



IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE
IN THE MATTER OF THE DEATH OF BABY H

Court Reference: COR 2019 001488

FINDING INTO DEATH FOLLOWING INQUEST

Form 37 Rule 63(1)

Section 67 of the Coroners Act 2008

*Amended on 2 July 2026 pursuant to section 76 of the **Coroners Act 2008****

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Findings of:	Coroner Catherine Fitzgerald
Counsel Assisting the Coroner:	Gordon Chisholm Instructed by Jessika Syrjanen, Coroner’s Solicitor
Counsel for Mr and Ms Brown, Senior Next of Kin	Lesley Whalan SC Jennifer Cowen Instructed by Blumers Personal Injury Lawyers
Counsel for Latrobe Regional Hospital	Naomi Hodgson Instructed by K&L Gates
Counsel for Dr Pinaki Chavali	Fiona Ellis Instructed by Avant Law
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*Amended to correct paragraph numbering and typographical errors.

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INTRODUCTION

1. Baby H* was one day old when he passed away on 24 March 2019 at the Royal Children's Hospital due to injuries which occurred during an instrumental delivery at Latrobe Regional Hospital. Baby H was born to his parents Mr and Ms Brown, and he was their first child together. Ms Brown's pregnancy and the initial stages of her labour had been without incident, and Baby H's death was unexpected.

THE CORONIAL INVESTIGATION

Jurisdiction and the purpose of a coronial investigation

2. Baby H's death was reported to the coroner as it fell within the definition of a reportable death in the *Coroners Act 2008* (**the Act**). Reportable deaths include deaths that are unexpected, unnatural or violent or result from accident or injury.
3. The jurisdiction of the Coroners Court of Victoria (**Coroners Court**) is inquisitorial.¹ The purpose of a coronial investigation is to independently investigate a reportable death to ascertain, if possible, the identity of the deceased person, the cause of death and the circumstances in which the death occurred.²
4. The broader purpose of coronial investigations is to contribute to a reduction in the number of preventable deaths through findings and recommendations made by coroners. This is generally referred to as the 'prevention role' of the coroner.
5. Coroners are empowered to:
 - a) comment on any matter connected with the death they have investigated, including matters of public health and safety or the administration of justice;³ and

*Pseudonyms have been used throughout this finding when referring to the deceased and his parents, pursuant to s 55(2)(e) of the *Coroners Act 2008*.

¹ Section 89(4) of the *Coroners Act 2008*.

² Preamble and section 67 of the *Coroners Act 2008*.

³ *Ibid* s 67(3).

- b) make recommendations to any Minister, public statutory authority or entity on any matter connected with the death, including public health and safety or the administration of justice.⁴
- 6. The powers to comment or make recommendations arise because of the obligation to make findings; they are not free-ranging. They are not separate or distinct sources of power enabling a coroner to conduct investigations for the sole or dominant reason of making comment or recommendation.⁵
- 7. Coroners are not empowered to determine any civil or criminal liability arising from the investigation of a reportable death and are specifically prohibited from including in a finding or comment any statement that a person is, or may be, guilty of an offence.⁶ It is not the role of the coroner to lay or apportion blame, but to establish the facts.⁷

Findings pursuant to section 67(1) of the Act

- 8. The matters about which a coroner investigating a death must, if possible, make findings are set out in section 67(1) of the *Coroners Act*. They are:
 - a) the identity of the deceased;
 - b) the cause of death; and
 - c) the circumstances in which the death occurred.
- 9. Findings as to the circumstances surrounding a death may relate to the acts or omissions of other persons, including:
 - a) factual findings as to the course of action taken by any person;

⁴ Ibid s 72(2).

⁵ *Harmsworth v The State Coroner* [1989] VR 989 at 996.

⁶ Section 69(1) of the *Coroners Act 2008*. However, a coroner may include in a comment a statement relating to a notification to the Director of Public Prosecutions if they believe an indictable offence may have been committed in connection with the death: see ss 69(2) and 49(1) of the *Coroners Act 2008*.

