

**St John of God Hauora Trust
Enrolled Nurse, EN C**

**A Report by the
Deputy Health and Disability Commissioner**

(Case 19HDC01464)

Contents

Executive summary	1
Complaint and investigation	2
Information gathered during investigation.....	3
Relevant standards.....	12
Opinion: St John of God Hauora Trust — breach.....	13
Opinion: EN C — breach.....	18
Recommendations.....	20
Follow-up actions	21
Appendix A: Independent advice to the Commissioner	22
Appendix B: Independent advice to the Commissioner.....	40

Executive summary

1. This report concerns the care provided to a woman at an assisted living facility before and after the woman sustained burns to her thighs. The Deputy Commissioner highlights the need for nursing and caregiving staff to adhere to residents' care plans, keep consistent and detailed documentation, communicate effectively, and seek clinical review in a timely manner. The Deputy Commissioner also comments on the importance of service providers having robust policies and procedures in place to support staff in caring for particularly vulnerable residents.
2. The woman lives with spastic quadriplegia and does not communicate verbally. She was a resident of the community home (owned by St John of God Hauora Trust) at the time of events. She used continence products at all times, and these were to be checked and changed regularly. There were several oversights in the management of the woman's continence products, including the use of an inappropriate size, and a delay in monitoring and replacing the continence product for 12 hours. Subsequently, it was discovered that the continence product leaked, and that the woman had sustained burns to both thighs.
3. There was also a lack of frequent pain assessments, inadequate medication administration, inconsistent documentation, a failure to seek timely medical review, and insufficient communication with the woman's welfare guardian.

Findings

4. The Deputy Commissioner found St John of God Hauora Trust in breach of Right 4(1) and Right 3 of the Code for failing to provide services with reasonable care and skill, and for failing to provide services in a manner that respected the woman's dignity.
5. The Deputy Commissioner also found the Community Homes Manager, an enrolled nurse, in breach of Right 4(1) of the Code for her failure to seek clinical advice from a registered nurse, and for providing insufficient guidance to staff when the burns were reported to her. The Deputy Commissioner was also critical of the nurse's management of the facility's continence products.

Recommendations

6. The Deputy Commissioner recommended that St John of God Hauora Trust provide evidence that the recommendations set out in the internal investigation have been implemented, consider implementing a handover tool to ensure that relevant information is communicated, undertake an audit of its Medication Administration Records, undertake an audit to confirm that adequate continence product supplies are being maintained, consider reviewing the adequacy of its process in place for sourcing medical care, and provide a written apology to the woman.
7. The Deputy Commissioner recommended that the enrolled nurse provide a written apology to the woman, and that the Nursing Council of New Zealand consider whether a review of the enrolled nurse's competence is warranted.

Complaint and investigation

8. The Health and Disability Commissioner (HDC) received a complaint from Mrs B about the services provided to her daughter, Ms A, at a St John of God community home. The following issues were identified for investigation:

- *Whether St John of God Hauora Trust provided Ms A with an appropriate standard of care between 4 July 2019 and 7 July 2019 (inclusive).*
- *Whether Enrolled Nurse EN C provided Ms A with an appropriate standard of care between 4 July 2019 and 7 July 2019 (inclusive).*

9. 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.

10. The parties directly involved in the investigation were:

Mrs B	Complainant/consumer's mother and welfare guardian
St John of God Hauora Trust	Provider
EN C	Community Homes Manager/provider

11. Further information was received from:

RN D	Clinical Coordinator
RN E	Clinical Manager
EN F	Enrolled nurse
Ms G	Support worker
Ms H	Senior support worker
Ms I	Support worker
Ms J	Senior support worker
Ms K	Support worker
District Health Board	

12. Also mentioned in this report:

Mr L	Support worker
------	----------------

13. Independent expert advice was obtained from a registered nurse and lead quality auditor, Christine Howard-Brown (Appendix A), and from a plastic surgeon, Dr Sally Langley (Appendix B).

Information gathered during investigation

Introduction

Ms A

14. Ms A, aged in her twenties at the time of events, lives with spastic quadriplegia¹ and does not communicate verbally. She is fed via a gastrostomy² and mobilises using a wheelchair. At the time of events, she had been living in a St John of God Hauora Trust (SJOG) community home for approximately seven years. Ms A's welfare guardian is her mother, Mrs B.
15. In response to the provisional opinion, SJOG noted that although Ms A does not communicate verbally, she is able to make her general feelings known through facial expressions, and often can be very vocal at night.

Care plan

16. The Personal Care Plan (the Care Plan) for Ms A, completed on 13 March 2019, recorded that she was nil by mouth and was to be fed via her PEG³ only. The Care Plan also recorded that Ms A was to receive a bed wash every morning and be showered every evening, and that DenTips⁴ were to be used twice daily and chlorhexidine mouthwash once daily for oral cares.
17. Under the "Continence and/or Elimination" section of the Care Plan, it was recorded that Ms A used continence products 24/7, and that SJOG staff were to check the continence product regularly to see whether it needed changing. The specific size of continence product used and the specific timing for staff to check the product was not recorded. Under the "Pain Management" section, it was recorded that staff were to look for non-verbal signs of pain from Ms A, including "[c]hange of mood, signs of grimacing, crying or making noises".

Community Homes Manager

18. EN C was appointed to the role of Community Homes Manager at the community home approximately a year prior to these events.⁵ At the time of events, SJOG's position description for Community Homes Manager included the requirement to "[c]ommunicate and interact as necessary [with staff members] to ensure excellent delivery of clinical services", and to maintain relationships with suppliers to ensure "[s]afe, effective, and timely delivery of supplies".
19. SJOG told HDC that EN C, as Community Homes Manager, was working under the delegation and direction of the Clinical Manager and the Clinical Coordinator.

¹ Spastic quadriplegia is type of cerebral palsy, which refers to a group of disorders affecting a person's ability to move. Spastic quadriplegia means that a person's whole body is affected.

² The surgical formation of an opening through the abdominal wall into the stomach.

³ Percutaneous endoscopic gastrostomy, a type of feeding tube that is inserted through the gastrostomy.

⁴ Oral swabs.

⁵ EN C resigned from this role following these events.

4 July 2019

20. At 3am on 4 July 2019, Ms A's PEG was noted to be leaking. Support worker Mr L recorded in the progress notes that Ms A was changed, and the leaking PEG pump corrected. Ms A was noted to be "very vocal" overnight. Mr L stated that he changed Ms A's continence product for a size XL⁶ because there was no supply of the correct size in the room. Mr L did not document in the progress notes that he had replaced Ms A's continence product with the incorrect size, but said that he had reported this verbally to the staff in the morning.
21. At 6.30am, Mr L documented in the progress notes that he had given Ms A her morning cares, including brushing, wiping, and combing her hair, and cleaning her teeth.

Morning shift

22. Support worker Ms K was working 7am–3pm on 4 July 2019. She said that night staff handed over that a different pad had been applied as there were no supplies of Ms A's allocated pad. At 2.10pm, Ms K documented in the progress notes that Ms A was "unsettled when [morning] staff commenced but then settled and went back to sleep". Ms K also documented that Ms A's bowels had not opened but that she was in "good spirits" and all cares had been attended to.
23. Ms K said that she did not check Ms A's continence product after lunch as the new continence products had not arrived at that point. Ms K stated that the supply of continence products arrived at 2.45pm. Senior support worker Ms J handed over to the afternoon staff that Ms A's product had not been changed because of a lack of supply of continence products.
24. Both Ms K and Ms J acknowledged that Ms A's continence product was left on too long and should have been checked earlier.

Afternoon shift

25. Support worker Ms G, who was working 4.30pm–9pm on 4 July 2019, stated that at approximately 4.30pm, she checked on Ms A, who was in the lounge and appeared happy and in no distress. Ms G said that she then began putting away the continence product order and assisted another resident with feeding.

Burns discovered

26. Ms G stated that at approximately 6.45pm, she took Ms A to her room and hoisted her into her bed. Ms G said that she then noticed that Ms A's trousers and cushion on her wheelchair were very wet. She removed Ms A's trousers and discovered that Ms A's continence product was "soaked", and that Ms A had "what looked like a burn and blisters to both inner thighs/groin area and down [her] legs". Ms G said that she called another support worker, Ms I, to view the burns, and they were "both upset at the extent of the burn/blisters". Ms I told SJOG's internal investigation that she was surprised to see the extent of the burns/blisters.

⁶ It appears that Mr L was mistaken about the size of replacement continence product used, as other SJOG staff say that Ms A was found in a size XXL continence product.

27. According to SJOG's internal investigation notes, both Ms G and Ms I said that Ms A was wearing a size XXL continence product, rather than her usual medium. Ms G also said that the product was not fitting properly. Ms G and Ms I both stated that they regularly ran out of continence products for residents, and that this had been raised with the manager previously.

Call to Community Homes Manager

28. Ms G rang EN C and "advised of the extensive burn/blister to both legs". Ms G said that EN C advised her not to shower Ms A, and to cover the blisters and keep pressure off the areas. Ms G stated that she asked whether she should take photos of the blisters and send these to EN C, but "[EN C] said no and advised she could not diagnose over the phone". Ms G said that she also asked EN C whether they should send Ms A to hospital, but EN C said no.
29. Ms I stated that Ms G told her that "[EN C] said [Ms A] did not need to go to hospital [and] just [to] make her comfortable". Ms I said that she completed observations and they were all within the normal range.
30. EN C told HDC that to the best of her recollection, Ms G neither offered to take photos nor asked whether she should send Ms A to hospital. EN C stated that she asked questions about Ms A's condition, including whether she was in pain, and thought that it would be better for Ms A to be seen by the Clinical Coordinator, who was to visit the facility the following morning.
31. At 11.05pm, Ms I updated the progress notes, noting that Ms A was then sleeping following the discovery of the "large burns". Ms A had been given paracetamol at 7.15pm, which Ms I documented in both the progress notes and the Medication Administration Record (the MAR), to which she also added her initials. There is no record of whether Ms A was exhibiting signs of pain at that time, or whether the paracetamol was effective.
32. That evening, Ms G filled out an Event Notification Form (the Event Form). She wrote that the burns were "large", but also noted that Ms A did not appear to be in any pain or discomfort.

