



OFFICE OF THE STATE CORONER

FINDINGS OF INQUEST

CITATION: Inquest into the death of Bela HEIDRICH

TITLE OF COURT: Coroner's Court

JURISDICTION: Rockhampton

FILE NO(s): 2008/562

DELIVERED ON: 29 June 2011

DELIVERED AT: Rockhampton

HEARING DATE(s): 5-7/07/2010 & 18/07/2010

FINDINGS OF: Mrs Annette Hennessy, Coroner

CATCHWORDS: Overlaying/smothering of newborn in hospital; breastfeeding lying down and supervision by nursing staff; breastfeeding policies.

REPRESENTATION:

Counsel Assisting: Ms A Martens

Family: Mr GR Mullins i/by Maurice
Blackburn Lawyers for mother
Father in person

For Nurses:
(RN ER Mann & RN SL Rapkins): Mr Rebetske i/by Roberts & Kane
Solicitors

For Qld Health: Mr C Fitzpatrick i/by Corrs Chambers
Westgarth

These findings seek to explain, as far as possible, how the death of Bela Heidrich occurred on 28 February 2008. Consequent on the court hearing the evidence in this matter where learnings indicate that changes can be made to improve safety and changes to departmental practice, recommendations may be made with a view to reducing the likelihood of a similar incident occurring in future.

THE CORONER'S JURISDICTION

1. The coronial jurisdiction was enlivened in this case due to the death falling within the category of "*healthcare-related death*" under the terms of s8 of the Act. A Coroner has jurisdiction to investigate the death under Section 11(2), to inquire into the cause and the circumstances of a reportable death and an Inquest can be held pursuant to s28.
2. A Coroner is required under s45(2) of the Act when investigating a death, to find, if possible:-
 - the identity of the deceased,
 - how, when and where the death occurred, and
 - what caused the death.
3. An Inquest is an inquiry into the death of a person and findings in relation to each of the matters referred to in section 45 are delivered by the Coroner. The focus of an Inquest is on discovering what happened, informing the family and the public as to how the death occurred, but not on attributing blame or liability to any particular person or entity.
4. The Coroner also has a responsibility to examine the evidence with a view to reducing the likelihood of similar deaths. Section 46(1) of the Act, authorises a Coroner to "*comment on anything connected with a death investigated at an Inquest that relates to – (c) ways to prevent deaths from happening in similar circumstances in the future.*" Further, the Act prohibits findings or comments including any statement that a person is guilty of an offence or civilly liable for something.
5. Due to the proceedings in a Coroner's court being by way of inquiry rather than trial, and being focused on fact finding rather than attributing guilt, the Act provides that the Court may inform itself in any appropriate way (section 37) and is not bound by the rules of evidence. The rules of natural justice and procedural fairness apply in an Inquest. The civil standard of proof, the balance of probabilities, is applied.
6. All interested parties can be given leave to appear, examine witnesses and be heard in relation to the issues in order to ensure compliance with the rules of natural justice. In this matter, Bela's family, Rockhampton Hospital and Queensland Health, and the Nurses who provided care to Bela and her mother, Zelia Blomfield, were represented at the Inquest.

7. I will summarise the evidence in this matter. All of the evidence presented during the course of the Inquest, exhibits tendered and submissions made have been thoroughly considered even though all facts may not be specifically commented upon.

Definitions

8. Co-sleeping is the practice of an infant and parent/s sleeping together on a shared sleep surface, most commonly a bed.
9. Bed-sharing is the practice where an infant is taken into a bed with a parent for purposes other than sleep (for example breast-feeding or cuddling) and without the intention to co-sleep. Bed-sharing becomes co-sleeping once either the infant and/or caregiver fall asleep.

Issues

10. The issues which were considered during the inquest were:
 - (A) whether anything during Zelia's labour that could've contributed to Bela's outcome;
 - (B) whether the decision to allow Zelia to breastfeed in bed was appropriate in the circumstances;
 - (C) whether appropriate monitoring was conducted of Zelia and Bela when they were breastfeeding in bed;
 - (D) whether appropriate policies and procedures were in place at the time with respect to this issue, and whether appropriate changes have been made to the policies by the hospital.

THE EVIDENCE

Zelia's Pregnancy, Labour and Birth of Bela

11. Prior to falling pregnant Zelia had been a regular smoker and she continued to smoke during pregnancy to a reduced extent. Zelia attended all antenatal appointments as required. She received a package of information that contained information about breastfeeding but not about either co-sleeping or bed-sharing. At the Inquest, her stated intention was to breastfeed Bela once she took her home, but not in bed to avoid the dangers of falling asleep together.
12. On the evening of 26 February 2008 at approximately 10pm, Zelia, who was 39 weeks pregnant, commenced labour. At approximately 2-2.30am on 27 February 2008 she called the midwife and was told it was likely she was in labour however not to attend the hospital until she needed pain relief or the contractions were 5 minutes apart. Zelia subsequently presented to the Rockhampton Hospital on the morning of 27 February 2008 and was admitted at approximately 7.30am. Zelia's sister Samarah Blomfield and partner (Bela's father) Andrew Heidrich were present during most of the labour.

13. During her labour, Zelia was given pethidine for pain relief and subsequently, an epidural. Zelia's medical records indicate that during the prolonged second stage of labour, lasting about 3 hours, meconium liquor was present and there were signs of foetal distress. Zelia gave birth to Bela Heidrich at 2.02am on 28 February 2008. Bela's Apgar scores were 9 at 1 and 5 minutes, indicating she was healthy.
14. The evidence from Zelia, Andrew and Samarah was relatively consistent regarding the timeline of events following Bela's birth. After Bela was born, Bela was placed on Zelia's belly, she was then wrapped and Andrew and Samarah held Bela. Student Midwife (SN) Mann noticed Bela was still making some gurgling noises so she gently suctioned Bela's mouth. The family's recollection is that Bela was taken to be weighed and measured and to receive her vaccinations. She was also bathed at that time. Whilst this was being done Zelia had a shower where she vomited, but was feeling better afterwards. SN Mann also recalled Zelia was in the shower whilst Bela's vaccinations were being prepared and the medical records note that vaccination took place at 3.10am.
15. Zelia then breastfed Bela, 30 minutes on one breast and 20 minutes on the other. Zelia recalls this occurring between 3.00am and 3.50am. She was keeping an eye on the time to determine how long Bela breastfed for. Bela's medical records indicate she was breastfed on both sides at 3.00am. Andrew and Samarah were present and supported Zelia's estimation of the duration of the feed.
16. Samarah indicated that Zelia had a bit of a sleep after her shower. Andrew's evidence was that Zelia was dozing on and off in the half hour before they left the hospital about 4am after the first feed. Enrolled Midwife (EM) Rapkins indicated during evidence that these events would all have occurred prior to 3.30am but later stated that the breastfeed occurred between 3.30-4am. SN Mann gave Zelia some Mylanta at 4am.
17. SN Mann and EM Rapkins conceded during evidence that the medical records would appear to have three events (Bela being bathed and vaccinated, Zelia showering and Bela being breastfed) all at 3.00am. Not all of these events could have occurred at the exact same time. EM Rapkins and SN Mann's evidence was that the times provided in the medical records are likely to be estimates only. SN Mann believed it was likely the three events occurred in close proximity to each other. EM Rapkins gave evidence that the entries she made in the medical notes were approximated to the nearest half an hour.
18. Counsel for the nurses submitted that the fact that breastfeeding occurred was more important to record than the precise times feeds occurred. Whilst that may be true for the first breastfeed, the timing of the second feed was important in order to determine the adequacy of

the supervision and the timing of the death of Bela and in that case, the accurate recording of the timing was very important.

