CORONERS COURT OF NEW SOUTH WALES

Inquest:	Inquest into the death of Eve Liza Brown
Hearing dates:	1-4 September 2025
Date of findings:	19 March 2026
Place of findings:	Lightning Ridge Local Court
Findings of:	Magistrate Harriet Grahame, Deputy State Coroner
Catchwords:	CORONIAL LAW - First Nations - medical - regional health – delayed transfer - Lightning Ridge Multi-Purpose Health Centre - hypovolaemic shock - splenic haematoma - urosepsis
File Number:	2021/191981
Representation:	**Counsel Assisting the Coroner**: Chris McGorey, instructed by the NSW Crown Solicitor's Office **John Brown, Petrina Brown, and Angie Newman:** Maurice Blackburn Lawyers (advice, not appearance) **Western New South Wales Local Health District, NSW Ambulance, Taniya Mathew, Jaime Brizuela and Emma Reavell**: Manal Hamdan, instructed by MinterEllison **Dr Irfan Hakeem**: Lorna McFee**,** instructed by Barry Nilsson **Dr Roger Brown**: Ben Wilson, instructed by Meridian Lawyers
Non-publication orders:	Non-publication orders were made on 2 October 2025. A copy of the orders can be obtained from the Coroners Court registry.

Findings

Identity

The person who died was Eve Brown

Date of death

Eve died on 2 July 2021

Place of death

Eve died at Lightning Ridge

Cause of death

Eve died of hypovolaemic shock due to an acute ruptured subcapsular splenic haematoma in the setting of urosepsis

Manner of death

Eve died at a regional health facility, awaiting transfer to a larger centre in NSW. Had her transfer been expedited the previous day, it is more probable than not that she would have survived.

Recommendations

To the Chief Executive of the Western New South Wales Local Health District (WNSWLHD), I recommend that:

1. The WNSWLHD review the adequacy of its practices and procedures, with specific regard had to the evidence and findings in this inquest, as regards:
    a. Its instruction to visiting medical officers (VMOs) regarding the VMO consulting an experienced clinician (whether through the Virtual Rural Generalist Service, vCare, or some other means) before admitting a patient to a small hospital facility like the Lighting Ridge Multi-Purpose Centre. This consultation is to include discussion around diagnostic work-up and the appropriateness of a potential transfer to a larger hospital, in lieu of admission, and discussion of planning and timing of transfer. This is particularly so in the case of a patient with suspected bacterial infection who at the time of admission presents with symptoms of infection (e.g. elevated temperature) but otherwise presents as stable.
    b. Consideration of requiring (if not already occurring) random clinical reviews of VMOs' decisions around admitting an acute patient to a

small hospital (rather than transfer to larger hospital), with such reviews being carried out by clinicians with significant experience in generalist medical care in regional areas and specialist emergency / intensivist experience. This is to guard against lesser standards being accepted at the smaller facility.

   c. Potentially using Eve's case as part of scenario training for nursing and VMOs around identifying patients at risk of deterioration, transfer and the importance of consultation and discussions before admitting a patient.

2. The WNSWLHD review its practice and procedures to ensure (i) the frequency of vital sign observations being recorded is regularly audited and (ii) ensuring nursing staff (independent of VMOs), in the event frequency of the taking of vital signs and patient monitoring of person in the Emergency Department or admitted as an acute patient is not being undertaken consistently, immediately escalate the matter to the Nursing Unit Manger / Health Services Manager for action (including consideration of whether transfer of a patient with a suspected infection should occur given the capacity issues)
3. The WNSWLHD review the adequacy of its instruction to nursing staff regarding:
   a. The duty of nurses working in smaller regional hospitals, which do not have medical officers rostered on site overnight, to request a VMO attend to examine a patient (rather than leave that to the discretion of the VMO) if the nurse considers that appropriate; and
   b. The importance of nurses entering progress notes into the electronic record system as contemporaneous to the event being documented as is reasonably practicable (rather than entering one electronic record at the end of a shift).

Contents

Introduction

1. This inquest concerns the death of Eve Liza Brown. Eve was 42 years old when she died at the Lightning Ridge Multi-Purpose Centre (the LRC or the centre) on 2 July 2021.

2. Eve first presented to the LRC's Emergency Department at about 9:30am on Thursday, 1 July 2021. She was suspected to have a urinary tract infection and was admitted and treated with intravenous antibiotics and fluids. During the early hours of 2 July 2021, her condition rapidly deteriorated and it was thought she may be septic. A request was made for a flight to transfer Eve to Dubbo Base Hospital. Owing to limited asset availability, the flight arrived at Lightning Ridge shortly after 12:30pm with its clinicians arriving at the LRC at about 12:45pm. Shortly before the flight arrived, Eve suffered a cardiac arrest and could not be resuscitated. Eve was declared deceased at 1:30pm. The cause of death recorded at autopsy was "*hypovolaemic shock due to an acute ruptured subcapsular splenic haematoma in the setting of urosepsis*".

3. The inquest explored the cause and timing of Eve's splenic rupture; the assessments, investigations, diagnosis and treatment Eve received at the LRC; and the timing and decision-making in relation to the request made to transport Eve by air to Dubbo Base Hospital.

Who was Eve and why was an inquest held?

4. Eve was described as having a big heart. She loved to connect with others and was always ready to have a yarn or a laugh. She was kind, generous with her time, and she enjoyed helping others. Eve was greatly loved by her parents, partner, siblings, and children. The Court heard that she was an exceptionally dedicated mother and a loyal partner. Her children were her pride and joy and she focussed on their care. She was also a talented artist who graduated with honours from Deakin University.

5. The Court heard that Eve was a proud Warrimay (Worimi) woman who embraced her Aboriginal culture with deep respect and pride. Her father is a Murriwarri man and Eve also had links to local Yuwaalaraay culture. She always respected other peoples' lands, journeys, and stories.

6. Eve Brown was still a young woman at the time of her death. She had so many dreams and so much potential. Family members shared many beautiful memories of Eve with the Court during their moving family statements on the final day of the inquest. I am thankful for their generous participation in these proceedings and acknowledge how difficult it must have been for them as we heard testimony of Eve's pain and distress in her final hours. It should be noted that the inquest came about largely at their request. After their contact, the local Walgett Magistrate referred Eve's death to the State Coroner, who in turn made a decision to hold these proceedings.

7. I accept that part of the family's motivation in requesting these proceedings was to create change. Eve's sister, Angie Newman, explained that "*we don't want what happened to Eve to happen to anyone else, and we don't want any other family in our community or any other remote communities to feel the pain and anguish we have endured*."

The role of the coroner and the scope of the inquest

8. Pursuant to s 81 of the *Coroners Act 2009* (NSW) (the Act), the role of the coroner is to make findings as to the identity of the deceased person and in relation to the place and date of their death. The coroner is also to address issues concerning the manner and cause of the person's death.

9. Under s 82 of the Act, a coroner may also make recommendations arising from the evidence in relation to matters that have the capacity to improve public health and safety in the future. I considered a number of proposed recommendations in this inquest, which I refer to below.

Background evidence and facts

10. The Court took evidence over four hearing days. The Court also received extensive documentary material in five volumes, as well as audio recordings and a number of exhibits. This material included witness statements, medical records, expert reports, and policies and procedures. The Court heard oral evidence from doctors and nurses involved in Eve's care and retrieval requests. The Court was also assisted by expert evidence from:

    i. Associate Professor Luke Lawton, specialist emergency physician;

    ii. Associate Professor Jeremy Hsu, trauma and general surgeon; and

    iii. Dr Matthew Bragg, specialist emergency physician.

11. While I am unable to refer specifically to all the available material in detail in my reasons, it has been comprehensively reviewed and assessed.

Issues for consideration

12. The following list of issues was prepared before the proceedings commenced:

    i. What was the cause and timing of Eve's splenic rupture?

    ii. Was the initial assessment, investigations and treatment planning at the LRH, between 9:30am and 5:00pm (when Eve was admitted) reasonable in the circumstances?

    iii. Between 9:30am and 5:00pm, was there a missed opportunity to realise the severity of Eve's condition, initiate investigations that might have revealed the internal bleeding and / or cause her transfer to Dubbo Base Hospital on 1 July 2021?

iv. What monitoring did Eve receive between her admission on 1 July 2021 at about 5:00pm and 7:00am on 2 July 2021 and how did she present in that time? Was the clinical response to her presentation reasonable in the circumstances?

v. From about 7:00am onwards until about 12:30pm, was the clinical response reasonable in the circumstances? Was a timely request made to transport Eve by air to Dubbo Base Hospital and was that effected promptly?

vi. Were the efforts to resuscitation Eve when she went into cardiac arrest reasonable in the circumstances?

vii. Was LRH's staffing numbers, facilities (x-ray, abdominal ultrasound, testing) reasonable having regard to Eve's presentation? Did these factors contribute to the outcome?

13. These issues guided the investigation, but an inquest tends to further crystallise the critical issues, and I address those issues under several broad headings below.

Fact finding

14. Annexed to Counsel Assisting's written closing submissions, was an outline of non-contentious facts. The interested parties' closing submissions in reply did not dispute this outline. However, in their submissions, the WNSWLHD sought to clarify two additional matters in that document. Counsel Assisting did not cavil with these two additional matters. I attach as Appendix A to these reasons a copy of the non-contentious document which incorporates those two points raised by the WNSWLHD. I do not intend to repeat all the material contained in it, however, I adopt its content as it sets out a useful chronology of events.

15. Counsel Assisting also produced comprehensive closing submissions summarising much of the evidence. I have also relied heavily upon his document in recording my written reasons, at times directly adopting his words, where appropriate. I have also had the opportunity to consult submissions from each of the interested parties and reviewed the evidence carefully where differences in fact or emphasis are noted and in all matters the conclusions are my own.

Cause and Timing of Eve's Splenic Rupture

Cause of Eve's splenic haematoma and rupture

16. Eve was found to have an antemortem splenic haematoma and splenic rupture during autopsy.

17. Splenic rupture is typically associated with physical trauma (e.g. blunt force trauma occasioned through car accident or assault), however, *atraumatic* splenic rupture can also

occur.

18. There is no evidence of Eve suffering trauma before her presentation to the LRC on 1 July 2021.

19. While there was a history of domestic violence in Eve's relationship with Mr Flick prior to 2014, there were no further incidents of violence after the resumption of their relationship in 2016 according to both Eve's mother and Mr Flick. No witness raised the possibility of Eve being physically harmed or injured by any person in the days before her death. There was no evidence of a significant or relevant accident or fall.

20. Examination of Eve's phone by the officer-in-charge did not reveal any evidence of Eve suffering an injury or being assaulted before 1 July 2021.

21. Dr Loots, forensic pathologist, also did not observe external signs of recent external injury suggestive of blunt force injury (outside that attributable to medical interventions) when conducting the autopsy.

22. Counsel Assisting submitted that the splenic haematoma and splenic rupture were not attributable to physical trauma as there is no evidence of Eve suffering trauma before her presentation to the LRC on 1 July 2021.

23. I have considered the evidence carefully and am well satisfied that Eve's attendance at the LRC was not precipitated by trauma. There is no evidence whatsoever of traumatic splenic injury in the days leading up to her hospitalisation.

24. *Atraumatic* splenic rupture is rare but can occur in splenic enlargement which can, potentially, result from (i) structural abnormality of the spleen and (ii) systemic infection or sepsis (which itself causes vomiting).

25. These were present in Eve's case. The autopsy revealed that Eve had both (i) a hamartoma (a benign tumour) in her spleen and (ii) bilateral pyelonephritis consistent with her suffering an acute on chronic ascending urinary tract infection (UTI) before her death.

26. Pyelonephritis is a bacterial infection that spreads from the bladder to the upper urinary tract / kidney area and is regarded as a more serious infection than a lower tract infection in the bladder. In Eve's case, this infection commenced before she presented to the LRC. During the days before her presentation, this infection caused symptoms such as nausea, vomiting, and elevated temperature.

27. Recurrent vomiting caused bleeding within the spleen's capsule, which is the outer layer or membrane of the spleen. This was the "*subcapsular haematoma"* observed in autopsy. The bleeding within the spleen built up until it caused a rupture of the spleen. This caused blood loss from the spleen into Eve's abdominal space (*intraperitoneal space*) which, in turn, caused hypovolaemic shock.

28. The blood that entered the cavity space caused peritoneal irritation / pain which likely increased as the volume of blood in that space increased. This is consistent with Eve's reports of abdominal pain at 4:00am, which increased in intensity as time went on.

29. All the available evidence points to Eve having suffered from an *atraumatic* splenic rupture and I make that finding.

Timing of the splenic haematoma and rupture

30. Although connected, splenic haematoma and splenic rupture have separate onsets.

31. Counsel Assisting submitted that the exact timing of the onset of the subcapsular haematoma could not be ascertained. Dr Loots opined that it was a recent formation and was likely to have been within one to three days of Eve's death. There is a reasonable likelihood it had onset by the time of her presentation to the LRC on 1 July 2021.

32. Counsel Assisting submitted that it was open for me to find that Eve's splenic *rupture* occurred close in time to her report of abdominal pain at about 4:04am on 2 July 2021 and no later than 5:13am when she reported that pain as severe. In this regard, Counsel Assisting summarised the relevant reports/observations as follows:

    i. At about 4:04am, Eve reported abdominal pain (not noted earlier at 2:14am).

    ii. At about 4:29am, Eve reported to RN Jaime Brizuela (RN Brizuela) ongoing "*lower abdominal pain (score 7-8/10)"* and feeling nauseated.

    iii. At about 5:13am, Eve reported to RN Brizuela "*severe pain in left side of abdomen"* and was observed to be "*groaning in pain"* and stating she couldn't breathe.

    iv. At about 5:45am, Eve collapsed to the floor while walking from her bed to the room's ensuite. This collapse was unwitnessed but heard by nearby nurses. Her collapse at about 5:45am was likely the result of a drop in her blood pressure caused by blood loss from her splenic rupture.

33. In my view, it is most likely that Eve's splenic rupture occurred at some time after 2:14am. It is impossible to know how long she was in pain before she made a complaint. Certainly, by the time she reported pain to nursing staff at 4:04am, it is likely that the process had commenced. By 4:29am, she was reporting the pain as 7-8/10 and by 5:13am she was groaning and finding it hard to breathe.

Eve's prospects of survival had she been admitted to Dubbo Base Hospital before 4:00am on 2 July 2021

34. Counsel Assisting submitted that there is a "reasonable possibility" that Eve would have survived her splenic rupture had she been transferred to Dubbo Base Hospital by about 4:00am (this being the approximate time she suffered her splenic rupture).

35. Counsel Assisting submitted that if that had occurred, Eve would have been in a facility that (i) had imaging facilities which would have revealed her internal bleeding and (ii) could provide her with emergency surgery.

36. The representative for Mr John Brown, Ms Petrina Brown, and Ms Angie Newman challenged the assertion there was a "reasonable possibility" Eve would have survived if she had been transferred before 4:00am. Rather, it was submitted that the joint position and consensus of the experts was that it would have been "*more probable than not*" that Eve would have survived had a request for retrieval or transfer to Dubbo Base Hospital been made or been underway by 5:00pm on 1 July 2021 (assuming at the very least Eve was to have arrived at Dubbo Base Hospital before 4:00am on 2 July 2021).

37. Having regard to the evidence of Dr Bragg, Dr Hsu, and Dr Lawton, Counsel Assisting submitted that it would be open to me to use either the terminology of either "reasonable possibility" or "more probable than not".