5 July 2019

33. Overnight on 4–5 July 2019, Mr L wrote in the progress notes that he checked Ms A regularly after receiving handover about the burns. He noted that Ms A was "sleeping well" and that the "burns on [her] thigh turned to blister and liquid [oozing]". The progress notes record that Ms A was given paracetamol at 6.30am, and the MAR shows that paracetamol was administered "nocte" (at night), along with Mr L's initials. There is no record of whether Ms A was exhibiting signs of pain at that time, or whether the paracetamol was effective.

Review by Community Homes Manager and Clinical Coordinator

34. EN C told HDC that she and the Clinical Coordinator, Registered Nurse (RN) D, reviewed Ms A together on the morning of Friday, 5 July 2019.
35. RN D stated:
- “On examination it appeared to me that the blisters and red tracking marks were from incorrectly fitted incontinence briefs which [Ms A] wears at all times. ... There was no extended redness (scalding) or heat as you would expect from a burn, the area affected was significant, there was redness and blistering along a line similar on both legs. There were no signs of infection. In my experience I have seen this type of blistering caused from incorrectly placed incontinence briefs which have been managed with a nonstick dressing for protection they generally heal within the week or so, and do tend to look worse before they get better.”
36. RN D said that although she did not know Ms A, she did not appear to be in any distress or show any signs of pain or discomfort when RN D touched and moved her legs. RN D stated:
- “If the GP for [the community home] had been available I would have suggested that he had a look at it, but as he was away with no one to cover this was not an option, in my opinion I did not consider it needed to be seen urgently at that time.”
37. EN C told HDC that it was RN D’s decision not to seek medical treatment. In response to the provisional report, SJOG told HDC that RN D disputes that she told EN C not to seek medical treatment.
38. Later that day, EN C commenced a Wound Assessment and Dressing Form (the Wound Form). She documented on the Wound Form that Ms A’s blisters on both thighs were pink, with light exudate⁷ and normal surrounding skin. EN C also recorded on the Wound Form that Ms A had 0/10 pain while the wound was being dressed, and 0/10 pain at the wound site. The Wound Form included a prompt to include tracing⁸ or a photo of the wound; however, this field was left blank.
39. EN C also completed a short-term care plan (STCP). Interventions listed in the STCP included application of a protective non-stick dressing to the blisters, which was to be checked each shift and changed daily by an enrolled nurse or manager, and that Ms A was to remain on bedrest, have her position changed four hourly, and receive twice daily bed washes rather than showers. The STCP did not refer to the Wound Form. SJOG told HDC that the STCP was lacking in detail, especially around pain management.
40. EN C also completed the Event Form that Ms G had filled in the previous night. EN C wrote that the cause of the burns was “continence product put on too tight and not checked by staff”. She noted that staff would be sent to in-house training.

⁷ The fluid produced by a wound as it heals.

⁸ A method of wound measurement, whereby a pen is used to trace the outline of the wound directly onto sterile transparent film.

Contact with Mrs B

41. EN C said that she tried to ring Ms A's mother, Mrs B, that day, but the call was unanswered, so she sent an email instead. A copy of the email was provided to HDC. EN C informed Mrs B that Ms A "was found with some blisters on her thighs" the previous night. EN C also wrote:

"Presumably from continence product not being in right position. I apologise for this and will ensure this does not happen again, by having staff complete [in-house] training. [Ms A] will be on bedrest for a couple of days until these are resolved. [Ms A] appears to be well otherwise and not in any discomfort. We are closely monitoring these blisters and have a protective covering placed on them. Any concerns please contact me."

42. In her complaint to HDC, Mrs B stated that she felt that the email did not indicate the severity of the blisters.

5 July 2019 — assessment of pain and administration of pain relief

43. The progress notes record that Ms A was given paracetamol at 10.55am, and this was also recorded in the MAR, along with Ms J's initials. There is no record of whether Ms A was exhibiting signs of pain at that time or whether the paracetamol was effective.
44. The progress notes for the afternoon shift record that Ms A had been washed twice, and was "not in any apparent discomfort". Overnight, the progress notes record that Ms A received her mouth cares, remained "settled" and "slept well" overnight, and "did not show any discomfort".

6 July 2019

45. EN F, who provided care to Ms A over the weekend of 6–7 July 2019, stated that she first reviewed the blisters on 6 July with Ms I's assistance, and Ms I told her that they looked the same as when they were first discovered on 4 July. EN F therefore considered that there had been no deterioration, and there were also no signs of infection and Ms A was not presenting with any non-verbal signs of pain or discomfort. EN F said that she administered paracetamol four hourly.
46. EN F did not record any of the above in the progress notes. She acknowledged that she should have done so, but said that she left it for a support worker to write the notes for that shift. EN F did, however, record in the Wound Form that there had been no change to the appearance of the blisters or to Ms A's pain levels.

6 July 2019 — assessment of pain and administration of pain relief

47. At 2.10pm, the support worker recorded in the progress notes that Ms A received all cares and was given paracetamol at 9.15am and at 2pm. There is no record of whether Ms A was exhibiting signs of pain or whether the paracetamol was effective. The paracetamol given at 9.15am was recorded in the MAR (but no initials were included), but the paracetamol given at 2pm was not.

48. At 10.20pm, Ms I recorded in the progress notes that Ms A had received her cares and had been “unsettled” for a couple of hours but was asleep at the time of writing. Ms I also recorded that Ms A was given paracetamol as charted, although the time at which the paracetamol was administered was not recorded in the progress notes. There is also no record of whether Ms A was exhibiting signs of pain or whether the paracetamol was effective. The MAR shows that paracetamol was administered at 6pm and 10pm, and both entries were initialled by Ms I.

7 July 2019

49. The progress notes record that at 1.50am, Ms A was noted to be crying but settled again shortly afterwards. She was noted to be crying again at 6am, and was given paracetamol at 6.10am, after which she was noted to be “settled”. The paracetamol given at 6.10am was recorded in the MAR but no initials were included.
50. At 2.30pm, the support worker recorded in the progress notes that the dressings on the burns were changed, and that the burns were “still the same”. The progress notes also record that Ms A was given paracetamol at 10am and 2.30pm, and that Ms A was “happy and settled”. There is no record of whether Ms A was exhibiting signs of pain, including when the dressings were changed, or whether the paracetamol was effective. The paracetamol given at 10am was recorded in the MAR (and initials were included) but the paracetamol given at 2.30pm was not.
51. At 2.30pm, EN F recorded in the progress notes that Ms A’s condition was “stable” and that she had been responding well to paracetamol and “kept comfortable”. EN F also documented:

“Tried to book another GP appointment but couldn’t get it done. Will need to see GP/nurse tomorrow to prevent any complications or infections as a preventative measure.”

52. EN F stated that when she tried to book an appointment, none were available, and she felt that “it would be worth getting a doctor to review” of Ms A. EN F also recorded in the Wound Form that there had been no change to the appearance of the blisters or to Ms A’s pain levels, which remained at 0/10.
53. The MAR shows that paracetamol was administered at 5.30pm or 5.50pm (the handwritten entry is unclear). No initials were included with this entry.

Visit by Mrs B

54. At 10.15pm, support worker Ms H recorded in the progress notes that Mrs B had visited. Ms H wrote that when Mrs B saw the blisters, she was “upset” and asked Ms H to call an ambulance. An ambulance was called at 8.47pm and arrived at the community home at 9.04pm.

55. Mrs B provided HDC with photographs of the burns taken on 7 July 2019. The photos show long and narrow burns with well-defined margins tracking down the inside of Ms A's thighs. The burns are a mixture of red skin and blistering skin.

Admission to hospital

56. Ms A was admitted to the public hospital at 12.54am on 8 July 2019. An Emergency Department RMO⁹ documented: "[Ms A's burns] do not appear to be urine burns. Appears to be hot liquid as cause[d] while sitting." The burns were reviewed by a Plastics RMO who wrote that the burns were "consistent with liquid tracks, pooling on posterior thigh left side".
57. While Ms A was in hospital, nurses noted that she appeared to have crusted faecal matter around her groin, and broken-down skin between her toes. A referral to the social work service was made, and the social worker also noted that Ms A's tongue was crusting, and her ears and hands were noticeably dirty and crusty.
58. SJOG acknowledged the concerns raised by public hospital staff in respect of the personal cares provided to Ms A, and stated that this did not meet its required standards.

Further information

Mrs B

59. Mrs B stated in her complaint that she believes that had she not visited on 7 July 2019, Ms A would not have received the required treatment for her burns. In response to the provisional opinion, SJOG noted that there was a plan in place to take Ms A to her GP on 8 July 2019.
60. Mrs B also highlighted the need for open disclosure with welfare guardians and families if incidents occur.

SJOG

61. SJOG told HDC:

"A great deal of reflection has taken place by all staff involved in this event. Staff have been very concerned that due to a lapse in ensuring best practice [Ms A] received an injury which resulted in a decision being made to move [Ms A] to another facility. ... We acknowledge and take full responsibility for the care [Ms A] received between 4–7 July 2019."

Policy

62. SJOG's Open Disclosure Policy in place at the time of events stated:

"St John of God Hauora Trust commits to the following aspects of open disclosure:

...

⁹ Resident Medical Officer. This term covers house officers and registrars.

- Ongoing communication until the resident or client or significant other has all the information and support needed.”