19. During the first breastfeed, SN Mann offered to assist Zelia attach Bela to her breast. SN Mann was unable to recall the exact instructions she gave to Zelia however her general practice was to provide instructions on how to position Bela and get the nipple in Bela's mouth and where Zelia should put her arms. Her general advice would also include some information about having the baby's chin tucked into the mother's breast so the head is far enough back that the nose is not occluded however she would not actually put it in terms to the mother that the infant's nose needs to be free. SN Mann believes she asked Zelia whether she would like to feed lying down or sitting up. Zelia elected to sit up. EM Rapkins later observed Zelia during this breastfeed and she appeared to be comfortable in this position and Bela fed well.
20. Andrew's recollection was that even during the first breastfeed, Zelia was exhausted and not confident nursing Bela. Zelia had told Andrew she felt weak and she had vomited in the shower. Andrew described Zelia as looking "dazed". It was clear to Andrew that Zelia just wanted to get some rest. Just prior to leaving the hospital at around 4am, Samarah's recollection was that Zelia was nodding on and off, she was not very alert and was fairly exhausted.
21. Both Samarah and Andrew recall speaking with a midwife prior to leaving. Samarah indicated this nurse was EM Rapkins. According to them, EM Rapkins indicated to Samarah and Andrew that if Bela did not settle, they would give her to Zelia to breastfeed and it would not matter if Bela nodded off. Andrew recalls that Zelia was not comfortable about this and at this point the midwife indicated that if Bela did not settle, because she had already had a good feed, they would take her to the nursery. Samarah did not recall any discussion about taking Bela to the nursery however she believed Zelia was awake during this discussion. Zelia gave evidence that she remembered EM Rapkins speaking to Andrew and Samarah as they were leaving. She recalls there was discussion about what might happen if Bela did not settle. Zelia cannot recall any other part of the conversation including what course of action might be taken if Bela did not settle.
22. EM Rapkins gave evidence there was no nursery for babies to be placed in (other than the special care nursery) and babies would only be placed there if needing that attention or if the mother was adamant she needed a break.
23. Andrew recalls that when he left the hospital there was some lighting in the room however it was not as lit up as the corridor outside the room. Zelia's recollection was there was a light on in the room however it was not very bright but not "ultra dark" either. At some point after Andrew and Samarah left, Zelia recalled that Bela was in her crib crying and

that EM Rapkins attended and picked up Bela. She believed that EM Rapkins took Bela to show her off to the other midwives and was gone for a period of approximately 15 minutes. During this period Zelia slept on and off.

24. EM Rapkins confirmed she took Bela for a period of about 10 minutes and visited the postnatal ward to determine what bed would be allocated to Zelia. She took Bela with her to give Zelia some time on her own to drink a cup of tea that had been made for her. EM Rapkins believed she came back into the birthing suite and placed Bela in her cot. EM Rapkins indicated Zelia was lying in the bed however she was not asleep. Bela did not settle and EM Rapkins suggested attempting another breastfeed in the position Zelia was in (i.e., lying down).
25. EM Rapkins indicated in her second statement that in suggesting Zelia lie down to feed she considered the following factors: Zelia had had a long day labouring, she had vomited in the shower and Bela was crying and mouthing for a breastfeed. EM Rapkins considered Zelia was not a large lady and there would be plenty of room for Zelia and Bela to lie beside each other. EM Rapkins did not consider there to be any risks to Zelia or her baby at this time as Zelia was awake and conversing with her. EM Rapkins was aware Zelia was a smoker however she did not consider this to be a risk factor in deciding to allow Zelia and Bela to bed-share as Zelia had not smoked since labour had commenced.
26. Zelia recalled that Bela was brought back into the room by EM Rapkins to breastfeed Bela again. Zelia believed she had been asleep immediately prior to this. The best time estimate Zelia could give was that this may have been approximately half an hour after the first breastfeed ended, which would be approximately 4.20am. EM Rapkins indicated in her first statement that the second breastfeed commenced at 4.30am but the medical records showed the feed at 4am. EM Rapkins was not able to resolve which time was accurate when she provided evidence at the inquest.
27. Zelia's evidence was that at this time she was drained and lethargic. EM Rapkins' evidence was that Zelia was responsive, alert and awake and she would not have classified Zelia as "*extraordinarily and unusually tired*" and her exhaustion was nothing beyond the normal. SM Mann's evidence was that Zelia "*didn't particularly strike me as exhausted*" and commented that women are often on a high after giving birth. Both nurses seem to have independently made consistent assessments of Zelia's condition based on their own experience. Submissions from Counsel for the nurses urged that terms such as *exhausted* when considering the above standard should be placed in context in accordance with midwifery practice.
28. Zelia recalls that EM Rapkins gave Zelia some instructions about positioning herself to breastfeed Bela lying down in the bed. EM Rapkins instructed Zelia to lie on her right hand side with her right arm

outstretched. Bela was placed in the bed with Zelia on her side and she attached easily to Zelia's breast. EM Rapkins placed a pillow behind Bela and raised the rail to the bed.

29. EM Rapkins indicated in her second statement that the "*bed rail was up on the bed on the right hand side with a pillow between this rail and the back of the baby*". In evidence, EM Rapkins indicated the pillow was positioned about mid way down Bela's back to extend the railing on the bed. She was confident the pillow was not behind Bela's head. During cross-examination, RM Rapkins stated that she could not visualise exactly where the pillow was but knew what her normal practice was. It became somewhat unclear as to whether the evidence of the placement of the pillow was a distinct memory or a description of normal practice.
30. Zelia recalls the pillow was directly behind Bela's head and back and that her outstretched arm was touching the pillow. Further, that when she was first positioned, her arm was on the pillow and it was uncomfortable and she had to move her arm position a little. She recalled that she could touch the pillow with her hand. Zelia denied the pillow was halfway down Bela's back and was extending the railing. She said that Bela was lying on it a little bit but that Bela did not have her head on the pillow.
31. SM Mann was unable to assist in relation to the placement of the pillow when she located Bela. She recalls there being no impediment to rolling Bela over to examine her but was unsure whether the pillow was there at the time or not. There was no dispute that a pillow was placed between Bela and the bedrail, but the exact position of the pillow was disputed between Zelia and RM Rapkins.
32. Zelia gave evidence that the instructions EM Rapkins gave to her was that she should lay on her side to breastfeed and when Bela was finished, Bela would let go or latch off the breast. Zelia has a specific recollection of being told by EM Rapkins that it would be okay for her to go to sleep. She did not recall all of the conversation had with the nurse.
33. EM Rapkins was unable to recall the exact instructions she gave Zelia however her usual practice was to advise the mother to leave the baby breastfeeding for as long as possible and when the baby is finished she would place the baby in the cot to sleep. EM Rapkins also indicated in her second statement she would usually instruct a mother not to hold or pull the baby in close to them as this pushes the baby's face against the breast and the baby is unable to pull away if need be. Her normal instructions would also include advising the mother to push the call button and ask for assistance if the baby came off the breast or if feeding became painful. EM Rapkins' usual practice was not to advise the mother they are able to sleep whilst breastfeeding and she would not provide a mother with any information about sleeping (i.e.,

whether they could or could not) unless they specifically raised it. EM Rapkins indicated she believed Zelia comprehended the instructions she gave to her however she did not check with Zelia to ensure the instructions had been understood.

34. EM Rapkins gave evidence that she did not believe a mother breastfeeding lying down was any more or less likely to fall asleep than a mother breastfeeding sitting up. EM Rapkins gave evidence she expected that Bela would feed, probably drop off to sleep and then she would return Bela to the cot. She also indicated it was possible Zelia may have also dropped off to sleep before she came back to return Bela to the cot. EM Rapkins indicated in her first statement that she checked on Zelia and Bela at some stage between 4.30am and 5.00am, about 10-15 minutes into the feed, and she spoke with Zelia and observed Bela moving for the breast.
35. Once Bela started breastfeeding, Zelia believes she was drifting in and out of sleep almost straight away, and "*wasn't really with it*". She did not recall speaking to any nurses between this time and when Bela was discovered. Zelia conceded it was possible nurse/s had entered the room to restock the medical cupboard and/or check on her however she stated that she was so tired and exhausted and she did not notice them as she was probably asleep.

The discovery of Bela

36. Zelia awoke sometime after commencing the second breastfeed, in the same position she had been left in by EM Rapkins. Zelia noticed Bela's head was cold and she called out to a nurse for assistance to retrieve a beanie for Bela's head. SN Mann was sitting at the desk outside the birthing suites attending to other duties when she heard Zelia call out. SN Mann went into the room and found Bela's head was cool to touch, much cooler than it should have been so she turned on the light. SN Mann observed Zelia lying on her right side with her arm level with her shoulder and forearm bent up above the pillow. Bela was lying on her side.
37. SN Mann rolled Bela onto her back. Bela was limp with no muscle tone, her face was blue and she was white around the nose and mouth area. SN Mann picked up Bela and hurried towards towards the Special Care Nursery (SCN) calling out for EM Rapkins at the same time. EM Rapkins took Bela and went into the SCN. SN Mann then tried to call a MET on the mobile phone however when she was unable to do so, she went into the SCN and pressed the MET button.
38. SN Mann was unable to give an estimate of the time frame within which these events occurred. EM Rapkins indicated in her first statement that SN Mann came out with Bela at approximately 5.10am and the MET was called by SN Mann at 5.15am. During evidence EM Rapkins indicated the clock which she looked at to base these times on might not have been accurate. EM Rapkins indicated the MET was called

straight away as she commenced resuscitation and the MET team responded immediately. The Hospital's records record the MET having been initiated at 5.32am. SN Mann and EM Rapkins' evidence was that this time would be the most accurate.