⁷ *Keown v Khan* [1999] 1 VR 69.

- b) findings as to relevant standard practices in a person's profession or industry; and
- c) findings as to the likelihood that various courses of action, including the one taken, could have prevented the death.

Standard of proof

- 10. All coronial findings must be made based on proof of relevant facts on the balance of probabilities.⁸ The strength of evidence necessary to prove relevant facts varies according to the nature of the facts and the circumstances in which they are sought to be proved.⁹
- 11. In determining these matters, I am guided by the principles enunciated in *Briginshaw v Briginshaw*.¹⁰ The effect of this and similar authorities is that coroners should not make adverse findings against, or comments about, individuals or entities, unless the evidence provides a comfortable level of satisfaction that they caused or contributed to the death.
- 12. Proof of facts underpinning a finding that would, or may, have an extremely deleterious effect on a party's character, reputation or employment prospects demands a weight of evidence commensurate with the gravity of the facts sought to be proved.¹¹ Facts should not be considered to have been proven on the balance of probabilities by inexact proofs, indefinite testimony or indirect inferences. Rather, such proof should be the result of clear, cogent or strict proof in the context of a presumption of innocence.¹²
- 13. I have had regard to the need to avoid hindsight bias in the examination of the evidence, and in particular the clinical decisions which were made at the time.

⁸ *Re State Coroner; ex parte Minister for Health* (2009) 261 ALR 152.

⁹ *Qantas Airways Limited v Gama* (2008) 167 FCR 537 at [139] per Branson J (noting that His Honour was referring to the correct approach to the standard of proof in a civil proceeding in the Federal Court with reference to section 140 of the *Evidence Act 1995* (Cth); *Neat Holdings Pty Ltd v Karajan Holdings Pty Ltd* (1992) 67 ALJR 170 at 170-171 per Mason CJ, Brennan, Deane and Gaudron JJ.

¹⁰ (1938) 60 CLR 336.

¹¹ *Anderson v Blashki* [1993] 2 VR 89, following *Briginshaw v Briginshaw* (1938) 60 CLR 336.

¹² *Briginshaw v Briginshaw* (1938) 60 CLR 336 at 362-3 per Dixon J.

Causation, proximity and connection

14. The “cause of death” refers to the medical cause of death, incorporating where possible, the mode or mechanism of death.
15. The “circumstances of the death” do not refer to the entire narrative culminating in the death, but rather to those circumstances which are sufficiently proximate and causally related to the death. Findings as to circumstances will necessarily include findings as to which events caused others, in what combination they played this causative role, and to what degree.
16. The standard for making a finding that matters are “connected with” the death for the purposes of making comment under section 67(3) or recommendations under section 72(2) of the *Coroners Act* is not the same as the standard for making a finding as to the circumstances. In *Thales v Coroners Court*,¹³ Beach J adopted the interpretation of Muir J in *Doomadgee v Clements*¹⁴ that “there was no warrant for reading ‘connected with’ as meaning only ‘directly connected with’”, and that the range of matters connected with a death, for the purpose of comments or recommendations, can be “diverse”.¹⁵
17. A comment about non-causative but substandard conduct may therefore still be appropriate as a matter “connected with” the death. It remains an adverse comment, despite not implying causation of the death, and the standard of proof for making such a comment is appropriately stricter.

Procedural history

18. At the time that Baby H’s death was reported, Coroner Phillip Byrne took carriage of the case and maintained carriage of the coronial investigation until retirement at the end of April 2022.

¹³ *Thales Australia Ltd v The Coroners Court of Victoria & Anor* [2011] VSC 133, [75].

¹⁴ *Doomadgee v Deputy State Coroner (Qld)* [2006] 2 QdR 352.

¹⁵ *Thales Australia Ltd v The Coroners Court of Victoria & Anor* [2011] VSC 133, [75].

