Ambulance Service

Call Handler, Ms B

Clinical Support Officer, Ms C

A Report by the
Deputy Health and Disability Commissioner

Case 17HDC01734

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Contents

Executive summary

1. In 2017, Mr A rang 111 because his wife, Mrs A, woke up bleeding from the site of her recent Caesarean section wound. Mr A asked for an ambulance.

2. Ms B, a call handler, answered the call and established the address and telephone number of Mr A's location and asked Mr A to describe the emergency. Ms B advised Mr A that she was organising help for him immediately, and told him not to touch the wound.

3. Ms B arranged for a clinical support officer, Ms C, to call Mr A. Ms C confirmed with Mr A that Mrs A had recently had a Caesarean section, and that the bleeding was occurring from the Caesarean section wound. Mr A told Ms C that they had woken to feed the baby and had found a pool of blood in the bed, and that when Mrs A got up to go to the toilet she saw blood dripping across the floor. He also told Ms C that he had not sighted the wound and had not applied pressure to it.

4. Ms C confirmed the location for service and advised Mr A that "the next available ambulance [would] come to [him]". Following a discussion about whether or not Mr A should drive Mrs A to the hospital himself, Mr A told Ms C that he was going to go to the hospital straight away.

5. Following admission to the public hospital, Mrs A was taken to theatre for an evacuation of retained products of conception. She had suffered a secondary post-partum haemorrhage[1] and required a blood transfusion.

Findings

6. The Deputy Commissioner found that Ms C breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code)[2] by not applying the correct response code, not giving instructions to control the bleeding, not recommending against self-transport, and not providing detailed instructions on what to do if Mrs A's condition worsened. The Deputy Commissioner also found that by failing to inform Mr and Mrs A of the risks associated with self-transport, Ms C breached Right 6(1) of the Code.[3]

7. The Deputy Commissioner was critical that Ms B did not provide advice to control the bleeding.

8. The ambulance service was not found in breach of the Code.

[1] Excessive bleeding that occurs between 24 hours and six weeks following the birth of a baby.
[2] Right 4(1) of the Code states: "Every consumer has the right to have services provided with reasonable care and skill."
[3] Right 6(1) states: "Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive …"

Recommendations

9. It was recommended that Ms C and Ms B each provide a written apology to the family, and that Ms C undergo refresher training in the use of the MTS system and the application of the various tools available during a call.

10. It was also recommended that the ambulance service provide refresher training sessions on surgical wound scenarios in relation to bleeding control instructions, and on what to say if a patient wants to self-transport to hospital, and provide a copy of Ms C's call review audits between 1 January 2019 and 30 June 2019.

Complaint and investigation

11. The Commissioner received a complaint from Mr A about the services provided to his wife, Mrs A, by Ms B, an ambulance call handler, and Ms C, a clinical support officer (CSO). The following issues were identified for investigation:

- *Whether Ms B provided Mrs A with an appropriate standard of care in 2017;*
- *Whether Ms C provided Mrs A with an appropriate standard of care in 2017; and*
- *Whether the ambulance service provided Mrs A with an appropriate standard of care in 2017.*

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

13. The parties directly involved in the investigation were:

Mr A	Complainant
Mrs A	Consumer
Ms B	Call handler
Ms C	Clinical support officer
Ambulance service	Provider

14. Further information was received from the DHB.

15. Independent expert advice was obtained from Wellington Free Ambulance Intensive Care Paramedic and Educator Ms Julie Sherston (Appendix A).

Information gathered during investigation

16. Mrs A, then aged 30 years, had her baby delivered by Caesarean section.

17. Ten days later, at 0221hrs, Mr A rang 111 because his wife woke up bleeding heavily. He asked for an ambulance.

18. HDC obtained a transcript of this telephone conversation and also of a later telephone conversation.

19. Ms B, a call handler, answered the call at 0221hrs. Ms B established the address and telephone number of Mr A's location and asked Mr A to describe the emergency. Mr A said: "[W]e've just woken up to feed our new baby, and she's [Mrs A] bleeding all over the bed, and she's dripping blood."

20. Ms B asked whether the bleeding was from the Caesarean site, and Mr A said "yes". Mr A told Ms B: "There's a huge, huge pool of blood in the bed. She's got up to the toilet and she's dripping blood all over the floor everywhere."

21. Ms B advised Mr A that she was organising help for him immediately, and told him not to touch the wound.

22. Ms B muted the conversation in order to have "a quick chat to a colleague". The pause lasted for 37 seconds. Ms B then advised Mr A to keep the line free because she was arranging for a nurse or paramedic to call him back to "make sure we are arranging the best help". Ms B told Mr A to call straight back if anything changed.

23. Ms B told HDC that after the call ended, she put through a note to the clinical staff requesting an urgent assessment for the patient.

24. At 0227hrs, Ms C called Mr A and identified herself as a paramedic. Ms C confirmed that Mrs A had recently had a Caesarean section and that the bleeding was occurring from the Caesarean section wound. Mr A told Ms C that they had woken to feed the baby and had found a pool of blood in the bed, and that when Mrs A got up to go to the toilet she saw blood dripping across the floor to the toilet and in the en suite. He told Ms C: "[S]he's dripping blood and her whole pyjamas are soaked." He also told Ms C that he had not sighted the wound and had not applied pressure to it.

25. Ms C enquired whether Mrs A was feeling hot or had had any trouble with the wound or had been feeling unwell in the last few days. Ms C also asked whether Mrs A was on any medication that might make her blood thin. Mr A said that Mrs A was "quite hot" but he did not feel that she had had trouble with the wound or that she had been unwell. He advised Ms C that Mrs A was taking tramadol for pain relief.

26. Ms C confirmed the location for service and advised Mr A that "the next available ambulance [would] come to [him]".

27. Mr A asked Ms C whether he should drive Mrs A to the hospital himself. Ms C asked how far from a hospital Mr A was, and he replied that it was a 20–30 minute drive. Ms C advised:

> "[L]et's, she's feeding the baby at the moment anyway, so let's do that, and let's get some, let's just hold tight, finish that first and then we can reassess … looks like we will have someone … on the way … very shortly … it would just be if there's any life threatening emergencies between now and then … so, if you decide to go, once baby's finished — by all means just give us a call back, … tell us you don't need us."

