Dr C to enquire about their reasoning for discharging Miss A, but was unable to locate them and presumed that their shifts had ended. However, Dr B's shift continued for around two hours following Miss A's discharge. RN I did not discuss her concerns with anyone else, nor did she document her concerns.

165. Dr C told HDC that "as a junior House Officer it was not easy to challenge a senior doctor". SDHB's SAE review also made the following comments about the lack of a multidisciplinary approach:

> "The team as a whole was in possession of enough information to indicate that this was a very unwell child, but there was no meeting of minds between the nursing and medical perspectives. This was a result of attitudes and opportunities. Staff were moderately busy with other patients and medical decisions were made while the nurse was out of the room. However an attitude of valuing the nursing perspective would have overcome that and ensured that there was adequate communication of concerns and opinions."

166. Any individual in the clinical team should be able to ask questions or challenge decisions at any time, and it is important that employers such as DHBs encourage such a culture. Good support systems (including the safety net of vigilant senior nurses and readily available consultants) are also crucial. That RN I and Dr C said they had concerns but did not raise them demonstrates that more could be done at SDHB to encourage a culture where it is commonplace for questions to be asked, to and from any point in the hierarchy, at any time.

Conclusion

167. The service SDHB provided to Miss A was suboptimal in the following respects:

- SDHB staff inappropriately discharged Miss A home on Saturday without first taking sufficient steps to consider her history and investigate the cause of her presenting symptoms.
- SDHB staff on two occasions failed to provide adequate discharge information to Miss A's family.

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- SDHB's system for paediatric follow-up was not sufficiently robust to ensure that follow-up would occur when requested.
- SDHB failed to encourage a culture where staff felt comfortable questioning or challenging decisions.
- Miss A's care lacked a multidisciplinary approach.

168. The SDHB team had sufficient information to provide Miss A with appropriate care. However, a series of judgement and communication failures meant that it did not do so. This represents a serious departure from the standard of care expected. Accordingly, I find that SDHB failed to provide services to Miss A with reasonable care and skill, and breached Right 4(1) of the Code.

Other comment — paediatric registrar notification

169. When Miss A presented to the Emergency Department for the second time at 9.14pm on Saturday, she was triaged as category two. SDHB's Memorandum of Understanding between the Emergency and Paediatric Departments requires the triage nurse to notify the paediatric registrar of the arrival of a category one or two child. I am concerned that this appears not to have occurred in this case.

Opinion: RN D — Breach

170. On Sunday, RN D answered a telephone call from Ms A in his role as a telenurse. I have several concerns about RN D's triage of Miss A's condition during this call.

171. At the time this call took place, the telehealth service had a policy whereby triage nurses had to rule out emergent symptoms within 60 seconds of the call commencing. This may not have been a case that required RN D to transfer Ms A to 111 immediately; however, as my expert nursing advisor Dawn Carey advised, "the probing around questions relating to 'rule out emergent symptoms' (ROES) were not done as well as they should have been". When reflecting on the call, RN D said: "I did not rule out emergent symptoms, which I know to be a very vital part of the call process."

172. In response to the provisional opinion, RN D submitted that he was entitled to think that the Emergency Department transferred the call to the telehealth service because it was not urgent, and that the transfer was done with the knowledge that Miss A had visited the Emergency Department the previous night. As stated, SDHB's policy was to transfer calls requesting health advice to the telehealth service, and the company confirmed that referring callers to the telehealth service is common across a number of hospital emergency departments.

173. The telehealth service's Breathing Difficulty (Severe) — Paediatric guideline recommends that a child should attend the Emergency Department if he or she has

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audible stridor and wheezing that is tight and persistent. In addition, Miss A's temperature of 40.2°C was enough to warrant immediate medical attention.[41]

174. I acknowledge that telephone triage is more difficult than face-to-face triage because the practitioner does not have the ability to see or touch the patient. However, in RN Carey's opinion, there was sufficient time and presentation of symptoms for RN D to have completed a triage assessment before the call ended. I agree with this advice. Miss A's breathing can be heard faintly almost immediately after the call began, and increases in volume throughout the call. Ms A twice advised RN D that Miss A's temperature was 40.2°C. The first time she did so was 15 seconds into the call.

175. The company told HDC that the average call duration for the telehealth service is 9 minutes 30 seconds. The telephone call with Ms A was 3 minutes 12 seconds long. Whilst I acknowledge that this is below the average call time, the telehealth service deals with a wide variety of calls, and the severity of the health issue varies widely. I share the opinion of RN Carey that RN D's clinical assessment of Miss A was not completed in a timely fashion based on the seriousness of her presenting symptoms.

176. When Ms A ended the call, she stated: "I'm just going to go, I'm going to go. Thanks, bye." RN D responded: "Okay." In a letter to Ms A following the incident, the company acknowledged that RN D's manner during the call did not demonstrate a sense of urgency. RN D told HDC that he thought Ms A was going to take Miss A to the Emergency Department; however, he did not ask Ms A if that was her intention or advise her to do so. He did not document this opinion in the assessment record at the time, nor did he document this in his written reflection to the company.

177. When reflecting on the call, RN D wrote:

> "Another fault in the way I handled the call was … how it ended, the mother ended the call before I had assessed her daughter. Ideally [I] should have taken more control of the situation and responded to the mother promptly when she was ending the call … Also immediately after the call had ended I should have at least discussed the call with the Resource Nurse."

178. RN Carey agreed with RN D's conclusions, as do I. If RN D was unsure what to do in these circumstances, on that shift he ought to have contacted the Resource Nurse, who was available to provide advice when required.

179. RN D did not rule out all of Miss A's relevant emergent symptoms, nor did he triage Miss A's clinical presentation within an acceptable timeframe and, therefore, did not provide appropriate advice to Ms A. Furthermore, he did not advise Ms A to take her daughter back to the Emergency Department or verify that she intended to do so, and he failed to take appropriate steps when Ms A ended the call. For these reasons, RN D failed to provide services to Miss A with reasonable care and skill and, therefore, breached Right 4(1) of the Code.

[41] RN D acknowledged this in his response to HDC.