39. It is noted that in Counsel for the nurses submissions, there was contest as to the accuracy of the timing of the MET call. This was not contested in evidence at all and was not raised as an issue. Some criticism has been levied that witnesses were not called to address this issue. I do not accept that there is any doubt in relation to the timing of the MET call in light of all of the evidence heard.
40. There was some difficulty identifying all the staff that responded and assisted in the SCN as there was no recorded information in the medical records which noted those staff present. The Hospital's legal representatives identified all staff that were present and statements were obtained from them. At present, Queensland health procedure is that a state-wide standard form is used and kept in the equipment trolley. One dedicated scribe is required to record the procedure, including staff present, and form is retained on patient chart.
41. EM Wendy Jenkins and EM Narelle McKay were working the night shift in the postnatal ward. EM McKay recalls that at approximately 5.30am she heard a loud cry and as a result she and EM Jenkins came out to investigate. EM McKay then heard the MET emergency buzzer sound. EM McKay recalls that when she arrived EM Rapkins was performing CPR and other staff were also responding to the MET call very quickly. Once the MET team arrived, EM Rapkins left the special care nursery. She did not make any further notes in either Zelia or Bela's medical records because she was distressed and distraught.
42. Dr Janet Ferguson was the Paediatric Register on duty and attended the SCN at 5.30am in response to hearing the labour ward emergency bell and supervised the resuscitation along with the Emergency Department doctor who attended in response to the MET call. During the resuscitation, at approximately 5.48am, Dr Leonie Gray, the on call Paediatrician Consultant was contacted and she travelled to the Hospital to assist, arriving a short time later. Dr Gray examined Bela and, at 6.05am and ordered the resuscitation be ceased as there had been no signs of life for approximately 30 minutes.
43. Once Bela was taken out of the labour ward room, Zelia was left alone for a period of time. During this time, Zelia contacted her mother and attempted to contact Andrew. SN Mann checked on the other patients in the birthing suite and then returned to Zelia. Zelia did not want to remain in the birthing suite so Zelia and SN Mann waited in the foyer for Andrew and Zelia's parents to arrive.

The cause and time of Bela's death

44. On 3 March 2008, Dr Nigel Buxton, an anatomical and forensic pathologist, conducted a post-mortem examination of Bela. Dr Buxton gave evidence at the inquest. Dr Buxton was of the opinion that neither the length of Zelia's labour, the medication she received, or foetal distress contributed to Bela's death because Bela's Apgar score at birth, 1 and 5 minutes following birth was 9 which indicated Bela was a normal baby.
45. Dr Buxton could not find any evidence of a congenital abnormality that would explain Bela's death. Nor did Dr Buxton find any evidence of trauma that might explain Bela's death.
46. In evidence, Dr Buxton informed the court that during a perinate's first few weeks of life they are only able to breathe through their nose. This is known as Obligate Nasal Breathing. It takes very little occlusion on the infant's nose to cause harm and around one minute before the baby will become unconscious. Dr Buxton was of the view that once a perinate's brain is deprived of oxygen for 3 minutes or longer they are essentially brain dead and in an average situation, once oxygen has been deprived for about 5 minutes he would expect the infant to have passed.
47. Dr Buxton was of the opinion that the cause of Bela's death was mechanical asphyxia due to or as a consequence of over-laying. In evidence he stated that he believed Bela's nose had been occluded by a physical obstruction causing her death. Dr Buxton indicated that "over-laying" could have been as a result of part of the bed or bedding or Zelia (i.e. her breast) occluding Bela's airway.
48. He was of the view the description of white around Bela's mouth and nose were indicative of compression of the skin which prevents the draining blood filling the capillaries and indicates there was pressure on this area with physical obstruction. The description of Bela's face as blue was likely due to hypostasis which would have developed after death indicating Bela's head was angled down. He was of the view that for hypostasis to have occurred at the time she was discovered which other evidence indicates was approximately 5.30am; she had, by then, been deceased for approximately 15 – 20 minutes. This was based on his previous opinion about the timing of the mechanism of death and allowing 5 minutes for hypostasis to set in.

Staffing

49. From approximately 10.45pm onwards on the day of Zelia's admission, EM Rapkins and SN Mann were working in the labour ward. As at February 2008, SN Mann was approximately half way through her midwifery training. As a student midwife she was required to be supervised by an Endorsed Midwife. EM Rapkins had been an endorsed midwife since December 1987 and had approximately 10 years experience in the labour ward.

50. At the commencement of the shift, there were two patients in the labour ward. One was Zelia and another was a patient, pregnant with twins, who had been admitted to the Hospital on 27 February 2008 for threatened pre-term labour. This patient was referred to during the course of proceedings as Patient A.
51. Patient A was predominantly cared for by SN Mann with Zelia (and Bela following her birth) being cared for by EM Rapkins. EM Rapkins indicated in her first statement that any patient who has an epidural in place and/or syntocinon infusion running (as Zelia did) should be cared for by a registered midwife, as one to one care.
52. EM Rapkins was of the opinion the staff rostered in the labour suite was appropriate for the shift. She had the option of being able to switch the student midwife for an endorsed midwife in the post natal ward if there was another admission/patient in labour.
53. SN Mann gave evidence she was rostered on to perform a full workload. She was of the opinion she should not have been regarded as a staff member able to take full responsibility for a patient's care and the fact she was not qualified in midwifery and it would have placed an extra burden on the endorsed midwife to supervise her.
54. EM Rapkins gave evidence that having a student midwife on a shift increases the endorsed midwife's workload as they need to allocate their work, supervise their work and discuss patient care plans. Despite this, both the student midwife and endorsed midwife would be expected to manage a full caseload.
55. Dr Jamieson provided evidence that as at 2008, and currently, the majority of nurses (4/5) who provide care in maternity services are endorsed midwives. She advised as a general practice at the Hospital that at a bare minimum, every shift has 4 endorsed midwives working, one for each area (i.e. special care nursery, labour suite and postnatal ward) and one extra to be able to rotate as required.
56. Dr Jamieson gave evidence there is currently a severe shortage of midwives and most midwives are unable to train for one year without being paid. She indicated steps had been taken by the Hospital to employ Student Midwives on a part time basis to allow them to fulfil their clinical placement requirements and obtain an income at the same time.
57. Dr Jamieson explained that supervision of student midwives can be direct or indirect depending on the task and the endorsed midwife's understanding of the competency of the student midwife. However an endorsed midwife must always supervise the student midwife's delivery of a baby. Student midwives and endorsed midwives who are

supervising the student would both be expected to have a full caseload.

58. Dr Jamieson explained that the Trendcare system allows for staff to input the amount of time per shift spent supervising work and seek to make adjustments to staff numbers or makeup as needed. It would seem from the evidence that perhaps Trendcare is not used in this manner. Dr Jamieson also stated that staff can raise issues such as the supervision of staff directly with the nurse unit manager which has occurred in the past.
59. Submissions from Counsel for the Hospital indicated that the appropriateness of both student midwives and endorsed midwives being required to work a full caseload will be further examined. It is a complex issue with a number of variables to be considered including the training, skill and experience of the registered midwife, the women being cared for, the level of training of the student midwife and environmental factors in each facility. Support is provided to student midwives by Nurse Educators and Clinical Facilitators and share the training responsibility with registered midwives. Other State and Territories are said to adopt the same approach as Queensland Health.

The other patients in the labour ward

60. At some time between Bela's birth and death, another patient arrived at the labour ward. This patient was referred to during the course of proceedings as Patient B. Patient B was a pregnant patient who presented with a 5 hour history of vomiting and diarrhoea. EM Rapkins indicated in her first statement that this patient arrived between 3.30am and 4.00am. Patient B's medical records note she was admitted at 4.30am. During evidence SN Mann was unable to recall whether this time would be the time Patient B presented to the labour ward or when she was first seen by SN Mann. EM Rapkins gave evidence it normally takes around 30 - 45 minutes to assess a patient before determining whether to admit them.
61. Patient B was initially assessed by SN Mann at 4.45am (medical records). SN Mann's evidence was that this was the time she made the notes, not the time she saw Patient B. SN Mann believes she would have seen Patient B approximately 20 minutes before making the notes.
62. SN Mann made various contact with the on call registrar and ward call doctor regarding Patient B whilst she was at the desk outside the birthing suites. She administered medication at 4.50am and contacted the on-call obstetrics registrar to consult on the need for further treatment and as a result the ward call doctor was paged to attend to that task.
63. EM Rapkins gave evidence that during the period of time when they were trying to contact the ward doctor, she was at the desk area with

SN Mann. EM Rapkins indicated in her first statement that at around 4.30am she contacted the switch as they had not heard from the ward call doctor. EM Rapkins indicated there was some difficulty in relation to the paging system and they spent quite some time on this task. SN Mann was stated the ward call doctor attended at some point after 4.45am and the insertion of the catheter would have taken between 5 and 10 minutes. During this time Zelia had already commenced breastfeeding for a second time. EM Rapkins gave evidence the ward call doctor had not arrived before 5.00am because she never saw them attend. SN Mann was confident all of the above events had occurred prior to Bela being discovered.