Internal investigation

63. SJOG carried out an investigation into these events. The findings include the following:
- The blisters were a “urine burn”.
 - Medicine management policy and procedures were not followed by support workers.
 - Ms A’s personal cares were scheduled for 4.30pm but not carried out until 7pm on 4 July 2019, which is when the burns were discovered.
 - Support workers were unfamiliar with continence product use and with documentation requirements.
 - EN C’s instructions to the support workers were lacking in detail.
 - By not contacting the duty registered nurse at SJOG for advice, EN C was practising outside her scope of practice.
 - Ms A’s progress notes were lacking necessary detail.
64. The investigation report made a number of recommendations, including the following:
- Monthly meetings to be held with the community home support workers to support developing team culture and identifying caregiving areas of weakness.
 - The Clinical Coordinator to undertake head-to-toe assessment of all residents at the community home to identify any other concerns in relation to personal care provision. This was completed.
 - Assessment of support worker skills to identify gaps in knowledge.
 - Daily oversight of the community home by the Clinical Coordinator for three weeks.
 - Creation of a designated area for wound product supplies.
 - Development of a specific Hospital Transfer Form.
 - Regional Manager to review with Community Homes Manager strategy for ongoing improvement for care delivery and implement a Performance Improvement Plan.
 - Provision of upskilling for support workers who contributed to inadequate care.
 - Review of continence product allocation and supply to ensure that residents do not run out of individual assessed requirements.
 - Review of toileting regimens and update of Personal Care Plans.
 - Support workers at SJOG to receive additional medication management training.
 - Implementation of a formal handover process.

65. SJOG also told HDC that the Community Homes Manager, EN C, was responsible for ensuring that an adequate supply of continence products was maintained. SJOG stated that its internal investigation found that staff had been raising concerns with EN C about the supply of continence products for some time prior to these events, but there had been no follow-up or action taken by EN C.

Changes made

66. SJOG has since implemented a Direction and Delegation Policy, which provides guidelines for enrolled nurses acting under the delegation of registered nurses, including that enrolled nurses must practise within the scope of their practice and level of competence, and escalate changes in health status and concerns about a resident to a registered health provider. SJOG also told HDC that it has now updated its STCP to include documentation of whether a pain assessment has been commenced. Finally, SJOG told HDC that a new full-time registered nurse was appointed to the role of Community Homes Manager at the community home in November 2019, with a full-time enrolled nurse supporting the role.

EN C

67. EN C told HDC: "I deeply regret the way this was handled and am sorry for any distress this caused [Ms A] and her family." EN C also said that since late 2019, she has not been practising as an enrolled nurse, and instead has been working as a support worker at another SJOG facility.

Responses to provisional opinion

68. Mrs B, SJOG, and EN C were all given the opportunity to respond to the relevant parts of my provisional opinion. Where appropriate, their responses have been incorporated into this report.
69. In addition, Mrs B told HDC that nearly two years after the incident, Ms A was still having ongoing problems with her skin where the burns were sustained. Mrs B stated that her main concern was not so much about how the burns came about, but rather how Ms A was "left to suffer for so long".
70. SJOG commented: "We are in agreement with the findings of the report, and unreservedly accept responsibility for the care that [Ms A] received." SJOG also agreed with the recommendations proposed in the provisional opinion. SJOG stated: "This does not excuse the actions of the staff, however we would like it noted that the staff believed they were acting in [Ms A's] best interest."
71. EN C commented: "Again I would like to express my regret of the way this situation was handled by me and the subsequent distress caused to [Ms A] and her family."

Relevant standards

NCNZ Competencies for Enrolled Nurses

72. The Nursing Council of New Zealand (NCNZ) states that enrolled nurses practise under the direction and delegation of a registered nurse or nurse practitioner.¹⁰ The NCNZ's Competencies for Enrolled Nurses¹¹ (the NCNZ Competencies) include the following:

“Competency 1.3

Demonstrates understanding of the enrolled nurse scope of practice and the registered nurse responsibility and accountability for direction and delegation of nursing care.

Indicator: Recognises and acts in accordance with the enrolled nurse scope of practice, organisational policy and own level of competence.

Indicator: Demonstrates understanding of the registered nurse's role to direct, delegate, monitor and evaluate nursing care.

...

Indicator: Seeks guidance from a registered nurse when encounters situations beyond own knowledge, competence or scope of practice.”

NZHDSS

73. The Health and Disability Sector Standards (NZHDSS)¹² state:

“Service Management — Te Whakahaere Ratonga

Standard 2.2 The organisation ensures day-to-day operation of the service is managed in an efficient and effective manner which ensures the provision of timely, appropriate, and safe services to consumers.

...

Adverse Event Reporting — Pūrongo Takahanga Kōaro

Standard 2.4 All adverse, unplanned, or untoward events are systematically recorded by the service and reported to affected consumers and where appropriate their family/whānau of choice in an open manner.”

¹⁰ However, in some settings enrolled nurses may practise under the direction and delegation of a registered health practitioner.

¹¹ The Nursing Council of New Zealand, May 2012.

¹² NZS 8134.1.2:2008, Ministry of Health, 2008.

Opinion: St John of God Hauora Trust — breach

Introduction

74. As a healthcare provider, SJOG is responsible for providing services in accordance with the Code of Health and Disability Services Consumers' Rights (the Code) and the NZHDSS. This includes an organisational responsibility for the actions of its staff.
75. Ms A is unable to communicate verbally and was reliant on SJOG staff to assess her needs reliably and provide her with all cares. She is totally dependent on others to keep her safe, comfortable, and well. Accordingly, she is a particularly vulnerable consumer, and it was vitally important that SJOG's staff were vigilant and thorough in providing services of an appropriate standard. In my opinion, there were a number of failures by SJOG staff, for which ultimately SJOG is responsible. I discuss these failures in further detail below.

Cause of burns

76. Early on 4 July 2019, Mr L changed Ms A's continence product for a size XXL product, rather than her usual size M, because there was no product left in her size. Mr L did not document this but did verbally inform the incoming morning shift.
77. Because staff were waiting for new product to arrive, Ms A's continence product was not checked until roughly 6.45pm, when she was taken to her room. At that point, Ms G found that Ms A's trousers and wheelchair were very wet, and subsequently discovered the blisters on both Ms A's thighs.
78. I note that there are conflicting views about the potential causes of Ms A's burns. SJOG's view, based on the assessment of RN D carried out on 5 July 2019, was that the burns were caused by urine as a result of an incorrectly placed continence product. Conversely, the view of the ED RMO, is that the burns did not appear to be urine burns, and instead appeared to be hot liquid burns.
79. My clinical advisor, plastic surgeon Dr Sally Langley, reviewed the photos of the burns alongside documentation from SJOG and the DHB. She advised:
- "I think it is unlikely that the burns are due to hot liquid (scald), hot water bottle or wheat bag, or other hot contact. It is more likely that there has been a far more severe than usual localized narrow irregular shaped burn due to urine due to incorrectly used incontinence napkins."
80. It is not possible to determine with certainty what caused Ms A's burns. However, I am guided by Dr Langley's advice and accept that it is more likely than not that the burns were the result of an unusually severe reaction to urine being in contact with Ms A's skin owing to the incorrectly placed continence product.

Lack of monitoring and delay in changing continence product

81. My clinical advisor, registered nurse and lead quality auditor Christine Howard-Brown, noted that more than 12 hours passed before Ms A's continence product was checked after a substitute size was used. Ms Howard-Brown advised:

"It is a significant departure from accepted practice that inadequate monitoring occurred when a substitute incontinence product was used. Peers would not necessarily view the need to use a substitute product as being unusual but would see the use of a grossly oversized product as unusual and that it creates an additional risk of moisture-associated skin damage. It should therefore be monitored closely and changed regularly to avoid skin damage. Therefore, peers would likely consider use of an oversized substitute incontinence product that was then left for 12 hours as representing a poor standard of care and a significant departure from accepted practice."

82. I accept Ms Howard-Brown's advice. Ms A was not able to communicate verbally when she needed her product to be changed, and therefore relied on SJOG staff to check regularly and consistently, in order to prevent harm to Ms A, and to protect her dignity. I am critical that they failed to do so, especially given that staff were aware that the wrong size had been substituted in the morning. If SJOG staff had checked and changed her continence product appropriately throughout the day, it is highly likely that Ms A would not have suffered the injuries that she did.

Pain assessment and administration of medication

83. Following the discovery of the burns, Ms A was administered paracetamol 11 times in total: once on 4 July;¹³ twice on 5 July;¹⁴ four times on 6 July;¹⁵ and four times on 7 July 2019.¹⁶ Aside from the documentation in the Wound Form by EN C and EN F, there were no documented assessments of whether Ms A was exhibiting non-verbal signs of pain. There were references in the notes to Ms A being "not in any apparent discomfort", "settled", and "calm in bed". Equally, however, there were also references to Ms A being "unsettled" and "crying".
84. In addition, on two occasions the administration of paracetamol was not recorded in the MAR.¹⁷ Only once was a comment about the effectiveness of paracetamol recorded — when Ms A was given paracetamol at 6.10am on 7 July 2019, after which she was noted to be "settled". Three of the nine entries in the MAR were not initialled.
85. Ms Howard-Brown acknowledged that the fact that paracetamol was administered suggested that informal pain assessments were taking place. However, she also advised:

¹³ At 7.15pm.

¹⁴ At 6.30am and at 10.15am.

¹⁵ At 9.15am, 2pm, 6pm, and 10pm.

¹⁶ At 6.10am, 10am, 2.30pm, and 5.30 or 5.50pm.

¹⁷ The 2pm dose on 6 July and the 2.30pm dose on 7 July 2019.

“Peers would likely see the absence of regular Panadol and formal pain assessments as being a moderate departure from the standard of care expected and that [Ms A] may have been experiencing avoidable pain (particularly where records indicate [Ms A] was unsettled or crying out). For example, it would be usual to see progress notes reference Panadol ‘given with effect’.”