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Opinion: The company — No breach

180. The company had overall responsibility for ensuring that the telehealth service provided Miss A with care of an appropriate standard when Ms A called to request advice. The company needed to have adequate systems, policies and procedures in place, and then ensure compliance with those policies, so that the care delivered was appropriate.

181. In addition to the overall responsibility referred to above, employers such as the company can be found vicariously liable for an employee's breach of the Code.[42] However, it is a defence for an employer to prove that it took such steps as were reasonably practicable to prevent the act or omission of an employee who breached the Code.[43]

182. RN Carey considers that the company's induction process was comprehensive and, in her opinion, "the training and supervision provided to [RN D] was consistent with his progress as a new Telenurse and comprehensive". I accept RN Carey's advice and am satisfied that the company provided RN D with an appropriate level of induction training for the position he held, and had a comprehensive system established to provide ongoing supervision and training. For these reasons, I am of the view that RN D's failings were individual clinical errors.

183. The company said that its review of this incident raised concern about ROES across the business and, as a result, it changed the process around ruling out emergent symptoms. It commented that the process has to be appropriate to the presentation, and that it was concerned with the risk of nurses becoming used to asking stock questions without deeper probing. In RN Carey's view: "[the company's] policies and procedures including the new [Rule Out Life Threatening Symptoms] are clinically sound and appropriate." I accept Ms Carey's advice.

184. For these reasons, I do not find the company to be in breach of the Code.

Recommendations

185. I recommend that Dr C, RN D and SDHB each separately provide a written apology to Ms A and Mr A. These are to be sent to HDC within three weeks of the date of this report, for forwarding to Ms A and Mr A.

186. In my provisional opinion, I also recommended that Dr B provide a written apology to Ms A and Mr A. Dr B has provided a letter of apology and this has been forwarded.

187. I recommend that, within six months of the date of this report, Southern District Health Board complete the following recommendations and report back to HDC:

[42] Section 72(2) of the Health and Disability Commissioner Act 1994.
[43] Section 72(5) of the Act.

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a) In relation to patients under 5 years of age, conduct an audit of all unplanned re-presentations to the Emergency Department within 48 hours of discharge, to measure compliance with:

— the requirement for assessment by a consultant or senior registrar prior to discharge;

— the requirement for nursing/medical consultation prior to discharge; and

— the requirement for a follow-up telephone call from paediatric staff to families following referral (following both the first and second discharge).

This audit should be undertaken over a minimum period of three months, with results and details of any remedial action provided to HDC.

b) Commission an independent review of senior/junior staff rostering to establish whether sufficient levels of supervision are available for junior staff working in the Emergency Department, and report to HDC the findings and any resulting action.

c) Include in its training and induction for all staff, information that the practice in SDHB is that the asking of questions and reporting of concerns is expected and accepted from all members of the multidisciplinary team, supply a copy of the training and induction material, and report to HDC on the steps taken to ensure there is a culture that encourages these actions.

d) Update HDC on the completion of outstanding recommendations from its SAE review, and monitoring of ongoing changes made, including:

1. Evidence of the three-monthly mandatory teaching sessions about paediatric assessment.
2. Evidence that the memo regarding clinical care in the Emergency Department (point 8, paragraph 106) is being recirculated three monthly. Consider amending the memo to make it clearer when nursing/medical consultation must occur.
3. Details of how SDHB is optimising on-the-job clinical training of junior staff.
4. The outcome of its investigation into whether an electronic alert can be placed on the Emergency Department system to alert staff that a patient is re-presenting to the Emergency Department within 48 hours of being seen previously.
5. The completed handout for parents to be provided when a follow-up telephone call from the Paediatric Department has been requested by the discharging doctor in the Emergency Department.
6. Evidence that the regular communication workshop for Emergency Department staff is taking place, and a description of the content of this workshop.

e) Review its Memorandum of Understanding — Emergency Department and Child Health Services, make amendments if required, and circulate a current version to all relevant staff.

f) Review its policy for transfer to the telehealth service. In particular, I recommend that it consider whether specific instructions should be included to cover the

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circumstance where a person has been discharged from the Emergency Department and advised to return if symptoms persist.

188. I recommend that Dr C undergo training about effective communication, paediatric care, and documentation, and report to this Office within four months of the date of this report, with evidence of this training and a reflection of his learning.

Follow-up actions

189.
- A copy of this report will be sent to the Coroner.
- A copy of this report with details identifying the parties removed, except the experts who advised on this case and Southern District Health Board, will be sent to the Medical Council of New Zealand and the [relevant overseas regulatory authority], and they will be advised of Dr B's name.
- A copy of this report with details identifying the parties removed, except the experts who advised on this case and Southern District Health Board, will be sent to the Nursing Council of New Zealand and the [relevant overseas regulatory authority], and they will be advised of RN D's name.
- A copy of this report with details identifying the parties removed, except the experts who advised on this case and Southern District Health Board, will be sent to the College of Nurses Aotearoa NZ, and the New Zealand Faculty of the Australasian College for Emergency Medicine, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

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Appendix A: Independent nursing advice to the Commissioner

The following expert advice was obtained from registered nurse Dawn Carey on 22 July 2015:

"1. Thank you for the request that I provide clinical advice in relation to the complaint from [Ms A] about the care provided by registered nurse [RN D] during a telephone consultation on [Sunday]. 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 information available on file: complaint from [Ms A]; response from [the company] including the recording of the telephone call on [Sunday], assessment detail report dated [Sunday], response to [Ms A] dated 20 May 2015.

3. [Ms A] has complained about the care provided by multiple health providers to her daughter, [Miss A], [in 2013]. One aspect of the complaint relates to [Ms A's] telephone contact with [the telehealth service] on [Sunday]. Concerned about her daughter, [Ms A] had telephoned the Emergency Department (ED) for advice. This call was transferred to [the telehealth service] and answered by [RN D]. I have been asked to review and comment on this telephone consultation.