64. SN Mann noted in her first statement that whilst she was attending to Patient B, EM Rapkins was coming and going past her at the desk. She was not aware Zelia had breastfed for a second time until she went into the room after Zelia called out. EM Rapkins indicated in her first statement that she believes Patient A buzzed indicating she had lower abdominal pains at approximately 5.00am and was assessed by EM Rapkins taking 10-15 minutes.
65. Counsel for Bela's Family submitted that both nurses attending on Patient B was an unreasonable approach to take having regard to the staffing levels and the tasks associated with attending on each patient. There was nothing to suggest, it was submitted, that RM Rapkins' attendance with Patient B, who was already being attended to by SM Mann, was required or reasonable in the circumstances.
66. Despite Patient B's arrival, SN Mann and EM Rapkins remained of the view they were able to handle the workload in the suite at that point in time because Zelia had given birth and Patient A was relatively stable. The Trendcare ward work allocation report indicates Zelia required 8 hours and 38 minutes care during the shift, the patient pregnant with twins and the new patient combined required 5 hours and 40 minutes care during the shift. SN Mann was rostered on for 8 hours and EM Rapkins for 7 hours and 30 minutes. Therefore, according to the Trendcare report this meant there was an excess 1 hour and 13 minutes of staff time for this shift.

Expert opinions

67. A report was sought by the Coroner from Professor Homer. Professor Homer is currently employed as a Professor Midwifery at the University of Technology Sydney and as the Director of the Centre for Midwifery, Child and Family Health. She is the immediate Past President of the NSW Midwives Association. Professor Homer also holds the following formal qualifications of Master of Nursing, PhD in Midwifery and a Master of Science in Medicine. At the time of preparing her report, she had practised as a midwife for approximately 20 years.
68. Representatives on behalf of Bela's parents engaged Ms Lewis to provide an expert report. At the time of providing her report, Ms Lewis

was the Director of Clinical Learning, School of Nursing at the University of Wollongong and also taught in the Masters of Science (Midwifery). At the time of giving evidence, Ms Lewis was employed as the subject convenor for the high risk pregnancy module in the Bachelor of Midwifery. Ms Lewis has previously been involved as the President and Treasurer of the Australian College of Midwives – South Australian Branch. Ms Lewis also holds a Master of Midwifery. During evidence, Ms Lewis indicated she had not engaged in any clinical work as a midwife since 2007.

Workload

69. Professor Homer gave evidence that it was common for postnatal wards to be staffed with Registered Nurses and/or Student Midwives which was in her view an acceptable practice. Both Professor Homer and Ms Lewis were of the opinion that Student Midwives should not be given a full caseload. Ms Lewis gave evidence that in an ideal world, there should be some concessions made for either the endorsed midwife or the student midwife to not have a full case load so that there is appropriate time to supervise. Both Professor Homer and Ms Lewis were of the view that the goal is for each labouring woman to have one to one care from an endorsed midwife and if a student midwife was available, that person would be in addition to the endorsed midwife.
70. Both Professor Homer and Ms Lewis were of the opinion that at the commencement of EM Rapkins and SN Mann's shift, the staffing levels were appropriate. Professor Homer was of the view that staffing levels were appropriate when Patient B arrived because none of the women in the birthing suites were in labour. Ms Lewis thought that the staffing levels were appropriate when Patient B arrived, depending on the division of labour. She was of the opinion that the endorsed midwife should have assessed the new patient and the student midwife should have been allocated the task of supervising Zelia and Bela. In light of the difficulties encountered in contacting the doctor for Patient B she was of the opinion it would have been appropriate to arrange to transfer Zelia and Bela to the post natal ward. Professor Homer stated that *"this constellation of events meant that Zelia was probably left alone for longer than she usually would have been."*

Zelia's labour

71. Professor Homer was of the view Zelia had a long labour however it was not unusually long for a mother having her first baby. She was of the opinion Bela was well throughout the labour and was healthy at birth. Ms Lewis agreed with Professor Homer on this issue.

Breastfeeding lying down

72. Both Professor Homer and Ms Lewis were of the opinion that an important role of midwives is to provide encouragement and reassurance to mothers to enable them to breastfeed their infants and there are healthy benefits to both the mother and infant if they are able to breastfeed soon after birth.

73. Professor Homer gave evidence that breastfeeding whilst lying down was (in 2008) and still is today, an acceptable practice both at home and in hospital. Ms Lewis also gave evidence that breastfeeding whilst lying down is still an acceptable practice depending on the level of supervision required taking into account that a mother is more likely to fall asleep than a person who is sitting up.

Was the decision to allow Zelia to breastfeed Bela in bed lying down appropriate in the circumstances?

74. In her report, Professor Homer commented *“it was appropriate to assist Zelia to breastfeed in bed given the circumstances. Zelia had had a long labour and was very tired but her baby was unsettled and feeding her seemed to be the most appropriate approach. In the first few hours after birth, a baby likes being close to his/her mother and often will stop and start feeding so long as they are in a position where this is possible. Enabling the woman to lie on her side is therefore a reasonable practice. Many women will find breastfeeding in this position to be very comfortable and effective.”*
75. In her report, Ms Lewis commented it *“is considered appropriate to assist women to breastfeed whilst lying on their side in a number of circumstances, ... which can make it difficult to support the baby sitting up... including if the woman is extremely tired. Therefore the decision was appropriate”* ... under direct supervision.

Information to be given to the mother

76. Professor Homer commented during her evidence it would never be acceptable to advise a mother it would be alright to fall asleep whilst breastfeeding. Ms Lewis was also of this opinion.
77. Professor Homer commented that in 2008 midwives would probably not have a discussion with mothers about falling asleep but given the significant developments in relation to SIDS and co-sleeping since then, she thought that such discussions would now take place.
78. Ms Lewis was critical of EM Rapkins making an assumption that a mother would know they should not fall asleep whilst they are feeding. Ms Lewis was of the opinion Zelia should have been given information such as not to go to sleep or if she was feeling tired to ring the bell so the midwife could return to collect Bela.

Were appropriate precautions taken to reduce any risks in allowing Zelia to breastfeed lying down?

79. In her report, Professor Homer commented that EM Rapkins *“took the appropriate precautions to reduce any risks in enabling Bella [sic] to breastfeed in bed. She positioned Bella [sic] close to her mother; she put the bed rails up and placed a pillow behind the baby.”* Professor Homer was of the opinion a pillow is often used to provide a buffer between the baby and the bedrails and/or to extend the bed rail. She

did not have any issue with a pillow being used. Her concern would be in relation to making sure there was enough room to ensure the baby did not overheat. Professor Homer's preference was for a pillow to be placed lower down the baby's back (not directly behind the baby's head) however she had seen both scenarios used commonly in hospitals without any tragic outcomes.

80. In her report, Ms Lewis commented that whilst the decision to allow Zelia to breastfeed lying down was appropriate, but preferably under direct supervision, i.e., one to one, constant supervision. Ms Lewis was critical of the decision to place the pillow behind Bela as it could have prevented Bela from being able to roll onto her back once she stopped suckling, based on Zelia's statement that the pillow was directly behind Bela's head. If a prop was needed for any reason, it was Ms Lewis' view that the mother should be directly supervised as required by breastfeeding policies.
81. Ms Lewis accepted that the use of pillows was still a common practice in hospitals but she was completely against a pillow being used in any circumstance when a mother is breastfeeding lying down.

Was the supervision of Bela and Zelia during the second breastfeed adequate?