86. In addition, Ms Howard-Brown considered that the records indicated that paracetamol was administered “intermittently”, and commented: “It is also reasonable to determine that the burns would be painful and that regular pain relief was indicated.” On one occasion in particular (at 1.50am on 7 July 2019), Ms A was crying but no paracetamol was administered.
87. I note that Ms A’s care plan directed staff to look for non-verbal signs of pain from Ms A, including “[c]hange of mood, signs of grimacing, crying or making noises”. Although Ms A is non-verbal, notes indicate her ability to understand and make choices. Accordingly, a pain scale could have been used to assess her pain levels formally, but there is no evidence that this occurred. I acknowledge that informal assessments appear to have been taking place, which is supported by the references in the progress notes to Ms A being “settled” or “not in any discomfort”. However, in my opinion, following the discovery of significant and unexpected injury, SJOG staff should have been administering paracetamol regularly and consistently, and undertaking regular formal pain assessments to ensure that any pain Ms A was experiencing was minimised. There is no evidence of staff having done so, and therefore I accept Ms Howard-Brown’s advice.

General standard of clinical documentation

88. Ms Howard-Brown advised that the general level of detail included in Ms A’s care plan, progress notes, wound assessment form, and short-term care plan by various staff was “brief”. Specifically, she noted:
- The STCP did not refer to pain management or explicitly link to the Wound Form.
 - The Wound Form did not include tracing or a photo of the wound, or an extensive initial wound assessment.
 - There was no documentation in the progress notes that the wrong size of continence product was fitted on 4 July 2019.
 - The personal care plan was brief and did not include the size and brand of continence products used, and the frequency with which to check and change the product.
89. Ms Howard-Brown advised:

“Where information is brief, it does not provide adequate guidance for staff. Where a resident is non-verbal it becomes more important for documentation to be comprehensive. When considering these factors together, this represents a moderate departure from accepted practice. Although progress records are not systematic in the content, this is not unusual in residential disability services.”

90. Ms Howard-Brown also noted the discrepancies in relation to the recording of administration of paracetamol (as set out in paragraph 84 above), and advised:

“Peers would also consider the discrepancy between progress notes (including not indicating the effectiveness of medication administered) and medication records (medication administered) to be a minor departure from the standard of practice expected (e.g. 6.00 pm or 6.10 pm medication administered). This discrepancy was acknowledged by SJOG in its internal investigation. However, discrepancies in the standard of recording of medication administration (e.g. not initialling; omission of recording the administration of a medicine) would be considered a significant departure from required standards.”

91. I agree that SJOG’s standard of documentation, and in particular with respect to medication administration, was deficient. SJOG has acknowledged the shortcomings with respect to documentation. Clear and accurate documentation is important, and even more so where a consumer is non-verbal, to ensure timely and appropriate provision of cares and administration of medication. It is unacceptable that SJOG staff failed to maintain adequate records, especially when Ms A was a vulnerable consumer and had suffered a significant and unexpected injury. I therefore accept Ms Howard-Brown’s advice.

Administering personal cares

92. In accordance with the STCP,¹⁸ Ms A was to receive twice-daily bed washes in lieu of her normal shower. According to the Care Plan, she was also to be administered chlorhexidine mouthwash once daily. After Ms A was admitted to the public hospital on 7 July 2019, nurses and a social worker noted that Ms A appeared to have crusted faecal matter around her groin, broken-down skin between her toes, crusting on her tongue, and noticeably dirty and crusty ears and hands.

93. I acknowledge that between 4 and 7 July 2019, the progress notes regularly refer to cares having been completed. However, Ms A’s presentation at the public hospital suggests that the cares were completed inadequately. SJOG acknowledged that the concerns raised by the public hospital staff indicated that SJOG’s required standards had not been met. Ms A was entirely reliant on SJOG staff for cares, and therefore it was crucial that personal cares were attended to thoroughly, in order to optimise her health and well-being and preserve her dignity. The apparent shortfalls in the provision of personal cares to Ms A are concerning.

Communication with Mrs B

94. Mrs B is Ms A’s mother and welfare guardian. Following the discovery of the burns on 4 July 2019, Mrs B was contacted once by SJOG staff, when EN C emailed her and advised her that Ms A had been “found with some blisters on her thighs”. Over the next two days, SJOG staff did not contact Mrs B proactively to update her on Ms A’s condition. Mrs B

¹⁸ Commenced on 5 July 2019 following discovery of Ms A’s burns.

visited Ms A on the evening of 7 July 2019, at which point she viewed the burns and requested an ambulance to transfer Ms A to hospital.

95. As welfare guardian, Mrs B was entitled to receive information from SJOG about Ms A's well-being. Given that there had been a significant and unexpected injury to Ms A, it is disappointing that SJOG staff did not contact Mrs B again after EN C's initial email. I consider that the communication by SJOG staff with Mrs B was inadequate, and was inconsistent with SJOG's Open Disclosure Policy, which required "[o]ngoing communication [with] the resident or client or significant other", and with standard 2.4 of the NZHDSS.

Conclusion

96. There were a number of deficiencies in the care provided to Ms A by SJOG and its staff. Specifically:
- Staff did not undertake regular formal pain assessments following the discovery of the burns.
 - Staff administered paracetamol only intermittently.
 - Clinical documentation was brief and lacking in detail, and there were discrepancies in the documentation of medication administration.
 - Staff did not contact Mrs B again after EN C's initial email on 5 July 2019.
97. In my view, collectively the above deficiencies represent a failure to provide services with reasonable care and skill, for which ultimately SJOG is responsible. Accordingly, I find that SJOG breached Right 4(1) of the Code.¹⁹
98. In addition, I note the following further deficiencies in the care provided by SJOG staff:
- After a substitute size of continence product was used on 4 July 2019, staff failed to check the product for over 12 hours, which more likely than not caused the burns to Ms A's thighs.
 - There were apparent shortfalls in the provision of personal cares to Ms A.
99. I consider that these failures, particularly in the circumstances where Ms A was entirely reliant on staff for her cares, amount to a failure to provide services in a manner that respected Ms A's dignity. Accordingly, I find that SJOG breached Right 3 of the Code.²⁰

¹⁹ Right 4(1) states: "Every consumer has the right to have services provided with reasonable care and skill."

²⁰ Right 3 states: "Every consumer has the right to have services provided in a manner that respects the dignity and independence of the individual."

Opinion: EN C — breach

Advice following discovery of burns

100. EN C was the Community Homes Manager for the community home at the time of events. SJOG told HDC that EN C was working under the delegation and direction of the Clinical Manager and the Clinical Coordinator.
101. After Ms G discovered Ms A's burns on 4 July 2019, she showed them to Ms I, and both Ms G and Ms I were upset and surprised at the extent of the burns. Ms G then rang EN C for advice, and said that she offered to take photos of the burns and send them to EN C, and also asked EN C whether to send Ms A to hospital. Ms G said that EN C said "no" to both suggestions. Conversely, EN C said that she does not recall Ms G either offering to take photos or asking whether she should send Ms A to hospital.
102. EN C said that she asked questions about Ms A's condition, including whether she was in pain. As the Clinical Coordinator, RN D, was expected to visit the facility in the morning, EN C thought that it would be better to wait for Ms A to be seen by RN D. EN C said that therefore she instructed Ms G not to shower Ms A, and to cover the burns and keep pressure off the wounds.
103. The progress notes, updated later that evening by Ms I, and the Event Form completed by Ms G that evening, both refer to the burns as being "large".
104. Ms Howard-Brown advised:

"From the documented information reviewed, progress notes written on 4 July state that there were large burns down both legs on upper thighs and around the groin area. With this extensive description, accepted practice would be to have a registered nurse or doctor assess the person as part of providing first aid. Arrangements made for the clinical coordinator to review the burns the following day indicates that the manager did not consider the burns to require urgent attention on 4 July.

I note that the manager is an enrolled nurse. I feel it would have been appropriate and in keeping with her scope of practice to seek advice from a registered nurse. ... I also note that there is no documentation that provides clear instructions other than covering the burns or action taken to cleanse the burns when the burns were discovered. If not cleansed, then urine could remain on the skin and placing a dressing on top would not prevent further skin damage.

It is accepted practice that staff contact a manager or designated health professional for advice afterhours who will come in to the service if needed. Peers would likely consider the advice provided by the manager as insufficient based on documents reviewed and that an immediate review by a health professional was indicated. The level of departure from accepted practice would partly be dependent on whether the manager received all necessary information in which to base her decision-making.

If full information was provided to the manager then the resulting actions would represent a significant departure from accepted practice, whereas if limited information was provided, this would more reasonably be a mild departure from accepted practice.”

105. Due to conflicting accounts, and the lack of relevant documented notes, I am unable to determine whether Ms G asked EN C about taking photos or sending Ms A to hospital. However, EN C was told that Ms A had burns on both thighs. In light of the contemporaneous documentation in the progress notes and the Event Form, I find it more likely than not that EN C would have been told that the burns were large in size. This information indicates that Ms A had sustained a significant and unexpected injury.
106. In my opinion, with this knowledge, EN C should have recognised the need to seek advice from a registered nurse immediately, rather than defer assessment until the next day. I also agree with Ms Howard-Brown that EN C’s advice to the support workers appeared to be insufficient.
107. I am mindful that EN C was working under the delegation and direction of the Clinical Manager and Clinical Coordinator, both of whom were registered nurses. I consider that EN C’s failure to seek advice from a registered nurse when the burns were reported to her and to direct the care workers to seek medical review of Ms A’s injuries that evening, and her insufficient guidance to staff, amount to a failure to provide care to Ms A with reasonable care and skill. Accordingly, I find that EN C breached Right 4(1) of the Code. As a result of EN C’s failures, Ms A was denied the opportunity to receive a timely and thorough assessment of her injuries.