19. The initial stages of the coronial investigation focused on determining the medical cause of death. A full autopsy and ancillary testing were performed, including full body CT scan, skeletal survey, neuropathology, toxicology, microbiology and histopathology. Medical records were obtained and statements taken from numerous clinicians involved in Baby H's delivery and subsequent medical care, as well as from Mr and Ms Brown.
20. From the outset of the coronial investigation, Mr and Ms Brown raised significant concerns about the clinical management of Baby H's delivery at Latrobe Regional Hospital (**LRH**) and, understandably, they expressed that they were highly distressed and grief stricken by his unexpected passing. They communicated their concerns to the Court.
21. In addition, Mr and Ms Brown communicated their concerns about the death to the Victorian Minister for Health, LRH and the Australian Health Practitioner Regulation Agency (**Ahpra**). The Court was informed of their concerns regarding the findings and conduct of the investigation by Ahpra and was advised that a complaint would be made to the National Health Practitioner Ombudsman in that regard. Additionally, Baby H's family made extensive criticism of the meetings which occurred between them, LRH and clinicians involved in Baby H's delivery following his death. They subsequently raised further concerns regarding the Root Cause Analysis (**RCA**) process conducted by LRH and the nature of the oversight of that review process by Safer Care Victoria (**SCV**).
22. Following Baby H's death, LRH reported the incident to Safer Care Victoria as a "sentinel event". In accordance with obligations arising in connection with sentinel events, LRH and SCV undertook a Root Cause Analysis (**RCA**) review process.¹⁶ Copies of the resulting RCA report were provided to LRH and to Mr and Ms Brown. The RCA report outlined the circumstances leading to Baby H's death and contained several recommendations for improving the quality and safety of health services. A further report from LRH regarding implementation of the recommendations was produced but not provided to Mr and

¹⁶ The RCA conducted by LRH included LRH clinicians not involved in the event and external clinicians, with a report produced dated 21 May 2019 under the Safer Care Victoria guidelines; the Safer Care Victoria RCA was conducted by SCV clinicians and external clinicians, with the undated report provided in June 2020: see CB 125.

Ms Brown. It was apparent that Mr and Ms Brown did not regard the RCA report process as having answered their questions and concerns about how Baby H's death occurred.

23. It is also apparent that communication between Mr and Ms Brown and LRH unfortunately broke down entirely in the period following Baby H's death. It was communicated to the Court that Baby H's parents were of the view that clinicians and the hospital had lied regarding the circumstances of Baby H's death and were not providing a full or accurate account of what occurred. In communications to the Court, it was also alleged that there was corruption in the conduct of the Ahpra investigation of the obstetrician who delivered Baby H, Dr Pinaki Chavali. Overall, Mr and Ms Brown formed a view that the Ahpra and Safer Care Victoria reviews led to more questions than answers regarding what occurred with their baby.¹⁷ Many aspects of the concerns raised by Mr and Ms Brown regarding the alleged inadequacy of other investigation processes were not within the jurisdiction of this Court to examine.¹⁸
24. On 15 July 2020, Ms Brown submitted a formal request for inquest to Coroner Byrne.¹⁹ Lawyers acting on behalf of Baby H's parents filed submissions in support of the request on 28 May 2021.²⁰ Amongst the matters raised was the perceived inadequacy of the reviews of the death to that point in accounting for how Baby H had died and why. In response to the initial request for inquest, on 14 August 2020, Coroner Byrne communicated that a decision had not been made as to whether or not an inquest would be held, and that notification would be given when a decision was made. As at the time I assumed conduct of the case in April 2022, no decision had been made regarding the inquest application and the coronial investigation remained open.
25. I determined that the investigation was incomplete and there were unaddressed issues regarding the cause and circumstances of Baby H's death. The forensic pathologist who completed the medical examiner's report opined that there were issues with the case which required further expert review and opinion from specialist clinicians. At that stage there

¹⁷ See Form 26 Request for inquest into death, CB 48-50

¹⁸ See correspondence at CB

¹⁹ Form 26 Request for inquest into death, CB 47.