82. Ms Lewis was of the opinion that the supervision of Zelia was not adequate as Zelia was extremely tired, she required close/direct supervision.
83. Professor Homer gave evidence that she would expect in a situation where the mother had access to the buzzer nearby and the door was open, checking every 15 to 30 minutes would be appropriate. Later during her evidence, she indicated that checking every 15 to 20 minutes is not unreasonable. Professor Homer gave evidence that at this hospital there were 12 women and 12 babies and two midwives supervising these patients in the postnatal ward. She indicated that normally one quarter would be breastfeeding at any one time so checking every half an hour would be reasonable. She later stated that one check in an hour was not unreasonable but at another time said that anything longer than 45 minutes without a check is too long.
84. Ms Lewis was of the opinion that if a mother was extremely tired or the midwife was worried they might fall asleep then they should be directly supervised. She indicated that in order for a midwife to assess whether the mother is going to fall asleep she should talk to the mother and ask her how tired or drowsy she felt. Ms Lewis was of the opinion that frequent checking would be every 5 minutes, no longer than 10 minutes in the birthing suite and at longer intervals in the postnatal ward. Ms Lewis was of opinion that checking should occur every 15 to 20/30 minutes if there was no concerns about the mother being tired/falling asleep.

85. Ms Lewis was of the opinion that the supervision of Bela and Zelia was not appropriate and she needed far closer supervision than one check in an hour. She considered that direct supervision was possible in Zelia's situation but could understand that circumstances might divert attention to other patients.

Root Cause Analysis Investigation

86. As a result of Bela's death, the Hospital conducted a Root Cause Analysis (RCA). EM Rapkins was contacted by the patient safety officer via email to obtain a statement. At the time, EM Rapkins was not clear on the RCA process and what this would involve. She was contacted at home on the telephone by the patient safety officer who took her statement. EM Rapkins spent most of this time during the interview crying. EM Rapkins did not have access to Zelia or Bela's medical records and had to rely on her memory only. Following the phone call, EM Rapkins received a typed statement. She was of the view this was poorly written. She re-wrote this document and returned it.
87. It was clear during her evidence that the lack of warning and support EM Rapkins received adversely affected her, the lack of support for her during the process upset her and the lack of access to records likely inhibited her ability to provide completely accurate information to the patient safety officer. It would appear the information sheet providing information about the RCA process was not provided to EM Rapkins and neither were the results of the RCA despite her requests for feedback in relation to her practice methods. SN Mann was not involved in the process at all and clearly could have assisted in obtaining a full understanding of the incident.
88. There were findings made in the RCA which related to a number of situations which allowed the co-sleeping of Bela with Zelia unsupervised, increasing the likelihood that Bela could be inadvertently suffocated and may have led to the unexpected death of Bela. Those findings were:
- (1) There were no clear guidelines for co-sleeping of mother and infant at the Hospital. A recommendation was made that the Safe infant care to reduce the risk of sudden infant death syndrome 2005 policy (referred to later) be implemented immediately at the Hospital and within the District Area.
 - (2) There was no clearly understood requirement for assessment, monitoring, documentation of a plan for a mother and infant with this particular set of risk factors (first baby, exhausted mother, meconium liquor present and febrile infant). A recommendation was made that a working party be established to develop and/or review protocols and guidelines, clinical pathways to record measures that eliminate or control risks of bed-sharing/co-sleeping and develop parent education process and tools. Further, that a

“rounding initiative” be implemented to assess the Hospital’s compliance with policy/ processes/ documentation and parental understanding of safe infant care and sleeping.

89. Dr Jamieson gave evidence she was disappointed about the way the RCA had been handled (with respect to EM Rapkins) and would endeavour to do whatever she could to ensure it did not happen again. Dr Wakefield, the Executive Director of the Patient Safety and Quality Improvement Service was also of the view the RCA process in this instance was unsatisfactory and he would raise this issue with all patient safety officers across Queensland to try and ensure it did not happen again.
90. Dr Wakefield agreed there was no step on the RCA form to ensure information or findings were provided back to the relevant staff. He indicated this was something his service would review further.
91. The submissions from Counsel for the Hospital indicated that there have been significant improvements in the RCA process since the time of this inquest including education for those participating in and conducting the RCA. Feedback to personnel who reported the incident and to staff is provided for in the Clinical Incident Management Implementation Standard (CIMIS). Facts sheets are also available. As a result of Bela’s case, the Incident Management Team (IMT) with the Patient Safety and Quality Improvement Service has commenced a full review of the key documents to ensure that they accurately reflect the need to provide feedback to relevant staff, including those interviewed in the RCA. Work is being done with the patient Safety officers in each District to ensure they are aware of the need to share information with relevant people.

Policy Matters

92. In 2005, Queensland Health produced a policy statement document entitled Safe infant care to reduce the risk of sudden infant death syndrome (“the policy statement”). This was the current policy at the time of Bela’s death. The policy statement provides a number of minimum standards for Queensland Health facilities.
93. The first minimum standard is that all well infants in Queensland Health facilities should always be placed on their back to sleep from birth, never on the front or side.
94. The fourth minimum standard is that all expectant and new parents should be made aware of the risk of SIDS associated with smoking, and be supported or referred to smoking cessation or reduction programs as appropriate.
95. The sixth minimum standard is that parents and carers of infants should be presented with accurate information on the risks of co-sleeping, and the conditions which may enhance its safety, so they can

make informed decisions regarding sleeping arrangements for their baby.

96. The policy statement details the following should occur to co-sleep safely including:
 - (a) Babies should be placed on their back to sleep, never on their tummy or side;
 - (f) Co-sleeping must be avoided where either parent is a smoker, or under the influence of alcohol or drugs or is overly tired
97. The policy statement did not contain any information detailing the difference between co-sleeping and bed-sharing, or any information to ensure safe bed-sharing practices.
98. SN Mann did not believe she had ever seen a copy of this document. EM Rapkins had not seen a copy of this document. Her experience was that as at February 2008, information regarding co-sleeping was not given to parents.
99. As at 2008, a Safe Sleeping for Babies brochure was provided to parents at the antenatal clinic and reinforced and discussed at the 36 week visit. This brochure provided information to reduce the risk of sudden infant death and some information about co-sleeping with strategies for parents to adopt to reduce the risk of sudden infant death and fatal sleeping accidents if they elect to co-sleep. Whilst the brochure used the word "bed-share", it does not provide any information on the issue of bed-sharing as it has been discussed here. The Hospital did not have a specific policy or guidelines issued to staff on the topics of co-sleeping and bed-sharing.
100. It was informal practice at the Hospital that when staff were conducting rounds if either a mother and/or infant had fallen asleep in the mother's bed, then the infant would be removed from the bed and placed in their cot. Both EM Rapkins and SN Mann confirmed knowledge of this informal practice; however SN Mann noted the ability to conduct rounds was dependant on the workload of staff.
101. In SN Mann's second statement she indicated that as at February 2008, she was not aware of any hospital policy regarding co-sleeping or breastfeeding in bed. She had observed a number of mothers breastfeeding their infants whilst in bed in the wards. EM Rapkins confirmed that no specific information was provided to expectant mothers about the risks of co-sleeping however she assumed mothers would make a link between co-sleeping and its risks on the basis of other information provided to women.
102. In November 2008, Queensland Health published an amended policy statement and guidelines entitled "Safe infant care to reduce the risk of sudden unexpected deaths in infancy" (an updated version of the 2005

document). The 2008 policy statement provides a number of minimum standards to be implemented in all Queensland Health facilities. Some of those standards particularly relate to this matter.

103. The first minimum standard is that all well infants in Queensland Health facilities should be placed on their back to sleep from birth, never on the front (tummy) or side.
104. The second minimum standard is that all staff members who care for families with young infants should provide parent education about Safe Sleeping recommendations and evidence-based infant care practices.
105. The fourth minimum standard is that all expectant and new parents should be made aware of the strong association between smoking and the increased risk of sudden infant death and be supported or referred to smoking cessation or reduction programs as appropriate.
106. The fifth minimum standard is that parents and carers of infants should be presented with accurate information about sharing sleep surfaces with their baby including benefits, risks, and strategies to enhance the safety of this environment so that parents and carers can make informed decisions regarding sleeping arrangements for their baby.
107. The 2008 policy statement also notes “*evidence suggests many benefits of parents sharing a sleep surface with baby, particularly as a strategy to support breastfeeding and facilitate maternal contact and responsiveness. However, research also clearly shows that sharing a sleep surface with a baby increases the risk of SIDS and fatal sleeping accidents in some circumstances. There is currently insufficient evidence to issue a blanket statement either for or against this practice*”.
108. The policy statement indicates it is not safe to share a sleep surface with a baby if either parent is a smoker, either parent is under the influence of alcohol and/or illicit drugs, either parent is under the influence of medication that causes sedation or either parent is overly tired or obese.
109. The policy statement lists the following strategies to reduce the risk of sudden infant death and fatal sleeping accidents including:
 - If the baby lies on his or her side to breastfeed, the baby should be returned to the supine position for sleep;
 - Sleep the baby beside one parent rather than between two parents;
110. As a result of this minimum standard, the 2008 policy statement provides the following guidelines for clinical practice and parent education:

- a. Shared sleep environments be discussed with all women antenatally at 36 weeks gestation;
 - b. Inpatient facilities should have room-sharing and shared sleep surface (bed-sharing/co-sleeping) policies;
 - c. Risk assessment of mothers and babies in hospital, which considers the clinical condition of the mother and baby and the safety of the physical environment should occur prior to mother taking baby into bed for feeding and/or settling to identify level of supervision required until baby is returned to their cot. This assessment should identify risks and specifically address circumstances where co-sleeping is not recommended; and
 - d. Discharge planning should include education on these issues.
111. Whilst EM Rapkins indicated she had not seen a copy of the 2008 policy statement she confirmed that item “c” was the current practice at the Hospital.
112. In September 2009, the Rockhampton Hospital developed a new policy titled Bed-sharing and co-sleeping. This policy provides that a mother may feed, change or nurse her infant in bed however if she is sleepy she is required to return her infant to their own crib (or ask for assistance to do so). The policy notes that breastfeeding lying down is an acceptable practice as long as the mother and infant have been clinically assessed to be physically well and the level of supervision required has been assessed and is provided. The policy also provides that antenatally, women will be given information on SIDS and SUDI followed by a verbal discussion to ensure understanding of the written material.
113. The policy details that in the birth suite, the baby should be placed with skin to skin contact with the mother for at least 60 minutes however the **mother should be given specific advice regarding the risks of falling asleep whilst feeding or having skin to skin contact and she should be advised to call for assistance if she becomes sleepy.**
114. The policy notes that **additional supervision** will be required for bed sharing in the following situations:
- a. Mothers who are sedated;
 - b. Mothers who are extraordinarily and unusually tired;
 - c. Mothers with a condition that could alter consciousness;
 - d. Mothers with any condition that may affect her ability to respond normally;
 - e. Mothers with any condition that could affect their spatial awareness;
 - f. Maternal or newborn pyrexia;
 - g. Any signs of illness in the mother or infant;
 - h. Mothers who are obese;
 - i. Mothers of multiple infants; and/or
 - j. Mothers who are smokers, substance users or consume alcohol.

115. There is no information provided in the policy as to what **additional supervision** is.
116. There is provision in the policy which seems to indicate factors to assess the level of supervision required for the mother and infant. Some of the factors for mothers include emergency caesarean section, assisted delivery, sedation in last 4 hours, narcotics administered in last 5 hours, extended labour and maternal fatigue. The policy notes a partner or relative can consent to provide direct supervision as long as they are aware of the risks of the mother falling asleep whilst having skin to skin time and to notify staff of concerns. The policy also notes that “Indirect supervision requires visual observations of baby on a frequent basis, based on clinical judgement.”
117. Again there is no information provided in the policy as to what **frequent supervision** is.
118. The policy also provides the following instructions for when mothers request to bedshare to feed or settle their infants, to be able to provide a safe environment:
- (i) The midwife/nurse should ensure that the mother is alert, awake and responsible at all times;
 - (ii) Ensure the mother’s bed is lowered to its minimal height;
 - (iii) Make sure the infant’s head cannot be covered by bed linen and is away from pillows;
 - (iv) Tuck the bed linen under the mattress behind the infant
 - (v) Elevate the bedrails and ensure the buzzer is within the mother’s reach;
 - (vi) Bed-sharing should be recorded in the patient’s notes;
 - (vii) Handover of care should include information on which women are bed-sharing to allow staff to plan on regular observations to ensure they have not fallen asleep;
 - (viii) The time of these observations should be recorded and signed on the infant feeding chart.
119. Dr Jamieson, the Nursing Director of Cluster 1 (including Maternity), agreed that “additional supervision” required interpretation as to what normal supervision would be. She gave evidence the word “additional” is a red flag to the midwife that they need to consider what the increased level of supervision should be. She was of the opinion it is very difficult to be prescriptive in a policy and there needs to be a requirement for professionals to be able to make clinical judgements.
120. Dr Jamieson agreed it would be helpful if some sort of training or gathering occur to discuss how the policy should be interpreted to ensure a consistent approach however there is some difficulty in being able to gather all staff working in maternity services due to the nature of the work and the staff.

121. Dr Jamieson agreed that the new policy does not contain information and/or instructions that should be given to the mother when breastfeeding lying down is to occur. Any risk assessment to allow bed-sharing or breastfeeding lying down is to be noted in the medical records however the level of supervision the midwife has determined is necessary is not required to be noted.
122. Dr Wakefield gave evidence that problems are created if there is no common understanding of terms. He was of the opinion attempts should be made to try and define these terms, even if it is difficult. Dr Wakefield was also of the view that important information contained in policies needs to be tailored to the “*lowest common denominator*” from an information point of view – i.e. a casual nurse who works one shift in the area.
123. SN Mann was asked about the Hospital’s new policies and procedures. Despite not having worked in the maternity wards for 12 months she was aware there was a new Hospital policy however she had not read the policy. She was aware the frequency of checking mothers who were breastfeeding lying down had increased and that mothers are encouraged to breastfeed sitting up.
124. EM Rapkins gave evidence that the practice of removing infants when co-sleeping had occurred still continued however the mother would now be reminded this was not a safe practice. She confirmed she had been notified of the new policies and procedures and was familiar with these documents. She stated that the current practice is to provide mothers with information about bed-sharing and co-sleeping and they are advised co-sleeping is not acceptable. She was of the opinion no information had been provided as to what ‘*frequent observation*’ or ‘*additional supervision*’ entails.
125. Since 2009, the Rockhampton Hospital District now distributes a brochure titled Baby Safety and security within the Hospital environment to parents. In particular, this brochure notes: “*Sharing your bed with your baby for the purposes of sleeping is not an accepted practice within the hospital or home environment, due to the risks of suffocation or injury. Please return your baby to the cot after feeding. Ideally you should be feeding and comforting your baby sitting up on the bed or chair.*” This locally generated brochure seems to be more conservative than the state-wide policy and perhaps should be considered for inclusion in the policy.
126. As a result of the RCA and amendments to the Hospital’s policy, auditing was undertaken by the Hospital to check staff’s knowledge of breastfeeding policy, supervision of breastfeeding of mothers in bed, rounding to prevent co-sleeping, the clinical pathway care component is signed in relation to the education for safe sleeping, baby safety brochure is at the mother’s bedside, the baby is in a safe sleeping position, mother feeding in safe posture or supervised, staff able to

describe content of breastfeeding policy re safe feeding positions, uses bedside brochure to educate mother about infant safety, encourages all women to sit up for breastfeed or provide supervision if unable to do so and regularly makes rounds on postnatal ward to ensure mothers and babies are not co-sleeping.

127. Audits were conducted monthly from February 2009 until February 2010. Dr Jamieson gave evidence that at least from late 2009, compliance was quite high.
128. Dr Jamieson explained that the Maternity Unit has more than 50 policies. Policies are disseminated to new staff during their induction period. There is no sign off requirement or competency based assessment on new policies. New policies are disseminated to existing staff via email and the relevant Nurse Unit Manager.
129. Dr Jamieson also indicated during evidence that currently extra staff are allocated on days when planned caesarean sections take place. She explained these mothers generally have to breastfeed lying down so an Assistant in Nursing is rostered on to provide direct supervision to these mothers. Dr Jamieson stated that the sensible approach would be to focus on the education of mothers about the risks and dangers of bed-sharing, particularly that co-sleeping can occur.
130. Counsel for the Hospital conceded in submissions that there is currently no state-wide Queensland Health policy in relation to the documenting of medical records including the noting of times and each Health Service District have their own policies and procedures to ensure the accurate documentation in medical charts. The recording of times and dates is seen as an important issue in this regard. There is ongoing staff education in relation to documenting medical records.
131. Dr Wakefield suggested in his evidence that medical records could be formatted so that staff are required to record the time the entry was made and the time the actual assessment or task took place.

Expert opinion on whether the subsequent changes to the Hospital's policy sufficient?

132. In her report Professor Homer commented that the "policy changes predominantly relate to additional and/or clear information about safe sleeping and co-sleeping practices. These are impressive and address well issues of co-sleeping and sharing sleep surfaces."
133. Professor Homer was asked about "frequent" and "intermittent" supervision. She indicated that they mean different things to different staff and the definition would depend on what was being supervised. Professor Homer and Ms Lewis were of the opinion that the policy does not provide information about what additional supervision is.