38. I have carefully reviewed the expert evidence which I regard as measured, undisputed, and unanimous on this question. I note the oral evidence given in conclave before me and the joint expert report provided to me. I accept that it is *more probable than not* that Eve would have survived had she been transferred the evening before her death and been at Dubbo Base Hospital prior to 4:00am on 2 July 2021.

Diagnosis and Treatment Plan on 1 July 2021

Subcapsular haematoma / splenic rupture not identified before death

39. The possibility of a subcapsular haematoma was not identified as a diagnostic possibility by Dr Hakeem, Visiting Medical Officer (VMO), on 1 July 2021. The experts were not critical of Dr Hakeem for this. Counsel Assisting submitted that a subcapsular haematoma or splenic rupture was not something that would have been reasonably obvious or something a clinician in real time would be expected to have reasonably considered as a diagnostic possibility (even as a differential diagnosis). This is when (i) there was no history or signs suggestive of Eve suffering a traumatic injury and (ii) how rarely atraumatic spleen ruptures occur.

40. Having reviewed the expert evidence, I accept and understand why Dr Hakeem did not specifically consider a subcapsular haematoma or splenic rupture on 1 July 2021. I also note that at the time of the examination, which occurred before midday on 1 July 2021, while Eve is likely to have had a subcapsular haematoma which was progressively worsening, there had been no rupture.

Failure to document differential diagnostic possibilities

41. Clinical assessment requires identification of a working diagnosis along with any other

differential diagnostic possibility reasonably enlivened by the patient's history and known symptoms. Differential diagnoses are absolute in that they should be investigated until they are excluded. This did not happen in Eve's case.

42. Counsel Assisting submitted that it was reasonable to identify a working diagnosis of acute upper UTI, however, there were other differential diagnoses that should have also been identified. I accept that submission. The very real dangers of anchoring to a working diagnosis before properly considering other possibilities is well documented in medical literature. Not all of Eve's symptoms were reasonably explainable by a UTI, particularly her history of nausea and vomiting. Arterial blood gas analysis revealed "*quite profound vomiting where there's so much vomiting that the acid has been lost from the stomach*".

43. The experts agreed that Eve's symptoms and history reasonably enlivened differential diagnoses of (i) obstructive pyelonephritis; (ii) bowel obstruction; (iii) diverticulitis; (iv) enteritis; and (v) pancreatitis (inflammation of the pancreas which typically results in severe upper abdominal pain that may spread to the back). These conditions can put a patient at serious risk if not identified and treated promptly. The plan documented by Dr Hakeem did not identify these differential diagnoses or provide for investigations to exclude them.

44. Counsel Assisting noted that investigation of these differentials required contrast CT imaging. The LRC did not have CT imaging capacity. Eve required transfer to a facility with CT imaging facilities. The closest facility with that capacity was Dubbo Base Hospital.

45. As is now known, Eve did not, in fact, suffer from any of the differential diagnoses suggested by the experts, her medical issue was somewhat unusual. However, the significance of the differential diagnoses is that had contrast CT imaging been performed to investigate them, it may well have revealed her subcapsular haematoma (and her splenic rupture if that had occurred by the time of imaging).

46. Early transfer to the Dubbo Base Hospital for CT imaging would also have meant Eve was in a hospital setting with intensive care and emergency surgery capabilities when her spleen ruptured.

Expert evidence on the importance of differential diagnoses and their investigation

47. The experts were united in their analysis of the problems inherent in Eve's recorded diagnosis. Dr Hsu said in his evidence:

> *"…However, the fundamental issue in this case is that the patient, in my opinion, was not managed in a facility that had the appropriate resources.*
>
> *So not only does that not include the resources to diagnose or confirm the diagnosis which was the working diagnosis at the time by the treating clinicians, but there was - there were no resources to work through the potential life-threatening differential diagnoses nor was there the ability to manage any deterioration. So, you know, we practise in a system of where*

it's not only enough to say we have treatment, for example, antibiotics which would treat a urinary tract infection, but we also have to consider what is the potential for further deterioration.

This stems from, you know, the systems that we have established in trauma where ***the principle is having the right patient in the right place at the right time****.* ***And so that also then considers if they do deteriorate, am I able to manage this patient appropriately?*** *And this is very - you know, it's very fortunate,* ***I think in this particular situation that there was over 12 hours between the time of presentation to the first sign of significant deterioration and by that stage the horse has bolted so to speak because the logistics that are required to transfer patients is not instantaneous****.*

So I think that, really, if you wind that all back, recognising the differential diagnoses, recognising that that facility at Lightning Ridge didn't have the capabilities to investigate or treat any potential deterioration for the patient, ***necessitated an early discussion within the system that exists that recognises these limitations of regional centres****, you know, that discussion never took place until it was too late."* (emphasis added)

48. Dr Lawton said in his evidence:

"…I think this particular case ***illustrates the tyranny of distance.*** *What we've got here is a patient with a diagnosis which fits some of the clinical facts, but not all of them, and I agree with my colleagues that I think there was a broader consideration to diagnostic inquiry was probably needed. You've got a patient with some diagnostic imperatives who's in a - in a small, remote health service, 350 [kms] away from the nearest base hospital where that can't happen. So that's the first piece. The second piece is if one of those diagnoses does manifest, then - and needs particularly surgical intervention, again the patient is also in a hospital where that cannot happen.*

So she's in a place where we can't definitively exclude a serious condition, a serious surgical condition and even if we find one, we can't treat it. And then so - and if one of those conditions exist and the patient begins to deteriorate, she's a very long way from definitive care, and that's the basis for Dr Hsu's comments about trauma patients being transferred early rather than retained in places where definitive intervention can't be undertaken." (emphasis added)

49. As for the need for CT scanning, Dr Lawton said in evidence:

"…to some degree that medical need for a CT scan to break that diagnostic conundrum that we're in, ***that exists independently of a patient's location****. Like, I think* ***if I'm going to say in the ED this lady would get a CT scan, then in Lightning Ridge she still needs a CT scan****. The problem is there's not a CT scanner in Lightning Ridge. And so I agree with Dr Hsu that that lends weight to ringing up Dubbo Hospital and speaking to the ED admitting officer and say, "Hey, this is what I've got" and articulating the concerns that I had, in which case I'd expect the admitting officer would say, "Of course, send the patient down, we'll get a CT scan done, contact retrievals.*

…

Really, the reason I think I sort of saying, well, I acknowledge in Lightning Ridge it's possibly going to take me six to 12 hours to get this lady to a CT scanner, ***I want to do that as soon as I can because I want to make a diagnosis while the patient is stable rather than when she's unstable****, you know, because if she does need surgery, whatever it is, you know - and I defer to - to Dr Hsu but, you know, your anaesthetic risks, all those sort of things go up if you've got a shocked patient who you're taking into theatre versus one who we know that there's pathology that needs to be sorted out, but we're doing so before the - the patient's physiology becomes significantly deranged."* (emphasis added)

Dr Hakeem's evidence regarding Eve's differential diagnoses and investigations

50. Dr Hakeem, in his evidence at inquest, unequivocally accepted the opinions of the experts I have set out above. I accept that Dr Hakeem has carefully considered his role in Eve's care and squarely faced the problems that have been revealed.

51. In examination, Dr Hakeem was asked how he arrived at his diagnosis and treatment plan. Without seeking to excuse the shortcomings of his diagnosis and treatment plan, he gave evidence that, in his experience, reports of abdominal pain and vomiting over several days could happen in cases of UTI, but he agreed that it was not usual.

52. Dr Hakeem explained that his abdominal examination was directed to investigating for possible signs of differential diagnoses such diverticulitis and pancreatitis. What he observed in that examination did not itself point to the likelihood of the differential diagnoses in Eve's case.

53. In court Dr Hakeem accepted (i) the existence of the differential diagnoses cannot be reasonably excluded based only on an abdominal examination alone (e.g. without CT imaging) and (ii) he did not document his consideration of these differential diagnoses (his documentation refers only to UTI).

54. Dr Hakeem said that had he been assessing Eve in a larger hospital with CT imaging facilities, he expects he would have requested a CT scan. He said his approach to Eve's treatment was informed by his experience working in smaller rural hospitals where facilities are not readily to hand.

55. Relevantly, Dr Hakeem said in evidence:

"Q. And when you conduct the abdominal examination, is that in mind, is that in terms of looking for any indicators particular to upper tract infection, or lower, or what would be--

A. Well, the - ***the general abdominal examination was to see if there is anything else as*** *- as well. Because the urinary tract infection from clear from the tests and from the*

temperature. Now, the other thing was to exclude any other differential diagnosis like - ***like the appendicitis, cholecystitis, pancreatitis, and diverticulitis, and things like that, which can present with abdominal pain****. And these are surgical conditions.*

…

Q. And would abdominal pain be an indicator for those types of conditions as well?

A. Yes. It's all - abdominal pain, they will be coming all with abdominal pain. But it - it depends on, like, their history, what - what - how did this pain - the - the manner of the pain came, the manner of the pain is acting, and the examination, the feeling of examination. It's usually a clinical thing, that you do it clinically, especially in these regional areas, like, even when - when I was in Derby, that's what you do, you try to clinically exclude this conditions because you don't have that much of resources to use.

Q. Can I just tease that out? When you say, it's what you would do in a regional area, as opposed to what, what would you do in a metropolitan area in that same situation?

A. In that same situation, straight away any abdominal pain, severe abdominal pain has to go to CT scan.

Q. So, are you saying there that, in terms of practice in a regional area, it is different to what you would apply in a more larger scale hospital setting?

A. Yes, yes. Of course.

Q. And just on that point, accepting, as you say, for instance, that you've described sort of guarding of the abdomen rebound tenderness or rigidity can be indicators of pancreatitis or--

A. Or appendicitis or cholecystitis. Yep.

Q. --in the context of someone with a fever and abdominal pain, you can't exclude those differentials on the basis of an abdominal examination alone. Can you?

A. Well, most of the time, you can. ***But a CT scan will be - is mandatory in these situations with - if there is a CT scan around, and--***

Q. And when you say, "most of the time, you can", but if there's a CT, it's mandatory--

A. Yeah.

Q. --just trying to understand the distinction there, I'm not trying to put words in your mouth here, please correct me if I'm wrong--

A. Yeah.

Q. --are you saying, most of the time, you can exclude those conditions in a regional setting where you don't have a CT scan--

A. Yes.

Q. --that would be standard practice, or--

A. Yep. Yes.

Q. Is that what you mean by that?

A. Yes.

Q. But you acknowledge that preferrable practice, or in a metropolitan practice would be, if a CT scan's available--

A. Yes.

Q. --you would do that? That's the--

A. Yes, yes." (emphasis added)

56. Further in his evidence, Dr Hakeem conceded that he should have documented other differential diagnoses that he excluded following the abdominal examination. His current practice is to identify and document differential diagnoses. Dr Hakeem explained that workload and time pressures were why other differential diagnoses were not documented on 1 July 2021.

57. Dr Hakeem also said:

> *"As I said, like, if it is in a - in a large centre, I would have sent the patient for a CT scan. But because of the distance and difficult logistics, it's - usually that's our practice in the regional areas and small hospitals, that's the practice of most of the doctors, is to try to exclude anything clinically as much as possible."*

58. The experts were asked to comment on the approach Dr Hakeem described.

59. Dr Lawton relevantly said in his evidence on this issue:

> *"The first thing that strikes me is that what you're obviously telling me about Dr Hakeem's clinical reasoning process is to a degree he actually recognised the diagnostic bind that I discussed in my previous answer which is, "I've got an exam that's not concerning but then I've got all these other" - "there is the possibility of these other diagnoses," and I outlined for you how I would approach that, and I think that was that imaging.*
>
> *And the comment that, "If I could've done a CT I would've but I didn't have one so I didn't," I return to my comment to say that the need for CT, in my view, realistically exists independently of the practice or the practice setting to a degree, and I think the bit - what I would say in response to that is I think, if I would've done a CT, I think it would've been reasonable to pick up the phone and speak to the nearest bed and say, "Hey, look, I've got a lady here, I think she's got a UTI but she's got all these abdominal symptoms that I can't really explain. I think I should send her up to you for a CT."*

60. Dr Hsu relevantly said in evidence:

> *"I recognise 100% that it's a different and more challenging practice environment. Right.* ***It is more difficult to organise a CT scan in Lightning Ridge than it is for me at Westmead***

> ***Hospital. I recognise that. But that shouldn't change the need to actually have it done, as in, again it's another fundamental principle that we have in surgical practice that if you think about it, you should probably just do it*** *and, you know, irrespective of the challenges behind it, and we try and build systems to help facilitate this, recognising that there are different levels of resources across the state, and I think to me that's where the greatest issue with regards to your question lies.* ***It's that recognition that a CT was required, but the decision not to was justified by factors that shouldn't really be, you know, entering into that decision****."* (emphasis added)

61. Dr Hakeem accepted the expert opinions that were critical of his management and he did not attempt to excuse the deficiencies in his diagnosis and treatment plan.

62. The representative for Mr and Mrs Brown and Ms Newman submitted that Dr Bragg also acknowledged there was an error in not considering other potential diagnoses. It was submitted on behalf of these family members that subcapsular haematoma was not the only differential diagnosis overlooked by Dr Hakeem, which could have led to alternate, life-saving care for Eve. I accept this is correct.

63. It is clear that Eve's initial presentation was not straightforward. While it may have been reasonable to identify a working diagnosis of acute upper UTI, she also had symptoms which did not fit that usual clinical picture. These included the history of nausea and ongoing severe vomiting. Dr Hakeem gave oral evidence that he had in fact considered pancreatitis and diverticulitis, however, these were not documented and could not have been reasonably excluded on the basis of an abdominal examination alone.

64. Close attention to differential diagnoses is always essential but in a situation such as this, it can become a matter of life or death. A number of differential diagnoses were identified by the experts who stated they should have been considered as concurrent or co-existent at the time of Eve's initial presentation. They needed to be excluded and should have been documented. The diagnosis and treatment plan formulated by Dr Hakeem was anchored to the UTI diagnosis and it did not make reasonable allowance for the differential diagnostic possibilities.

65. The real significance of the issue rests with the fact that a contrast CT scan was essential to properly investigate the available differential diagnoses. Dr Hakeem conceded that had he been at a large hospital, "*I would have sent the patient for a CT scan*." The experts acknowledged the difficulties and resource restrictions involved in working in a regional setting, but made it clear these restrictions should not change the way diagnosis is approached. If a CT scan was necessary to exclude potentially life-threatening differential diagnoses, it was necessary *wherever* the patient was seen and arrangements needed to be made to get the patient to the right location.

66. In my view, discussions and planning about transferring Eve to a hospital where imaging was available should have commenced soon after Dr Hakeem made his first examination. Certainly, by the time she was admitted a formal request should have been made and, ideally, arrangements would have been well underway.

Consideration of the LRC's capacities when formulating plans

67. As noted by Counsel Assisting, careful consideration must be given to (i) the limited capacity of the LRC to investigate and to respond in the event of a deterioration and (ii) the timeframes involved in effecting a transfer to Dubbo Base Hospital should that become necessary for investigation or emergency treatment.

68. Longer distance transfers can involve greater difficulty to arrange from a flight logistics perspective owing to weather, fatigue and duty hours, and competing tasks. Early requests and planning for transfer mitigates the risks to a patient should the working diagnosis prove incorrect or if the patient experiences an acute deterioration that might require an emergency response not available at the rural hospital.

69. Early discussions around planning for transfer also reduce the likelihood of missed opportunities for early transfer. Sometimes a flight may be in the air to be collect another patient nearby. That asset might be able to attend Lightning Ridge to collect a stable patient with little difficulty as part of that tasking. If there is information to hand pointing to limited assets availability at later times, that makes an early request for transfer more important.