4. [The company has] provided a response to [Ms A's] complaint. They report that many hospitals transfer telephone calls requesting medical advice from the ED to [the telehealth service], which is a nurse led telephone triage service and staffed by experienced registered nurses who use robust decision support software. The response explains that the RN triages patients with symptoms and/or provides general health advice if required. *Having ascertained that there is not an immediate life threatening emergency the [telehealth service] process is to then explain the call plan ... The triage nurse will then collect the caller's name and demographic data for the patient in order to create a clinical record* ... Having completed an internal review of the call and documentation, [the company] concluded that [RN D] could have been clearer in his explanation of the process that he was following and more directive given the nature of [Miss A's] symptoms and [Ms A's] distress. The response expresses confidence that ... *had the nurse been given the opportunity to perform an assessment, ... the outcome would have been an appropriate management plan for the level of urgency of the symptoms (most likely a transfer to 111 or perhaps referral to the emergency department immediately).* The [company] response to [Ms A] reports that following their review finding, the RN has undergone additional training and increased monitoring to ensure better management of calls.

HDC

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5. Review of clinical notes
   a. Assessment detail report (ADR)
      i. The submitted ADR reports [Ms A's] telephone call to [the telehealth service] as occurring at 7.04am on [Sunday]. The ADR reports the telephone duration length as 4.8 minutes, the patient as [Miss A] and lists her date of birth. The presenting problem is recorded as *fever/seen last night in ED/temp now 40.2. Further documentation — caller hung up/said she was going to.*

   b. Telephone recording
      i. After being greeted, [Ms A] identifies her reason for calling; *My girl's had a fever and it was up to 39 ... I took her to the hospital and she's on ibuprofen and Panadol and they said that will take it down but she's up to 40.2 right now. She seems to be a little delirious almost, do I need to take her back to the hospital for this?*
      ii. Within the first 40 seconds of the call, [Miss A's] breathing pattern is identified; *… it's quick and shallow 'cos she's had the 'flu like she's had a cough and stuff. That noise that you can hear is her; ... she's asleep with her eyes open. I've just given her some ibuprofen but, but it's not very deep*. At this point, [RN D] explains the processes involved, that he will ask some more questions and then give advice to [Ms A]. This is agreed. For the next 60 seconds of the call, demographic information is sought from [Ms A] — [Ms A's] name, [Ms A's] date of birth, daughter's name, daughter's date of birth.
      iii. Following 10 seconds of silence, [Ms A] reports having attended the ED previously and asks [RN D] *… she's at 40.2 now and that means a high fever doesn't it? …* In response to being asked about the review of the ED doctor, [Ms A] reported *They just said it was a viral infection and they tested her and stuff, but stuff can change can't it and she's just beside herself. I was trying to ring the emergency department to see if I was supposed to go down there but they put me through to [the telehealth service].*
      iv. During the last 10 seconds of the call, [Miss A] is heard becoming more upset and her mother trying to comfort her. The call is ended with [Ms A] saying *… I'm sorry, I'm just gonna go, I'm just gonna go. Thanks, bye.*

6. Comments
   ACEM guidelines[1] include that the triage assessment should not take any more than 2–5 minutes. This is in recognition that triage is not a treatment but part of a process to determine clinical urgency so that a patient can access appropriate clinical treatment. While I appreciate that ACEM guidelines are not applicable in non ED settings, I do consider the advised timescale to be relevant in guiding all registered nurses involved in triage assessment.

[1] Australian College for Emergency Medicine (ACEM), *Guidelines on the implementation of the Australasian Triage Scale in Emergency Departments*, Guideline Nr:G24, (Victoria, Australia: ACEM, 2005).

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Essentially the role of telephone triage is to determine whether the patient is in need of emergency assistance (111) now, needs to attend the ED promptly but is safe to do so in a private vehicle, needs review in the next 24 hours/longer timescale, or can be solely managed with telephone advice. In my opinion, this assessment process needs to be completed in a clinically appropriate timescale.

7. Clinical advice
In my opinion, triage assessment starts from the initial interaction and the practitioner uses all senses available to them. Telephone triage is obviously more difficult than face-to-face as the practitioner cannot see or touch the patient and has to rely solely on what they hear and are told.

The submitted telephone recording is 3.12 minutes in length. Present throughout the call is [Miss A's] audible noisy, rapid breathing. This is accompanied by [Ms A's] commentary on her daughter's condition and what treatments she has given. Taken together, I consider there are signs and symptoms that indicate a sick child who requires urgent medical review. I use the phrase 'sick child' as a clinical term.

I am critical that [RN D] was not clinically concerned by [Miss A's] noisy, rapid breathing pattern and note that it was not identified on the ADR assessment notes. In my opinion, [Miss A's] breathing pattern was a significant symptom. I am also concerned that [RN D] did not attempt to call [Ms A] back after she hung up. In my opinion, there was adequate time and adequate presentation of symptoms for [RN D] to have completed a triage assessment before the call ended. Unfortunately, these factors mean I do not share [the company's] confidence that [RN D] would have initiated an appropriate clinical management plan had [Ms A] not terminated the call.

In my opinion, the assessment and decision making by [RN D] on [Sunday] significantly departed from accepted standards of care.[2] In my opinion, further information should be sought from [the company] as to [RN D's] experience as a triage RN and his completed [telehealth service] training at the time of this complaint."

Further expert advice was obtained from RN Carey on 21 September 2015:

"1. Thank you for the request that I provide additional clinical advice in relation to the complaint from [Ms A] about the care provided by registered nurse [RN D] during a telephone consultation on [Sunday]. 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. This additional advice is provided following a review of further information received from [RN D] and [the company] and should be read in conjunction with my previous advice on this case.

[2] Nursing Council of New Zealand (NCNZ), *Competencies for registered nurses* (Wellington: NCNZ, 2007); NCNZ, *Code of conduct for nurses* (Wellington: NCNZ, 2012).

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2. I have reviewed the following information available on file: response from [the company] dated 26 August 2015 including information relating to [RN D] [interview transcript, reference checks, training progress report, call coaching reports, employment file, self reflection on nursing practice], [the telehealth service's] Nurse Triage Training Manual, screenshots [of assessment software] various Policies and Guidelines that relate to [the telehealth service's] call processes or paediatric 'breathing difficulty' presentations; response from [RN D] including statement, curriculum vitae; clinical advice dated 22 July 2015.