²⁰ Further submissions on behalf of Mr and Ms Brown, CB 100.

was no expert opinion regarding the adequacy of the management of the delivery in circumstances where the death appeared to be due to birth trauma, and Baby H's parents had raised significant concerns about how the death occurred in this manner. I therefore commissioned an independent expert report from Dr Samantha Hargreaves, Obstetrician and Gynaecologist.²¹

26. Following receipt of the expert report of Dr Hargreaves, it was apparent that there remained gaps in the evidence regarding relevant facts, as well as several relevant factual disputes, and the potential for criticism of the medical management of the delivery in several regards. Having regard to these issues and the application for an inquest by Baby H's parents, whilst an inquest was not mandatory in this case, I determined that an inquest would be held.²²
27. An inquest hearing was listed from 28 August to 1 September 2023, and a draft inquest scope and witness schedule was distributed to interested parties. Subsequently, in March 2023, submissions were received from the legal representative for Mr and Ms Brown in relation to eleven further witnesses who it was submitted should supply statements.²³ This necessitated further investigations regarding clinicians and nursing staff who were said to have been present for, or involved in, Baby H's delivery. Two additional statements were obtained and added to the brief.²⁴ In May 2023, the legal representative for Mr and Ms Brown filed submissions in support of an application that a statement be obtained from Dr Julia Gunn, the Neonatologist who cared for Baby H at The Royal Children's Hospital (**RCH**). This statement was sought and added to the brief.²⁵ A settled witness schedule and inquest scope was distributed to interested parties on 4 August 2023.

²¹ Dated 19 January 2023, CB 75-85, citing Exhibit 6a – Head trauma after instrumental births – Doumouchtsis et al, CB 614-628; Exhibit 6b – Head injuries after instrumental vaginal deliveries – Doumouchtsis et al, CB 629-634; Exhibit 6c – Operative vaginal delivery: a review of four national guidelines – Tsakiridis et al, CB 635-644; Exhibit 6d – Effect of mode of delivery in nulliparous women on neonatal intracranial injury – Towner et al, CB 645-650; Exhibit 6e – The effect of sequential use of vacuum and forceps for assisted vaginal delivery on neonatal and maternal outcomes – Gardella et al, CB 651-657; Exhibit 6f – Choice of instruments for assisted vaginal delivery (Review) – O'Mahony et al, CB 658-732.

²² Transcript of Mention Hearing (9 February 2023), 5.21 - 6.9.

²³ CB 557.

²⁴ Statement of Beverley Anderson, CB 553-554; statement of Ana Punzalan, CB 555-556.

²⁵ CB 562-567.

28. An inquest brief was prepared and released to interested parties, comprising the forensic pathologists' reports, witness statements, relevant correspondence, medical records, exhibits, and expert reports.²⁶

The Inquest

29. The scope of issues to be considered at inquest was listed as follows:
- a) The consent process for the trial of instrumental delivery, specifically:
 - i. Consent to trial forceps; and
 - ii. Consent to trial vacuum extraction;
 - b) The roles and responsibilities of staff during the instrumental delivery;
 - c) The decision to proceed with instrumental delivery;
 - d) Performance of the instrumental delivery, including:
 - i. The preparation for instrumental delivery;
 - ii. Consideration given to rotation from OP to OA position;
 - iii. The degree of force used during the application of forceps; and
 - iv. The attempt at vacuum delivery after the failed forceps delivery;
 - e) Whether documentation of the delivery and birth in the operating theatre was appropriate; and
 - f) The cause of death, and whether Baby H's death was preventable.
30. Interested parties given leave to appear at the inquest pursuant to section 56 of the Act and who appeared with legal representation were as follows:
- a) Mr Brown and Ms Brown, the parents of Baby H;

²⁶ Coronial Brief of Evidence - Version 10 (21 June 2024).