70. Lightning Ridge is a considerable distance from the nearest base hospital and it has very limited capacity for scanning or surgery. Early planning for evacuation is essential when differential diagnoses are identified which may produce life threatening complications.

Level of monitoring available overnight at the LRC

71. Counsel Assisting submitted that a decision to admit a patient overnight to a facility like the LRC should consider the level of monitoring the patient is likely to receive there overnight. In Eve's case, overnight admission in the acute care ward meant she was under the supervision of a single nurse who was solely responsible for the acute care ward (4 beds) and the emergency department (4 beds). That nurse was also performing the "senior nurse on shift" role meaning he had oversight responsibilities for the nurses assigned to the aged care ward (19 beds).

72. Even if there were limited numbers in the acute care ward and Emergency Department as at 5:00pm when the decision to admit Eve was made, it could not be assumed it would remain that way. Emergency Departments themselves are especially *"fluid"* environments.

73. In his evidence, Dr Lawton described an arrangement whereby a single nurse covering a

small acute care ward and Emergency Department, which are physically and geographically separated, as putting that nurse "*in an absolutely impossible position"*. I accept his assessment.

74. There was no doctor on shift at the LRC overnight to assist. If the responsible nurse required advice from a medical officer, he or she would rely on contacting the Virtual Rural Generalist Service (VRGS) or vCare or otherwise calling the afterhours on-call VMO by telephone.

75. Counsel Assisting submitted that the monitoring Eve would receive overnight at the LRC was less than that which would be expected were she admitted to an acute care ward at a larger hospital like Dubbo Base Hospital. He submitted that these limitations ought to have been weighed in the formulation of any treatment plan. The level of care available at LRC overnight should have been a factor in the decision about whether to transfer Eve to Dubbo Base Hospital on the afternoon / evening of 1 July 2021 or whether to admit her overnight to the LRC. I accept this submission.

76. In my view, the level of care that would have been available is another clear factor pointing towards the need for planning for transfer to Dubbo to have commenced at the time of the first consultation.

Consultation around plan to admit to the LRC

77. In the view of the experts, it would have been beneficial for Dr Hakeem to have consulted a medical officer about his proposed treatment plan (to admit Eve and not transfer her). In Counsel Assisting's view, this would have provided an opportunity for Dr Hakeem to "soundboard" his plan with an experienced colleague who could test the assumptions underlying the proposed plan, point to risks / weaknesses in the plan and to potentially advocate alternative measures for consideration. I accept this submission.

78. Working in a small hospital or regional medical centre can be isolating. Professionals can come to accept that what would happen in a larger centre is largely irrelevant. This cultural slip must be guarded against. As the experts made clear, Eve needed CT scanning wherever she was. She also needed to be somewhere where she could be adequately monitored and treated if she deteriorated.

79. The WNSWLHD has procedures relevant to the identification of deterioration of patients and their transfer to hospitals with appropriate investigative and emergency medicine capacities. The procedures did not mandate Dr Hakeem consult a VRGS and/or vCare clinician before admitting Eve as opposed to requesting or discussing her transfer to a larger hospital (e.g. Dubbo Base Hospital).

80. Dr Bragg described the benefits of colleague consultation, stating in his evidence:

"…I think, one of the key issues here in this - in this case. So, without wanting to sort of jump too far ahead, my - my thoughts on this matter are, look, ***we've got an isolated doctor working in a low-resource setting****. The - whose - whose primary role is in the associated general practice but who provides on-call and onsite support to a small rural facility that is -* ***Lightning Ridge is mainly an aged care facility with four acute beds.*** *So what is the - the mechanism for this doctor when it comes to admitting an acute patient and there's evidence presented in - in the brief of evidence that Lightning Ridge admits less than one acute patient to their acute ward per day. Maybe one every two days.* ***So there's not a high incidence of acute patients being admitted****. So it's not a routine occurrence as would happen in my hospital or Dr Lawton or Dr Hsu's hospital. So what - and there are - there are facilities in place within the system to help support isolated doctors like Dr Hakeem.*

So if, hypothetically, as part of the decision to admit Ms Brown to Lightning Ridge for a presumed or working diagnosis of ascending urinary tract infection, I think the evidence, although it's not definitely documentation, I think the evidence is pretty clear that Dr Hakeem felt that she had an ascending urinary tract infection of the upper urinary tract, not a simple urinary tract infection, a simple cystitis, bladder infection. I think that it's pretty clear that he thought he was treating a kidney infection and he was - he was correct, the autopsy findings did show pyelonephritis, so kidney infection.

At that - at that point where he's made the decision, "I think" - "I think this is kidney infection, I think they need admission to treat that" which I think is appropriate, ***if there was a mechanism where Dr Hakeem could get support for that admission decision****, and that could be done within the existing system framework, so via vCare or the virtual generalist service, there might be an opportunity when you're having a discussion with a peer and you're having to present information over the phone, that gives you an opportunity as the primary doctor to review yourself what's going on and some of the things, as Dr Lawton said, that don't really quite add up. You know, some of the symptoms don't fit with an obvious kidney infection.*

So that - just that ability to speak to a peer, discuss the case, that may have enlivened the possibility of doing a CT scan because it just, as Dr Lawton said, it just doesn't all quite add up neatly. As it was - he made a decision on his own without that sort of support and I think that's - that's possibly an area which could be looked at to try and improve the service at Lightning Ridge." (emphasis added)

81. In his evidence, Dr Hakeem, agreed that, with the benefit of hindsight, it would have been of benefit to discuss his plan to admit Eve. He considered that would best be done with vCare as opposed to the VRGS.

82. The system in place allows for more consultation than took place. I accept the expert's view that had Dr Hakeem discussed Eve's case with a colleague, he may have been alerted to the need for transfer rather than admission.

83. It is important to state that Dr Hakeem accepted the expert evidence. It was clear to me that Eve's death has had a significant impact on him and had caused him to review his

practice and undertake additional courses to improve his skills in diagnosis and treatment planning, particularly in regional or rural settings where there is less support.

84. The evidence revealed that there were systems in place to support isolated medical practitioners, such as Dr Hakeem, at the time of Eve's death. While these systems have apparently been strengthened since 2021, I retain concerns about whether they are robust enough to ensure that the treatment plans developed at small facilities are commensurate with those at larger facilities. In a small facility, the decision to transfer or admit a patient can have profound implications. Encouraging consultation on this issue is a matter to which I will return to when discussing recommendations below.

Vital Signs and Nursing Monitoring between 9:30am and 9:30pm

Required frequency of vital sign observations

85. The WNSWLHD procedure for frequency of vital sign observations (e.g. heart rate, respiratory rate, temperature, blood pressure) during Emergency Department admission required:

    i. For a patient with yellow zone observations, a full set of vital sign observation must be taken and documented at minimum every 30 minutes. That frequency can be changed to once hourly after consultation with a senior medical officer or vital sign observations return to *Between the Flags* post treatment.

    ii. For a patient whose vital signs are *Between the Flags*, a full set of vital sign observations must be taken and documented every hour for 4 hours. Thereafter, the frequency is to be at a level directed by a senior medical officer.

    iii. The expected frequency of vital signs, for a patient admitted to a ward (e.g. acute care ward), who is considered *Between the Flags*, is once every four hours.

Lack of vital signs recorded for Eve between 9:30am and 9:30pm

86. Eve's vital signs were first taken at triage at about 9:30am. Her temperature (38.5°C) was a *yellow zone observation*. As per the WNSWLHD procedure, she should have had her vitals taken every 30 minutes after the initial observations were taken until a senior medical officer directed that it could be reduced to once hourly. However, more than 12 hours passed until the next documentation of Eve's vital signs. These were not recorded until 9:49pm (while she was in the acute care ward). This is clearly unacceptable.

87. The *Between the Flags* observation protocol is intended to assist in the early detection of an acutely unwell patient or one who is experiencing deterioration to allow for early escalation or intervention. It is a well-recognised protocol throughout NSW. In my view, if a patient will not receive care which includes adherence to this kind of basic protocol,

arrangements should be made to move them immediately. It is incumbent on the WNSWLHD to ensure that minimum requirements can be met.

88. Nurse Emma Reavell (RN Reavell) was the sole nurse assigned to the Emergency Department between 7:00am and 9:00pm. That shift normally ended at about 3:30pm. She worked extra hours owing to staff shortages. She became the nurse in charge for the whole facility from about 4:30pm. RN Reavell was responsible for taking Eve's vital signs after triage until her move to the acute care ward at about 4:00pm to 5:00pm.

89. RN Reavell conceded that Eve's vital signs were not taken as required. She could not recall or explain, at the time of giving evidence, why that requirement was not complied with.

90. Counsel Assisting submitted that the effect of RN Reavell's evidence is that although she endeavoured to comply with the vital signs' requirements wherever possible, it was not an extraordinary occurrence for vital signs not to be taken at the mandated frequency. Explanations for this would most commonly be the workload the Emergency Department nurse might have on a particular day.

91. Registered Nurse Kerry Irvin (RN Irvin), the LRC Nursing Manager, who was acting in the role of LRC Health Services Manager as of 1 July 2021, was asked whether the lack of vital signs observations in Eve's case was abnormal in her experience. The effect of RN Irvin's evidence was that it was not an unusual occurrence having regard to workload experienced in small rural hospitals like the LRC. While it may not be uncommon for vital signs to be taken as regularly as required, the 12-hour gap in Eve's case was not normal in RN Irvin's experience.

92. I accept that both nurses gave honest evidence about the difficulties experienced at the LRC with strictly complying with a basic protocol such as the taking of vital signs.

93. The experts emphasised the importance of vital signs and their being taken at the required frequency. Vital signs are "objective" markers of the patient's wellbeing. Dr Hsu said, relevantly, in his evidence:

> *"…within New South Wales, we actually have systems that standardise care for patients and observations are part of that standardised system.* ***We have an escalation system, so the Between the Flags, which relies on the vital signs, which is an automatic notification for escalation of care and assessment that is standard throughout all New South Wales hospitals****. And if this system which should be in place and applicable to a facility such as Lightning Ridge, then to accept that you can't meet that, then results in variation which then results in errors, which then results in omissions and then potential harm to the patient, again it's not an isolated situation for which I'm gathering from the evidence from the nurses.*

This is a problem that affects all hospitals in New South Wales, as in, the workforce shortage, the under-resourcing, but in particular, I guess ***a regional setting is particularly vulnerable, and we know that there are disparities in outcomes between regional patients and metropolitan patients****, and to me that's further evidence to suggest that* ***we actually need these systems in place to ensure that we are closing that gap in terms of outcomes for regional patients, and so these systems are important****. They're very important, and the fact that they're not able to execute these or carry out these systems - and it's sort of that, again to the previous points about, you know, whether there's a culture, you know, that, you know, that we can't - you know, we can't practically do it, so therefore we just don't.*

You know, we wouldn't accept that in a metro, and I think - I don't think we should accept that in regional areas as well just because there's a lack of - of resources. I think that needs to be highlighted*."* (emphasis added)

94. In his evidence, Dr Lawton noted that all hospitals receive accreditation through the Australian Commission on Safety and Quality in Health Care. Accreditation requires a hospital to submit at short notice (e.g., weeks' notice) to audits of compliance with expected care standards.

95. Ms Sharon McKay, in her evidence for the WNSWLHD, was asked about RN Irvin's evidence about the difficulties in meeting vital sign requirements and the audits undertaken to monitor compliance. The effect of Ms McKay's evidence was that, in her opinion, it was not common practice in small facilities for vital signs to not be recorded as required by the policy. She said that RN Irvin and RN Reavell's evidence was disappointing in this regard. Ms McKay also explained that she did not think it common practice to miss vital sign checks and that it had not been identified as an issue during WNSWLHD's six-monthly audit schedule monitoring compliance with the vital sign regularity, which is overseen by Western New South Wales clinical governance.

96. In their submissions, the WNSWLHD accepted that the checking of vital signs for Eve while in the Emergency Department ought to have occurred at least hourly, which did not occur.

97. The WNSWLHD noted in its submissions that both Dr Bragg and Associate Professor Lawton considered it was likely that, other than an elevated temperature, Eve's vital signs (if taken during the 12-hour gap in which her vitals were not taken) would have remained stable and between the flags. Indeed, following Eve's admission to the Acute Care Ward, her vital signs were taken at regular intervals after 9.49pm.

98. The WNSWLHD also submitted that, consistent with the evidence of Ms McKay, significant staffing challenges were felt at LRC in 2021 as a result of COVID-19 border closures, which reduced the available pool of nurses from which additional staff could be sourced and that this inevitably led to more frequent overtime shifts for nursing staff at the LRC.

Additionally, if nursing staff felt as though greater assistance was required on the floor, it was common practice for the Nursing Manager (a designated non-clinical role) to assist with patient care on the floor. Alternatively, the Health Services Manager could be notified of the need for more nursing staff, and attempts could be made for additional nurses to be sourced to assist at the LRC. No such request was made on 1 July 2021.

99. Counsel Assisting did not contest the WNSWLHD's submissions on these points.

100. In my view, the long gap in vital sign recording is extremely worrying. There appeared to be general agreement that 12 hours was a long and completely unacceptable gap in all the circumstances, whether or not it contributed to Eve's deterioration. Perhaps of even greater concern to me was the general acceptance by the nursing staff who gave evidence that the pressures of their work meant that at times they were just unable to carry out checks as mandated. In other words, it was not unusual to need to prioritise other work over the taking of vital signs. This contrasted with the evidence of Ms Sharon McKay. She told the Court that she did not think it common practice to miss vital sign checks and that the WNSWLHD had not identified poor compliance with vital sign monitoring through their auditing processes. The evidence is hard to reconcile. I had no reason to doubt either RN Reavell or RN Irwin, who seemed particularly candid and forthright. The issue is one of great significance and I will return to it when discussing recommendations below.

Evidence about audits / systems for monitoring vital signs compliance

101. A further request was made to the WNSWLHD, after the oral evidence, for evidence about the outcome of (i) audits carried out for the LRC in 2021 and 2022 regarding vital sign compliance and (ii) the most recent short notice assessment by the Australian Commission on Safety and Quality in Health Care Scheme / National Safety and Quality Health Service Standards (National Standards), and any recommendations or lessons learned arising.

102. In the WNSWLHD's submissions, it was noted that the WNSWLHD's facilities are audited against the National Standards, with the audit process overseen by NSW Health's Clinical Excellence Commission. Relevant to vital sign monitoring and patient deterioration, the WNSWLHD is audited against item 8 of the National Standards, being '*Detection and Management of Acute Deterioration'*. This includes a six-monthly random audit schedule to review compliance with vital sign monitoring and monthly audits.

103. As regards to the auditing at the LRC of vital signs compliance in 2021 and 2022, the WNSWLHD advised that the LRC was required to provide the results of the previous day's *Between the Flags* reports (both vital signs and alerts) for a 2-month period (March and April 2022). As part of this inquest, the WNSWLHD provided the *Between the Flags* reports for 25 to 27 February 2022 which showed amongst other matters:

i. On 25 February 2022, of the 10 patients in the LRC's Emergency Department, there were 15 instances of "incomplete set(s)" of vital signs.

ii. On 26 February 2022, of 8 patients in the LRC's Emergency Department, there were 8 instances of "incomplete set(s)" of vital signs.

iii. On 27 February 2022, of the 7 patients in the LRC's Emergency Department, there were 3 instances of "incomplete set(s)" of vitals signs.