28. Mr A told Ms C that he was going to go to the hospital straight away. Ms C said: "[N]o worries, if you have any trouble … on the way … stop, put some pressure on and give us a call back … otherwise I'll let you carry on."

29. The call ended at 0233hrs.

30. Mr A drove Mrs A and their baby to the public hospital and arrived at 0250hrs. Mr A believed that Mrs A was in a life-threatening situation because of the amount of blood she was losing, and he decided to drive her to the hospital himself, as he was concerned about the delay in dispatching an ambulance.

31. On arrival at the hospital, Mrs A was pale but her vital signs were normal — a temperature of 36.3°C, pulse of 75 beats per minute, blood pressure of 112/78mmHg, respiration rate of 18 breaths per minute, and an oxygen saturation of 99%.

32. At 1306hrs, Mrs A was taken to theatre for an evacuation of retained products of conception. She had suffered a secondary post-partum haemorrhage[4] and required a blood transfusion.

Further information from the ambulance service

Standard Operating Procedures

33. The Standard Operating Procedures (SOPs) state:

> "CSO's must speak to the patient whenever possible [and] if the clinician is unable to speak to the patient, they must ensure the person they are speaking to is with the patient."

Medical Priority Dispatch System (MPDS)

34. The ambulance service explained that the priority of a call used by the call handlers is determined by a clinical triage tool called the Medical Priority Dispatch System (MPDS). A code is assigned following structured questions that are asked by the call handler. The code is made up of three elements. The first is the main complaint, the second is the priority and is associated with colour response priorities, and the last is additional clinical information that may be useful. The ambulance service stated:

[4] Excessive bleeding that occurs between 24 hours and six weeks following the birth of a baby.

> "In summary, the call handler does not decide the response priority for the incident. The call handler determines the chief complaint through structured questioning and the system then determines the dispatch code. The dispatch code then determines the priority colour."

35. In this case, the code was 21BO1M and the main complaint was bleeding, so Ms B selected "protocol 21 — haemorrhage/lacerations". Bleeding from the abdomen correlated with the "Bravo level" and "determinant descriptor — possibly dangerous haemorrhage". The "M" of the code refers to a medical rather than a trauma event. This then correlated to a response priority of "Green". The colour priorities are:

Purple	Immediately life-threatening — for example, cardiac or respiratory arrest
Red	Potentially life-threatening — for example, serious haemorrhage or chest pain
Orange	Urgent and potentially serious but not life-threatening
Green	Not life-threatening — may be eligible for clinical telephone assessment (CTA)
Grey	Non-urgent — eligible for CTA

36. The ambulance service provided HDC with "Protocol 21", the protocol tool that was selected and used for this call. Protocol 21 outlines that serious bleeding needs to be controlled.

Manchester Triage System

37. The CSOs use an assessment framework called the Manchester Triage System (MTS), which is an electronic card system that uses algorithms and is designed for use by medical professionals to quickly assist with secondary triaging of patients. The MTS assessment ensures that "key symptoms of clinical concern are identified promptly". This provides guidance by way of a series of questions until a determinant is reached so that the most appropriate resource or pathway of care can be actioned. MTS is a guideline only, and clinicians are encouraged to upgrade a response if, according to their judgement, a higher priority is appropriate. In this case, the CSO selected "card 52 — wounds" to help guide her decisions. Card 52 advises to apply pressure to a wound to control bleeding in certain circumstances such as "uncontrollable major haemorrhage" and "uncontrollable minor haemorrhage".

38. The ambulance service also explained that a "face to face NOW" response describes events where a call can be upgraded immediately for an ambulance to be dispatched during a call. The ambulance service stated:

> "[W]ith reference to the language used by [Ms C] during this call, and the way she described an ambulance was coming, it is likely that this call met the criteria for 'face to face NOW' and an ambulance would have been dispatched. The caller elected to take the patient via car to the hospital instead …"

39. The ambulance service also provided evidence of comprehensive SOPs and the training manual for its staff in the use of the various tools utilised during a call. The ambulance service confirmed that it provides training for bleeding control advice, upgrading of calls, and self-transport advice/recommendations to self-transport or not, and that both Ms B and Ms C had received the training. Call handlers have a five-week induction training that includes training on the systems used to triage calls, and they must pass examinations and complete a workbook that requires mentor sign-off. CSOs also have in-depth training and post-course consolidation of their learning, consisting of mentored and assisted shifts.

40. The ambulance service advised HDC that since these events there has been organisational improvement that has addressed areas pertaining to this event — for example, the introduction of an "override and shift function" that allows call handlers to override certain protocols if they feel that the protocol is not appropriate for the main complaint.

Internal review

41. The ambulance service told HDC that two audits of the calls were undertaken. Initially, the call handler call was found to be compliant, but the secondary audit found areas of non-compliance, in that no control of bleeding advice was given, two non-scripted questions were asked, and a 37-second muted pause in the conversation was considered too long.

42. The ambulance service explained the different outcomes:

> "Audit has a number of qualitative aspects and is not entirely quantitative, and although we strive for consistency, some variations between auditors is expected."

43. The ambulance service also reported to HDC that internal reviewers receive two days of training and also attend a weekly national meeting where any reviews they are unsure of are discussed. The ambulance service said that its latest figures show that the reviewers are performing consistently at a high level.

44. A review of the CSO call found the following:

> "[T]he call highlighted that the patient should have been provided advice pertaining to bleeding control such as; sitting down and/or applying pressure to the wound. A further assessment as to the amount of blood loss may also have been useful. This patient should have received advice if her symptoms worsened such as; '*if she becomes dizzy, confused, loses consciousness or the bleeding becomes worse, please call us back immediately'.* Advice was provided to call back if there were '*any troubles'* however it was not clarified with the caller to what that meant."

Further information from Ms B

45. Ms B told HDC that during the call from Mr A, she paused the call for 37 seconds to obtain advice from a colleague, as she felt that the system-generated coding and priority for this patient was too low.