Management of supply of continence products — adverse comment

108. At the time of events, the job description for the Community Homes Manager included the responsibility to ensure safe, effective, and timely delivery of supplies. Early on 4 July 2019, a substitute continence product was used for Ms A because there was no supply left in her size. I note the comments from Ms G and Ms I that they ran out of continence products for residents regularly, and that this had been raised with the manager previously. I also note SJOG’s comment that its internal investigation found that staff had been raising concerns with EN C about the supply of continence products for some time prior to these events, but there had been no follow-up or action taken by EN C.
109. I also note Ms Howard-Brown’s comment:
- “[Ms A’s] situation, the number of products required each day is predictable. This means, with good planning and ordering, the facility should not be without stock. The product used by [Ms A] is from a standard product range, which would not pose any difficulties in supply.”
110. EN C did not take appropriate action to ensure that adequate supplies of continence products were maintained. This is particularly disappointing in light of the fact that staff

had raised concerns with her about the supply of continence products. As this case demonstrates, having inadequate supplies of care products can present a very real risk of harm to consumers who rely on such products in their daily life.

Recommendations

111. I recommend that SJOG:
- a) Provide evidence that the recommendations set out in SJOG's internal investigation (noted in paragraph 644 above) have been implemented, and report on any further changes that occurred following the implementation of those recommendations, within three months of the date of this report.
 - b) Consider implementing a handover tool to ensure that relevant information is communicated when staff seek advice from registered health practitioners. SJOG is to report back to HDC on the results of its consideration, and provide evidence of any handover tool it has developed or implemented, within three months of the date of this report.
 - c) Undertake an audit of a random sample of five Medication Administration Records against the relevant progress notes in order to ensure that there are no discrepancies and that sufficient detail is included. SJOG is to report back to HDC with the results of this audit, and the details of any further training identified as necessary as a result, within three months of the date of this report.
 - d) Undertake an audit to confirm that adequate supplies of continence products are being maintained at the community home. SJOG is to report back to HDC with the results of this audit, and the details of any changes identified as necessary as a result, within three months of the date of this report.
 - e) Consider reviewing the adequacy of its process in place for sourcing medical care in circumstances where GP cover is unavailable. SJOG is to report back to HDC on the outcome of its consideration, and any changes made as a result, within three months of the date of this report.
 - f) Provide a written apology to Ms A for the failures identified in this report. The apology is to be sent to HDC within three weeks of the date of this report, for forwarding.
112. I recommend that EN C provide a written apology to Ms A for the failures identified in this report. The apology is to be sent to HDC within three weeks of the date of this report, for forwarding.
113. I recommend that the Nursing Council of New Zealand consider whether a review of EN C's competency is warranted, based on the information contained in this report.

Follow-up actions

114. A copy of this report with details identifying the parties removed, except St John of God Hauora Trust and the experts who advised on this case, will be sent to the Nursing Council of New Zealand, and it will be advised of EN C's name.
115. A copy of this report with details identifying the parties removed, except St John of God Hauora Trust and the experts who advised on this case, will be sent to the Ministry of Health's Disability Support Services team, and it will be advised of the name of the community home.
116. A copy of this report with details identifying the parties removed, except St John of God Hauora Trust and the experts who advised on this case, will be sent to the Office for Disability Issues and the New Zealand Disability Support Network, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A: Independent advice to the Commissioner

The following expert advice was obtained from a registered nurse and lead quality auditor, Christine Howard-Brown:

“I agreed to provide an opinion to the Commissioner on case number 19HDC01464. I have read and followed the Commissioner’s Guidelines for Independent Advisors, and am not aware of any conflicts of interest in relation to this case.

I am a registered nurse and lead quality auditor working in the health and disability sector. My qualifications are a Bachelor of Nursing (Massey University); Master in Business Administration (merit) (Victoria University of Wellington) and Doctor of Philosophy (University of Otago). I have extensive experience working in the health and disability sector in a variety of roles including senior leadership, quality audit, service design and service improvement.

I received instructions from the Commissioner to review documents and advise whether I consider the care provided to [Ms A] at St John of God (SJOG) was reasonable in the circumstances and why. In particular, there were seven areas where the Commissioner sought advice.

1. The appropriateness and timeliness of changing [Ms A’s] incontinence product on 4 July 2019
2. The appropriateness of escalation of [Ms A’s] care after the burns were discovered (i.e. whether medical review should have been sought)
3. The assessment of [Ms A’s] pain levels and administration of pain medication between 4 July and 7 July 2019
4. The standard of the clinical documentation, including the documentation of events in the progress notes
5. The standard of communication between SJOG staff about [Ms A’s] care between 4 July and 7 July 2019
6. The adequacy and appropriateness of SJOG’s Neglect and Abuse of Residents and Clients Policy, and Open Disclosure Policy
7. Any other matters in this case that warrant comment.

The Commissioner provided the following information for review:

Records from SJOG

- Referral from the Nationwide Health & Disability Advocacy Service
- Incident notification to the mother of [Ms A] by SJOG
- Complaint response from the mother of [Ms A] to SJOG
- Photographs of [Ms A’s] legs
- Complaint acknowledgement by SJOG to [Ms A’s] mother

- Terms of reference for the internal investigation completed by SJOG
- Letter summarising recommendations arising from the complaint investigation sent to [Ms A's] mother by SJOG
- Investigation report completed by SJOG
- Tracking sheet of progress to implement recommendations arising from the complaint investigation
- File notes x2 in respect of the complaint received written by SJOG chief executive
- Complaint form completed by SJOG following the email complaint received
- Written statements from the clinical manager, community homes manager, clinical coordinator, night staff
- Event notification forms x4
- Progress note records written by SJOG staff between 3 July 2019 (pm) and 7 July 2019 (pm)
- Doctors notes written 29 March 2019
- Wound assessment and dressing form entries 5 July 2019–7 July 2019
- Next of kin/relative contact sheet
- Short term care plan
- Medication chart
- Medication administration record
- Personal care outline
- Alert form
- Peg change chart
- Falls Risk Assessment form
- Braden scale and pressure injury risk management plan
- Bowel record
- Peg feeding regime
- Swallowing plan
- Personal care plan
- Neglect and abuse of residents and clients policy
- Open disclosure policy
- Shower list at the time of the event and updated versions
- Nurse in-charge/shift leader policy
- Direction and delegation policy
- Updated short term care plan register and short term care plan document
- Progress notes document
- Examples of continence product monitoring
- Position descriptions for the community homes manager, enrolled nurse, registered nurse
- Training records for the community homes manager
- Guideline for contacting the duty registered nurse (with log)
- Wound management policy
- Wound assessment form

Additional information was provided by SJOG dated 26 June 2020, which has been subsequently reviewed and added to my initial advice dated 12 April 2020. Additional information included:

- Cover letter with reference to pain relief and continence assessment
- Summary of the induction programme for the community homes manager
- Induction sign-off sheets for the community homes manager completed in 2018
- Minutes of the Clinical Development meetings dated 21 February 2018 and 21 March 2018
- Training transcript for the community homes manager dated 2018 and 2019 (print out dated 25 June 2020)
- Email as sent to HDC by the community homes manager at the time of the incident

[District Health Board] records ([the DHB])

- Emergency Department Medical Assessment Record
- Emergency Department Record and progress notes
- Emergency Department Handover form
- Ambulance care summary form
- Letter from the [DHB] Social Worker to [disability service]
- Patient information form
- General medicine Handover/transfer form
- Plastics progress summary
- Gastroenterology progress summary
- Risk screening/assessment form
- Medical Assessment of Acute Admissions form
- Care plan — 24 hour entries 8 July 2019–2 August 2019
- Discharge summary (general medicine)
- Referral form to the Care Coordination Centre
- Clinical progress notes
- Email correspondence between [the DHB] and [the disability service]
- Feeding prescription and nursing checklist for bolus feeding prescription
- Drug treatment sheet
- Fluid balance 24 hour charts and summary
- Body outlines/diagrams form
- Medical illustration clinical imaging request form
- Initial wound assessment and management forms (one for each thigh)
- Laboratory records

To support the opinions I have expressed, I have relied on the following literature and websites.

Beckman D et al. (2015) Proceedings of the Global IAD Expert Panel. Incontinence associated dermatitis: moving prevention forward. Wounds International 2015. Available to download from www.woundsinternational.com

Black, J et.al (2011) MASD Part 2: Incontinence-Associated Dermatitis and Intertriginous Dermatitis — a consensus. *Journal of Wound Ostomy Continence Nurses* 38(4):359–370

Continence New Zealand website. <https://www.continence.org.nz/pages/Continence-Information-Adults/18/>

Gray, M. Black, J. Baharestani, M et.al. (2011) Moisture-associated skin damage. Overview and pathophysiology. *Journal of Wound Ostomy Continence Nurses* 38(3): 233–241.

Health and Disability Commissioner (2019) Guidance on open disclosure policies. Available to download from <https://www.hdc.org.nz/news-resources/search-resources/leaflets/guidance-on-open-disclosure-policies/>

Hunter New England Health (2009) ISBAR revisited: Identifying and solving barriers to effective clinical handover. Project toolkit. NSW Health. Available to download from <https://www.safetyandquality.gov.au/sites/default/files/migrated/ISBAR-toolkit.pdf>

Ministry of Health (2015) Disability Support Services Tier Two Service Specification Community Residential Support Services. *Ministry of Health, Wellington*. Available to download from <https://www.health.govt.nz/system/files/documents/pages/community-residential-support-services-v1.0-tier-two-service-specification.pdf>

Ministry of Health (2010) HealthCERT bulletin. Ministry of Health Issue 1, July. Available to download from <https://www.health.govt.nz/system/files/documents/pages/healthcert-bulletin1-july2010.pdf>

Ministry of Health. Nationwide Service Framework Library. Continence Education and Consumables Services. Available to download from <https://nsfl.health.govt.nz/service-specifications/current-service-specifications/additional-resources>

Ministry of Health. National Service Framework Library. Tier 2 Community Health Transitional and Support Services — Community Residential Support Services for People with Chronic Health Conditions. Available to download from <https://nsfl.health.govt.nz/service-specifications/current-service-specifications/community-health-transitional-and-support>

Nursing Council of New Zealand. (2012) Competencies for enrolled nurses. Nursing Council of New Zealand. Available to download from https://www.nursingcouncil.org.nz/Public/Nursing/Scopes_of_practice/Enrolled_nurse/NCNZ/nursing-section/Enrolled_nurse.aspx?hkey=963854c0-246c-4bb1-800c-920a19b022dc

Standards New Zealand (2002) New Zealand Standard Health Records NZ8153:2002. *Standards New Zealand*

Voegeli, D (2012) Moisture-associated skin damage: aetiology, prevention and treatment. *British Journal of Nursing* 21(9):517–521.