104. It appears from this response that no audits were carried out in 2021. The outcome of the "day before checks" on the three dates specified is not presently known.

105. As regards to the recent short notice assessment, the Australian Council on Healthcare Standards (an authorised accredited agency by the Australian Commission on Safety and Quality in Health Care), carried out a short notice assessment across the WNSWLHD on 15 and 16 July 2025. The findings of that assessment have not yet been provided owing to concerns at potential infringement of the disclosure provisions of the *Aged Care Act 1997* (Cth).

106. The WNSWLHD submitted that in 2021, the LHD conducted six audits of observations at the LRC (reflected in an annexed schedule to the submissions), which included an audit of vital signs. For the period of 2022 to date, the LRC continues to complete audits in accordance with the National Standards. This includes LRC completing 20 random audits of vital sign compliance in 2025.

107. The importance of strict monitoring of vital sign compliance is obvious in the context of the evidence given at this inquest, which included evidence from nursing staff that suggested that while all effort was made to comply with the standard, it did not always occur.

Capacity of rostered nurses to monitor patients admitted overnight

108. At the hearing, RN Reavell was asked if LRC nurses would discuss with VMOs if potential issues might arise with a nurse's capacity to monitor the patient overnight if the patient were admitted (for example, if the acute care ward is at full capacity). The effect of RN Reavell's evidence was that such considerations would be unlikely to result in a request for the patient's transfer.

109. RN Irvin, in describing the "reality" of managing workloads in facilities like LRC, described nursing staff "making do" with what they had rather than requesting a transfer of patients, owing to busy workloads.

110. Nurses on duty at a small facility such as LRC are well placed to be able to comment on whether there will be capacity to properly manage a patient overnight. It is a matter I will return to below in recommendations.

Treatment and Response after 2:00am

Eve's condition as of 2:14am

111. At about 2:14am, Eve's temperature was recorded by RN Brizuela as 38.5°C which put it just inside the yellow zone. By this time, Eve had exceeded the maximum allowable dose of paracetamol for a 24-hour period. Her temperature remained elevated although she had been administered paracetamol just under three hours earlier (11:35pm).

112. RN Brizuela acknowledged in evidence that he should have initiated the WNSWLHD's *Clinical Emergency Response System* protocol (CERS). In his supplementary statement, RN Brizuela said at [17]:

> "*In my First Statement at paragraph [16], I state that I performed another set of observations on 2 July 2021 at 0214 hours. Eve did not complain of any pain. If she had done so, I would have documented this in her eMR. Eve's temperature was still high. Having reflected on this set of observations, I acknowledge that a patient with an elevated fever (even after receiving paracetamol some 2.5 hours earlier) required escalation at around 0214 hours, in accordance with the Hospital's CERS. In Eve's case, my first line of escalation would likely have involved a request for a [VRGS] consultation as a first step, as I later actioned at 0404 hours."*

113. Counsel Assisting submitted that this was a reasonable concession by RN Brizuela.

114. The WNSWLHD submitted that it is not apparent that any escalation at that time would have altered Eve's clinical management given that the observations revealed that Eve was haemodynamically stable and there was no report of pain at the time.

115. While I cannot be certain what the result of contact with VRGS at 2:14am would have been and how it might have changed Eve's management plan, it should be recognised as a missed opportunity in her care.

Prospects of Eve surviving as at 4:00am (approx. time her spleen ruptured)

116. Counsel Assisting submitted on the basis of the undisputed medical evidence that Eve's prospects of surviving her splenic rupture were low to non-existent by about 4:00am (being the approximate time of the rupture). This was in circumstances where:

    i. Eve was then admitted to the LRC which lacked the investigative capacity required to identify the fact of the internal bleeding and the emergency care capacity to provide lifesaving care in response to the internal bleeding; and

    ii. The time that was reasonably required to transfer Eve to Dubbo Base Hospital even assuming a request was made to do so at about 4:00am (the first request for retrieval services wasn't made till about 8:00am).

117. According to Counsel Assisting, this fact highlighted the importance of early transfer of patients who present with signs of bacterial infection but without a definitive diagnosis (even when they present as hemodynamically stable).

118. Counsel Assisting further submitted that the shortcomings in Eve's treatment after 4:00am were unlikely to have materially reduced the prospects of her survival.

119. While I accept Counsel Assisting's submission that the shortcomings in Eve's treatment after 4:00am were unlikely to have materially reduced the prospects of her survival, I am certain the deficits in the care she received increased her suffering in those final hours.

RN Brizuela's attempted contact with CRGS between 4:05am to 4:30am, and again at 4:49am on 2 July 2021

120. RN Brizuela made multiple attempts between 4:05am and 4:30am, and again at 4:49am, to contact the VRGS for a medical officer consult to discuss Eve's presentation. Counsel Assisting submitted that it was appropriate for him to have done so (although RN Brizuela accepts this should have occurred earlier in time (e.g. by at least 2:14am)). RN Brizuela said in evidence that he understood his request for a VRGS consult complied with the WNSWLHD's CERS protocol.

121. Megan Connors, Director, Western Virtual Division Service Delivery Directorate, said in evidence that the VRGS was still a relatively new initiative in mid-2021 and that its systems then for managing contact were not as advanced as those that exist now.

122. Relevantly, Ms Connors said in evidence:

> *"A. … overnight at this time, in this date range, there was a call diversion put in place overnight because of staffing issues. It was a safeguard for the clinicians to be able to leave a message if the call - noting that this is a non-urgent escalation pathway for medical advice and support, so that we were able to recontact, so they would leave a message and that could be picked up and the clinician, either the VRGS doctor or the nurse coordinator in the vCare hub could pick that up and make contact with the facility. So, it was a safeguard. That has since been discontinued.*
>
> *Q. It seems that the information you had access to showed that there was a call to VRGS at 4.30 and that that was diverted to vCare?*
>
> *A. Yes.*
>
> *Q. Was the voice message left for vCare?*
>
> *A. Yes.*
>
> *…*
>
> *Q. Do you know if vCare received that message or made an attempt to call back or--*

A. There was a following call into vCare about 4 - what time are we there, 4.30? So, around the 4.49 mark where the nurse coordinator did answer the call from the nurse in Lightning Ridge and then there was a - I understand there was a request for - a request by the nurse coordinator if they wanted us to attempt to reconnect into VRGS which was undertaken. And, then during that time I understand the nurse was able to contact the local medical officer who then continued to support direction of care at that point in time.

Q. So, where you've referred in the third sentence, "The call at 4.49 was again diverted to vCare, hospital staff were advised to lodge an online VRGS request".

A. Yes.

Q. Just to understand how you are able to determine that, is there a record made at vCare end that shows that phone contact?

A. So, we - any record of phone contact is entered into - we have what we call a bespoke EMR. So, the nurses will make a note of that contact and that will feed into the EMR progress notes, so it's all connected but we have our own record system to be able to interrogate incidents like this.

Q. But, does that tell you who the nurse was that made the call?

A. No.

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Q. But it tells you it came from Lightning Ridge?

A. Yeah. So - in the progress notes? I can't remember the exact detail in the progress notes that were written in the vCare journey board. The nurse, we had one nurse on night duty and in the call board or the - the call centre solution, so we have a system called Touch Point where we can see calls come in and then the conferencing element to that. So, the call that came from Lightning Ridge at that point in time was to - there was no name. We haven't I don't believe there was any reference to Lightning Ridge or the nurse that they actually contacted.

Q. Was there something in the note to the effect that a vCare nurse advised that they should lodge an online VRGS request and that the caller said they had already done that?

A. Yes.

…

Q. Has there been changes or improvements made to the system of contacting VRGS and how that's managed?

A. Yeah. So, the diversion has ceased. I can't confirm when that - that took place but it no longer occurs. So, the - the process for requesting a VRGS consult, be it for an emergency triage 3 through 5 or for any inpatient review, the initial step is for the EMR request to be put into the - through the electronic medical record and then if there is urgency or the clinician wants to get a high priority of attention on a particular request that's just gone in, they're encouraged to call the 1800-number to [VRGS], to the clinicians that are on, rostered."

123. The effect of the WNSWLHD's evidence is that it is expected that a call to the VRGS, like that made by RN Brizuela at about 4:30am, would be answered under the present arrangements.

124. On this matter, Ms Connor relevantly said in evidence:

> *Q. And, the VRGS, if there's a phone call now, would that be the expectation after hours, would that get through to a clinician to answer or would it go to an answering machine and a call returned or--*
>
> *A.* ***Yeah. So, there's options there****. So, we now have two doctors rostered overnight into VRGS. At this time there was one, so we've increased the workforce to be able to respond to that. The clinicians, if the phone goes unanswered, there is a call-back message mechanism that is managed by the doctors who are on duty. So, there are no nurses. This is nurse direct to VRGS.*
>
> *Q. Is there a way with the message that you press a button to indicate some level of priority with a message that--*
>
> *A. So, they stay in a queue that they come in and the electronic medical record request, the nurse will apply a triage category to that for urgency."* (emphasis added)

125. I accept that the system as it now operates is an improvement on the system which operated in 2021.

Dr Hakeem's failure to attend the LRC to examine Eve in response to the phone contact he received from RN Brizuela between about 4:55am and 6:00am

126. In the opinion of the experts, Dr Hakeem should have attended the LRC to examine Eve in response to the calls he received from RN Brizuela between 4:55am to 6:00am. Their view is that he ought to have done so after being told that Eve had "gone to ground" in a call that occurred shortly before 6:00am (if not sooner) and he should have done so on his own volition even if it is accepted that he was not specifically requested to attend by RN Brizuela. Dr Hakeem accepted the experts' views about this.

127. In his evidence, RN Brizuela said he did not expressly ask Dr Hakeem to attend to examine Eve in their calls during this period although he considered Dr Hakeem should have attended. RN Brizuela stated that he was not an "assertive nurse" and was reluctant to specifically request that Dr Hakeem attend. RN Brizuela was hopeful that by relaying the key information, Dr Hakeem would make his own decision to attend. Counsel Assisting submitted that it appears RN Brizuela was reticent to make this request of a VMO owing to the adverse reaction of VMOs in the past to such requests.

128. As noted by Counsel Assisting, it is incumbent on the nurse with responsibility for the supervision of patients (who are in the acute care ward and Emergency Department overnight) to expressly request the on-call VMO attend to examine the patient if the nurse considers that appropriate. The nurse has the benefit of being with the patient and is best placed to judge when care needs to be escalated. Counsel Assisting submitted that a contemporaneous record should be made of that request.

129. Counsel Assisting also submitted that the nurse needs to understand that doing so is a necessary part of their role and that if they feel unable to meet that requirement, they ought to identify this to their supervisor and/or seek support. In RN Brizuela's case, this is more important as he was the senior nurse in charge overnight, meaning he had supervisory oversight of the other nurses on shift that night. In my view if a senior nurse is not assertive enough to ask an on-call VMO to attend to a deteriorating patient in the acute care ward, then that nurse is in the wrong role or requires significant re-training. The system relies on confidence that nurses will make these kinds of requests in a timely manner.

130. It appears some counselling was provided to RN Brizuela on this issue after Eve's death, however, the extent to which the WNSWLHD has instructed all its nursing staff about this requirement, since Eve's death, is not clear on the available evidence.

131. The WNSWLHD submitted that in 2018 it introduced face-to-face training which focused on nurse advocacy for patients called *Speaking up for Safety* (noting that the initial roll-out was slow due to COVID-19). RN Irvin described this training as "*empowering and giving nurses the tools to possibly stand up to doctors*…". It is noted that RN Brizuela's e-training records reveal that since July 2021, he has undertaken this training at least twice.

132. In late 2021, the WNSWLHD also developed a 'Red Flag' Clinical Support tool to assist with the identification of red flags related to a variety of presentations at the LRC's Emergency Department. The training also incorporated training on how and when staff should communicate an identified deterioration in a patient, with a specific example of what to say to a doctor in a clinical setting, if you wanted them to attend the hospital to review a patient.

133. This kind of training needs to happen continuously and should contain role playing exercises, if necessary.

What was communicated as between RN Brizuela and Dr Hakeem between about 4:55am and 6:00am

134. There is a difference between Dr Hakeem and RN Brizuela concerning the content of their conversations between 4:55am and 6:00am on 2 July 2021. Counsel Assisting's view is that, whatever the account preferred, it does not lessen the significance of (i) Dr Hakeem

not attending in person at least after he was told of Eve's collapse at 5:45am and (ii) RN Brizuela not expressly requesting Dr Hakeem do so.

135. RN Brizuela opened an electronic progress note at 4:20am and he electronically saved that note at about 8:17am (time at which a time stamp was attached). This was electronically submitted after RN Mercy Bosha (RN Bosha) escalated Eve's care to vCare.

136. Any amendments made to the document after it is submitted are tracked, however, this is not the case in relation to information that is entered into the progress note *before* it is electronically submitted. RN Brizuela said in evidence his usual practice up until 2 July 2021 was to leave the note open, adding to it throughout the shift. It appears he was never counselled against doing so before then.

137. This is in contradistinction to him creating and submitting a succession of smaller progress notes during his shift when it was reasonably possible for him to do so. That approach would mean that timestamps were recorded. This would show what was recorded and when and would have provided me with greater clarity about what occurred.

138. Counsel Assisting helpfully summarised the differing accounts of RN Brizuela and Dr Hakeem of their conversations in the following table:

Approx. time	**RN Brizuela's account**	**Dr Hakeem's account**	**Other**
4:29am	Progress note records "*04:29, rang VRGS 3-4x times, nil answer*".	(N/A)	The WNSWLHD checks of the phone logs record a call to VRGS at 4:30am and 4:49am (these logs do not show 3-4 calls at 4:29am). This is a matter to be considered in evaluation of the accuracy of what is recorded on the face of the progress note.
4:55am (1st call)	Progress note records, "*04:55, Rang Dr Irfan, informed about the pt's complaint, Dr advised to give stat ibuprofen 400mg and IVF Hartmans 1L x 4hrs*". RN Brizuela, in his evidence, said Dr Hakeem instructed him during this call to administer ibuprofen (400mg) to reduce Eve's fever and Hartmann's solution over 4 hours for dehydration.	During the first call, which he said he received at 4:49am, RN Brizuela reported Eve being in pain and asking for permission to administer morphine. Dr Hakeem directed a phone order for Ketorolac rather than morphine (which would have been counterproductive for the reported constipation). Dr Hakeem did not recollect any discussion about giving Eve Hartmann's solution (as "*the patient has already received 2 litres of Hartmann earlier")* or Ibuprofen (this is	An electronic medication order for Ketorolac was entered by RN Brizuela at 5:00am (*order start time "05:20*") and 2 x 200mg Ibuprofen tablets entered at 5:00am (*order start time "05:00"*). In evidence RN Brizuela agreed that the time the Ketorolac medication order was entered (5:00am) meant he was told at or before 5:00am to administer Ketorolac (rather than him being told