3. **[The company]**
I have been asked to review the standard of care provided by [the company] to [Miss A], and to specifically comment on the following:

a. [The company's] comments on the timescale for telephone triage assessments
The response reports that the average call duration for [the telehealth service] is 9 minutes 30 seconds and expresses the opinion that the ACEM timescale guideline referenced in my previous advice is not appropriate in relation to telephone triage. I consider the guideline — triage assessment should not take more than 2–5 minutes — to relate solely to the nursing clinical assessment of need. I consider that the average length of call time to [the company] reflects the RN assessment (triage) process plus them relaying their clinical advice, checking understanding and whether the client agrees to follow said advice and closing with the necessary safety netting disclosure advice. I agree with [the company's] investigation finding that in this case, the probing around questions relating to 'rule out emergent symptoms' (ROES) were not done as well as they should have been.

b. [The company's] assessment process
[The telehealth service] is a computer based system and as such requires a familiarity with technology and specific training. The [telehealth service's] triage process is supported by guidelines that can be accessed by keyword search, anatomical search or title search. Once assessed each guideline offers an overview of clinical information for the Telenurse to review. The nurse then proceeds through the guideline by asking a series of questions of the caller that then determines the clinical advice or disposition, as referred to within the [telehealth service's] system. In my opinion, the tools that support the assessment process are comprehensive, systematic and clinically appropriate.

c. [The company's] induction process
[The company reports] that, upon employment, new Telenurses undergo 10 days/80 hours of orientation training over a two week period. This is followed by 5 days/40 hours where the new Telenurse works alongside a preceptor, gaining exposure and being mentored during calls to [the

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telehealth service]. The preceptors complete training progress reports noting areas of strength and areas for the new employee to focus on. Following this, post training support is provided to the new Telenurse in one hour slots on a weekly basis for four weeks. The reported focus during this time includes calls or guidelines that the new Telenurse wishes to discuss. After approximately three months' employment, a four hour Calibration class is completed. This includes a review of progress, processes and further coaching. A review of overall progress including the new nurse's opinion on their training to date and experience of the role is also formally captured after approximately three months' employment. Throughout the induction period, new Telenurses also receive specific feedback coaching by their Team Leader where a number of calls are reviewed and critiqued. [The company] report[s] that a Resource Nurse is always available to the Telenurse for support or advice.

I consider [the company's] induction process to be comprehensive.

d. **The adequacy of the training and supervision provided to [RN D]**
Records show that upon employment as a Telenurse, [RN D] completed the induction programme detailed above. Following the preceptor period, training progress reports conclude that [RN D] ... *made sound progress during precepting. He is feeling confident about going solo. He demonstrates sound clinical judgement and will be a good addition to the team.* On file are evidence of regular contact and coaching from his Team Leader. The three month review summary reports that [RN D] … *has been receptive to constructive* feedback *and his reviewed calls demonstrate his ability to make corrective adjustments to his call handling and triages …*

In my opinion, the training and supervision provided to [RN D] was consistent with his progress as a new Telenurse and comprehensive.

e. **The adequacy of [the company's] policies and procedures including the new 'Rule out life threatening emergency' (ROLTE)**
In my opinion, the policies and procedures including the new ROLTE are clinically sound and appropriate. I consider that the development of ROLTE is demonstrative of an organisation that is reflective, risk aware and risk responsive. In my opinion, these are vital organisational attributes.

f. **[The company's] current triage forms (screenshots provided)**
The forms reflect the service being national and the fact the Telenurse is required to capture demographic data. The clinical assessment/triage component is detailed in section b of this advice. I consider the current triage forms to be appropriate.

4. **[RN D]**
I have been asked to review the standard of care provided by [RN D] to [Miss A], and to specifically comment on the following:

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a. Telephone triage assessment

[RN D's] response reports working as a [telehealth service] RN for four months when he took [Ms A's] call. Her call was the ... *first call of the day at 7.04am, and the child's breathing was rapid and noisy ... Following on with the call process, I was* about *to ask some further questions when the mother terminated the call. The mother at the end of the call said, 'I'm just gonna go, I'm just gonna go', I had taken this to mean that she was taking her daughter straight back to ED. So I thought it would not help to call her straight back ... I felt dissatisfied that I was not able to complete the call and give the advice, but I thought that the mother had terminated the call to take the child to ED ...*

[The company] report[s] that ... *a referral is made for all dispositions except Self Care and Activate 111. The telenurse should ascertain the provider the patient intends to visit ... A fax will still be generated ... in DHB's where Emergency Departments have requested a fax be sent ...* Due to [Ms A] terminating the call, it would have been problematic for [RN D] to comply with such requirements. Unless [RN D] was familiar with the expected actions in such a scenario, it would seem appropriate that the available Resource Nurse would have been contacted for advice. I would also have expected that the ADR would reflect [RN D's] understanding that [Ms A] was going to attend the ED, rather than limiting it to ... *caller hung up/said she was going to.*

Should the Commissioner determine that [RN D] thought that [Ms A] was terminating the call and going to attend the ED immediately —
I would be mildly critical of the documentation practices of [RN D].

Should the Commissioner determine that [RN D] did not think that [Ms A] was going to attend the ED immediately —
I remain critical of the assessment and decision making of [RN D]. As detailed in section 7 of my previous advice, I continue to hold the opinion that the care provided by [RN D] on [Sunday] significantly departed from accepted standards.

b. Self reflection dated […] 2013

Following notification of the hospital investigation into the death of [Miss A], [the company] asked [RN D] to listen to a recording of [Ms A's] call and to complete a self reflection. As part of the reflection, [RN D] notes ... *I do not think that I handled the call very well at all ... There is so much that I can identify now that was completely wrong in the way that I handled the call. I did not immediately assess the condition of the child, it is obvious to me now that the child was potentially very unwell and that I did not take prompt action ... In other words I did not rule out emergent symptoms, which I know to be a very vital part of the call process. I can remember my initial feelings of the call, is that I was caught off guard. It was a shock to*

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have received a call like this first call in the morning … Ideally I should have taken more control of the situation and responded to the mother promptly when she was ending the call … Also immediately after the call had ended I should have at least discussed the call with the Resource Nurse.

I agree with [RN D's] conclusions.