46. Ms B said:

> "Unfortunately, in this instance I didn't provide instructions to control the bleeding as I was focused on the more familiar 'Not to touch a surgical wound' aspect.
>
> …
>
> I was aware that in some non-traumatic incidents where profuse bleeding is reported then it is applicable to provide bleeding control instructions, however, I was not absolutely certain about what those situations were, so I proceeded with what was familiar and known."

47. Ms B told HDC that she has learnt from this event. She said:

> "I am now thoroughly familiar with all instructions about controlling bleeding in all situations. I have had [a] similar incident as this recently and did not hesitate to provide the correct instructions. Furthermore, these learnings have been shared with my colleagues on shift and we regularly discuss rare or difficult situations to make sure we are all aware of the required processes."

Further information from Ms C

48. Ms C told HDC that she underestimated the severity of the bleeding. She used the MTS "discriminator dictionary", which helps to determine the clinical symptoms that are being assessed. She said that she was aware of the differences between bleeding types. She stated:

> "If I had insisted the patient or her husband apply pressure to the wound it would have helped me to determine if it was a 'major uncontrolled haemorrhage' or a 'minor uncontrolled haemorrhage'. I regret not asking for pressure to be applied so that I could assess that aspect more accurately. Unfortunately at the time I did not realise the severity of the bleeding based on the information I was receiving in the assessment about the physical blood loss and the patient's level of cardiovascular compromise given she was standing, mobile and talking normally with no pain or shortness of breath. Had I chosen the 'major uncontrolled haemorrhage' the default for a F[ace] 2[to] F[ace] now box is Orange, with Red if immediately life-threatening situation. Given the patient was standing and mobile, walking, I should have chosen RESP3 Orange Response for this type of bleeding."

49. Regarding advice to control the bleeding, Ms C told HDC that when she called Mr A she thought it strange that he was not applying pressure to the wound, and she had not realised that the call handler had told him not to touch the wound. Ms C said that had she known that he had been given that advice, she would have corrected it, as it contradicts her clinical training in bleeding control.

50. Ms C told HDC that she always intended to send an ambulance, and that when Mr A suggested that he self-transport, she weighed up the distance to the hospital, and the fact that an ambulance had yet to be dispatched. She said that she attempted to advise Mr and

Mrs A to wait and finish feeding the baby, but that on reflection she should have been clearer that her recommendation was to wait for an ambulance, and had she realised the severity of the bleeding she would have been more firm.

51. Ms C has apologised to the family, and reflected:

> "I feel that I could have assessed this presentation more thoroughly and while I asked lots of different questions to assess the severity of the compromise the bleeding had caused, if only I had asked them to apply pressure I would have had a much clearer idea of the severity of the bleeding occurring. I would have then selected an orange response from the discriminators listed and been able to provide them with a much firmer recommendation to wait for an ambulance. I would have recommended she lie down so that she didn't become dizzy or collapse and that firm pressure be applied to reduce ongoing bleeding.
>
> I regret not insisting the caller visualise the wound and apply pressure. I regret not providing a firmer recommendation to wait for the ambulance and I regret not providing more specific and detailed advice and instructions. Every call is an opportunity to reflect and learn. I am a very reflective person and I will carry these lessons with me for the rest of my career."

Responses to provisional opinion

52. Mr and Mrs A were provided with an opportunity to comment on the "information gathered" section of my provisional report. Mr A emphasised the ongoing impact this event has had, and continues to have, on his family. He felt that his "family was let down by the ambulance service and they received no compassion/counselling/reassurance or apology whatsoever".

53. Mr A also stated:

> "It would appear that [the ambulance service] management have correctly identified and acknowledged the serious shortfalls in the medical assessment of [Mrs A]. It is satisfying to acknowledge the effort that [the ambulance service] has taken to address those issues."

54. The ambulance service, Ms C, and Ms B were each provided with an opportunity to comment on the relevant sections of my provisional report. The ambulance service provided two responses to my provisional opinion, which were also on behalf of Ms C and Ms B. Where relevant, the responses have been incorporated into this report.

55. The ambulance service submitted:

> "[Ms C] did not correctly advise the application of pressure to the site and it is therefore difficult to determine if the bleeding was major or minor but there was no other evidence at the time to suggest it was major and all of the subsequent evidence does not support the bleeding being major."

56. The ambulance service provided the audio recording of the CSO call-back. It submitted:

> "[T]he actual recording gives context and highlights the aspects of the conversation that support [Ms C's] approach … Our view is that [Ms C] did provide advice toward the end of the call, and that based on the availability of ambulances at that time, and based on the bleeding sounding like it was not major, it was inappropriate to insist that they wait for an ambulance because it was like[ly] that [Mrs A] was going to reach hospital faster than we were going to have an ambulance reach [Mrs A]."

Opinion: Ms B — adverse comment

57. Mr A called 111 because his wife had woken up to feed their newborn baby and was bleeding profusely.

58. Ms B was the call handler who first received Mr A's call. Ms B ascertained that Mrs A had recently had a Caesarean section and had woken up to find a large amount of blood in the bed and that she was still actively bleeding.

59. Ms B correctly selected "Protocol 21" and, after her questioning, the system selected the response colour as Green, meaning non-life-threatening. At that time, she recognised that Green might not be the correct response to assign, and sought advice from her colleagues. She advised Mr A that a paramedic would call him back to ensure that his wife received the most appropriate care. Ms B advised Mr A not to touch the wound.

60. My expert advisor, Ms Julie Sherston, advised me that it is not common to be presented with bleeding to such an extent as in this incident, and that Ms B correctly consulted with a colleague when she felt that the Green code the system assigned was not the most appropriate.

61. The transcript obtained by HDC indicates that Ms B was aware that there was serious bleeding. She was told by Mr A that Mrs A was "bleeding all over the bed" and "dripping blood", and that there was a "huge, huge pool of blood".

62. The ambulance service reviewed the call and concluded that Ms B should have given Mr A instructions on how to control the bleeding. Protocol 21 provides that serious bleeding needs to be controlled.

63. Ms B said that she was aware that in some situations she should provide advice to control bleeding, but that she was not sure about the particular situations.