	He noted, in his progress note "*05:00, pt went back in her bed, given stat ibuprofen 400mg tab"; "0505, IVF Hartmans 1L started for 4hrs";* and *"05:13am, pt c/o of severe pain in left side of her abdomen*…". RN Brizuela maintained that Dr Hakeem told him in this call to give Eve Ibuprofen. He also maintained Dr Hakeem directed him in this call and to administer Hartmann's 1 litre (he said this phone interaction was witnessed at his end by his nursing offsider and the Hartman's bolus was specifically noted in the fluid chart form). He maintained that Dr Hakeem directed the administration of the Ketorolac in their second call (not their first call).	something that can be nurse initiated which the VMO may be asked during normal business hours to retrospectively approve – no need for approval from VMO to be sought for this medication overnight). Dr Hakeem's practice was not to give oral ibuprofen at nighttime when a patient has an empty stomach with potential for nausea (his go to pain medication would be Ketorolac).	that by Dr Hakeem in a 5:20am call as he noted in his progress note). A handwritten record for the Hartmann's bolus, made by RN Brizuela, listed the time "0505" (included a note "*changed stat bolus at 0550 hrs"*).
5:07am	(RN Brizuela's progress note does not mention a call at 5:07am).	Based on his phone logs, Dr Hakeem says he received a second call at 5:07am from RN Brizuela. During this call RN Brizuela said Eve was constipated and he had administered her an enema (nurse initiated) which Dr Hakeem agreed with.	
5:20am	RN Brizuela has his second call with Dr Hakeem occurring about 5:20am. He noted, in his progress note, *"05:20, rang [Dr Hakeem], informed pt in severe abdominal pain, advised to give stat ketorolac 30mg IM, Author clarity to [Dr Hakeem] if it is ok to give ketorolac as the pt jus had ibuprofen, Dr Irfan stated that it's ok to give ketorolac, Dr Irfan advised he can't order morphine as pt constipated, given ketorolac 30mg IM stat at Left deltoid muscle after sometimes, pt was relieved with the pain, lying in bed, watching tv…"*	Dr Hakeem's statement, which listed the times he received calls, does not refer to a call about 5:20am. His statement refers to calls received at 5:07am and 5:51am. In the calls he received (before the report of Eve's collapse) he denied being told that Eve reported she was experiencing "*severe abdominal pain"* (he recalled only being told of her report of "pain").	
5:50am	Noted, in his progress note, after finding Eve on the ground after hearing bang (5:45am) and using a sling lifter to shift her back into her	Dr Hakeem, in his statement, recorded the third call being received at 5:51am. During this call, RN Brizuela advised that while walking from her	

	bed, he *"…Rang Dr Irfan, informed about the pt's condition, advised to changed the Hartmans 1L to bolus, and another Hartmans 1L x 4hrs"* (note did not record the specifics of what he reported about Eve's fall). RN Brizuela, when asked if it was possible he told Dr Hakeem that Eve had "eased herself to the ground", did not deny that was a possibility but stated he had no actual memory of what he said.	bed to the toilet, Eve had felt weak and eased herself to the ground (not told she had collapsed or that a bang heard). She had not lost consciousness and did not have any seizure activity. Her blood pressure was in the 60s and she had a respiratory rate of 30 breaths per minute and a heart rate of 110 per minute with normal oxygen. After placement in bed her blood pressure increased to "*the high 80s"*. Dr Hakeem directed RN Brizuela to give Eve "*a challenge of 500 [ml] of Hartmann's solution and do a point of care bloods to check for her lactate to see if the infection had worsened"*.	

139. The WNSWLHD currently has procedures for the entering of a progress note into its electronic medical record (eMR) system, being:

(1) '*Health Care Records Documentation and Management*' (PD2025_035; 2 September 2025) – this specifies at [2.3.4] that "*documentation should be timely, sequential and should [be made]…at the time of an event or as soon as possible afterwards*". It also specifies expectations when a single entry is entered that summarises events "*that occurred over a period of time (such as a shift)*". The latter appears to be the approach adopted by RN Brizuela.

(2) *Documenting a Progress Note and Inserting Results* (revised January 2024) – this provides instruction on creating an electronic progress note but has no instruction as to the timing of entering electronic notes.

140. Counsel Assisting submitted that it appears the approach taken by RN Brizuela to his record keeping on 2 July 2021 is one that is acceptable under current procedure. Nevertheless, it is clear that the practice of entering a single progress note at the end of an 8-10 hour shift, covering everything that occurred, rather than making shorter contemporaneous notes has added to my difficulties in establishing what actually occurred.

141. Having considered all the available evidence in relation to the contact between Dr Hakeem and RN Brizuela, it is difficult to be certain about some issues. Nevertheless, to the extent that differences exist between RN Brizuela and Dr Hakeem's accounts, I prefer Dr Hakeem's recollection of events. He gave candid evidence and was able to identify his own shortcomings. In my view, his explanations were plausible and consistent. On the other hand, RN Brizuela's account was somewhat confused and lacking in detail or clear recollection.

142. Specifically, I accept Dr Hakeem's account that Ketorolac was discussed in the first call at around 5:00am and I note this is consistent with the medication order. I accept Dr Hakeem's evidence that he would not have directed the administration of ibuprofen. I accept his evidence that RN Brizuela told him Eve had felt weak and "eased herself to the ground" rather than that she had collapsed with a bang. I note that in Court RN Brizuela agreed that this formulation was a possibility and that he no longer had an actual memory of what he said.

Response and Treatment after 7:00am

Response/treatment provided by RN Bosha

143. In Counsel Assisting's view, RN Bosha's response when she came on shift was of a high standard in that she immediately recognised Eve was in a critical condition, she escalated her care to vCare, and she then gave vCare a highly competent oral briefing.

144. It was perfectly clear to RN Bosha that Eve's care needed to be escalated and she immediately set about making that happen. She was highly professional and efficient and I commend her efforts to assist Eve. She was the champion Eve needed, but her involvement came too late.

Involvement of vCare

145. The vCare team suspected Eve's acute deterioration was probably attributable to septic shock rather than haemorrhagic shock. The experts are not critical of the vCare's approach in this respect. This was not something that would have been reasonably obvious as a possibility to those involved in real time. The experts consider the treatment recommendations of vCare to have been reasonable. I accept their opinion.

146. The LRC had no imaging or scanning devices that, if used, would have revealed the bleeding into Eve's abdomen cavity. Even had Eve's internal bleeding been realised, regrettably the LRC did not have the capacity to provide emergency care to treat the problem.

147. Unfortunately, the vCare team was hampered by the delay which had already occurred. I accept the expert opinions and am not critical of their involvement.

Capacity of clinicians at the LRC to insert an arterial line

148. During vCare's consult, the specialist asked if the clinicians at the LRC could insert an arterial line. None of the available medical officers had the expertise to do so. The experts gave evidence that they would not reasonably expect a VMO at a small facility to have that capacity and were not critical of the LRC in this regard, nor did they think the inability to insert an arterial line was material as regards Eve's prospects of survival.

149. I accept the expert's view on this matter.

Error in the report to vCare about the quantity of fluid administered

150. During his verbal handover to the vCare team shortly after 7:00am, Dr Hakeem advised that Eve had received three litres of fluid administration to that point when, in fact, she had received five litres.

151. It appears this error arose as Dr Hakeem was basing his report on his expectation of what had been given based on what he directed the previous day and in the third call with RN Brizuela at about 5:51am (without reference to what was recorded in the handwritten fluid charts).

152. The error meant Eve was administered fluid over and above the recommended levels. The quantity of fluid that had been given, relative to what Eve's blood pressure was when vCare became involved, was also relevant to vCare's assessment of the severity of her condition.

153. Ultimately, in the view of the experts, this error was not material to Eve's prospects of survival by the time vCare became engaged.

154. The error was unfortunate, however, I accept the undisputed expert evidence that it did not affect Eve's prospects of survival.

Time taken for the flight retrieval asset arriving in Lightning Ridge

155. A request for a flight retrieval was made by vCare to Aeromedical Retrieval Services shortly after 7:52am on 2 July 2021. The initial request was treated as a P2 priority, which meant an asset with only a nurse(s) was permissible. Sometime that morning, the priority classification was changed to a P1. This likely occurred owing to an assessment that a medical officer was also required on the flight given Eve's condition. This ultimately led to the dispatch of the Royal Flying Doctor Services' (RFDS) medical retrieval team.

156. The RFDS clinicians did not get to the LRC until about 12:45pm. The factors contributing to that timing were (i) availability of assets; (ii) availability of pilots for the retrieval asset owing to the pilot's previous shift and CASA requirements for fatigue management and (ii) severe fog and weather conditions on the day.

157. The five or so hours between the request and the arrival only highlights the importance of early discussions and timely requests for patient transfer.

Other considerations

Impacts of COVID-19 on staffing

158. As of July 2021, COVID-19 restrictions were in place. The border lockdown limited the pool of available short-term nurses available to the LRC to meet shortfalls in rosters. It appears the WNSWLHD recruited many short-term nurses from interstate for this purpose,

particularly from Queensland.

159. For the LRC nursing staff, this meant an increase in overtime by the nursing staff to cover shortfalls that would normally be solved through temporary nurse recruitment. Counsel Assisting submitted that it is reasonable to conclude this *may* have affected the quality of care and decision-making of the nurses involved in Eve's case on 1 July 2021 into the early hours of 2 July 2021 but that the extent of any impact cannot be determined.

160. Counsel Assisting noted that this issue has, hopefully, improved with there no longer being border / COVID-19 restrictions in place.

161. While I note the COVID-19 restrictions which were in place, in my view it has not been established that they were a significant factor in the care deficits leading up to Eve's death.

VMO contractual arrangements

162. The WNSWLHD did not recruit Dr Hakeem directly to perform the VMO role at the LRC. Dr Hakeem was contracted to Ochre Health to provide (i) locum services at the Ochre Medical Centre in Lightning Ridge and (ii) VMO services at the LRC.

163. The WNSWLHD separately had a contract with Ochre Health for the latter to provide VMO services for the LRC. The WNSWLHD relied on Ochre Health to meet the VMO services required, however, its contractual arrangement did not stipulate the minimum number of VMOs to be contracted at any one time to meet those requirements. I note that Ochre Health were not a party of sufficient interest and were not involved in these proceedings.

164. The WNSWLHD also had a separate contractual arrangement with Dr Hakeem that required him to comply with relevant policies when he performed VMO duties for the WNSWLHD, however, this did not stipulate minimum VMO ratios.

165. Dr Hakeem's initial Ochre Health contract commenced in March 2021. He told the court that initially there were three General Practitioners. Before July 2021, the number of VMOs contracted to work in Lightning Ridge reduced to two, being Dr Hakeem and Dr Roger Brown. This meant the clinic and hospital duties during business hours, along with afterhours on-call duties, were covered by them without a third VMO to assist in relieving. This may have stemmed from reduced availability of interstate staff owing to COVID-19 lockdowns, but I cannot be certain of that.

166. I was troubled by the evidence that the WNSWLHD's contract with Ochre Health involved no stipulation about the number of VMOs required. If VMOs are extremely busy or overstretched, it could potentially impact their capacity to attend at night and may impact nurses' willingness to call doctors in.

Issuance of the Death Certificate and contact with the family

167. Dr Brown issued a death certificate for Eve which listed cause of death as "*septic shock caused by urosepsis*".

168. As accepted by Dr Brown in his evidence, Eve's death was a *reportable death* under the Act and a death certificate should not have been issued. The *reportable death* mechanism is important for ensuring the State Coroner is notified of deaths that occur in specific circumstances. This is to ensure a full investigation, including a post mortem examination is undertaken where appropriate. It is worth noting that the autopsy which was conducted in this case revealed that the certificate prepared by Dr Brown was in any event incorrect.

169. Dr Brown, in his evidence, said he issued the certificate intending it would remain on file at the LRC to be issued if there was a determination later that an inquest would not be held. He expected there would, at the very least, be some sort of investigation by the WNSWLHD into Eve's death.

170. Dr Brown said he did not issue the certificate with a view to avoid coronial proceedings or investigations. He accepted, unreservedly, that he should not have issued the certificate and said that he would never do so again if circumstances repeated themselves.

171. Counsel for Dr Brown submitted that I would accept Dr Brown's evidence in this regard as he demonstrated appropriate insight into the issues at hand.

172. Owing to RN Irvin's intervention, police were notified and a report was then made by police to the Coroners Court. In Counsel Assisting's view, the certificate's issuance did not prejudice the subsequent investigation. Nevertheless, it is important to note that this was clearly a coronial matter, and a certificate should never have been written. The practice of writing a certificate "just in case" is unacceptable and should be denounced in no uncertain terms. The medical certificate was shown to be wrong after further investigation and if it had been issued the true circumstances of Eve's death would have been obscured.

173. I am aware that the family were very distressed by the contact they had with some staff at the LRC following Eve's death. While the issue was not examined at the inquest, I accept it caused enormous hurt. Eve's loving family should not have been left feeling disrespected and alone. I am profoundly sorry that occurred.

Findings

174. For reasons stated above, I make the following formal findings pursuant to s 81 of the Act:

Identity

The person who died was Eve Brown

Date of death

Eve died on 2 July 2021

Place of death

Eve died at Lightning Ridge

Cause of death

Eve died of hypovolaemic shock due to an acute ruptured subcapsular splenic haematoma in the setting of urosepsis

Manner of death

Eve died at a regional health facility, awaiting transfer to a larger centre in NSW. Had her transfer been expedited the previous day, it is more probable than not that she would have survived.

Recommendations

175. Counsel Assisting proposed four recommendations addressed to the WNSWLHD. Those proposed recommendations, along with the parties' responses to them and my consideration of them, are set out below.

Proposed recommendation 1(a)

176. Counsel Assisting initially proposed that the WNSWLHD should review the adequacy of its practices and procedures as regards to "*mandating VMOs to consult an experienced clinician (whether through VRGS, vCare or some other means) before admitting a patient to a small hospital facility like the LRC. This consult to include discussion around the appropriateness of transfer to a larger hospital, in lieu of admission, and discussion of planning and timing of transfer. This is particularly so in the case of a patient with suspected bacterial infection who at the time of admission presents with symptoms of infection (e.g. elevated temperature) but otherwise presents as stable*."

177. In their submissions, the WNSWLHD opposed this recommendation on the grounds that it was too broad and not suited to the wide variety of presentations at smaller facilities such as the LRC and that it is contrary to and could compromise the efficacy of the VRGS, vCare, and more informal discussion pathways (as discussed in the expert evidence). The WNSWLHD submitted that the proposed form of the recommendation has the potential to curb and unnecessarily constrain the exercise of clinical judgment by the treating clinician, mandating the escalation of all admission decisions, and that the proposed requirement would stretch the availability and efficacy of existing formal and informal pathways with the mandatory escalation of non-acute presentations.

178. The WNSWLHD proposed the following alternative wording for the recommendation:

"*VMOs at smaller facilities without specialist cover and imaging facilities are encouraged to discuss the possible admission, diagnostic work up and potential transfer of acute patients with peer or more senior clinicians via VRGS, vCare (where appropriate) or more informal pathways*."

179. In reply submissions, Counsel Assisting submitted that proposed recommendations 1(a)-(c) are not framed as a command to implement, rather, as a recommendation for the WNSWLHD to review its practices and procedures. He noted that it is ultimately a matter for the WNSWLHD to determine what (if any) changes it will make following that review, which would inevitably include consideration of resources.

180. In relation to proposed recommendation 1(a), Counsel Assisting submitted that it goes to a critical issue in this matter and it is consistent with the expert evidence given in these proceedings. Counsel Assisting submitted that the recommendation could be amended as follows:

    i. The WNSWLHD review the adequacy of its practices and procedures, <u>with specific regard had to the evidence and findings in this inquest</u>, as regards:

        a) <u>Its instruction to</u> VMOs <u>regarding the VMO</u> consulting an experienced clinician, whether through VRGS, vCare or some other means, before admitting a patient to a small hospital facility like the LRC. This consult to include discussion around <u>diagnostic work-up</u> and the appropriateness of <u>a potential transfer</u> to a larger hospital, in lieu of admission, and discussion of planning and timing of transfer. This is particularly so in the case of a patient with suspected bacterial infection who at the time of admission presents with symptoms of infection (e.g. elevated temperature) but otherwise presents as stable.