134. Professor Homer was also not sure what the definition of “extraordinarily and unusually tired” was intended to be. She was not sure whether this was a comparison to other mothers or compared to other times in the particular mother’s life. Ms Lewis was also concerned in relation to the lack of definition of this phrase and challenges in interpretation.
135. Ms Lewis was also of the opinion that the policy should be clearer in terms of the information provided to mothers to ensure they are aware to contact the midwife by using the buzzer if they are tired or sleepy. Further, that if the mother was sedated or risk of falling asleep there should be direct supervision.
136. Professor Homer was of the opinion that the Breastfeeding brochure currently provided to parents, stating that sharing bed with baby for purpose of sleeping is not acceptable at home or in hospital due to risks of suffocation or injury, is sensible advice to be provided to parents. Ms Lewis was of the opinion that the information should be more explicit regarding the dangers of lying down with a baby in that you are more likely to fall asleep.
137. Both experts agreed that staff training on the new policy was of paramount importance.

Previous Similar Death - Arisa Huber Findings

138. In 2006, the Deputy State Coroner held an inquest into the death of Arisa Huber, a newborn child who died at the Mater Mother’s Hospital on 18/8/05. On 16/8/05, Arisa’s mother had a relatively sleepless night, attending to and feeding Arisa. The Deputy State Coroner’s findings detail that Arisa was placed in the bed with her mother on several occasions. Neither of Arisa’s parents had been advised of any dangers to Arisa in having her bed-share or co-sleep.
140. The Deputy State Coroner found that Arisa had been left in bed with her mother between 5.00am and 6.45am without any supervision. Arisa was found at 6.50am on 17 August 2005 intensely cyanosed, pulseless and apnoeic. Arisa was resuscitated, taken to intensive care and ventilated however she passed away on 18 August 2005.
141. Following Arisa’s death, the Mater Hospital reviewed and refined its policy on bed-sharing and co-sleeping. The new policy states that it is not safe to breastfeed in bed where the mother is sedated; extraordinarily tired; has a condition that may later affect consciousness; has a condition that may affect spatial awareness; the infant has a fever or illness; the mother is very obese; the mother has multiple babies; the mother is a smoker, known substance abuser or known to consume alcohol.
142. The Deputy State Coroner was of the opinion that the safest option appeared to be the option subsequently adopted by the Mater Hospital

following Arisa's death, which does not recommend co-sleeping but which supports breastfeeding, including in bed, where it is safe to do so.

143. The inquest highlighted the potential dangers of mothers affected by medication and extremely tired, bed-sharing with their newborn infants. The Deputy State Coroner's findings were delivered on 6 November 2007 and were forwarded to the Minister for Health and the Director-General of the Department of Health on 19 November 2007.

Action/s taken by Queensland Health as a result of the Arisa Huber Findings

144. The Patient Safety and Quality Improvement Service (known as the Patient Safety Centre in 2008) is a Queensland Health service designed to improve patient safety, which aims to reduce the adverse events that occur in the health care system. This service has one full time project officer dedicated to coronial management. This project officer's responsibilities include the prompt response by Queensland Health to related coroner's recommendations and sharing information regarding lessons learned from the coronial system.
145. Where no comment by Coroners as to the extent of the application of a recommendation, an assessment is made by the Patient Safety and Quality Improvement Service as to whether the recommendation applies state-wide or not.
146. Dr Wakefield indicated that the Arisa Huber findings were interpreted to apply only to the Mater Mother's Hospital and therefore the comments were forwarded to that facility only for action. However Dr Wakefield noted in addition to this, state-wide action was occurring and a state-wide policy Safe infant care to reduce the Risk of Sudden Unexpected Deaths in Infancy was produced in November 2008. The Child Health and Safety Branch, which conducted this review, was provided with a copy of the Huber findings to assist in the formulation of the 2008 policy statement. The Mater Mother's Hospital's policy is relatively comprehensive and the medical notes folder now contains a table to record the bed-sharing supervision level (intermittent, frequent, constant supervision), the location of the baby and the activity of baby.
147. He was of the opinion the two Queensland Health policy statements (dated 2005 and 2008) are mandatory to Queensland Health facilities and not optional. Dr Wakefield gave evidence about other methods for distributing information to Queensland Health. The Patient Safety and Quality Improvement Service distribute newsletters on various topics to staff. Another method is an Alert which is a more serious notification however these are only distributed when a solution is known. Dr Wakefield also spoke of a search engine that is currently being developed within Queensland Health where employees are able to type in a topic or a problem and find links to incidents, RCA's and inquest findings. Dr Wakefield also advised that providing staff with a half to

two page summary of inquest findings would be a good idea to disseminate issues and he was then in negotiations with the Office of the State Coroner in relation to determining the appropriate person to provide these summaries.

148. Dr Wakefield also indicated there are the following actions currently occurring in Queensland Health:
- Development of a Queensland Health state-wide Breastfeeding Policy which covers the risk factors associated with new mothers breastfeeding in bed;
 - Foundation of the Queensland Maternal and Perinatal Council which provides another important mechanism to review all paediatric deaths and make recommendations for improvement in service safety and quality; and
 - Negotiations to develop a Patient Safety Notice highlighting the issue of safe sleeping practices for newborns and more specifically accidental deaths occurring in the context of associated risk factors for new mothers.
149. In September 2010, the QPQIS issued a Patient Safety Notice warning that there was an urgent need for health care workers who have responsibility for caring for mothers and their infants to have greater awareness for the need for assessment of maternal capacity and subsequent infant observations for optimal safety where mothers and babies are sharing sleep surfaces.
150. The Manager of the Clinical Governance and Quality Systems Unit provided information that the findings from the Huber inquest were disseminated to the Maternity Unit in Rockhampton by the District Director of Nursing in July 2008. The Maternity Unit Nurse Manager advised she was not aware of the findings of this inquest until after Bela Heidrich's death. The Maternity Unit Nurse Manager was the person responsible for disseminating information to the staff who work in maternity services and providing their education.
151. Dr Jamieson was asked what processes were currently in place to ensure that coronial findings are disseminated. She indicated the Central Queensland Nursing executive committee are often provided with information which is then passed on to Nurse Unit Managers to disseminate. There is also a state wide Director of Nursing meeting which is held monthly that discusses matters where there is a need for state-wide awareness. Dr Jamieson indicated the Rockhampton Hospital is very dependent on state-wide information being filtered down to their level in relation to possible policy changes (from either inquests or RCA's etc).

Issues

152. It is clear that Bela's death has had a significant impact on Bela's parents, her extended family and the nurses who cared for Zelia and Bela.

153. I am satisfied that Zelia gave full and frank evidence and made appropriate concessions in relation to particular points in which she could not recall.
154. EM Rapkins attempted to give full and frank evidence. She was, however, hindered to some extent by the passage of time since Bela's death, the medical records (which detailed several events as occurring at different times) and, in some instances, she was unable to recall exactly what she did and had to rely on her usual practice.
155. Given that the medical notes are not precise as to time, it is appropriate that they be used in this regard as an approximation only. It was evident that different staff have different practices in relation to noting the time in the medical records. Some practitioners note the time they make the notes (which may refer to an assessment that took place earlier), whereas other practitioners refer to the time of the assessment, even if the notes are made some time after the event. This clearly creates confusion in accurate interpretation of the medical notes.

(A) whether anything during Zelia's labour that could've contributed to Bela's outcome;

156. Considering the AGPAR results, Dr Buxton's evidence and that of the expert midwives, it is clear that Bela was well following birth and that there were no issues arising from the labour which contributed to death.

(B) whether the decision to allow Zelia to breastfeed in bed was appropriate in the circumstances;

157. I am satisfied on the evidence that at about 3.10am after Bela received her vaccination, Zelia breastfed her for about 50 minutes. Andrew and Samarah left the hospital after that feed, around 4am.
158. Given that Zelia did not hear the discussion that occurred between EM Rapkins and Andrew and Samarah before they left the Hospital, the information they said was given was unlikely to have had any affect on Zelia's conduct of the second breastfeed. It is therefore unnecessary for any findings to be made as to the exact content of the statements made by EM Rapkins to Andrew and Samarah.
159. I am further satisfied that the second breastfeed commenced at some point between 4am and 4.30am after EM Rapkins took Bela for a period of 10 to 15 minutes, most likely the second breastfeed commenced between 4.15am and 4.30am.
160. There is a conflict as to Zelia's state at that time and the instructions provided at the commencement of the second breastfeed. It is likely

Zelia was dozing rather than being fast asleep prior to EM Rapkins returning to the room with Bela. I am satisfied that whilst the nurses have both assessed Zelia as not extraordinarily tired or exhausted based on their clinical experience, but it is clear from the evidence from other witnesses that Zelia was not awake and alert as described by EM Rapkins. It is clear that she was drowsy at best – very tired at worst, sleeping from time to time and not confident about feeding.