Dawn Carey (RN PG Dip)
Nursing Advisor
Health and Disability Commissioner
Auckland"

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Appendix B: Independent clinical advice to the Commissioner

The following expert advice was obtained from emergency medicine specialist Dr Shameem Safih:

"My name is Shameem Safih. I'm an Emergency Medicine Specialist.

The HDC's office has asked me to review the case of [Miss A], ref C14HDC01187.

I have read the commissioner's guidelines for providing expert advice.

I have reviewed the following documents:

Letter of complaint from the mother, [Ms A]

The coroner's report

Reports written to the coroner

The serious event report

The Southern District Health Board's response

The relevant clinical records

The commissioner has asked me to comment on the following specific issues

1. whether paediatric review should have been sought on [Friday]
2. whether it was appropriate to discharge [Miss A] on [Friday]
3. whether appropriate discharge advice was given and whether there were appropriate systems in place to enable the follow up paediatric phone call to occur
4. whether [Dr C's] clinical assessment on [Saturday], including his history taking was adequate
5. whether [Dr C] adequately relayed [Miss A's] presentation to [Dr B] on [Saturday], including whether he should have given his opinion on the best course of action
6. whether there was adequate supervision of [Dr C] by [Dr B] on [Saturday], and whether [Dr B] should have examined [Miss A] himself
7. whether paediatric review should have been sought on [Saturday]
8. whether it was appropriate to discharge [Miss A] on [Saturday], including whether nursing staff should have been involved in this discussion
9. whether appropriate discharge advice was given on [Saturday], including whether a follow up paediatric phone call should have been requested; and
10. any other comments on the care provided.

Summary of Case

[Miss A] was a two year 10 month old infant who developed a non specific illness at home [in 2013], and was unwell but did not alarm her mother particularly until 5 days later on [Friday]. Sometime after midnight the mother took her to hospital. [Miss A] was hot and lethargic. She was seen by an

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Emergency Department (ED) house officer and reviewed by an ED registrar. She had a high temperature that had not responded to paracetamol, so she was prescribed ibuprofen. Her temperature settled and she was discharged with a diagnosis of viral infection. At home according to the mother she remained listless, with fluctuating level of unwellness and activity, reduced appetite and ongoing fever.

On [Saturday], 48 hours later she became worse, and her mother recognised a change in the pattern of her breathing: it was rapid, with possibly a grunt. She had persistent fever, cough, and reduced oral intake, and had developed diarrhoea.

The mother took her back to the ED where another ED house officer assessed her. He consulted with the supervising Emergency Medicine consultant. [Miss A] was discharged again on the same presumptive diagnosis of a viral upper respiratory tract infection.

Her condition deteriorated the next morning [Sunday]. Her mother phoned ED for advice but got automatically redirected to [the telehealth service].

Apparently her interaction with [the telehealth service's] advisor was unsatisfactory. She felt her sense of urgency was not being appreciated so she terminated the call. Soon afterward [Miss A's] condition rapidly deteriorated and she arrested. Parents commenced CPR. Paramedics and the hospital team in the ED continued CPR but the outcome was death.

Post mortem findings were acute myeloid leukemia associated with overwhelming strep pyogenes septicaemia, empyema and peritonitis, with dural venous sinus thrombosis, brain swelling and cerebellar tonsillar herniation.

Review of presentations in detail

<u>First Presentation</u>

Nursing notes

0055 Triage 3 Fever, cough

0120: cough, fever for 3 days. Temp 39.3°C Oxygen saturation 98%, Heart rate 170, respiratory rate 32

0245 Temp 39°C Heart Rate 158 Respiratory rate 38 Looks much improved

[Dr E's] assessment

Time seen 0155

Noted vital signs. Commented on history of usual coughs and colds. Noted a wet sounding cough. Examined [Miss A], took note of vital signs, listened to the chest, looked in the ears but was unable to examine the throat. She made a diagnosis of viral upper respiratory tract infection. Referred to her supervising registrar.

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[Dr F], ED registrar

Noted 'well child, bright, happy, interactive'.

Temperature had remained 39°C in spite of paracetamol so he prescribed a dose of Ibuprofen. Half an hour later the temperature had dropped to 37.4°C. He noted [Miss A] lived close by and mother was happy to take her home. His advice was to return if any concerns, and he requested a paediatric follow up call.

Second presentation

Nursing notes

2114 Triage Category 2 (A higher prioritisation, indicating she should be seen within 10 minutes)

Presenting problem: Shortness of breath, increased work of breathing, shallow breathing, very upset and distressed, respiratory rate 48

Further Nursing observation at 2130

Pale, HR 175, RR 44 Temp 37.3 Deg C Oxygen saturation 97%

Irritable, lethargic, cough, grunting.

Not eating. 2 times diarrhoea

Seen in ED Thursday night

Medical assessment 2117

[Dr C] ED House Officer

Noted parents concerned regarding breathing. Noted presentation 48 hours before with fever and coryzal symptoms and noted the diagnosis of viral upper respiratory tract infection.

Noted mother's concern that '[Miss A] not breathing well and worried she would sleep and not wake up'. Found chest examination to be normal.

Impression after examination was 'Viral illness'. He also noted 'since child settled, parents were not concerned anymore and happy to go home. Been discussed with ED SMO.' He did not document what he told the SMO, or what advice was given.

To get this information I looked at [Dr C's] report to the coroner.

In his report he mentioned taking note of the previous diagnosis of Viral Upper respiratory tract infection, and said he was concerned about the fast heart rate and the fast respiratory rate. He said that he 'discussed the case with the supervising consultant and it was agreed that no further investigations were necessary. The

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diagnosis of a viral illness was confirmed.' He acknowledged 'others' might have obtained a paediatric review but added it was likely that [Miss A] would still have been discharged home.

I have also reviewed the DHB's Serious Adverse Event Report.

This was conducted quite thoroughly and the key issues have been identified. Corrective and preventative actions have been appropriately initiated or planned. I will make reference to a relevant section of the report further down.