181. I have considered the submissions of the WNSWLHD carefully and reviewed the alternative wording suggested. It is clear that the WNSWLHD accept the profound benefits that arise when VMOs at smaller facilities reach out to peers or more senior clinicians when considering critical issues such as diagnostic work up and patient transfer. The facts of this case demonstrate these kinds of discussions can be potentially life-saving.

182. In my view, it is desirable that the WNSWLHD review its practices and procedures for VMOs in this regard. I intend to make the recommendation in its amended form.

Proposed recommendation 1(b)

183. Counsel Assisting also proposed that the WNSWLHD should review the adequacy of its practices and procedures as regards to "*ensuring random clinical reviews of VMOs' diagnosis and treatment of patients, with such reviews being carried out by clinicians with*

significant experience in generalist medical care in regional areas and specialist emergency / intensivist experience. This is to guard against lesser standards being accepted at the smaller facility."

184. The WNSWLHD opposed this recommendation on the grounds that the current review processes already extend to an examination of regional cases with VMO involvement. An additional review process would be unnecessary, would divert resources and may reduce the effectiveness of any clinical reviews which occur. The WNSWLHD submitted that an additional layer of oversight and support is provided to regional clinicians as part of vCare's virtual support function and the ability to remotely monitor the clinical course of inpatients throughout the LHD and identify those at risk of deterioration promotes a proactive healthcare model.

185. In reply submissions, Counsel Assisting maintained that the recommendation is appropriate, noting that it arises from the evidence of Dr Hakeem and the experts' significant concern at the possibility of a lesser investigative standard arising in a small hospital setting. Counsel Assisting submitted that it was not evident how the audit and review referred to by the WNSWLHD effectively achieves the goal of scrutinising decisions to guard against the possibility of lesser diagnostic standards creeping in or becoming the norm.

186. Counsel Assisting submitted that the recommendation could be amended as follows:

> i. The WNSWLHD review the adequacy of its practices and procedures, <u>with specific regard had to the evidence and findings in this inquest</u>, as regards:
>
> b) <u>Consideration of requiring (if not already occurring)</u> random clinical reviews of VMOs' <u>decisions around admitting an acute patient to a small</u> hospital <u></u>(rather than transfer to larger hospital), with such reviews being carried out by clinicians with significant experience in generalist medical care in regional areas and specialist emergency / intensivist experience. This is to guard against lesser standards being accepted at the smaller facility.

187. In my view, there is a need to guard against the growth of a culture where lower standards of investigation and clinical care are accepted in rural and regional settings. As Dr Lawton pointed out, if Eve needed a CT scan, she needed it irrespective of where she was located. If it was not going to happen in Lightning Ridge, as appears to have been the case, she needed to be moved rather than admitted and it needed to happen as soon as possible.

188. In my view, it is appropriate for the WNSWLHD to have an expert review a sample of random VMOs' decisions in relation to admitting acute patients to small facilities such as the LRC. The evidence directly arising from this inquest calls for careful consideration of

the possibility that the reality of isolation and lack of immediate resources affects diagnosis and treatment planning in an unacceptable way.

189. I intend to make the recommendation in its amended form. I am not persuaded it will divert resources or reduce the effectiveness of clinical reviews that already occur. In my view, it is timely for the WNSWLHD to grapple with developing a culture that provides pro-active care for regional and rural patients. Rural and regional VMOs are at times tasked to make difficult decisions in relation to admission or transfer. It is essential that we have confidence that those decisions are sound.

Proposed recommendation 1(c)

190. Counsel Assisting proposed that the WNSWLHD review the adequacy of its practices and procedures as regards to "*potentially using Eve's case as part of scenario training for nursing and VMOs around (i) identifying patients at risk of deterioration transfer and (ii) the importance of consultation and discussions before admitting a patient*."

191. The WNSWLHD agreed with this recommendation and I intend to make it.

Proposed recommendation 2

192. Counsel Assisting proposed that the WNSWLHD review the adequacy of its practices and procedures as regards to "*ensuring that (i) the frequency of vital sign observations being recorded is regularly audited and (ii) ensuring nursing staff (independent of VMOs) consider requesting a transfer of a patient with suspected infection where the nurse considers the minimum required frequency of checking vital signs cannot be adequately met at that facility*."

193. The WNSWLHD agreed with (i) of the proposed recommendation but not (ii). The WNSWLHD submitted that the current form of the recommendation could adversely impact the availability of scarce retrieval resources and slow the pathways to transfer for urgent cases in circumstances where there may be no clinical indication to transfer. It was noted that there are internal mechanisms to activate greater clinical care support within the LRC and that any concerns about capacity to comply with the LHD's policies for the taking of vital signs and patient monitoring should be escalated to the Nursing Manager and/or Health Services Manager.

194. The WNSWLHD submitted that if genuine staffing pressures are identified, it is expected that either the Nursing Manager will assist with patient care and/or that additional nursing staff will be arranged by the Health Services Manager. In the WNSWLHD's view, utilising scarce medical retrieval resources to move patients due to staffing pressures is not feasible and would lead to a misallocation of resources. The WNSWLHD noted that encouraging nursing staff to seek additional support from mechanisms within the facility to

ensure patient safety can and should be encouraged.

195. Counsel Assisting did not cavil with the WNSWLHD's submissions and proposed the following alternative wording to the recommendation:

> i. The WNSWLHD review its practice and procedures to ensure (i) the frequency of vital sign observations being recorded is regularly audited and (ii) ensuring nursing staff (independent of VMOs), in the event frequency of the taking of vital signs and patient monitoring of person in the Emergency Department or admitted as an acute patient is not being undertaken consistently, immediately escalate the matter to the Nursing Unit Manger / Health Services Manager for action (including consideration of whether transfer of a patient with a suspected infection should occur given the capacity issues) ~~consider requesting a transfer of a patient with suspected infection where the nurse considers the minimum required frequency of checking vital signs cannot be adequately met at that facility~~.

196. I have taken into account the submissions made by the WNSWLHD in this regard and intend to make the recommendation in its amended form.

Proposed recommendation 3

197. Counsel Assisting proposed that the WNSWLHD review the adequacy of its instruction to nursing staff regarding:

> a. The duty of nurses working in smaller regional hospitals, which do not have medical officers rostered on site overnight, to request a VMO attend to examine a patient (rather than leave that to the discretion of the VMO) if the nurse considers that appropriate.
>
> b. The importance of nurses entering progress notes into the electronic record system as contemporaneous to the event being documented as is reasonably practicable (rather than entering one electronic record at the end of a shift).

198. The WNSWLHD agreed with the proposed recommendation.

199. In my view, the recommendation arose directly from the evidence in this inquest and I intend to make it.

Proposed recommendation 4

200. Counsel Assisting proposed that the WNSWLHD "*review its contractual arrangements with VMO providers to stipulate a minimum VMO ratio for an area (e.g. minimum three VMOs for Lightning Ridge area). This extends to what expectations are expressed in the contract about the action the VMO provider will take, and the notice it will give to the WNSWLHD,*

if that minimum ratio cannot be met."

201. The WNSWLHD opposed this recommendation on the grounds that given the challenge faced by the LHD in recruiting medical practitioners to work in remote facilities such as the LRC, the exercise would not be assisted by adding a stipulation to a commercial provider that would impact how they run their GP practice (which may not be reasonably or easily met and may discourage the provider from providing the service for fear of breaching the contract). Further, the WNSWLHD submitted that there was not any evidence to support a finding that the quality of care received by Eve was impacted by a depleted VMO ratio.

202. The WNSWLHD submitted that measures such as the VRGS, although in its infancy in July 2021, are now firmly in place to ease the burden on rural VMOs and to ensure that high quality patient care is maintained.

203. In reply submissions, Counsel Assisting did not press this recommendation, noting the evidence of the rollout of the VRGS and the expected availability of that service now.

204. I remain deeply troubled by the possibility that the use of commercial contracts provides little assurance that patients in rural and regional areas will receive adequate levels of service, particularly when it appears the LHD has little or no control over staff ratios. Nevertheless, I accept the WNSWLHD's submission that there was no clear evidence in these proceedings that the quality of care received by Eve was directly impacted by a depleted VMO ratio. There was a VMO available to be contacted and while he stated his record-keeping may have been affected by his workload, he did not blame workload for his clinical decisions.

205. On reflection, I accept that any remaining concerns I may have about the way these contracts operate fall outside my statutory tasks in relation to Eve's death. I decline to make the recommendation.

Conclusion

206. A proper recognition of the differential diagnoses available when Eve was first examined on 1 July 2021 should have set in train immediate discussions about the need to move her to a facility where scanning (and perhaps other investigations) could take place and where specialists were available or on-call should surgery have been indicated.

207. Once admitted to the LRC, there were further missed opportunities to escalate Eve's care. The resources available at the LRC overnight were inadequate for her needs. Overnight, Eve should have been reviewed by a doctor much earlier than she was. The arrival of RN Bosha the following morning and her immediate involvement of vCare was appropriate, but it occurred too late for Eve. By then, her condition was critical and her suffering extreme.

208. Eve's death highlights the need to support a robust culture in small rural centres that does not accept that *diagnosis* should be approached in a manner different from how it is approached at a larger or more well-resourced centre. The need for proper recognition of differential diagnoses and, in this case, the need for CT scanning existed wherever Eve was. The focus should have been on how that could be achieved in a timely manner. I was greatly assisted in this inquest by the evidence of three eminent experts. As I have already stated, I accept their joint view that had a request for transfer to Dubbo Base Hospital been made on 1 July 2021 and achieved before her deterioration in the early hours of the following day, it is more probable than not that she would have survived.

209. Eve's sister told the inquest that the choice to live in a small remote community should not mean that access to a high standard of healthcare is denied. I agree. I am pleased that the WNSWLHD have accepted that it is appropriate to use Eve's story in training nurses and VMOs about identifying patients at risk of deterioration, the issues involved in patient transfer, and the importance of consultation and discussions before making a decision to admit.

210. The inquest heard harrowing evidence of Eve's final hours. I thank the family for their generous attempt on the final day to bring the spirit of Eve into our grief-filled courtroom and to show me how much more there was to her life. The Court was adorned with her beautiful artwork and her family spoke of her with such respect. I learnt that she lived a life of love, compassion, and generosity; that she loved her children beyond measure; that she was educated and talented and gave back to her community; that she always 'rooted for the under dog'; that she loved to dance, laugh, and have a good time with her family and many friends; and that she brought colour and kindness to the lives of many. I am sorry we never met.

211. I am certain Eve will always be remembered and cherished.

212. Eve's mother showed enormous grace when speaking with me. She told me "*we have Eve's children 15, 14 and 13 years old, to guide them to adults and make sure we do what Eve wanted us to do, with educating them, making sure they grow up to be as she was. Eve will always be a shining star in our family, her spirit, her love and her legacy will live on forever in our hearts.*"

213. Once again, I offer Eve's family and Mr Flick and her children my very sincere condolences for their profound loss.

214. I thank Detective Scott Rogers and other police involved in the investigation.

215. Finally, I would like to thank my counsel assisting Chris McGorey and the various solicitors from the Crown Solicitor's Office who instructed him over the course of this inquest. Nicolle Lowe's assistance must also be recognised. Her role as Aboriginal Coronial Information

and Support worker at our Court is of immense value to the administration of justice in this State.

216. I close this inquest.

Magistrate Harriet Grahame
Deputy State Coroner
Coroners Court of NSW
19 March 2026

APPENDIX A

OUTLINE OF NON-CONTENTIOUS FACTS

Eve's background

1. As of July 2021, Eve, a First Nation's person, aged 42, worked as a freelance artist and lived in Lightning Ridge with her partner of 14 years, Neville Flick (*senior next of kin*), and their 3 children, Mehnah, John and Jaxon.

2. Eve is a survived by numerous other family members including her parents, Petrina and John Brown, and sisters, Angie Newman, Trinette Simms, Jessica Brown and brother, Matthew Brown.

3. Eve had epilepsy since she was 18. She was as of 1 July 2021, or previously had been, prescribed Epilim for the management of her epilepsy. Eve's family considered her epilepsy was well controlled and Eve could predict when she would have a seizure and take herself to bed.

Eve's presentation to LRC at 9:30am on Thursday 1 July 2021

4. At about 9:30am on Thursday 1 July 2021, Eve presented with her mother to the Lightning Ridge Multi-Purpose Health Centre (referred herein to as the **LRC** or the **centre**). Eve reported at least three days of vomiting, constipation and considerable pain.

LRC set up

5. Lightning Ridge is a small regional township with surrounding agricultural properties (population is about 2,000 people).

6. The LRC is a small rural health facility located in Lightning Ridge that provides multi-purpose services including a hospital.

7. As of July 2021, the LRC had 28 beds across three wards / areas consisting of:

   (1) 19 beds in an *aged care ward*.

   (2) 4 beds in an *acute care ward*.

   (3) 4 beds in the emergency department (**ED**).

8. There are no dedicated ED staff with nurses allocated across the centre on a need's basis including during common surge periods.

9. In terms of its nursing staff on roster:

   (1) Morning / Day shift (7:00am to 3:30pm) – four nurses were rostered being (a) a nurse manager (also a registered nurse), (b) a registered nurse, (c) an enrolled

nurse and (d) an assistant in nursing. In 2021 there was one nurse assigned to the emergency / acute care wards, three nurses assigned to the aged care ward one of whom was designated as a "swing" nurse to assist in the emergency / acute care wards if required.

(2) Evening shift (2:30pm to 11:00pm) – four nurses were rostered with (a) one nurse assigned to the emergency / acute care wards and (b) three nurses assigned to the aged care ward one designated to act as a "swing" nurse to assist in the emergency / acute care wards if required. On 1 July 2021, owing to a lack of available staff, two nurses were rostered for the evening shift being (a) a registered nurse and (b) an assistant in nursing. To make up the shortfall in staff the Nurse Manager worked overtime from 3:30pm to 9:00pm and the day shift enrolled nurse from 3:30pm to 9:00pm.

(3) Night shift (10:45pm to 7:15am) – two registered nurses, along with a health and security assistant, were rostered. RN Jamie Brizuela (**RN Brizuela**) was the night nurse assigned to the acute care ward / emergency ward. The other rostered nurse was assigned to the aged care ward.

10. The LRC had a contractual arrangement with Ochre Health for the provision of medical officers. Essentially:

(1) One medical officer is rostered for the LRC between (a) 8:00am to 6:00pm on weekdays and (b) 8:00am to 12:00pm on weekends.

(2) During these times, the rostered medical officer is responsible for managing all triage categories, conducting inpatient ward rounds, and managing any deteriorating acute inpatients.

(3) Outside these hours a medical officer is on-call.

(4) LRC nursing staff can contact the on-call medical officer and trigger a rapid in person attendance for triage 1 and 2 category patients, or as otherwise deemed necessary.

11. It is understood this arrangement meant there was not a medical officer permanently always placed within the centre.

12. During the day the medical officers would attend to perform a ward round and assess patients as requested / required. The medical officer would otherwise be based at the nearby clinic (located about 200m away from the centre).

13. In 2021, Dubbo Base Hospital was the appropriate and nearest large scale referral location for acute patients. Dubbo Base Hospital is located approximately 349km from the LRC.

Escalation / intervention services

14. The LRC, along with its VMOs, had access to virtual intervention services namely:

    (1) vCare – this is a virtual service for rural hospitals within the WNSWLHD that commenced in 2006. It aims to support their treatment and management of critically unwell patients. It permits a clinician at the centre to have real time audio / visual consultation with a senior / consultant level clinician that includes specialists in emergency medicine. It operates as a 24 hours / 7 day a week service with a rotating roster of senior doctors and nurse coordinators.