Voegeli, D (2013) Moisture-associated skin damage: an overview for community nurses. *British Journal of Community Nursing* 18(1):6–12.

Woo, K. Beeckmann, D. Chakravarthy, D (2017) Management of moisture-associated skin damage: a scoping review. *Advances in Skin & Wound Care* 30(11):494–501

Zulkowski, K. (2017) Understanding Moisture-Associated Skin Damage, Medical Adhesive-Related Skin Injuries and Skin Tears. *Advances in Skin & Wound Care* 30(8). Available to download from <https://nursing.ceconnection.com/ovidfiles/00129334-201708000-00008.pdf>

A brief chronological summary of events related to the case was provided by the Commissioner's office as set out below.

4 Jul 2019 3.00am	[Ms A's] PEG pump was found to be leaking. Unknown support worker (SW) documented correcting the leak and changing [Ms A's] clothing. [Ms A] was noted to be 'very vocal' and not sleeping well throughout the night.
2.10pm	SW [Ms K] recorded in the progress notes that [Ms A] had settled after being unsettled earlier in the shift and was later 'in good spirits'.
2.45pm	SW [Ms I] started afternoon shift. SW [Ms I] told SJOG's internal investigation that morning staff handed over that [Ms A's] incontinence pad had not been changed since early morning because they had run out of products in her size.
4.30pm	SW [Ms G] started afternoon shift. SW [Ms G] told SJOG's internal investigation that at the start of her shift [Ms A] was in the lounge and appeared happy.
6.45pm	SW [Ms G] took [Ms A] to her room for a shower. She told SJOG's internal investigation that she noted that [Ms A's] trousers and wheelchair cushion were very wet. [Ms G] undressed [Ms A] and found her incontinence product was soaked and that she had burns on her inner thighs and groin area. SW [Ms G] also noted that the incontinence product was size XXL and did not fit properly.
7.15pm	[Ms G] called Facility Manager [EN C] to report the burns. [EN C] was told that [Ms A] did not appear to be in any discomfort. [EN C] told [Ms G] to cover the burns and to not shower [Ms A], and that [EN C] would review the burns the following morning. 20mls paracetamol given.
Overnight	20mls paracetamol given. Blisters noted to be oozing.
5 Jul 2019 6am	20mls paracetamol given.

8am	[EN C], along with Clinical Coordinator [RN D], reviewed [Ms A]. Event form and short term care plan completed, and [Ms A's] mother notified.
10.55am	20mls paracetamol given.
Overnight	Progress notes record that [Ms A] was not in any apparent discomfort and was settled overnight.
6 Jul 2019 9.15am	20mls paracetamol given.
2pm	20mls paracetamol given.
10.20pm	20mls paracetamol given.
Overnight	Progress notes record that [Ms A] was at times unsettled and crying out.
7 Jul 2019 6am	Progress notes record that [Ms A] was crying. 20mls paracetamol given and [Ms A] became more settled.
10am	20mls paracetamol given.
2.30pm	Dressings on blisters changed. 20mls paracetamol given.
5pm	[Ms A's] mother ([Mrs B]) visited. She requested to see [Ms A's] burns. SW [Ms H] removed bandages and [Mrs B] said she wanted [Ms A] to be seen by a doctor immediately. SW [Ms H] rang for an ambulance.
9.53pm	[Ms A] arrived at [the public hospital] ED via ambulance. [The DHB's] ED assessment record notes the impression that the burn 'does not appear to be urine burns. Appears to be hot liquid as cause while sitting'. A hospital social worker also had concerns about [Ms A's] oral hygiene and finger/hand cares.

Advice in respect of the reasonableness of care provided to [Ms A] by SJOG is based on the areas for comment sought by the Commissioner. As there is some discrepancy between the cause of the burns received by [Ms A], a review of both [the DHB] and SJOG notes included consideration of the cause. On the balance of probability, I think it is most likely that [Ms A] received her burns from moisture-associated skin damage (from urine and/or faeces). The rationale for this is provided in the table below. For this reason, I have limited my comments to the areas requested by the Commissioner to this most likely scenario. In the event that there was a hot water burn as the cause of the burns, then there is no documented evidence in the SJOG notes that indicates the event occurred.

Likely moisture associated skin damage	Likely burn from hot water
Wrong size incontinence product used and not changed for at least 12 hours causing an environment where moisture-associated skin damage can occur	
[Ms A] is nil by mouth so isn't given hot drinks	
Margins of the burn area are consistent with an ill-fitting incontinence product	
Clinical coordinator (registered nurse) assessment of the burns on 5 July 2019 determined the cause was from incorrectly fitted incontinence briefs with no redness or scalding or heat from the skin. Pattern is similar on each leg	
Clinical coordinator (registered nurse) determined burns were consistent with urine burns seen in her past clinical experience	
Clinical coordinator (registered nurse) visits this facility amongst other facilities so is not a fulltime employee to the facility concerned but is an employee of the organisation — i.e. likely to be objective	
No event notification of an accident with hot water made by any staff member	
Event notification completed by staff related to incontinence product being incorrectly fitted and not changed for several hours	
[The DHB] medical assessment record from the emergency department was completed by a junior medical staff member (house officer) who was unable to contact the residential service to gather a history which would have been material to his clinical impression	Clinical impression did not change when [the DHB] medical assessment record was updated following overnight stay in ED.
Ambulance record notes burn like blisters down both thighs	ED handover record states non-accidental burns
[The DHB] general medicine handover/transfer record completed by a registered nurse includes current diagnosis as blister both thighs — ?chemical burns ?scalded from boiling water	
[The DHB] Plastics progress summary completed by a doctor working in the Plastics Department states on examination linear burn tracks from mid medial thighs bilaterally tracking down towards posterior thighs. Consistent with liquid tracks, pooling on posterior thigh left. Most superficial to	[The DHB] general medicine discharge summary states wounds reviewed by plastics consistent with hot liquid burns (incorrect in that the record does not say 'hot')

mid dermal burns.	
[The DHB] Nursing care plan (which was updated daily and written as separate daily plans) includes a consistent reference to chemical burns	
Photographs of burn severity and presentation is consistent with literature which includes photographs of severe moisture-associated skin damage caused by incontinence ¹	

1. The appropriateness and timeliness of changing [Ms A's] incontinence product on 4 July 2019

SJOG acknowledges in its internal investigation, that there was poor management in the use of incontinence products in the 24 hours prior to the discovery of burns. This included the supply of the correct product, communication regarding the shortages of the product and associated monitoring and documentation when a substitute product was used.

It is current accepted practice to select incontinence products based on a documented assessment. The assessment considers a range of factors such as cognitive skills, mobility, bladder and bowel pattern, nutrition, medical condition, skin condition and the person's size. Examples of such an assessment is available on the Continence New Zealand website and Ministry of Health National Service Framework website.^{2,3}

There are considerable differences in the designs of absorbent incontinence products that mean they are not simply inter-changeable as correct sizing and fitting is essential for effective use. The frequency in which products need to be changed is also dependent on several factors including the type of incontinence, the product's absorbency and fit.

Generally, for someone in [Ms A's] situation, the number of products required each day is predictable. This means, with good planning and ordering, the facility should not be without stock. The product used by [Ms A] is from a standard product range, which would not pose any difficulties in supply.

From information reviewed, an inappropriate absorbent incontinence product size was used as a substitute as supplies specific to [Ms A's] had run out. Progress notes, incident forms and written statements by staff indicate that an inappropriately fitting substitute product (extra-large fit and not medium) was used on 4 July 2019, and was not changed for at least 12 hours. The product was fitted sometime between 6.00 am and 7.00 am, and then not changed until a support worker intended showering [Ms A] at 7.00 pm. It

¹ Refer to referenced documents in the first section to this advice

² https://www.continence.org.nz/user_files/continence_tools/assessment_form_care_plan.pdf

³ <https://nsfl.health.govt.nz/service-specifications/current-service-specifications/additional-resources>

is not possible to ascertain from progress records provided whether regular monitoring occurred during this time. However, based on the state of the skin when the product was changed around 7.00 pm, it indicates adequate monitoring had not occurred.

In my opinion, peers would use a substitute continence product as near to the size required as possible in a situation where stock had run out. In consideration of the fact that it was a non-prescribed product, monitoring and changing the product occurs more frequently, as a substitute product is more likely to result in moisture-associated skin damage from prolonged exposure of the skin to urine or faeces.

'The use of an absorptive or containment device may exacerbate irritation when it creates prolonged occlusion and hyperhydration of the skin' (Black, et. Al. 2011)

It is a significant departure from accepted practice that inadequate monitoring occurred when a substitute incontinence product was used. Peers would not necessarily view the need to use a substitute product as being unusual but would see the use of a grossly oversized product as unusual and that it creates an additional risk of moisture-associated skin damage. It should therefore be monitored closely and changed regularly to avoid skin damage. Therefore, peers would likely consider use of an oversized substitute incontinence product that was then left for 12 hours as representing a poor standard of care and a significant departure from accepted practice.

To help prevent a similar occurrence in the future, it is important to hold adequate supplies of the prescribed incontinence products, regularly monitor and change them as indicated and use good practice guidelines to help prevent moisture-associated skin damage. It is noted that SJOG has subsequently instituted a documented stocktake process to ensure adequate supplies are held on site and there is visibility of incontinence product orders placed.

2. The appropriateness of escalation of [Ms A's] care after the burns were discovered (i.e. whether medical review should have been sought)

SJOG acknowledges in its internal investigation, that policies and procedures were not followed by Facility Manager [EN C] when she was notified of the incident. If the SJOG Community Homes Guidelines were followed, the duty registered nurse would have been contacted for advice.