161. I am satisfied that no information was given to Zelia by EM Rapkins about whether or not she could sleep or any information about using the buzzer if she was tired or required assistance. Given the absence of this information, it is apparent that Zelia was not aware that she could not sleep. Given her position in the bed and her tired state, it was no surprise that she did fall asleep.
162. It is clear on the evidence that it was appropriate and within policy guidelines at the time for Zelia to breastfeed in bed. Further, it was appropriate taking into account Zelia's comfort. The fact of breastfeeding lying down in bed was also within practice and policy guidelines at the time of the incident but the evidence relating to supervision required in these circumstances differed.

(C) whether appropriate monitoring was conducted of Zelia and Bela when they were breastfeeding in bed;

163. The evidence of Zelia is that she went straight to sleep almost immediately after commencing the second breastfeed. Zelia has a clear recollection of this, and is clearly distraught this action is likely to have contributed to Bela's death. Zelia conceded that a check or checks may have occurred, but she cannot remember them, probably due to being asleep.
164. I am satisfied on the evidence that the MET call was made at approximately 5.32am. In light of Zelia's condition and the position in which she was feeding, the supervision provided by EM Rapkins was inadequate. Even if Zelia only breastfed for an hour (it could have been up to 1 hr and 15 mins), and EM Rapkins checked on her within the first 15 – 20 minutes, this would suggest Zelia then breastfed for at least a further 35 (to 50) minutes without any further supervision. Both Professor Homer and Ms Lewis were of the view checks conducted at intervals longer than 30 minutes were inappropriate. It is doubtful that Zelia and Bela were intentionally forgotten however it would seem that in dealing with Patient B and the phone system issues, in addition to a call from Patient A, both SN Mann and EM Rapkins were distracted and possibly required further assistance.
165. Given the evidence of Dr Buxton, Bela passed away, at a minimum, 10 minutes before she was discovered, however it was more likely she had been deceased for a period of 15 to 20 minutes prior to being discovered.

166. The policy position is that bed-sharing, particularly breastfeeding lying down, is appropriate providing clear instructions are provided, the appropriate set-up is adopted and the appropriate level of supervision is provided. It is common sense that a person lying down is more prone to fall asleep than a person sitting up, therefore requiring more supervision.
167. The comments made by EM Rapkins that it was likely that Zelia was going to fall asleep and that she would return Bela to the cot, indicate she did consider co-sleeping was likely to occur and in that instance more supervision or alternatively, more information about the dangers of co-sleeping should have been provided to Zelia.
168. Given the conflicting evidence of the experts regarding the use of the pillow, the lack of clear policy/literature on this topic, and the evidence that use of a pillow in these circumstances is common practice in hospitals, it is apparent that further research and discussion amongst the midwifery and obstetrics profession needs to be conducted in relation to this issue in order to ensure safety of infants.
169. No party made any submissions that nurse/s should be referred for disciplinary action and I do not consider that course appropriate in circumstances of this matter.

(D) whether appropriate policies and procedures were in place at the time with respect to this issue, and whether appropriate changes to the policies have now been put in place by the hospital

170. It would appear that the 2005 policy statement was not in effect followed because as at February 2008, parents and carers of infants were unlikely to have been presented with accurate information on the risks of co-sleeping and the conditions which would enhance the safety of co-sleeping. Further, the nurses involved in this matter did not have direct knowledge of the policy at the time.
171. Whilst the RCA process was instrumental in determining what action needed to be taken to address issues for the future, the Hospital failed to provide EM Rapkins with information regarding the RCA process and the support she required. It is unacceptable that she was required to participate in the process without access to Zelia and Bela's medical records without notice or support and received no feedback from the RCA. Further, SN Mann should have been included in the RCA process.
172. Following the RCA, the Hospital took appropriate steps to develop and implement a new policy and conducted auditing to ensure the policy was informed to, understood by, and being used by the staff. This procedure needs to be adopted for all new and amended policies.

173. However, the evidence from the experts and EM Rapkins was that the levels of supervision detailed in the policy were unclear and requires midwives to interpret the policy which may occur in a way which is not consistent. Further development and training is required on this issue.
174. During the course of the Inquest, it became apparent that there had been another death in similar circumstances in southeast Queensland since the time of Bela's death. Given that three newborn deaths have occurred at three different hospitals within Queensland, in very similar circumstances, it is vital that every possible step be taken by Queensland Health to ensure a similar death does not occur in the future. Best practice policies should be implemented across the State and private hospital systems as a matter of priority.

FORMAL FINDINGS

175. I am required to find, so far as has been proved on the evidence, who the deceased person was and when, where and how the person came by their death. After consideration of all of the evidence and exhibited material, I make the following findings:

Identity of the deceased person– The deceased person was Bela Heidrich born on the 28th February 2008.

Place of death –Bela died at the Rockhampton Hospital, Canning Street, Rockhampton.

Date of death – Bela died on 28 February 2008.

Cause of death –The formal cause of death was due to mechanical asphyxia due to or as a consequence of over-laying. Bela died while she was bed-sharing with her mother in the hours following birth for the purposes of breastfeeding during which her mother fell asleep.

RECOMMENDATIONS

176. I thank the parties for the submissions made regarding recommendations which were of significant assistance. I have adopted some of the recommendations proposed in those submissions.
177. I make the following comments by way of recommendations pursuant to section 46 of the Coroners' Act to assist to prevent similar occurrences in the future and in the interests of public safety. To the extent that the parties have already taken remedial action, the court expects that those actions are bona fide and implemented long term.

IT IS RECOMMENDED:

1. **That all Queensland Health facilities that provide birthing services be provided with a summary of events in relation to the three deaths that have occurred in similar circumstances to ensure staff are aware of the potential dangers of bed-sharing.**

2. That all Queensland Health facilities that provide birthing services have a specific policy that covers the topics of co-sleeping and bed-sharing. These policies should be easily understood by staff and clearly match the level of supervision to patient needs.
3. That Queensland Health consider whether the existing policy should require the following steps be taken before breastfeeding lying down occurs:
 - (a) That a risk assessment be conducted to consider the condition of the mother, in particular that she is lucid and awake and that this is noted in the patient's medical records;
 - (b) That the mother be given some information about the dangers of falling asleep and be provided with a buzzer to be able to contact staff in the event she becomes tired, the baby has stopped feeding or is unsettled; and
 - (c) That a determination be made about the level of supervision required and this be noted in the patient's medical records.
4. That every prospective parent in Queensland be provided with specific information both orally and in written form in relation to SIDS/SUDI, bed-sharing (with specific reference to breastfeeding lying down), co-sleeping and the risks and dangers associated with each and steps that can be taken to bed-share and/or co-sleep more safely. This information should be provided during the antenatal period, at hospital prior/during the first feed and during the postnatal period prior to discharge.
5. That further consideration be given to framing the various levels of supervision referred to in the breastfeeding policy to ensure consistent approaches by nursing staff, and that training occur on new information.
6. That Queensland Health give consideration to adopting the procedure used by the Mater Mother's Hospital, Brisbane, where the medical notes accurately record bed-sharing, the location of the baby and the infant's activity.
7. That Queensland Health conduct further examination into the appropriateness of student midwives and endorsed midwives both being required to work a full case load. Consideration should be given to ensuring appropriate time is set aside for the supervision and training of the student midwife in the ward.
8. That Rockhampton Hospital ensure that all recommendations of the RCA have been implemented.
9. That Queensland Health ensure that the RCA process includes providing feedback to staff involved in the incident being investigated.

10. That Queensland Health ensure that a full record is kept of staff attending a MET call.
11. That Queensland Health ensure steps are taken to ensure medical records in all Queensland Health facilities accurately reflect the date and time of the assessment, and where an assessment is conducted at some period earlier than when the notes are later made, that this be noted. It is recommended that consideration be given to Dr Wakefield's opinion that rather than retraining staff on this issue, records be amended so staff are required to record the time the entry is made in the medical records and the time the actual assessment/measurements etc took place.
12. That Queensland Health ensure that Patient Safety Officer in each Health Service District be responsible for a regular assessment of the clocks in the facility to ensure they are checked and synchronised.

I close the inquest.

A M Hennessy
Coroner
Rockhampton
29 June 2011