    (2) Virtual Rural Generalist Service (**VRGS**) – this is a virtual service that commenced in 2020. It also operates as a 24 hour / 7 day a week service. It is aimed at supporting rural generalists to rural and remote communities to supplement the availability of on-call medical officers. One goal of the service is to lessen the strain on rostered medical officers and reduce potential fatigue particularly overnight / weekends (by providing a service that nursing staff can consult in lieu of an on-call VMO). The consultant medical officers have admitting rights to VRGS supported hospitals and the advice / service they can provide includes (a) video consultations with patients in the ED; (b) acute inpatient management and escalation as required; (c) virtual ward rounds; and (d) clinical support for residential aged care residents.

    (3) VRGS is designed to operate closely with vCare with clear delineations to ensure that care for higher acuity patients is escalated appropriately:

        (a) If a medical officer is not available on site at an LHD facility, patients assigned a triage category of 1 (immediately life-threatening) and 2 (imminently life-threatening) must be referred to vCare.

        (b) Patients assigned a triage category of 3 (potentially life-threatening), 4 (potentially serious conditions) and 5 (less urgent) must be referred to VRGS. The option is there for VRGS to engage vCare if it considers the patient requires critical care.

Eve's presentation to the LRC

15. At 9:35am, Eve was triaged by RN Taniya Mathew (**RN Mathew**). RN Mathew was rostered as the "*swing nurse*" that day, meaning she predominantly worked in the 20-bed aged care unit but would assist the *one other nurse rostered on that day* in the LRH ED and acute ward if needed. RN Mathew was asked by the nurse rostered to the ED that morning, Registered Nurse Emma Reavell (**RN Reavell**), to triage Eve, as RN Reavell was attending to a palliative patient. RN Reavell later checked the triage performed.

Between the flags

16. Nurses and doctors utilise a “Between the flag” system as regards vital signs.

17. This is recorded in standard adult general observation (**SAGO**) charts, with each vital sign is graphed separately and in colour coded bands.

18. There are two escalation zones for each observation being *yellow* and *red*. Relevant zones include:

    (1) Respiratory: rate/min 6–10 and 25–29 (yellow zone, early warning signs), ≤5 and ≥30 (red zone, late warning signs);

    (2) Blood oxygen saturation: (SpO2, %) 91–95 (yellow), ≤90 (red);

    (3) Heart rate/min 41–50 and 120–139 (yellow), ≤40 and ≥140 (red);

    (4) Systolic blood pressure (mm Hg) 91–99 and 180–199 (yellow), ≤90 and ≥200 (red);

    (5) Pain (subjective report): severe (7-10 out of score of 10) (yellow); and

    (6) Temperature: ≤35.5°C and ≥38.5°C (yellow), nil criteria (red) (*temperature falling between 35.6 and 38.4* °C falls in normal range).

Eve’s report to RN Mathew

19. RN Mathew recorded Eve’s temperature at 38.5 and a pain scale of 8/10. Eve reported:

    (1) Having been in pain and constipated since Friday and vomiting since Sunday.

    (2) She (Eve) experienced pain (burning) when urinating.

    (3) Having 5 suppositories to relieve her constipation with minimal relief.

Vital signs recorded at 9:49am

20. RN Matthew made a progress note of the vital signs she took from Eve triage at 9:35am. Eve’s temperature was measured at 38.5°C which was elevated and fell just within *yellow zone*. Her other vital signs, other than herself report about pain, otherwise fell within the normal range.

21. The next known record of Eve’s vital signs (other than her temperature and reported pain) was that entered at 9:49pm (about 12 hours later). Eve’s vital signs were not checked between these times.

22. RN Mathew asked Eve to provide a urine sample but she was unable to urinate. Eve had a glass of water and was able to provide a sample that was tested and showed she had an infection (a progress note about this urine analysis was entered at 10:45am).

23. RN Mathew gave her 2 tablets of paracetamol (1g).

RN Mathew’s triage categorisation

24. RN Mathew assigned Eve a triage 3 category ("Emergency LR" triage group).

25. That triage category required assessment by a doctor in 30 minutes. The experts jointly agree that the triage categorisation was appropriate.

26. RN Mathew was not yet certified to independently triage patients. Although she had completed the theory component, she had not yet completed the ten supervised triages required for certification.

27. RN Reavell, in evidence, said she reviewed RN Mathew's documented triage and considered it appropriate.

28. The experts considered the triage category 3 assignment was reasonable (no criticism is made of this categorisation).

RN Mathew's contact with Dr Hakeem (VMO)

29. RN Mathew contacted by phone Dr Irfan Hakeem (**Dr Hakeem**) before or by 10:30am.

30. Dr Hakeem was a Visiting Medical Officer (**VMO**) and the LRH's rostered general practitioner and discussed Eve's case.

31. Dr Hakeem directed RN Mathew over the phone to perform a point of care blood test and to take a formal blood sample for culture. By the time Dr Hakeem arrived at the LRC, RN Mathew had inserted an IV canula to collect the blood sample.

32. RN Mathew administered Eve 1g of paracetamol following her initial phone call with Dr Hakeem.

Bedside urine sample collected / analysed at 10:45am

33. A bedside urine sample was collected and analysed by 10:45am which showed abnormalities. RN Mathew entered a progress note for a "*Urinalysis Beside Generic"*, which recorded "*Abnormalities detected"* and "Positive (+)" (urine generic nitrite).

VMO arrangements

34. Dr Hakeem was not permanently based within the LRC.

35. Dr Hakeem was working a day shift (9:00am to 5:00pm) at the Ochre Medical Centre. That clinic was located nearby to the LRC (about 200 metres away).

36. Dr Hakeem was contracted by Ochre Health to provide a locum placement at its Medical Centre (17 Pandor Street, Lightning Ridge).

37. Ochre Health was contracted with the Western NSW Local Health District to provide VMO services to the LRC.

38. The contractual arrangement between Ochre Health and Dr Hakeem required he:

(1) Provide General Practitioner (**GP**) medical services to the population of Ochre Health Bourke and Brewarrina through its medical centre.

(2) To conduct daily ward rounds at the LRC for all acute inpatients (mandatory for on call days and strongly recommended for off call days).

(3) To provide routine and emergency medical services for inpatients and non-inpatients presenting to the LRC including daily ward round of all acute inpatients (at a mutually agreeable time) and a review of residential aged care residents (minimum monthly) that did not already have a nominated GP.

(4) During on-site / on call periods he was required to be contactable and available to attend the LRC within emergency treatment benchmark times and initiated within Guidelines set within PD2020_018 *Recognition and management of patients who are clinically deteriorating* when requested by the registered nurse, vCare or VRGS.

(5) In addition to general practice session hours, Dr Hakeem was to be available on weekdays while on call between 8:00am and 6:00pm (Cat 1-5: 8:00am-6:00pm; Cat 1-2: 6:00pm-8:00am) and on weekends between 8:00am and 12:00pm (on call 12:00pm-8:00am Cat 1-2).

39. The contract provided for "on-call" of "1:3" indicating Dr Hakeem was to be one of three VMO at any given time.

Induction of VMOs

40. Dr Hakeem was separately appointed by the WNSWLHD to the temporary position of Rural Generalist (Honorary Medical Officer) which permitted him to perform the VMO at the LRC. That contractual arrangement obligated Dr Hakeem to comply and observe relevant "*hospital policies and procedures and applicable NSW Health Policy directives*".

41. It does not appear on the evidence that Dr Hakeem received any intensive induction on practices / expectations of the LRC as regards requesting transfer of patients to Dubbo Base Hospital considering (i) distance from Lightning Ridge to Dubbo; (ii) potential limitations of retrieval assets that may at times result in delay in transfer of patients; and (iii) the experience / capacity of the LRC nursing staff to monitor an acute patient, identifying if a life threatening deterioration has onset and appropriately responding.

42. The induction material which forms part of the VMO onboarding process, including in May 2021 when Dr Hakeem commenced as a VMO at the LRC, did include information and guidance around the Critical Care Advisory Service (CCAS) (now known as vCare). The induction material identifies:

i. The number to be called to escalate a critically unwell patients;

ii. That the call must be made from the patient's bedside with a hands-free headset;

iii. That patient monitoring cameras are available in the resuscitation bay in the emergency department and may be accessed and controlled remotely by authorised clinicians; and that

iv. The clinical team will determine whether local management is possible, and otherwise, the mode and urgency of transport.

43. The Patient Flow and Transport component of the induction material provides information regarding interfacility transfers, including providing contact numbers for patient flow enquiries, repeating that critically ill patients must be referred via CCAS (now vCare).

Assessment by Dr Hakeem between about 10:30am-11:30am

44. Dr Hakeem undertook an examination of Eve between 10:30am and 11:30am.

45. Dr Hakeem's examination included (1) taking a history from Eve and (2) an abdominal examination.

46. At 11:48am, Dr Hakeem entered a progress note as follows:

"42 y F

Abdo pain constipation LUTS and vomiting

BG of haemorrhoids

On Friday she went to toilet 3 times and strained hard but did not produce any stool

Afterwards developed bloating and abdo pain with nausea

She started to vomit every time she would take any thing

Abdo pain was colicky in nature and there was pain in the anal region

Used haemorrhoid cream which settled the anal pain

Took 3 supps on Tuesday and Wednesday and produced watery stool and felt some relief <u>but vomiting continued</u>

<u>This am vomited once</u>.

PMHx: Haemorrhoids Epilepsy

Medication: Epilim

Social:

Lives with partner and 3 children in town

Smoker 20 cig/day

Alcohol twice a month small amount

O/E

Conscious alert

Temp 38.5, HR 108 other obs BTF

Abdomen: Soft mild tenderness no guarding or rebound Bowel sounds + in all quadrants

PR: Multiple external piles sessile and non tender with tender internal extension. No fissure could be seen anus and rectum empty no bleeding.

UA:

Blood WBC and nitrate +ve

POC bloods:

pH 7 .5, Na 131, K 3.3, Cl 92, An Gap 20, BGL 6.1, Lac 1.3

Imp:

UTI systemic alkalosis post recurrent vomiting.

Plan:

Blood culture and formal bloods

N/Saline 1 L stat and 1 L in 3/24

Ceftriaxone 2 gm IV

Paracetamol prn

Ondansetron 8 mg IV stat."

(underline added)

(NOTE: haematology results of samples collected at 11:40am listed in the progress notes at Tab 25 p.260-62)

47. RN Mathew states that she was present for Dr Hakeem's examination of Eve. RN Mathew entered a progress note at 11:45am, which included the following as regard the treatment plan:

"…Informed doctor oncall, [advised] to do POCT bloods, formal bloods and blood culture. [Advised] IV fluids 1LX2 ;Stat and over 3 hours, IV Ondasetron 8rng stat, IV ceftriaxone stat hence administered.

IVC @ right arm with 22G.

Doctor rEvewed the patient.

IV fluids ongoing ATOR ."

(note: it is understood ATOR stands for "At time of review")

48. In his statement, Dr Hakeem stated that during his examination of Eve:

(1) Eve reported that her epilepsy was very well controlled and she had not had seizures for many years (*I note the OIC's view that Eve may have suffered seizures more recent than that suggested in this report*).

(2) She complained of having "*features of lower urinary tract infection with burning while urinating and frequently needing to empty her bladder".*

(3) He observed Eve had a "*high temperature of 38.5 and had a heart rate of the order of 90/minute*" with her respiratory rate / oxygen saturation and blood pressure appearing normal.

(4) Eve presented as "*mildly dehydrated*".

(5) On palpation of her abdomen it was soft without palpable lump in her abdomen but had mild left loin tenderness.

49. Dr Hakeem's documented an initial impression of "*UTI systemic alkalosis post recurrent vomiting".*

50. Dr Hakeem documented a treatment plan that consisted of the administration of:

(1) Intravenous (**IV**) antibiotics (Ceftriaxone 2gm IV).

(2) Ondansetron (8mg IV stat) (management of nausea).

(3) IV fluid administration (began at about 11am).

51. Further investigations were requested including blood chemistry, haematology and blood cultures. These were collected at about 11:40am).

52. In his written statement Dr Hakeem stated:

(1) He ordered 1gm of paracetamol to improve her fever and ordered a point of care blood test. This showed pH of 7.5 which indicated no acidosis (which might arise in severe infections). Her sodium, potassium, bicarbonate and other blood electrolytes were normal, as was the lactate blood level.

(2) The *"urinalysis analysis showed all the features of a urinary tract infection".* The treatment plan at this point was for administration of IV antibiotics for suspected UTI, administration of IV fluids for dehydration and the taking of blood tests and cultures.

(3) He concluded (presumably by about 11am to 12pm):*"…[Eve had] a urinary tract infection and I ordered formal blood tests an a blood culture for her. I started her on ceftriaxone 2 gm intravenously which is the usual empirical antibiotic to treat a urinary tract infection. I also started [Eve] on intravenous fluids as she was dehydrated from recurrent vomiting. I ordered her to be given Ondansetron to prevent nausea and vomiting."*

Eve remained in the ED (resus bed)

53. Eve remained in the LRC's ED, likely in a 'resus' bed, while the investigations were undertaken.

RN Mathew completes shift (about 3:30pm)

54. RN Mathew saw Eve one further time, in the ED, at about 3pm, when she disconnected Eve's IV fluid so she could go to the toilet and then reconnected it on her return. She then completed her shift at 3:30pm.

Blood results (by 4:00pm-5:00pm)

55. Between about 4:00pm and 5:00pm, the blood cell count (presumably from the blood sample earlier taken by RN Mathew) was returned showing a high white blood cell count indicative of infection. This result "confirmed the infection" and Dr Hakeem admitted Eve to the hospital on *"Daily Ceftriaxone and intravenous fluids"*.

Review by Dr Hakeem at about / by about 4:00pm

56. At about or by 4:00pm, Dr Hakeem had reviewed the results of investigations including Full Blood Count (**FBC**). This was part of his afternoon hospital round / attendance. He did not examine Eve at this time.

57. The investigations showed a high white blood cell count indicative of infection.

58. In Dr Hakeem's mind, this result "*confirmed the infection*" and he admitted Eve to the hospital on *"Daily Ceftriaxone and intravenous fluids"*.

59. Dr Hakeem formulated and documented his working diagnosis at that time as "*? UTI sepsis*".

60. Dr Hakeem's relevant progress note recorded as follows:

> "*Improved partially on abx*
>
> *FBC: WBC 21 and neutrophil 17.5*
>
> *Impression:*
>
> ***? Urinary sepsis***
>
> *Plan:*
>
> *Admit*
>
> *Regular medications*
>
> *Continue on abx*
>
> *IV Hartmann 1 L/4 hours."*

61. Dr Hakeem's documented plan was for Eve to be admitted for the administration of IV antibiotics and fluids for dehydration.

62. Although he used the term "sepsis", Dr Hakeem considered Eve to present as hemodynamically stable at this time. The term hemodynamically stable refers to a patient, although ill, is assessed to be at a low immediate risk of a life threatening complication like shock considering their vital signs and presentation.

63. Dr Hakeem next expected Eve to be seen by himself or another VMO when the morning ward was carried out the next day.

Eve's admission to the LRC's acute care ward about 5:00pm on Thursday 1 July 2021

64. Eve was admitted as a patient to the LRH's acute care ward and remained a patient until her death.

65. At the time Eve was admitted to the acute care ward:

    (1) The acute care ward's four beds were fully occupied (Eve, two other acute patients and one palliative patient).