64. Ms Sherston advised me that Ms B should have given Mr A instructions on how to control the bleeding. According to the tools in the system, serious bleeding needs to be controlled. Ms Sherston advised that Ms B's failure to provide advice to control the bleeding was a critical failure under the MPDS auditing system, and a severe departure from process.

However, Ms Sherston pointed out that although the failure to provide advice to control the bleeding delayed getting the bleeding under control at the earliest opportunity, it "did not result in a different response for the ambulance at the time".

65. I am guided by Ms Sherston, and accept that Ms B correctly paused the call to seek guidance when she recognised that the severity of the incident was higher than the system assigned and, further, she correctly followed the process for escalation. I also consider this to have been an unusual presentation, and Ms B defaulted to what was more familiar to her, i.e., not to touch the wound.

66. However, I agree with Ms Sherston that Ms B should have provided advice to control the bleeding, and I am concerned that she gave the wrong instruction. I remind Ms B of the importance of applying the tools in the system correctly, and continually refreshing her knowledge to ensure that she is able to deal appropriately with any incident that may arise.

67. I am satisfied that Ms B has learned from this incident. It is positive to note that she has familiarised herself with all bleeding instructions, and that recently she was able to provide the correct advice for a similar incident.

Opinion: Ms C — breach

Application of the discriminator dictionary and response code

68. Ms C was the CSO who called Mr A. Mr A told Ms C that there was a pool of blood in the bed, and that when Mrs A got up to go to the toilet she saw blood dripping across the floor to the toilet and in the en suite. He told Ms C: "[S]he's dripping blood and her whole pyjamas are soaked." He also told Ms C that he had not sighted the wound and had not applied pressure to it. She used the MTS system to guide her decisions, and selected "card 52 — wounds". Her assessment of the situation led to a "Green" response code.

69. Ms C told HDC that she underestimated the severity of the bleeding. She used the MTS "discriminator dictionary", which helps to determine the clinical symptoms that are being assessed. She said that she was aware of the differences between bleeding types. She stated:

> "If I had insisted the patient or her husband apply pressure to the wound it would have helped me to determine if it was a 'major uncontrolled haemorrhage' or a 'minor uncontrolled haemorrhage'. I regret not asking for pressure to be applied so that I could assess that aspect more accurately. Unfortunately at the time I did not realise the severity of the bleeding based on the information I was receiving in the assessment about the physical blood loss and the patient's level of cardiovascular compromise given she was standing, mobile and talking normally with no pain or shortness of breath. Had I chosen the 'major uncontrolled haemorrhage' the default for a F[ace] 2[to] F[ace] now box is Orange, with Red if immediately life-threatening

> situation. Given the patient was standing and mobile, walking, I should have chosen RESP3 Orange Response for this type of bleeding."

70. Ms Sherston advised that card 52 was the correct selection, but that Ms C failed to apply the determinants on the card correctly and, as a result, failed to upgrade the response code from Green to Red, or "at minimum … [Orange]". Ms Sherston advised me that the correct priority for response was an "F2F Now" (a "Face-to-face now"). She considers that the failure to upgrade the response code was a severe departure from the accepted standard of care. She stated: "This upgraded response would have focussed the dispatcher on finding the closest resources as soon as possible."

71. There was significant bleeding and a lack of control of the bleeding. Ms Sherston explained that when card 52 is selected, the fourth question associated with that card explores whether there is an uncontrolled major haemorrhage. Ms Sherston gave the definition from the discriminator dictionary used as "a haemorrhage that is not rapidly controlled by application of sustained direct pressure and in which blood continues to flow heavily or soak through large dressings quickly". Ms Sherston told HDC that a CSO is trained to stop when a determinant is reached, and to upgrade or downgrade the response code and to give immediate care advice.

72. Ms C was aware that Mrs A had been dripping blood onto the floor, and that her pyjamas were soaked with blood.

73. In Ms Sherston's view, the determinant, being an uncontrolled major haemorrhage, was reached at question four, and Ms C should have stopped and upgraded the call to at least a conservative "Orange" response. Ms Sherston said that the correct priority for response was an "F2F Now". I accept Ms Sherston's advice.

74. Ms C has acknowledged that she should have asked Mr A to apply pressure to the wound, which would have helped her to determine whether the bleeding was a minor or major haemorrhage.

Instructions to control bleeding

75. Ms Sherston advised that Ms C's failure to provide Mr A with instructions on how to control the bleeding was a severe departure from the accepted standard of care. The audio transcript indicates that Ms C was aware that pressure was not being applied to the wound. Ms C told HDC that she was surprised that pressure had not already been applied to the wound, and that had she realised that Mr A had been told not to touch the wound, she would have corrected that advice immediately, according to her clinical training. Ms Sherston advised:

> "Whilst the call taker missed this opportunity, the CSO should have given appropriate full instructions in a timely manner when it became clear this was missed by the original call taker. One of the benefits of a call-back using MTS is to provide patient care advice including control of bleeding instructions.

> Most CSOs would have provided detailed instructions on controlling the bleeding regardless of the instructions given by the call taker."

76. I agree with my expert advisor. Ms C has also acknowledged that she should have given this instruction. I consider that regardless of the advice given by Ms B not to touch the wound, the information Ms C had was sufficient for her to have utilised her clinical training and the system tools she had, and to have instructed Mr A to apply pressure to the wound.

Self-transport and advice given for self-transport

77. I accept that Ms C always intended to send an ambulance, and weighed up the distance to hospital against the time it would take for an ambulance to become available. I have also considered that Mr A chose to self-transport.

78. Ms Sherston advised me:

> "Whilst the training does cover that self-transport can be advised from the F2F Now outcome, it is intended that the majority of the time an ambulance will be the most appropriate response for this outcome, especially where life threats are present. However, the clinician can use their clinical judgement and take into account resources, distance to hospital or local A+M [Accident and Medical centre], condition of the patient, and ability to self-transport safely."

79. Ms Sherston advised me that allowing self-transport and not giving appropriate advice on what to do if Mrs A became worse was a moderate departure from the standard of care. In Ms Sherston's opinion, "it was not safe to transport given [Mrs A's] condition, the ability to provide pressure on the wound whilst the husband was driving and watch a new-born as well". Ms C told HDC that had she realised the severity of the bleeding, then she would have been firmer with her recommendation to wait for an ambulance. Ms Sherston advised me that it would be normal practice to advise a caller of the risks of self-transport.