When the burns were discovered the support worker contacted the manager who is also an enrolled nurse. The manager provided advice to cover the burns. From documented information, the area was covered but not cleansed. Photographs were not taken and sent to the manager, nor did the manager come in to assess [Ms A] herself or request that a registered nurse review [Ms A] to determine best management. A wound assessment was not completed on 4 July when the burns were discovered. A clinical coordinator who is a registered nurse undertook a review the following day at the manager's request. The manager completed a wound assessment form on 5 July and dressed the burns.

From the documented information reviewed, progress notes written on 4 July state that there were large burns down both legs on upper thighs and around the groin area. With this extensive description, accepted practice would be to have a registered nurse or doctor assess the person as part of providing first aid. Arrangements made for the clinical coordinator to review the burns the following day indicates that the manager did not consider the burns to require urgent attention on 4 July.

I note that the manager is an enrolled nurse. I feel it would have been appropriate and in keeping with her scope of practice to seek advice from a registered nurse. The Nursing Council could provide a view on this if the Commissioner feels this is relevant. I also note that there is no documentation that provides clear instructions other than covering the burns or action taken to cleanse the burns when the burns were discovered. If not cleansed, then urine could remain on the skin and placing a dressing on top would not prevent further skin damage.

It is accepted practice that staff contact a manager or designated health professional for advice afterhours who will come in to the service if needed. Peers would likely consider the advice provided by the manager as insufficient based on documents reviewed and that an immediate review by a health professional was indicated. The level of departure from accepted practice would partly be dependent on whether the manager received all necessary information in which to base her decision-making.

If full information was provided to the manager then the resulting actions would represent a significant departure from accepted practice, whereas if limited information was provided, this would more reasonably be a mild departure from accepted practice.

As per the Disability Support Services specification for Community Residential Support Services, the service has a responsibility to provide first aid and emergency treatment for the degree of risk associated with the provision of the service.⁴

To prevent a similar occurrence in the future, services should consider using handover tools that ensures relevant information is communicated when seeking advice.⁵ This in turn enables the person providing advice to make informed decisions. Advice should be provided by a suitably qualified and experienced health practitioner and be within their scope of practice. It is noted that current SJOG policies, procedures and guidelines are consistent with staff seeking assistance from suitably qualified health practitioners.

3. The assessment of [Ms A's] pain levels and administration of pain medication between 4 July and 7 July 2019

The personal care plan includes a section on pain management that includes 'as needed' pain relief and 'to look for non-verbal signs of pain'. The short-term care plan

⁴ Refer Tier 2 Community Health Transitional and Support Services — Community Residential Support Services for People with Chronic Health Conditions <https://nsfl.health.govt.nz/service-specifications/current-service-specifications/community-health-transitional-and-support>

⁵ For example, ISBAR <https://www.safetyandquality.gov.au/sites/default/files/migrated/ISBAR-toolkit.pdf>

developed in response to the burns does not include a reference to pain assessment or treatment. There are discrepancies between progress notes and medication records.

Medication records indicate that Panadol was administered intermittently following the discovery of burns to the skin. A summary of progress records, medication administration records and the wound assessment dressing form completion related to pain management is shown below.

Date	Progress record	Medication administration record	Wound assessment & dressing form	Notes/Concerns
4 July 2019 pm shift	Panadol 20 ml given Vocal at start of shift Sleeping at 11.05 pm	7.15 pm prn Panadol		Panadol given following discovery of burns No reference to effectiveness of Panadol but reference to sleeping could be indicative of pain control
4 July 2019 night shift	Checked regularly Burns on thigh turned to blisters and liquid ooze Panadol given at 6.30 am	PRN Panadol on administration sheet dated 4 July nocte		No time recorded on medication administration record No reference to assessment of pain to determine need for Panadol — however blistering likely to be painful
5 July 2019 am shift	Short term care plan completed Panadol given at 10.55 am	Panadol administered 10.55 am	Wound assessment completed indicating no pain at dressing stage or wound site	No reference to assessment of pain to determine need for Panadol or its effectiveness following administration
5 July 2019 pm shift	In no apparent discomfort			
5 July 2019	Settled Showed no			

night shift	discomfort Slept well			
6 July 2019 am shift	Panadol at 9.15 am and 2.00 pm. Due next at 5.00 pm	Panadol administered 9.15 am	Wound assessment completed indicating no pain at dressing stage	No initial of staff that administered 9.15 am dose on medication administration record 2.00 pm dose not recorded on administration record Progress record indicating next dose due 5.00 pm does not align with medication orders No reference to pain assessment or effectiveness of Panadol but reference to administering Panadol and suggesting further dose indicates consideration of pain
6 July 2019 pm shift	Unsettled for a couple of hours Asleep at 10.30 pm PRN Panadol given as charted	Panadol administered 6.30 (or 6.00) pm and 10.00 pm		6.00 or 6.30 pm dose illegible to know exact time of administration 10.00 pm dose incorrectly dated on administration record Being unsettled may be suggestive of discomfort No reference to pain assessment or effectiveness of Panadol administered
6 July 2019 night shift	Cried out at 1.50 am Crying at 6.00 am	Panadol administered 6.00 am		No pain assessment documented or PRN Panadol given in response to crying out

	Panadol administered 6.10 am — settled			at 1.50 am Minor discrepancy between progress record time and medication administration record Crying out may be suggestive of pain or discomfort No reference to pain assessment
7 July 2019 am shift	Panadol at 10.00 am and 2.30 pm; due 6.30 pm Happy and settled	Panadol administered 10.00 am	Wound assessment completed indicating no pain at dressing stage	No administration record for 2.30 pm dose No reference to pain assessment but reference to being happy and settled which may be indicative of effectiveness
7 July 2019 pm shift	PRN Panadol Kept comfortable	Panadol administered 5.30 pm (or 5.50 pm)		5.30 or 5.50 pm dose illegible to know exact time Dose administered did not allow four hours between doses as per medication order No reference to pain assessment but reference to being kept comfortable which may be indicative of effectiveness

Although [Ms A] is non-verbal, notes indicate her ability to understand and make choices. This means that a pain scale may have been able to be used (e.g. such as the Wong-Baker Faces pain rating scale⁶), in addition to looking for non-verbal cues as to

⁶ https://wongbakerfaces.org/wp-content/uploads/2016/05/FACES_English_Blue_w-instructions.pdf

pain experienced. It is also reasonable to determine that the burns would be painful and that regular pain relief was indicated. As noted by SJOG, the fact that Panadol was administered, suggests informal pain assessments were occurring. As [Ms A] is a long standing resident of the service, it is possible that the staff felt they would pick up on cues easily and administer pain relief as required. In a statement from SJOG and the review of progress notes, it is noted that [Ms A] was only unsettled on a few occasions. [DHB] records indicate that when [Ms A] arrived to hospital that pain relief was given and was effective.

Regular assessment and documentation of the level of pain, medications administered and a short-term care plan that includes pain management for the type of injury experienced is representative of accepted practice.

Peers would likely see the absence of regular Panadol and formal pain assessments as being a moderate departure from the standard of care expected and that [Ms A] may have been experiencing avoidable pain (particularly where records indicate [Ms A] was unsettled or crying out). For example, it would be usual to see progress notes reference Panadol 'given with effect'.

Peers would also consider the discrepancy between progress notes (including not indicating the effectiveness of medication administered) and medication records (medication administered) to be a minor departure from the standard of practice expected (e.g. 6.00 pm or 6.10 pm medication administered). This discrepancy was acknowledged by SJOG in its internal investigation. However, discrepancies in the standard of recording of medication administration (e.g. not initialling; omission of recording the administration of a medicine) would be considered a significant departure from required standards.

To prevent a similar occurrence in the future, short-term care plans should consider pain assessment and pain relief as part of the standard required in developing a short-term care plan for person who has experienced moisture-associated skin damage.

4. The standard of the clinical documentation, including the documentation of events in the progress notes

SJOG acknowledges in its internal investigation, that there were a number of short falls in the standard of clinical documentation. As a result, there have been changes made to improve standards, in particular those related to progress reporting and short term care planning. SJOG also found that some documentation was incomplete, despite good practice templates and policies being in place; for example, the wound assessment.

A short summary of the standard of clinical documentation is provided below. It demonstrates that documentation is generally brief and lacks detail consistent with accepted practice despite templates mostly meeting accepted practice.

Record	Comment
Short-term care plan	The short-term care plan contains brief information and does not include reference to pain management or an explicit link to the wound assessment and dressing form.
Wound assessment and dressing form	The wound assessment does not include an initial wound assessment that is more extensive than the wound assessment and dressing form. For example, an initial wound assessment maps the wound and provides an assessment of the extent of the wounds and dressing products recommended. The wound assessment and dressing form acts as a checklist with the ability to write minimal content. It is impossible to see from the wound form whether there is improvement or decline where categories checked are the same (e.g. more or less exudate). Although there is an area for the dressing regime and prompt for photos or tracing this was not completed. The form had content documented for 5, 6 and 7 July.
Continence assessment	<p>There was no incontinence assessment provided with the documents for review. It would be accepted practice that there was a full continence assessment completed. It may be that it was not provided for review.</p> <p>SJOG noted following its initial review of my advice that the Personal care plan includes documentation of a continence and/or elimination plan in section 1.5. (See information below in respect of this plan). Note that a plan differs from an assessment which is used to determine the plan.</p>
Personal care plan	<p>The personal care plan is in a standard format commonly seen in residential disability services.</p> <p>Information was generally brief for each topic area of the personal care plan providing little detail for staff who would be unfamiliar with [Ms A]. For example, oral care is required morning and night but details as to how to provide the oral care are partly found in the front summary, swallowing plan and personal hygiene parts of the plan. Size and brand of incontinence products and the frequency to routinely check and change is not on the plan. Peg feeding prescription and charting is of the expected standard. There is a risk that showers are not provided as it is recorded as needing to be done every second day without the usual days recorded to set expectations. This is important because when progress records</p>

Record	Comment
	simply state, cares provided as per plan, you do not know whether this included a shower or not. Personal preferences are not explicitly documented (e.g. is a shower every second day in the afternoon the preference of [Ms A] or that of the facility).
Incident reporting	A standard incident reporting template is used commonly seen in health and disability services and is of an acceptable standard.
Relative communication record	A standard template is used, commonly seen in residential disability services. Information on this form is of an accepted standard.
Progress notes	Progress notes are written for each shift which is considered good practice. However, the content of progress notes does not represent systematic reporting of events or meet the Health Records Standard. There is no documentation in the progress notes that the wrong size incontinence product was fitted on 4 July 2019. There is not reference to incident reports being completed in relation to burns found on 4 July 2019.
Complaint investigation records	The standard of the complaint investigation documentation is comprehensive and representative of good practice.
Medication administration records	See notes in the prior table which demonstrates short-falls

Peers would consider the templates and forms to be representative of current accepted practice, but would also find the level of detail to be brief and not to an acceptable standard. Where information is brief, it does not provide adequate guidance for staff. Where a resident is non-verbal it becomes more important for documentation to be comprehensive. When considering these factors together, this represents a moderate departure from accepted practice. Although progress records are not systematic in the content, this is not unusual in residential disability services.