After reviewing all the documents, these are my comments on the issues raised by the HDC:

1. whether paediatric review should have been sought on [Friday]

The commonest cause of fever in a child of this age is viral upper respiratory tract infection. In a febrile child between 3 months and 3 years old the risk of a serious infection with fever of over 39 degrees is 5% if not fully immunised and 0.5% if fully immunised. Well looking children without suspicion of serious (bacterial) cause of infection do not need to be investigated any further. They also do not need to be referred to a paediatric service, as doctors in an emergency department should be able to manage these patients. Discharge instructions and appropriate follow up are key to the outpatient management of these children. [Dr F] the registrar personally reviewed [Miss A] and has clearly documented the picture of a child who appeared well and happy. A very small percentage of infants with a febrile illness will look well initially, may not have any localising signs, and are early in the course of a potentially serious infection. The fact that the child's temperature can be brought down and he or she feels better with antipyretics does not necessarily mean that there is not a potentially serious infection present in its early stages. In particular when there are multiple cases of viral upper respiratory infection in the community in winter it is possible that a serious infection in its early stages may slip through. Hence follow up and discharge instructions are critical.

My opinion is that care provided met the standard of care/accepted practice on this occasion.

2. whether it was appropriate to discharge [Miss A] on [Friday]

Given that [Miss A] was well looking it was reasonable to discharge her.

Red flags in a febrile child of this age that would indicate a serious infection would be lethargy or listlessness, toxic appearance, respiratory distress (including grunting), petechial or purpuric (tiny little bleeds superficially in the skin) rash, neck stiffness, decreased level of consciousness, and inconsolability. At the first presentation these red flags were not present.

[Miss A's] initial heart rate is of a concern. 170 per minute is high for a child of her age. Anything more than 160 would be abnormal (ref Cameron et al). Heart

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rate will be increased by fever and dehydration. One would like to see the heart rate settle down with reduction of fever and adequate hydration prior to discharge from the ED. The heart rate did settle to 158 per minute at 0245 and [Miss A] is documented as a 'well looking, happy, bright interactive child'.

There are other factors to be considered when discharging or admitting a child.

This list is from Cameron et al, Text Book of Paediatric Emergency Medicine

Age of child

Availability of appropriate follow up

Parental ability to provide care and monitoring

Comorbidity

Distance from hospital

Time of presentation

Parental anxiety levels

To enable a paediatrician opinion

Possible child at risk outside hospital

My opinion is that discharge from the hospital on this occasion met standard practice.

3. whether appropriate discharge advice was given and whether there were appropriate systems in place to enable the follow up paediatric phone call to occur

The discharge advice as documented is not very specific. It merely said 'return if any concerns'. It could be more specific about concerning features to look for, such as lethargy, abnormal respiratory pattern, inability to eat and drink, vomiting, rash, irritability, decreased urine output, etc. It could be also more specific about how to manage the fever (paracetamol and ibuprofen doses, drinking fluids, cooling measures). It should also include a time specific review by another care provider, eg see your GP in 24 or 48 hours.

The system of paediatric follow up phone call upon a request from the ED doctor on a patient that ED has solely managed is not universal or standard practice. It seems that this is the follow up plan that this ED/Paediatric Unit relies upon. However the system appears to not have been set up properly as it failed on this occasion.

My opinion is that the discharge instructions and the follow up plan had shortcomings, and represent a moderate departure from standard. I would add that this was the failure of a specific system set up in this hospital, probably between the departments of Emergency Medicine and Paediatric Medicine.

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4. whether [Dr C's] clinical assessment on [Saturday], including his history taking was adequate

The presenting complaint of shortness of breath and the mother's serious concern about breathing was documented by [Dr C] but he ignored these, not exploring them any further. It appears he was biased by the earlier made diagnosis. This fixation to the earlier diagnosis coupled with his lack of experience meant that he failed to recognise that this child was quite sick. He ignored clues and red flags. The nurse had noted pallor, tachypnoea with grunting breaths and tachycardia. A heart rate of 175 and a respiratory rate of 44 is abnormal and should have raised alarm. These findings mandated further investigation and intervention — x-ray chest, full blood count, IV antibiotics and a paediatric referral. [Miss A] should have been admitted but she was in the department for barely 45 minutes. The ED observation time is woefully short. I note [Dr C's] lack of insight in this — he states in his report to the coroner that 'Representing with tachycardia might have led others to obtain a paediatric review but it is likely that [Miss A] would have still been discharged home'.

My opinion is that his overall clinical assessment represents a serious departure from standard of care. The caveat to this is his level of experience, the fact that he is a junior house officer, and that he requires supervision.

5. whether [Dr C] adequately relayed [Miss A's] presentation to [Dr B] on [Saturday], including whether he should have given his opinion on the best course of action

This is not clear from [Dr C's] notes. All he stated was 'been discussed with the SMO'.

However the adverse event review has some clear documentation around the nature of the discussion that occurred between [Dr C] and [Dr B]. The review panel found out presumably by direct interview of both parties that all the red flags had been presented to [Dr B]. These were

a. Representation to ED within 48 hours
b. Tachycardia
c. Shortness of breath, increased respiratory rate
d. Significant maternal concern
e. Nursing observation ('irritability, pallor, lethargy, cough, grunting breaths, not eating, and diarrhoea')

My opinion is that [Dr C's] documentation about his consultation with [Dr B] is seriously below standard.

However, it appears from reading the adverse event report that he did present the salient features about the case to [Dr B].

The other part of this question is whether he should have given his opinion about the best course of action to [Dr B]. The simple answer is yes. If he felt that [Miss A] needed investigation, treatment with antibiotics, and referral to paediatric

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service and admission then that is what he should have presented as his plan of management. We encourage juniors to come up with a provisional diagnosis, a differential diagnosis and a plan of management when presenting a case for discussion with or review by the consultant. This is an essential part of their growth as a doctor.

6. whether there was adequate supervision of [Dr C] by [Dr B] on [Saturday], and whether [Dr B] should have examined [Miss A] himself

It is understood that the consultant on a shift has a huge task supervising the management of 50 to 60 patients during his shift. If working alone ie without other consultant colleagues, he can not be expected to personally review every patient. Which patient he personally reviews depends on a number of factors. An important consideration is his understanding of the junior doctor's experience and clinical skills. Other factors are mainly around the presence of red flags in the patient's clinical presentation. When the presence or absence of red flags are not voluntarily presented by the referring junior, then the supervisor needs to be able to ask the right questions to elicit them. This is an essential part of the risk management role of any shift consultant in an ED. In this case there were enough red flags, see the list above.