80. The ambulance service told HDC that Ms C should have given Mr A clear advice on what to do if Mrs A became worse if he did choose to drive, rather than just say that if there were "any troubles" to call back.

81. I am guided by Ms Sherston and the ambulance service. I consider that Ms C had sufficient information about the bleeding to recommend firmly that Mr A wait for an ambulance. I am critical that when Mr A indicated that he was going to self-transport Mrs A, Ms C did not give Mr A detailed advice about what to do if Mrs A's condition worsened during the drive to hospital, and did not explain the risks of self-transport.

Conclusion

82. In my view, by not applying the correct response code, not giving instructions to control the bleeding, not recommending against self-transport, and not providing detailed instructions on what to do if Mrs A's condition worsened, Ms C did not provide services to Mrs A with reasonable care and skill, and therefore breached Right 4(1) of the Code.

83. Further, by failing to inform Mr and Mrs A of the risks associated with self-transport, I consider that Ms C failed to provide them with information that a consumer would reasonably expect in the circumstances, and therefore I consider that she breached Right 6(1) of the Code.

Opinion: Ambulance service — no breach

84. As a healthcare provider, the ambulance service is responsible for providing services in accordance with the Code. In this case, I consider that the errors that occurred do not indicate broader systems or organisational issues at the ambulance service. Therefore, I consider that the ambulance service did not breach the Code directly.

85. In addition to any direct liability for a breach of the Code, under section 72(2) of the Health and Disability Commissioner Act 1994 (the Act), an employing authority can be vicariously liable for any acts or omissions of its employees. Under section 72(5), a defence is available to the employing authority if it can prove that it took such steps as were reasonably practicable to prevent the acts or omissions of an employee.

86. At the time of this event, Ms B and Ms C were employees of the ambulance service.

87. The acts and omissions for which the ambulance service could be considered liable include the failure to provide bleeding control advice; the failure to recommend against self-transport; the failure to provide advice on what to do if Mrs A's condition became worse; and the failure to upgrade the call from a "Green" response code to an "Orange" response code.

88. For the purpose of my investigation, I have considered the circumstances in which both Ms B and Ms C independently, on separate calls, omitted to advise Mr A to apply pressure to Mrs A's wound to control the bleeding. This of itself may suggest a general deficiency in the organisation's induction/training framework or some other organisational failure. However, I have also reviewed and considered the training manuals and quality assurance documentation that provides for the relevant training and quality of service. The ambulance service provides training on giving bleeding control advice; on the upgrading of calls; and on self-transport advice/recommendations to self-transport or not to self-transport, and this training had been provided to Ms B and Ms C. I consider that the ambulance service had trained its call takers appropriately.

89. I am satisfied that the ambulance service took reasonably practicable steps to prevent Ms B's and Ms C's errors. I find that the ambulance service is not vicariously liable for Ms B's omission or Ms C's breach of the Code.

Other comment

90. I have also considered whether the different outcomes of the call review suggest a systems and/or an organisational failure. Ms Sherston has advised that the compliance

difference between the two reviews may indicate a knowledge gap with one of the case auditors. The ambulance service explained that the reviewers receive training but that some variation between auditors is to be expected. I do not consider that the difference in reviews suggests a systems and/or an organisational failure due to the training and support provided for the audit process, including an audit system for audits. It is my opinion that the difference in the two reviews was likely a knowledge gap with the reviewer. I am pleased that the ambulance service has in place a robust system for reviewers to seek collegial advice and openly discuss reviews, which in turn should aid in addressing any knowledge gaps.

Recommendations

91. I recommend that Ms B provide a written apology to the family, to be sent to HDC within one month of the date of this report, for forwarding.

92. I recommend that Ms C:

a) Provide a written apology to the family, to be sent to HDC within one month of the date of this report, for forwarding; and

b) Undergo refresher training in the use of the MTS system and the application of the various tools available during a call. Evidence of the training is to be provided to HDC within six months of the date of this report.

93. I recommend that the ambulance service:

a) Provide refresher training sessions to call handlers on surgical wound scenarios in relation to bleeding control instructions. Evidence of the training is to be provided to HDC within six months of the date of this report.

b) Provide refresher training sessions on what to say if a patient wants to self-transport to hospital. Evidence of the training is to be provided to HDC within six months of the date of this report.

c) Provide HDC with a copy of Ms C's call review audits between 1 January 2019 and 30 June 2019. If expected compliance is not achieved, the ambulance service is to consider and provide to HDC further improvements that could be made to ensure compliance. The results of the audits and consideration of any further improvements should be sent to HDC within six months of the date of this report.

Follow-up actions

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

95. A copy of this report with details identifying the parties removed, except the expert who advised on this case, will be sent to Ambulance New Zealand.

Appendix A: Independent advice to the Commissioner

The following expert advice was obtained from Ms Julie Sherston:

"I, Julie Sherston have been asked to provide an opinion to the Commissioner on case number C17HDC01734, and I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

My qualifications:

- Certified MPDS Instructor for the International Academies of Emergency Dispatch. (MPDS — Medical Priority Dispatch System)
- Certified Emergency Dispatch — Quality for the International Academies of Emergency Dispatch.
- Certified ProQA Instructor for the International Academies of Emergency Dispatch. (ProQA — Professional Quality Assurance)
- Educator for Wellington Free Ambulance Communications Centre for 12 years.
- Educator for the Clinical Desk — Particularly the use of the Manchester Triage System. (MTS).
- Intensive Care Paramedic — (lapsed authority to practice)
- Certificate in Adult Teaching.

Expert advice requested

Please review the enclosed documentation and advise whether you consider the care provided to [Mrs A] by [the ambulance service] was reasonable in the circumstances, and why.