    (2) The aged care ward's nineteen beds were fully occupied.

    (3) There were two registered nurses and one health / security assistant rostered at the LRC between 10:45pm and 7:15am.

    (4) During that overnight period (10:45pm to about 7:00am), one registered nurse was responsible for monitoring and attending the admitted patients in the acute care

ward and ED being RN Brizuela. He was also the senior nurse on shift for the facility.

(5) There was no doctor present at the hospital overnight although there was the capacity of nursing staff to contact on-call VMOs (e.g. Dr Hakeem) or the VRGS / vCare.

66. Between Dr Hakeem's note at 4:07pm (outlined above), and RN Brizuela coming on shift at 9:00pm, only one progress notation was made being that by RN Reavell at 8:54pm stating:

"*Dr charted IVAB to start at 1700hrs today.*

Pt already had stat dose of same medications when she came in.

ISBAR to dr he advised to have tomorrow not today.

Please confirm with VMO if ivab should be for 0800hrs not 1700hrs

IVF running at 250mls an hr."

67. There is no known record of any observation being taken between 5:00pm and 9:00pm.

Administration of medications at about 7:30pm to 8:00pm on Thursday 1 July 2021

68. Eve was noted to have received PRN ondansetron (4mg IV) at 7:25pm, Epilim at 7:48pm and 1000g of paracetamol at 8:00pm (administered by Registered Nurse Remya Renjith).

RN Brizuela comes on shift at about 9:00pm on Thursday 1 July 2021

69. RN Brizuela stated that he commenced work in the acute care ward an hour early (at 9:00pm) due to understaffing. He was the most senior nurse during his night shift.

Documenting of vital signs at about 9:49pm on Thursday 1 July 2021

70. At 9:49pm, a progress note was entered of Eve's vital signs. The vital signs recorded at this time were temperature 38.1 degrees; peripheral pulse rate 90bpm; respiratory rate 20brpm; Systolic blood pressure 120 mmHg; Diastolic blood pressure 75 mmHg; and oxygen saturation 99%. Simply put Eve's temperature was within the normal range (e.g. below yellow zone commencement of 38.5°C) but *elevated*. Her other vital signs also fell within the normal range.

Vital signs taken by RN Brizuela at 11:35pm on 1 July 2021

71. RN Brizuela's first recorded observations for Eve were recorded at 11:35pm (about 2 ½ hours after he began his shift). Eve's vital signs were last recorded at 9:49pm.

72. RN Brizuela noted "*pt in bed, Obs taken, BTF, except temp-38.2, given PRN Paracetamol 1gm tab*" (*BTF* means "between the flags").

73. The "*BTF…except temp-38.2*" referred Eve's vitals generally being "*between the flag*" save for her temperature.

74. The temperature recorded of 38.2°C was, technically speaking, below the *yellow zone* however it was elevated and a likely indicator of Eve battling an infection.

75. RN Brizuela administered Eve 1g of paracetamol to manage her temperature.

Vital signs taken by RN Brizuela at 2:14am on 2 July 2021

76. Eve's next recorded temperature was taken by RN Brizuela at 2:14am, when it was recorded to be 38.5 degrees. That temperature fell just within the *yellow zone*.

77. RN Brizuela noted: *"Obs taken, temp-38.5, pt clo nausea, given PRN ondansetron 4mg IV Author unable to give paracetamol as it exceeded the maximum dose of paracetamol in 24hrs, applied tepid sponge bath on forehead instead*".

78. Because Eve had exceeded the maximum dose of paracetamol to that point, RN Brizuela considered that the administration of paracetamol at that time was not permitted. He thereby applied a tepid sponge to her forehead in an attempt to reduce her temperature.

Temperature recorded at 4:04am

79. At about 4:04am, RN Brizuela noted Eve's temperature to be 38.3°C, which was just under the *yellow zone* (38.5 °C), and she reported abdominal pain (note stated "*pt c/o lower abdominal pain"*).

Attempts to contact VRGS between about 4:04am and 4:30am on 2 July 2021

80. At about 4:04am RN Brizuela recorded having "*sent a consult to VRGS, a/w response*" (*VRGS* meaning the *Virtual Rural Generalist Service*).

81. In his statement, RN Brizuela stated that:

    (1) If a registered nurse has concerns about a patient, and the patient's triage category is between 3 to 5 (non-critical), the nurse can order a consultant with the VRGS via the patient's *electronic medical record* (**EMR**).

    (2) He requested a VRGS consult, having assessed Eve as a "*triage category 3, that is having a potentially life-threatening condition that requires medical assessment by a doctor within 30 minutes*" (RN Brizuela did not contemporaneously document that he considered Eve attracted a triage 3 category).

    (3) At about 4:29am, after receiving no response to his consult request, RN Brizuela recorded having "*rang VRGS 3-4 x times, nil answer*".

Eve further complaint of lower abdominal pain at 4:29am on 2 July 2021

82. At 4:29am, RN Brizuela also noted "*pt sitting in toilet bowl, trying to defecate, pt still feeling nauseous, spewing saliva, nil c/o burning urination**,** just lower abdominal pain, score 7-8/10*". (emphasis added)

RN Brizuela's phone contact with Dr Hakeem at about 4:55am (*1st phone contact*)

83. RN Brizuela commenced an electronic progress note at 4:23am, which he concluded and entered (electronically signed) after 8:00am (e.g. at the conclusion of his shift) in which he recorded calling Dr Hakeem at "04:55" to discuss Eve.

Eve's complaint of *severe* abdominal pain at 5:13am on 2 July 2021

84. In RN Brizuela's electronic progress note, which he commenced 4:23am and he concluded / entered (electronically signed) after 8:00am (e.g. at the conclusion of his shift), he recorded "*05:13…pt c/o **severe pain in left side of her abdomen**, groaning in pain, pt stated" / can't breathe*" and "*Obs taken, BTF, spo2-98%, RR-20, Author advised to pt to breathe in and out*" (emphasis added) (note 'BTF' refers to *Between the Flags*).

RN Brizuela's phone contact with Dr Hakeem at about 5:20am on 2 July 2021 (*2nd phone call to Dr Hakeem*)

85. In RN Brizuela's electronic progress note, which he commenced 4:23am and he concluded / entered (electronically signed) after 8:00am (e.g. at the conclusion of his shift), he recorded calling Dr Hakeem at "*05:20*" to discuss Eve.

Eve's collapse at 5:45am

86. In RN Brizuela's electronic progress note, which he commenced 4:23am and he concluded / entered (electronically signed) after 8:00am (e.g. at the conclusion of his shift), he recorded:

> *"05:45, while Author and RN Remya was changing the pad and bedsheet of Room 1, **we heard a bang in Room 3**, RN Remya went in Room 3, found out pt lying on the floor Author went in pt's room, pt lying in her back, pt stated she just wanted to go to the bathroom to open her bowel, she was almost in the toilet door, and suddenly her feet got unsteady, and he sat and laid on the floor, pt unsure if she had a head strike, Obs taken, airway patent, speaks in sentences, RR-22, spo2-99%, BP-88155, HR-128, cold to touch, diaphoretic, T-38.3, GCS-15 - - - Rang HSA, t/f the to bed, via sling lifter, put pt's feet under the pillow…*" (emphasis added)

87. In his statement RN Brizuela said:

(1) He was with another patient in another room, with another nurse, when they heard a "bang" sound coming from Eve's room.

(2) When he entered with another nurse he found Eve lying on the floor on her back. Eve reported that she had got up to go to the toilet. When she was near to the toilet door she suddenly felt unsteady on her feet so she sat and laid on the floor (the way she went to ground was not witnessed). She was unsure if she suffered a head strike.

(3) Her heart rate was high, blood pressure low and she was cold to touch and sweating.

RN Brizuela's phone call to Dr Hakeem shortly before 6:00am (*3rd phone call*)

88. In RN Brizuela's electronic progress note, which he commenced 4:23am and he concluded / entered (electronically signed) after 8:00am (e.g. at the conclusion of his shift), he recorded a phone call with Dr Hakeem after Eve was found on the floor.

Subsequent progress notes made by RN Brizuela

89. In RN Brizuela's electronic progress note, which he commenced 4:23am and he concluded / entered (electronically signed) after 8:00am (e.g. at the conclusion of his shift), he recorded the following taking place with Eve up until his handover to the morning shift nurse (RN Mercy Bosha (**RN Bosha**)):

"0600, BP-91159, changed to pt's gown, put incontinence pad, pt stated she wants to open her bowel but unable 0210712021 06:15, given NJ microax 1 tube

06:30, BP-93162, HR-118, temp-37.5, IVF hartmans consumed, changed to Hartmans 1L x 4hrs, pt stated she opened her bowel Author got busy in ED, had a pt in severe pain, RN Remya assisted the Author as well

0655: [Dr Hakeem] rang, advised to rpt chem 4,

0705, handed over the pt to the next shift, pt still hypotensive, shifted to Resus bed 1 incontinence pad changed, BO, type 6, light green color handed over to the morning staff IMMS done…"

RN Brizuela's phone contact with Dr Hakeem at about 6:55am

90. At 6:55am, Dr Hakeem spoke to RN Brizuela by phone and asked for another point of care blood test.

Escalation in clinical response at about 7:00am on Friday 2 July 2021

91. At 7:00am, RN Bosha began her shift. RN Bosha determined (independent of Dr Hakeem) Eve should be transferred from the Acute Care ward to a resus bed in the ED.

92. RN Bosha arranged for a Virtual Care (vCare) consultation within the ED. This resulted in a Consultant, Dr Fergal McCourt (**Dr McCourt**) (based at Dubbo Hospital) (*Emergency Physician or Intensivist*), advising on treatment.

93. RN Bosha noted at 7:17am:

> *"07:14 Assumed care of pt.*
>
> *Bed side handover is that pt hypotensive with SBP less than 90. Hartmann's in progress.*
>
> *RR 35.*
>
> *Pt diaphoretic.*
>
> *Generally looks unwell.*
>
> *Hx noted.*
>
> *Pt meets sepsis criteria.*
>
> *Plan*
>
> *Move pt to ED for haemodynamic monitoring.*
>
> *ISBAR with Dr Hakeem and clinical r/v requested."*

94. RN Bosha also requested Dr Hakeem's immediate attendance at the hospital.

95. RN Bosha recorded at 7:28am that Eve had been "*escalated to vCare*" and that she had a "*manual BP 84/68"*.

vCare telehealth assessment commences at about 7:35am and handover from Dr Hakeem to Drs Fergal McCourt / Roger Brown

96. RN Bosha's intervention led to the involvement of Dr McCourt who view the examination / treatment of Eve via AVL and provided instruction to clinicians at the LRC through use of headsets.

97. A rapid response team (red zone) alert was recorded at 7:26am.

98. At 7:35am, the vCare telehealth assessment commenced using the camera located in the Emergency Department resuscitation area. The vCare Nurse Manager Donna Crameri recorded the situation as "*Priority A – Hypotension ?sepsis*". She summarised the history and current investigation findings.

99. The vCare consultant Dr McCourt joined the consult at about 7:37am.

100. At about 7:52am, Dr McCourt spoke with Aeromedical Control Centre for Priority 2 tasking of an Air Ambulance flight from Dubbo with Flight Nurse escort. The State

Retrieval Consultant, Dr Keith Edwards, was joined into this teleconference to discuss the retrieval request.

101. At about 8:00am, Dr Hakeem handover Eve's care to Dr Roger Brown (**Dr Brown**), the LRH's rostered general practitioner.

102. Dr Brown and Dr McCourt considered the possibility of haemorrhagic shock but ultimately was of the view that Eve's symptoms were attributable to septic shock. It is not known what action could have been taken while Eve was at LRC, to address her internal bleeding from her ruptured spleen had that been realised.

103. The LRC did not have the capacity for surgical operations.

104. Antibiotics, fluid and adrenalin was administered and attempts made to support Eve's blood pressure.

105. Eve's blood pressure continued to deteriorate and it became clear that she was progressing to cardiorespiratory collapse. Efforts were made to prepare for the provision of emergency treatment in that event pending the arrival of the Royal Flying Doctor Services' (**RFDS**) and Eve's family were brought to the LRH.

Erroneous information regarding fluid administration

106. The vCare auditory recording captured Dr McCourt seeking to establish how much intravenous fluid Eve had received to that point in time. Dr Hakeem advised that a total of three litres had been administered to her where she had in fact been administered a total of 5 litres (2L Normal Saline and 3L Hartmann's Solution) by 7:00am.

Request for retrieval

107. By about 8:00am, vCare had contacted Aeromedical Retrieval Services to request an asset to attend Lightning Ridge to transport Eve to Dubbo for admission to the Dubbo Base Hospital. The initial request was treated as a P2 priority which meant an asset with nurse(s) only was permissible. This category is less time sensitive as compared to a P1 categorisation.

108. Sometime before mid-morning the priority status was changed to P1. This likely occurred after it was determined that a medical officer should be involved in the flight transfer given her condition. This ultimately led to the dispatch of the RFDS medical retrieval team.

Eve goes into cardiac arrest at about 12:20pm

109. At about 12:21pm on Friday 2 July 2021, Eve went into cardiac arrest (a paramedic inserted a guedals airway at about 12:20pm). Cardiopulmonary resuscitation (**CPR**) was administered however she could not be revived.

110. The RFDS arrived at the LRH at about 12:45pm and a doctor within that team intubated Eve.

111. CPR was eventually ceased at about 1:15pm and Dr Brown formally declared Eve to be deceased at 1:30pm.

Police attendance and report to the Coroner

112. Police were notified soon after of Eve's death.

113. Dr Roger Brown signed a "*cause of death certificate"* that listed cause of death as septic shock caused by urosepsis. Dr Brown completed a document that indicated that Eve's death was not a "reportable death" under the *Coroners Act 2009 (NSW).* The death certificate was issued without a report of the death to the coroner.

114. At 3:45pm that same day (2 July 2021), Nursing Unit Manager Kerry Irvin (**NUM Irvin**) notified the police of her concerns that the death ought to be reported to the coroner.

115. NUM Irvin advised that there were discrepancies in the actual amount of IV fluid that had been administered to Eve as compared to that recorded as being administered. The vCare team were initially advised that five litres of fluid had been administered to Eve since her presentation the day before, however it was then ascertained that seven litres had ultimately been administered.

116. Ms Irvin's intervention resulted in a report of the death being made to the coroner (P79A) that same day and an investigatory response which included establishment of a crime scene at the LRC ED and ensuring blood samples were kept and CCTV footage secured.

Pathologist opinion as to cause of death

117. An autopsy was conducted on 8 July 2021 by Dr Donovan Loots (**Dr Loots**), Staff Specialist Forensic Pathologist, at Forensic Medicine in Newcastle.

118. In the opinion of Dr Loots, Eve's direct cause of death was hypovolaemic shock due to an acute ruptured subcapsular splenic haematoma in the setting of urosepsis.

119. Amongst other matters, Dr Loots noted / opined:

    (1) There were no recent significant injuries were noted on the surface of the body other than those considered to be due to therapeutic intervention.

    (2) Histological examination of tissue slides showed *severe acute-on-chronic pyelonephritis* with multiple haemorrhagic abscesses which was the likely cause of the urosepsis.

    (3) Sections sampled from the ruptured subcapsular splenic haematoma and adjacent splenic tissue confirmed the presence of a large, acute antemortem haemorrhage.

(4) A large volume of blood within the peritoneal cavity (approx. 2270ml of mixed clotted and fluid blood) (the peritoneal cavity is the space that holds most of the organs in the abdomen including the liver, stomach and intestines).

END