My opinion on this matter is that supervision was inadequate, and [Dr B] should have personally examined [Miss A]. This represents a significant departure from standard of care.

In busy EDs supervision can be very challenging and failure of adequate supervision is often a reflection of the busyness of the department, the workload on the consultant, the acuity of the patients, support from other specialities, and the number of junior ED staff and their skill mix. This is something the Director of the Emergency Department and the Management of the DHB need to look into.

7. whether paediatric review should have been sought on [Saturday]

See above. Paediatric review was clearly indicated.

My opinion is that this was a serious departure from standard of care

8. whether it was appropriate to discharge [Miss A] on [Saturday], including whether nursing staff should have been involved in this discussion

[Miss A] should not have been discharged on [Saturday].

Communication should have been better between [Dr C] and [Dr B], and between the two doctors and the nursing team. The nursing team should be empowered to speak up about their concerns. It did not happen in this case.

My opinion is that discharge of [Miss A] represents a serious departure from standard of care.

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Whereas the nursing team should ideally be consulted about their concerns, or should be able to speak out about their concerns, there are still in existence barriers to communication. Many places have introduced successful strategies to break down these barriers eg the SBAR tool for communication, and the introduction of the Adult Deterioration Detection Systems Score (ADDS Score) which requires a score based standard response from the nurse and the doctor.

9. whether appropriate discharge advice was given on [Saturday], including whether a follow up paediatric phone call should have been requested

Appropriate discharge advice was not given. We have to go back one step here. Discharge was inadvisable and inappropriate in this case therefore the question of appropriateness of discharge advice does not really arise. The paediatric follow up call as I said is local practice and whereas it is highly commendable, it is not standard Emergency Department practice, and needs to be set up to succeed. As a local system it failed on this occasion. According to the Adverse Event Review finding 'There are false expectations as to how this service is supposed to work and this must be clarified'.

I would reiterate that this was not a case where phone follow up was the appropriate action in the management of [Miss A], this child should have been investigated with blood tests and chest x-ray, referred acutely to paediatrics and admitted. The fact that the child had acute myeloid leukaemia and the odds may have been stacked against her is not relevant.

My opinion is that discharge, discharge advice, and an improper follow up system fell seriously below the standard of care.

Shameem Safih FACEM

07 April 2015"

The following further advice was obtained from Dr Safih:

"My name is Shameem Safih. I'm an Emergency Physician (FACEM) in active practice across a major tertiary hospital ED and smaller rural hospitals .

On the 7th of April I provided the Health and Disability Commissioner with advice in the case of [Miss A], ref number C14HDC01187.

The Commissioner has asked me to review my advice and make some additional comments in the light of new information provided by the Southern DHB and [Dr B].

To do this I've reviewed my advice and pertinent documents from before. I've also reviewed the following new documents provided to me:

1. Southern DHB's response to notification dated 4th June 2015
2. [The company's] response to notification dated 20th May 2015

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3. [Dr B's] response to notification dated 1st June 2015

The Commissioner has asked me if after reviewing the information provided, I would change my advice in any way.

Specifically he has asked me to comment on the following:

1. In [Dr B's] response to notification dated June 2015, he provides a different recollection of the information provided to him by house officer, [Dr C] on [Saturday]. If the Commissioner was to accept [Dr B's] recollection of the information provided to him by [Dr C], was then
   a. [Dr B's] decision not to personally review [Miss A] appropriate
   b. [Dr B's] decision to discharge [Miss A] appropriate
2. The adequacy of Southern DHB's induction process for locum consultants
3. The adequacy of Southern DHB's policies
4. The changes made by [Dr B] to his practice following this incident

Addressing the first

In [Dr B's] response to notification dated June 2015, he provides a different recollection of the information provided to him by house officer [Dr C] on [Saturday]. If the Commissioner was to accept [Dr B's] recollection of the information provided to him by [Dr C], was then

[Dr B's] decision not to personally review [Miss A] appropriate

[Dr B's] decision to discharge [Miss A] appropriate

There are 3 versions of the interaction:

1. [Dr C's] documentation was of a settled child whose parents had been reassured about their concerns and were expressing acceptance of the decision to discharge ('happy to go home'). He adds toward the end of his notes 'been discussed with ED SMO' — There are no documented details of this consultation. The implication is that he would have presented [Miss A] to [Dr B] as a settled child whose parents were happy to take her home.
2. In his letter to [the Medical Director of Patient Services] [Dr C] says he discussed the case with [Dr B] and that it was agreed that no further investigations were necessary, and that the diagnosis of a viral illness was reconfirmed (presumably by [Dr B]). He says he ([Dr C]) was concerned with the heart and respiratory rate. This concern is not reflected in his clinical notes. He added in his initial response that even a paediatric review would likely not have resulted in admission.
3. In the adverse event review, [Dr C] stated that in his consultation with [Dr B] he communicated his concerns about [Miss A's] return to the department within 48 hours, the mother's fear about the child dying, and highlighted the tachycardia. However, in a contradiction to the above, he also told [Dr B] the child was otherwise 'healthy and normal'. He did not tell him the child had come in as a triage 2 ('High risk, potentially or actually quite unwell, needs to

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be seen within 10 minutes of presentation'). He said he showed [Dr B] the chart, the nurse's notes (irritable, lethargic, grunting, cough, not eating, diarrhoea x2) and asked what he should do. He said he expected to be told the child should be observed for longer or referred for a paediatric opinion but says he did not verbalise this expectation. He recollects the child was observed briefly from afar by [Dr B] who thought she was looking and behaving well. He also said [Dr B] advised discharge and told him not to be concerned about the tachycardia as the child looked so well.