In particular, please comment on:

- *The appropriateness of the triage and priority category assigned to [Mrs A].*
- *The quality of advice given by the call handler in regards to not touching the wound.*
- *Whether [Mr and Mrs A] were given the appropriate information on Ambulance availability.*
- *Any other matters in this case that you considered warrant comment.*

For each question, please advise:

- *What is standard of care/accepted practice?*
- *If there has been a departure from the standard of care or accepted practice, how significant a departure do you consider this to be?*
- *How would it be viewed by your peers?*
- *Recommendations for improvement that may help to prevent a similar occurrence in future.*

If you note, there are different versions of events in the information provided please provide your advice in the alternative. For example, whether the care was appropriate based on scenario (a), and whether it was appropriate based on scenario (b).

I have reviewed the provided documents which included:

- Letter of Complaint
- [The ambulance service's] Letter of Response
- Call Transcripts
- Comments from Complainants

Background

[At 2:21] [Mrs A] awoke to find that she was bleeding profusely from the site of her caesarean section she received [10 days earlier]. Her husband called the Emergency Service and advised the call handler that there was a large pool of blood in the bed, and that the wound was dripping blood. They were instructed not to touch the wound or to give [Mrs A] anything to eat or drink. The handler then assured [Mr and Mrs A] that help was being arranged, and that they would speak to a colleague quickly. After a short time, the handler returned to the phone, and advised that a paramedic or nurse would be contacting them shortly but if there were any changes they should call 111. The incident was coded 21B01 — a possible dangerous haemorrhage medical — and triaged Green response priority.

At 2:27 [Mr and Mrs A] received a call from a Paramedic from [the ambulance service]. The paramedic ascertained that [Mrs A] was still bleeding from the left side of her wound. They asked [Mr A] to check for his wife's temperature, to which he stated she was 'quite hot'. The paramedic also questioned if the wound itself was red or inflamed to which [Mr A] replied he could not see the wound due to her pyjamas and she was holding their baby. After more questioning, [Mr A] inquired whether he should drive his wife himself to hospital. The paramedic stated that an ambulance was on the way very shortly but if [Mr A] wished to travel to hospital himself he could. [Mr A] then drove his wife to hospital where it was found she had a very low blood count and was in need of a transfusion. At the time of the call, [the ambulance service] now advises there were no available Ambulance vehicles in the vicinity of [Mr and Mrs A's] home.

Note: As there were two persons using two different systems I have provided my opinion on each person and system separately. I have covered this based on the chronological order of events. i.e. the EMD call handler followed by the CSO call taker.

EMD Call Handler:

Question 1. The appropriateness of the triage and priority category assigned to [Mrs A].

The incident was correctly coded as 21B01 (POSSIBLY DANGEROUS Haemorrhage) using the Professional Quality Assurance (ProQA) software tools. ProQA is the software enhanced version of the system called Medical Priority Dispatch System

(MPDS). The response colour assigned to this incident is a green response (green — Not Life Threatening). The response colours (prioritisation of the response by an ambulance) are determined for allocation by the agency's local response group (Steering committee) not by MPDS as stated in [a letter from the ambulance service].

It appears that the Call Handler has either messaged or informed the CSO that there are some concerns with this call as there is a documented pause by the Call Handler. This indicates that the Call Handler has correctly followed the Standard Operating Procedure (SOP) to inform the CSO if they believe the response for this call was incorrect either if the code was correct. This is the accepted practice and was followed correctly.

Recommendations for the future:

The ProQA system has some in-built functions. The use of these functions has been left to the individual agencies to decide as to whether they allow their Call Handlers to utilise them. These functions are 'Override' and 'Shift' [and] currently the Communications Centres in New Zealand have taken a more traditional approach. This approach relies on the Call Handlers manually escalating incidents where they recognise the severity of the patient as being higher than the assigned response priority to a Team Manager Communications (TMC) or Clinical Paramedic Advisor (CPA)/Clinical Support Officer (CSO) for review. This is the process followed in this incident. This manual process adds a delay whilst the clinician calls them back, re-triages the patient, revises the response priority where necessary and sends the incident back into the dispatchers' queue to assign a resource.

My recommendation would be to develop a local policy enabling the use of the in-built functions. This would enable the Call Handler to upgrade the response when clear criteria have been discovered during the call process but has not been considered by the logic sequence of ProQA software. The shift function works by giving the Call Handler the ability to select the highest response when the patient's condition meets the criteria for two or more ProQA codes within the same determinant level. This recommendation ensures that the appropriate patient care response is considered when both conditions are present. If the call involved a POSSIBLY DANGEROUS Body area and no SERIOUS Haemorrhage being present, this would not result in an upgrade. If both conditions are present i.e. POSSIBLY DANGEROUS Body area and SERIOUS Haemorrhage, then a 'Shift' would be applied and result in an upgraded patient appropriate response.

However, to enable this to occur I also recommend a review of the SERIOUS Haemorrhage response to a higher response level. This could be either an orange or red response. In this incident there are two ProQA codes available — 21B01 (POSSIBLY DANGEROUS Haemorrhage) and 21B02 (SERIOUS Haemorrhage). Currently these are both assigned a green response. I recommend the 21B02 be assigned a higher response.

For future similar incidences this would take the form of allowing the Call Handler to use the function call 'shift'. This would mean the Call Handler could use shift and assign the coding as 21B02 and generator a higher response in a timelier manner without having to involve another call to the caller. This would reduce the time delays, the caller having to go through another assessment (set of questions) and provide a more appropriate level of service. It was clear by the Call Handler's actions to seek escalation that they have sufficient knowledge to successfully impact on better outcomes for the patient.

Question 2. The quality of advice given by the call handler in regards to not touching the wound.

There were two call reviews completed for this incident. The letter dated 9 October 2017 states: 'following a secondary audit/review of the initial 111 call, it has been determined that the call handling was non-complaint in regard to the provision of instructions to control serious bleeding from a surgical site. (Note: this differs to the original audit findings by the previous complaint investigators).' I have read the transcript of the call and agree with the secondary review that the Call Handler has not correctly followed the instructions within ProQA. The ProQA instructions state: '(Surgical Wound) Do not touch the wound.' However, there is also a critical EMD information statement below which states: '(Surgical Wound) Control bleeding only if SERIOUS.' MPDS and ProQA both have the definition for SERIOUS Haemorrhage as 'Uncontrolled (spurting or pouring) from any area, or anytime the caller reports "serious" bleeding.' Based on the information given by the caller on numerous occasions the patient did fit into the definition of SERIOUS Haemorrhage.