There is an opportunity to improve the level of detail of clinical records. This includes taking a systematic approach to progress reporting. The Health Records standard includes that records provide clear evidence of the care planning, decisions made and care delivered and information shared. Advice on updating progress notes has been

provided to the sector by the Ministry of Health that remains valid.⁷ Personal plans should include sufficient detail to enable a person unfamiliar with the resident to competently provide care and support for them.

5. The standard of communication between SJOG staff about [Ms A's] care between 4 July and 7 July 2019

SJOG in its internal investigation notes limited communication between staff was a contributory factor in [Ms A's] care not meeting expected standards. This has subsequently resulted in changes to communication processes used by SJOG.

Please refer to comments above in respect of the short term care plan and standard of progress reporting. In addition, written statements by staff suggest that not all relevant information was handed over between shifts or communicated between staff. For example, that [Ms A's] incontinence product was the incorrect size when fitted on the night shift (around 6.00 am) on 4 July and was not changed on the morning shift of 4 July. Poor communication likely contributed to the avoidable event which resulted in the burns [Ms A] received. There is some discrepancy in the recollection by staff in the advice received on 4 July by the manager when the burns were reported to her. Miscommunication could be avoided with use of systematic tools and templates for the verbal handover of information.⁸

The standard of communication between SJOG staff was insufficient and miscommunication between staff are contributory factors in [Ms A] receiving burns. However, peers working in residential disability services would likely agree that a lot of relevant information is handed over verbally which lacks structure despite the increasing availability of communication tools to help address issues of poor communication. This therefore represents a moderate departure from accepted practice.

6. The adequacy and appropriateness of SJOG's Neglect and Abuse of Residents and Clients Policy, and Open Disclosure Policy

Neglect and Abuse of Residents and Clients Policy is consistent with others used across health and disability services.

The Open Disclosure Policy is consistent with the guidance on open disclosure policies published by the Commissioner and is appropriate. The reference to the Commissioner's guidance is not the current version. (References 2007 and not 2019 but the policy itself is dated 2018).

Both policies would be subject to audit under the Health and Disability Services Standards. In my opinion both policies are satisfactory.

⁷ Refer <https://www.health.govt.nz/system/files/documents/pages/healthcert-bulletin1-july2010.pdf>

⁸ For example <https://www.ahrq.gov/hai/quality/tools/cauti-ltc/modules/implementation/long-term-modules/module4/mod4-facguide.html>

7. Any other matters in the case that warrant comment

I note there is reference within [DHB] documentation of a social worker and nursing staff concerns as to [Ms A's] general state of cleanliness with clear signs of not having been cleaned or washed recently when admitted to [the DHB]. I would recommend that the Commissioner also consider this information as being relevant. It points to concerns I have raised about whether personal cares were being delivered as intended when the personal care plan lacks detail."

Appendix B: Independent advice to the Commissioner

The following expert advice was obtained from plastic surgeon Dr Sally Langley:

“I have been asked to provide an opinion on the nature of the burns sustained to the thighs of [Ms A] in July 2019.

I have been sent documents and photographs:

1. 16/09/2019 [the] CEO, St John of God Hauora Trust. Email to [HDC]
2. 04/07/2019 Event notification, [EN C], Manager
3. 08/07/2019–02/08/2019 admission to [the public hospital].
4. 09/07/2019 [Plastic surgery registrar] report following assessment.
5. 23/07/2019 Investigation Report, St John of God Hauora Trust, 9 pages, compiled by [RN E], Manager Residential Clinical Support.
6. Photographs of [Ms A's] thigh burns

I have no conflict of interest.

I have read the Guidelines for Independent Advisors

Summary

[Ms A] was in long term care at St John of God Hauora Trust ... for several years. The thigh burns were noted on 04/07/2019 after about 7pm when the staff were getting [Ms A] undressed to go for a shower. On taking off her Molicares (disposable incontinence napkins) staff found large burns down both legs on upper thigh and groin. Other staff were asked to have a look and the manager, [EN C], was rung. The comment was that the continence product was put on too tight and was not checked by the staff. In the Investigation Report (5.) it is stated that [Ms A] was fitted with the incorrect size incontinent product, at 6am on 04/07/2019. The size XXL was used instead of the appropriate size M (medium). There was no supply of the correct M size. [Ms A] was then not checked for 13 hours. The incontinence product was removed. It is reported that [Ms A's] track pants and the product were 'sopping wet'.

On 05/07/2019 the clinical coordinator assessed the burns/blisters and attributed them to urine burns. The plan was for daily dressings.

An event form was filled out stating that 2x Molicares were placed under her bottom and JP (Johnson's incontinence pad) was placed over her thighs and groin. Also a pillow was placed between her knees so as to keep her legs apart. I interpret that this was following the discovery of the burns.

The mother of [Ms A] was informed on 05/07/2019 and visited on 07/07/2019. She was concerned about her daughter's condition and arranged her admission to the public

hospital on 08/07/2019. The medical ward note says that the burns were consistent with hot liquids. The blisters were debrided and dressed.

[Ms A] was reviewed by [a plastic surgery registrar] who noted blistering of medial thighs. [The registrar] found on examination linear tracks from mid medial thighs bilaterally tracking down towards posterior thighs. The burns would be consistent with liquid tracks, pooling on posterior thigh left side. The burns were mostly superficial to deep dermal. The dressing suggested was Mepilex Ag.

Four photographs were sent to me. There were four of the right thigh and four of the left thigh. It took me a while to work out the orientation of the person but eventually worked it out based on orientation of pants, striped top and sides of the bed.

The burn photos look consistent with some being initial (blistered) and some being a few days after the burn injury. They look like they are a mixture of superficial dermal, mid and possibly deep dermal. The burns are long and narrow and seem to be well defined. The surrounding skin looks normal and healthy.

The right thigh burn is a long narrow serpiginous shaped burn running obliquely across the upper inner thigh from medially distally to laterally proximally just inferior to the anterior superior iliac spine. Initially it was blistered.

The left thigh burn is a right angled burn with a longitudinal component running vertically down the medial aspect of the thigh and at right angles proximally with a transverse component, running transversely across the upper anterior thigh. The angle is a definite right angle.

These burns look like they have been caused by something that has made contact with the thighs, while the person was either in the sitting position or perhaps lying on their side. The object that has caused the burn would have had a narrow edge.

I considered whether the cause could be a hot water bottle or wheat bag but I would have thought the burn would be broader and would be less defined at the edges. Therefore I think that is unlikely.

Another possibility would be a hot metal bar or structure with a longitudinal component between the thighs and a transverse component at right angles which has been on the left thigh. This is not a feasible explanation.

These burns were not caused by a scald mechanism or flame.

On reading the correspondence sent with respect to [Ms A's] burns and the two proposed causes, i.e. hot liquid or urine I have had to review this case with those two possibilities in mind.

I do not think that these burns would be hot liquid burns. It is very unlikely that [Ms A] would have encountered hot liquid that could pour in to her lap and cause burns. She is nil by mouth and apparently does not take oral fluids let alone hot drinks. It is very unlikely that someone else's drink has fallen over into her lap. Also the burns are long and narrow and I think that hot liquid burns would cause a wider area of burn.

The other proposed cause is a urine burn. This also seems very unlikely from my experience. The burns are almost linear and more distal on her thighs than I would have thought could be related to napkins or pads. Also the burns are narrow. However the serpiginous shape of the edge of the burns could be similar to the edge of a napkin. I postulate that the napkin saturated with urine has caused a urine/chemical burn at the edge of the product perhaps due to a stronger concentration at the edge and perhaps a lower pH.

Urine is not supposed to cause chemical burns. There is very little in the literature. There is mention in the literature of irritant contact dermatitis caused by urine and faeces. This condition is linked to incontinence of urine, faeces, moisture, ammonia and friction.

In summary, it is evident that [Ms A] has sustained burns to both thighs. I think it is unlikely that the burns are due to hot liquid (scald), hot water bottle or wheat bag, or other hot contact. It is more likely that there has been a far more severe than usual localized narrow irregular shaped burn due to urine due to incorrectly used incontinence napkins.

References:

Healthlink.com: Incontinence associated dermatitis related to Increased pH, ammonia, bacteria, friction

DermNetNZ: Irritant contact dermatitis/Napkin dermatitis — as above

Kara Shah, Clinical Pediatrics 18/04/2017: Myths on Chemical Burns in the Diaper Area: Diaper rash. Diapers cannot cause chemical burns. Irritant contact dermatitis due to prolonged exposure to urine or stool causing irritation, maceration, friction and ammonia with increased pH. Fecal lipases and proteases. Inflammatory response. Secondary infection.

Dr Sally Langley”