- b) The Latrobe Regional Hospital; and
 - c) Dr Pinaki Chavali, the consultant obstetrician who delivered Baby H at the Latrobe Regional Hospital.
31. The inquest ultimately ran for a total of nine days. It was fragmented into three “sittings” due to the receipt of additional evidence during the course of the inquest.
32. From 28 August to 1 September 2023, the following witnesses gave evidence:
- a) Mr Brown, the father of Baby H;²⁷
 - b) Ms Brown, the mother of Baby H;²⁸
 - c) Dr Yeliena Baber, forensic pathologist at the Victorian Institute of Forensic Medicine;²⁹
 - d) Dr Linda Iles, specialist forensic pathologist at the Victorian Institute of Forensic Medicine;³⁰
 - e) Ms Hannah Heil, registered nurse and midwife at the Latrobe Regional Hospital, who was present during the delivery;³¹
 - f) Dr J. Paul Brougham, general practitioner at the Latrobe Community Health Service, who managed Ms Brown’s pregnancy and was present during the delivery;³² and
 - g) Dr Pinaki Chavali, specialist gynaecologist and obstetrician at the Latrobe Regional Hospital, who performed the delivery.³³
33. At the close of evidence on 1 September 2023, the inquest was adjourned to 18 December 2023, due to evidence given by Dr Chavali which required consideration and response by

²⁷ Transcript of Inquest (T), 12.11 - 120.5.

²⁸ T 120.19 - 131.26; 136.16–182.28.

²⁹ Dr Baber gave her evidence concurrently with Dr Iles: T 184.8–225.2.

³⁰ T 184.8 - 225.2.

³¹ T 225.24 - 267.22; T 272.6 - 354.25.

³² T 356.6 - 403.23; T 406.10 - 476.24.

³³ T 481.5 - 563.15; T 564.8 - 695.6.

the expert witnesses. Further material was then added as exhibits to the brief from Dr Iles, Dr Baber and Dr Hargreaves.³⁴

34. On 7 November 2023, legal representatives acting for Mr and Ms Brown made written submissions that two additional witnesses ought be called to give evidence, namely the treating anaesthetist and a theatre technician who were present during Baby H's delivery. Submissions in response to this application were subsequently provided by lawyers for LRH and Dr Chavali. By letter of 9 November 2023, the interested parties were advised that the inquest would proceed as listed on 18 December 2023, and that oral submissions regarding the application would be heard at the completion of evidence. When oral submissions were subsequently made, the issue was left to my discretion and I do not regard the application as having been pressed.³⁵ I did not seek the attendance of the witnesses.
35. On 17 November 2023, three academic articles referred to by Dr Chavali during his oral evidence were provided to the Court and marked as exhibits.³⁶
36. On 12 December 2023, six days prior to the resumption of the inquest, legal representatives acting on behalf of Mr and Ms Brown submitted four new expert statements³⁷ authored by Prof Andrew Whitelaw, a Professor of Neonatal Medicine, and an application was made for the material to be incorporated into the coronial brief of evidence. The proximity to the continuation of the inquest left inadequate time for review of this material and the application for inclusion of Prof Whitelaw's reports was determined after the completion of the evidence scheduled for 18 December 2023.

³⁴ Exhibit 5a – Email request to Dr Linda Iles and Dr Yeliena Baber seeking information in response to Dr Chavali's evidence, dated 9 November 2023, CB 600; Exhibit 5b – Questions asked of Dr Iles and Dr Baber via email, dated 9 November 2023, CB 601-605; Exhibit 5c – Response of Dr Iles to questions, dated 15 November 2023, CB 606-608; Exhibit 5d – Response of Dr Baber to questions, dated 6 December 2023, CB 609-613.

³⁵ T 817.11- T 818.14

³⁶ Exhibit 4a - Cerebellar-pulmonary embolism, cause of death in the newborn – Clement et al, CB 583-587; Exhibit 4b - Embolism of brain tissue to the lung in a neonate – Hauck et al, CB 588-589; Exhibit 4c – Embolism of fetal tissue to the lungs and the placenta – Baergen et al, CB 590-599; Exhibit 13 – Supplementary Expert Report of Dr Samantha Hargreaves – 6 June 2024, CB 1001-1002.

³⁷ Dated respectively 27 March 2023, 23 August 2023, 30 November 2023 and 11 December 2023.