The Call Handler did depart of the standard of care or accepted practice when missing the instructions to control bleeding. This departure did not result in a different response for the ambulance at the time. It did delay getting the bleeding controlled at the earliest possible opportunity. It is not common to be presented with a surgical wound bleeding to the extent described in this incident. Unless this protocol is regularly reviewed by Call Handlers it can be missed.

Severity of Departure: The departure from process under the MPDS audit system would be considered a critical deviation, however given that the current assigned response level is the same. This is a severe departure from process.

Recommendations for the future: I recommend that regular scenario-based training and reminders are given to all Call Handlers. This will ensure the less common/ frequently used information is refreshed with the Call Handler and are more familiar with it, to apply this knowledge when required.

Question 3. Whether [Mr and Mrs A] were given the appropriate information on Ambulance availability.

The Call Handler has followed all the correct processes for ProQA. This system does not allow the Call Handler to give ETAs. This is because Call Handler does not have

sufficient information available to give this at the time of the call. The International Academies of Emergency Dispatch and the Emergency Medical Dispatch — Quality (EMD-Q) Performance Standards has a universal customer service standard 7 (Don't create uncontrollable expectations). This standard says that Call Handlers avoid any statements that may create unattainable or unrealistic expectations for the caller. This includes giving ETAs. This is due to the inability for the Call Handler to predict such things as driving conditions, travel routes and travel times. The Call Handler followed the correct process.

There is a SOP for second calls requesting ETAs however, [as] this was not a second call back to the Communications Centre it is not applied.

I do not have any recommendations for the Call Handler's call in relation to the ambulance availability.

Question 4. Any other matters in this case that you considered warrant comment.

My understanding [is that] the methodology used by the reprioritisation group for local responses is based on historical data and uses a percentage-based algorithm to arrive at the response colours. This information is gathered from the patient reports and is based on the Ambulance Officers patient status codes. These status codes are open to interpretation or are subjective.

Recommendation:

The methodology be reviewed to ensure it is in line with best practices internationally. Given that two call audits were undertaken with a different outcome, it would suggest there is a knowledge gap with the case auditor. There should not be such a large compliance difference between the two reviews.

Recommendation:

Regular independent review of auditors to establish and ensure consistency.

CSO Call Taker:

Question 1. The appropriateness of the triage and priority category assigned to [Mrs A].

In my opinion there are several failures within this part of the call process by the CSO.

There is no mention of the use of the Manchester Triage System (MTS) being used in either letter from [the ambulance service]. The SOP for the Clinical Desk states that 'Upgrading will be done following call back utilising MTS or be in accordance with CHSOP 2.4'. There appears to be no review/audit of this call. I would have expected this to have been included in the initial investigation.

For this call the correct MTS card to have used is 52 — Wound. When the CSO applies this card the fourth question is around exploring the Uncontrolled Major Haemorrhage. The CSO has access to the Discriminator Dictionary. The dictionary

definition for Uncontrolled Major Haemorrhage is 'a haemorrhage that is not rapidly controlled by application of sustained direct pressure and in which blood continues to flow heavily or soak through large dressings quickly'. The training supplied to the CSOs is to stop when a determinant is reached. Based on this definition a determinant was reached at question 4 and should have resulted in an upgrade. The training states to upgrade or downgrade using the RESP Codes. Give immediate care advice.

I believe the standard of care was lacking for this call. There is no evidence to say the CSO used the correct MTS card, reviewed the discriminator dictionary, stopped once a determinant was reached and applied the correct response code of RESP 2 (RED Response) or at minimum being conservative RESP 3 (Orange response). The CSO was required to give immediate care advice before moving on. Based on the transcript this caller did not receive any advice until the very end and this was very limited. The correct priority for response was a 'F2F Now' (Face to face now). This defaults to an orange response with the ability to move to a red only if immediately life-threatening problem. The failure to apply this minimum response is a departure from the accepted practice. In fact, I note the call re-entered the queue for dispatch at 2.31 as a green priority. This should have been at a minimum of an orange response. Given that there were potentially 3 ambulances available at 2.31 who could respond to the patient had the upgrade response been assigned. This upgraded response would have focussed the dispatcher on finding the closest resources as soon as possible. I believe this indicates a lack of following an appropriate standard of care.

The other departure from the documented SOP was that at no time did the CSO ask to speak to the patient. The SOP states: 'CSO's must speak to the patient whenever possible.' They did follow the SOP 'if the clinician is unable to speak to the patient, they must ensure the person they are speaking to is with the patient.' Whilst the training does cover that self-transport can be advised from the F2F Now outcome, it is intended that the majority of the time an ambulance will be the most appropriate response for this outcome, especially where life threats are present. However, the clinician can use their clinical judgement and take into account resources, distance to hospital or local A+M, condition of the patient, and ability to self-transport safely.

My opinion for this call would be that it was not safe to self-transport given the patient condition, the ability to provide pressure on the wound whilst the husband was driving and watch a new born as well.

Based on the information gathered it is my opinion that the CSO should have upgraded this to a minimum of an orange response.

Severity of Departure:

With regards to the departure:

- On not speaking to the patient. I would rate this departure as mild. This is due to the being with the patient.

- On incorrect selection of MTS card. I would rate this as severe. This is due to having an outcome on the patient and their care.
- On not applying the discriminator dictionary definition correctly. I would rate this as severe. This is due to the significant bleed involved and the lack of control to the bleeding.
- On not applying the correct response code. I would rate this as severe. This is due to the risk to the patient outcome with a delayed response or no response.
- On allowing self-transport. I would rate this as moderate. This is due to the risk as mentioned above in the husband driving the patient, however they do have the right to select self-transport but the risks of doing so should be given to the patient.

Recommendations for the future:

The CSO undergoing some remedial training related to the use of the MTS tool, the benefits of the tool and application of the SOP. The lack of correct utilisation of the MTS tool increased the risk to patient safety.