4. [Dr B] in his new response says
    a. He was the supervising consultant
    b. The evening was quite busy
    c. He was seeing his own patients as well
    d. He was not expected to personally review every patient seen by a junior.
    e. In his practice he would be guided by the information provided by the house officer
    f. If expressly asked he would always review the patient
    g. [Dr C] discussed [Miss A] with him at the central work station at a spot which directly looked into her cubicle
    h. He denies that he was alerted to any red flags
    i. He did not see the observation chart or the nurse's documentation
    j. He was not told the child was a category 2
    k. He was presented the child as not being unwell, having a viral infection and being safe to discharge with parents desiring discharge
    l. He was able to see [Miss A] (from afar) and she appeared well and happy based on what he had been advised
    m. He agreed with [Dr C's] plan to discharge [Miss A]
    n. He says his agreement regarding discharge and decision to not personally review [Miss A] was influenced by the information given to him by [Dr C]
    o. He regrets he did not take into account the junior doctor's lack of paediatric knowledge
    p. He regrets that in spite of the abnormal vital signs and her second presentation both of which he was aware of he did not personally review [Miss A].

Comment

[Dr B's] version of the consultation is that [Miss A] was presented as a child who had re-presented to the department within 48 hours, but looked well and probably had an ongoing viral infection. He was not given any red flags. The nurses' concerns, the triage category and parental concerns had not been conveyed to him.

The system he worked in

1. Made him the designated supervisor (There was another consultant running the shift), but
2. Required him to take a case load (big or small), and
3. Did not mandate compulsory senior review of a patient returning to the department

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In an ideal health care system every patient seen by a junior in the emergency department should be reviewed by a consultant. If that's not possible then the system should be set up to enable consultant review of high risk patients. High risk patients can be identified in a number of different ways. One category of high risk patients is those with an unscheduled return to the ED within 48 hours for the same problem. Another category of high risk patients are those with abnormal vital signs. Some would regard children esp. infants as also being in a high risk category.

So in answer to the question whether [Dr B] should have reviewed [Miss A] himself I would say in a perfect world, yes. However we have to take into consideration the fact that [Miss A] was presented as a well infant with a viral infection whose parents were happy to take her home, no other concerns were presented, [Dr B] could see a well child from afar, the department was busy and he had his own case load to deal with. There is no clear set standard around this. As such, although not without risk, his decision to not review [Miss A] personally would not be regarded as significantly different from common peer practice.

Comment on changes made by [Dr B] (response to point 4 raised by the Commissioner)

He has made changes to his practice around consultations from junior staff: he will take into account their lack of experience (especially paediatric) and will read nurses' notes and take into account parental concerns. He will have a lower threshold for reviewing cases personally. In my opinion these are appropriate practice changes. My only comment will be that given another very busy day and the exact set of circumstances there is a risk of this happening to any Emergency Physician. Therefore the DHB should take steps to ensure that systems and monitoring are in place (resources, roles, policies) to enable robust supervision.

Comment on the adequacy of Southern DHB's induction process for locum consultants

The induction process as stated by the DHB is

1. 1.5 hours of IT training
2. 2 days of orientation to the department, equipment, policies, and processes conducted by the SMO team and the Senior Nursing team
3. Supernumery first clinical shift.

On the surface this induction looks adequate. One would assume that all processes around patient safety, supervision of juniors, quality targets, referrals, documentation, discharge, lab and radiology results follow up, hospital and interdisciplinary interaction, CME requirements, leave, clinical duties vs nonclinical duties, filling of ACC forms for overseas applicants etc would be covered. I would recommend the Commissioner obtain a SHORT list of KEY existing policies and guidelines, particularly with regard to consultant role, junior supervision and patient safety in the ED, to his satisfaction.

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Comment on the adequacy of policies set in place by Southern DHB, pertinent to this case

The following actions have been put in place:

> All ED clinical staff are reminded 3 monthly (presumably to coincide with 3 monthly rotations of house officers) about the procedure around unscheduled paediatric re-presentations.
>
> Returning children will be reviewed by consultant or senior registrar, with a low threshold for review by paediatric staff.
>
> No children will be discharged without a discussion between the treating doctor and the patient's nurse.

The paediatric follow up phone call process has been detailed. An internal referral will be faxed to [the Paediatric Department] and a handout given to parents informing them of the pending phone call.

The nursing documentation form for paediatric presentations is thorough, with good check lists in place for primary assessment, an Early Warning Score, parental concerns and safe discharge. In a future revision it might be prudent to consider including a tick box for referral for [the Paediatric Department] phone review.

All clinical staff are encouraged to challenge decisions to discharge (when concerned) and are encouraged to bring their concerns to the Nurse in charge or the senior doctor on duty.

All phone calls coming in from community seeking advice are redirected by staff to [the telehealth service]. A direct line has been established so staff can easily transfer the call.

The DHB says they had a supervising consultant on the particular shift in question ([Saturday evening]). I notice that pertinent to [Miss A's] presentation there was probably no more than a 15 minute window in which there were two consultants present in the department (one finished his shift at 10pm and the other at midnight, [Miss A] arrived 9.17pm, and left ED at 10.07 pm). Depending on what else was happening in the department at the time this may not have left a consultant free to provide close supervision. The roster appears to have a minimum of two consultants in the day but not consistently two in the evenings Monday to Friday. The weekend cover appears to be 1 consultant in the day and two in the evenings till 10 pm, with 1 remaining on till midnight.

There is evidence of collaboration between the Paediatric department and the Emergency department (meeting minutes 19th May 2015). The Paediatric follow up phone call has been added as a standing agenda for these meetings. There was discussion about an audit of this process. A regular audit would be a good idea.

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Comment

As far as creating safety around paediatric assessment, return paediatric presentations, referral for paediatric phone reviews and communication amongst staff are concerned it appears that adequate procedures have been put in place. Most seem to exist as an 'understanding of process' rather than as a departmental procedure formally dated and signed off by the [clinical director (CD)]. I would recommend a more formal structure to this process in the form of signed off procedures that can be presented to clinical staff at the 3 monthly orientations.

My recommendations around supervision is that the CD and the DHB look at the consultant roster, and see whether it allows for good junior supervision, given the number of juniors to be supervised, and the volumes of patients presenting to the department."

On 19 November 2015 Dr Safih provided the following further advice by telephone:

"[A] consultant should not solely rely on being told all T2 patients and should be proactively looking at the screen to show him/her this. For example, in my own ED this is called a 'work screen'…

… it is reasonable to expect that a consultant presented with a patient and not told about the vital signs (eg heartrate) would either review the notes himself to ascertain that information or would ask the junior doctor what these vitals are."

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