37. On 18 December 2023, the Court’s independent expert, Dr Samantha Hargreaves, gynaecologist and obstetrician at the Epworth Freemasons³⁸ gave evidence.
38. Following oral submissions, the application for the addition of Prof Whitelaw’s four statements was granted and they were marked as exhibits and added to the coronial brief.³⁹ This necessitated the production of the briefing materials that had been provided to Prof Whitelaw, and that he be called to give evidence via video link as he worked and resided overseas. This also necessitated calling the treating neonatologist from RCH, Dr Julia Charlton.⁴⁰
39. The matter was listed for further hearing from 24 to 26 June 2024, during which time evidence was heard from:
 - a) Professor Andrew Whitelaw, Emeritus Professor of neonatal medicine at the University of Bristol;⁴¹ and
 - b) Dr Julia Charlton, neonatologist and then senior medical director of the neonatal program at the British Columbia Women’s and Children’s Hospital.⁴²
40. A further application for the addition of materials to the coronial brief was made by the legal representatives of Mr and Ms Brown and this was granted.⁴³
41. The inquest evidence was closed and on 26 June 2024, Mr and Ms Brown read their coronial impact statements to the Court.

³⁸ T 704.7 - 811.19.

³⁹ Exhibit 8 – Expert Report of Professor Andrew Whitelaw – 27 March 2023; CB 735-750; Exhibit 9 – First Supplementary Report of Professor Andrew Whitelaw - 23 August 2023, CB 751-754; Exhibit 10 – Second Supplementary Report of Professor Andrew Whitelaw – 30 November 2023, CB 755-759; Exhibit 11 – Third Supplementary Report of Professor Andrew Whitelaw – 11 December 2023, CB 760-762.

⁴⁰ Dr Julia Gunn at the time of her involvement in the medical care of Baby H.

⁴¹ T 838.20 - 903.1.

⁴² T 904.5 - 942.26.

⁴³ Exhibit 14 – Letter from Dr Chavali to AHPRA – 14 June 2019, CB 1003-1014; Exhibit 15 – Supplementary statement of Dr Chavali – 26 June 2024, CB 1015.

42. After the conclusion of the inquest, written submissions were filed by Counsel Assisting, and each of the interested parties, with submissions in reply then filed on behalf of Mr and Ms Brown and Dr Chavali.⁴⁴

The evidence and submissions

43. This finding is based on the entirety of the investigation material comprising the coronial brief, the testimony of witnesses who gave evidence at the inquest, and documents tendered and marked as exhibits. All of this material, together with the inquest transcript, will remain on the coronial file and comprises the investigation into the death.
44. I do not purport to summarise all the evidence, and I will refer to the evidence only in such detail as is necessary to comply with the relevant statutory obligations and for narrative clarity. I note that the coronial investigation of Baby H's death has been lengthy and complex. The final brief of evidence and exhibits exceeds 1,000 pages, and there was detailed examination of witnesses over nine days. Throughout the coronial investigation and inquest, the cause of death and almost all aspects of the clinical decision-making regarding the instrumental delivery were the subject of extensive challenge and examination.
45. In relation to the written submissions filed, I note that the positions of the parties remain largely irreconcilable regarding many critical aspects of what occurred prior to and during the instrumental delivery, in particular the submissions made on behalf of Dr Chavali and Mr and Ms Brown. Additionally, there was varying agreement and disagreement by the parties with the submissions made by Counsel Assisting. Ultimately, at the end of the inquest, what occurred and why in relation to Baby H's death remained highly contested. Whilst I have considered all the submissions made, I will only make specific reference to them if necessary.

⁴⁴ The final submissions received were filed on 28 November 2024.