Greater oversight and review of CSOs including the number of calls audited. This would enable trends and continued education training to be developed. This is the best safeguard to ensure the patient care is of the highest standard.

Question 2. The quality of advice given by the call handler in regards to not touching the wound.

Whilst the call taker missed this opportunity, the CSO should have given appropriate full instructions in a timely manner when it became clear this was missed by the original call taker. One of the benefits of a call-back using MTS is to provide patient care advice including control of bleeding instructions.

Most CSOs would have provided detailed instructions on controlling the bleeding regardless of the instructions given by the call taker.

Severity of Departure:

The lack of instructions to control the bleeding, I would consider this to be severe. This is due to the impact on patient outcome.

Recommendations for the future:

As above provide more training for the CSO. Guidelines included that regardless of call taker giving instructions that CSO give detailed control bleeding instructions to ensure they are being followed as per the call taker's instructions.

Question 3. Whether [Mr and Mrs A] were given the appropriate information on ambulance availability.

The SOP for an ambulance required to attend is to give the caller this statement: 'My colleague is arranging help for you. Bear with me one moment.' This statement was not used during the call and the caller was not aware one was coming. This relates to

the incorrect coding of the response. I believe had the caller known earlier in the call an ambulance was being organised he would have been less likely to have transported his wife.

CSOs have often been heard to advise the caller the response has been upgraded.

Recommendation for the future:

Where a call has been upgraded based on using the MTS tool that the caller is advised of the upgraded response. This will reduce the anxiety faced by the caller talking to multiple people and make them aware an ambulance is responding.

Question 4. Any other matters in this case that you considered warrant comment.

Some guidance given on what to say when the caller wants to self-transport and when it is not in the best interests of patient safety. This currently is very ad hoc and adds risk to the patient and others.

I have listed a summary of my opinions and recommendations below.

Overall Findings:

- The Call Handler missed the control bleeding instructions.
- The Call Hander identified the need to follow the escalation process.
- The CSO missed the opportunity to upgrade the call appropriate to the patient's needs.
- The CSO failed to follow the MTS tool structure and SOP.
- The failure to upgrade resulted in a delay in the closest available resource being sent as early as possible.
- The enhanced functions within ProQA were not available for use.

Recommendations:

- Develop local policy to use in-built functions in ProQA.
- Revise the response colour for SERIOUS Haemorrhage on Protocol 21.
- Regular training for Call Handler on infrequently used surgical wounds.
- The methodology being used by the reprioritisation group be reviewed to ensure it is in line with best practices internationally.
- Regular independent review of auditors to establish and ensure consistency.
- The CSO undergoing some remedial training related to the use of the MTS tool, the benefits of the tool and application of the SOP.
- Greater oversight and review of CSOs including the number of calls audited.
- Guidelines included that regardless of call taker giving instructions that CSO give detailed control bleeding instructions to ensure they are being followed as per the call taker's instructions.
- The caller is advised that the call has been upgraded based on using the MTS tool.

- Guidance given on what to say when the caller wants to self-transport and when it is not in the best interests of patient safety.

Secondary Review on 14 October 2018.

I, Julie Sherston have been asked to provide an additional opinion to the Commissioner on case number C17HDC01734, and I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

The additional request:

Please consider whether the responses to notification changes your advice with regards to the severity of the breaches and if so please set out the reason why. Please note, your opinion should not [be] based on the outcome of the action or inaction but rather on whether the action or inaction itself is a departure from the standard of care.

I have reviewed the additional provided documents which include:

- Email regarding the term of Clinical Support Officer.
- REP3078 Call Review Summary
- 9 April 2018 Letter from HDC
- 21 May 2018 Letter from [the ambulance service]
- Standard Operating Procedure
- Emergency Call Taking — CHSOP 2.10
- Notification Responses

Severity of Departure: Quality of advice given by the call handler in regards to not touching the wound.

The departure from process under the MPDS audit system would be considered a critical deviation, however given that the current assigned response level is the same. This is a severe departure from process.

Upon reviewing the additional information provided and taking into consideration this, I would still consider this to be a severe departure from process.

Severity of Departure: CSO

With regards to the departure:

- On not speaking to the patient. I would rate this departure as mild. This is due to the husband being with the patient.
- On incorrect selection of MTS card. I would rate this as severe. This is due to having an outcome on the patient and their care.
- On not applying the discriminator dictionary definition correctly. I would rate this as severe. This is due to the significant bleed involved and the lack of control to the bleeding.
- On not applying the correct response code. I would rate this as severe. This is due to the risk to the patient outcome with a delayed response or no response.

- On allowing self-transport. I would rate this as moderate. This is due to the risk as mentioned above in the husband driving the patient, however they do have the right to select self-transport but the risks of doing so should be given to the patient.

Upon reviewing the additional information provided and taking into consideration this.

1. I would still consider not speaking to the patient as a mild departure from process.
2. Based on the information provided by the Clinical Support Officer it appears that the correct MTS card was selected for this call and patient's presentation. Based on this there is no evidence to support there was a departure from the standard of care.
3. Not applying the discriminator dictionary definition correctly. I would still rate this as a severe departure of process. This is due to the significant bleeding involved and the lack of control to the bleeding.
4. Not applying the correct response code. I would rate this as a severe departure from the standard of care. This is due to the incorrect exploration and application of the classification of the bleeding as mentioned above. These are closely linked to each other. The default setting within the MTS system is for a face to face now response.
5. Allowing self-transport. I rated this as moderate departure on my first review. This is due to the risk of the husband driving the patient, whilst caring for his wife and baby. This patient required an ambulance as part of the normal standard of care. It is difficult to match this standard of care with that of the patient code of rights. It is normal practice to advise a caller of the risks to self-transport. Based on that lack of normal process and the risks of self-transport, it is a moderate departure from the standard of care.

Severity of Departure: Quality of advice given by the CSO in regards to controlling the bleeding.

The lack of instructions to control the bleeding by the CSO is a severe departure of the standard of care. Based on the additional information received this is still a severe departure of the standard of care."

The following further advice was provided by Julie Sherston:

"I have listened to the audio [of the CSO call back] and it does provide more context than the transcript. I acknowledge this was a difficult call. Based on the audio I still stand by my advice."