MATTERS IN RELATION TO WHICH A FINDING MUST, IF POSSIBLE, BE MADE

Circumstances in which the death occurred, pursuant to s 67(1)(c) of the Act

a. Background

46. In March 2019, Ms Brown was 33 years old and pregnant with her first child. Her pregnancy had been uneventful and her antenatal screens did not detect any abnormalities or issues with the pregnancy aside from Ms Brown's Group B Streptococcus (**GBS**) positive status.⁴⁵ Throughout her pregnancy, Ms Brown was managed in the community by her general practitioner (**GP**) Dr J. Paul Brougham.⁴⁶ Based on her medical history, Dr Brougham deemed Ms Brown low risk and suitable for GP obstetric care by him. It was planned that Ms Brown would deliver her baby at Latrobe Regional Hospital (**LRH**) as a patient of Dr Brougham, who would be responsible for her obstetric care including delivery of the baby. Under the model of care which existed at LRH at that time, Dr Brougham had a contract with LRH as a Visiting Medical Officer performing obstetric services at the hospital.⁴⁷

b. Labour

47. Shortly before 9:30 pm on the evening of 22 March 2019, Ms Brown experienced a spontaneous rupture of membranes (**SROM**), draining clear liquor. She contacted the LRH at that time and advised them of the SROM and her GBS positive status, and she was advised to present to the hospital.

48. Ms Brown presented to LRH at about 10:30 pm that night and was assessed. Cardiotocography (**CTG**) was commenced. This continuous electronic monitoring tracked the baby's heart rate while simultaneously monitoring the mother's uterine contractions. The CTG trace was normal. Ms Brown was commenced on intravenous antibiotics at about 12:30 am on 23 March 2019 due to her GBS positive status.

⁴⁵ Statement of Ms Brown, CB 56.

⁴⁶ Ibid.

⁴⁷ T 358-359.

49. Dr Brougham was notified of Ms Brown's overnight admission the following morning but was not available to attend to her until lunchtime. In the intervening time, Ms Brown was managed by LRH midwifery staff and obstetric clinicians.
50. At about 6:00 am, Ms Brown was informed by a midwife that she would need an induction of labour, which she initially refused. The midwife later returned and told Ms Brown that a doctor informed her that Ms Brown needed an induction. Ms Brown then agreed and signed a consent form, but has stated that she did not know why the induction was needed and it was not explained to her. She also stated that the risks/complications of the induction were not explained to her.
51. At 6:30 am, Ms Brown was transferred to a labour room. She was assessed and a vaginal examination was performed. Her cervix was found to be 3 cm dilated, 0.5 cm thick and her baby was in the posterior position at 2.5 station.⁴⁸
52. At about 7:15 am, a syntocinon infusion was commenced and the CTG was noted to be normal.⁴⁹ Ms Brown requested pain relief and at about 9:15 am, an epidural was commenced. A vaginal examination at the same time revealed Ms Brown was 4 cm dilated and a fetal scalp electrode (FSE) was also placed on the baby's scalp to accurately monitor its heart rate during labour.⁵⁰
53. At about 1:00 pm, Ms Brown was reviewed by Dr Brougham for the first time since being admitted the previous night. The syntocinon infusion was continuing at that time. Dr Brougham performed a vaginal examination and noted that Ms Brown was fully dilated, the baby was at spines, with contractions closer together. Dr Brougham believed that the baby was in the occipito anterior (OA) position and directed the midwifery staff to reduce the syntocinon infusion to reduce the frequency of the contractions. It was also decided that one hour would be allowed for the baby to descend, before commencing pushing. The CTG

⁴⁸ Latrobe Regional Hospital records, CB 417.

⁴⁹ Ibid, CB 418.

⁵⁰ Ibid, CB 419-420.

was recorded as “reactive, baseline ? 130, contractions closer together”,⁵¹ with a clinical note indicating “difficult to determine baseline”.⁵²

54. At about 2:25 pm, Ms Brown commenced active pushing and syntocinon was reduced. The baseline fetal heartrate remained at 125-130 beats per minute, which was considered within normal range.⁵³ Following an hour of active pushing, Ms Brown was reviewed by a hospital medical officer (**HMO**) at about 3:15 pm. The HMO noted that Ms Brown was experiencing tachycardia and haematuria. The HMO contacted Dr Brougham. At this time, the midwife noted a “high head baby in [occipito posterior]”.⁵⁴
55. Dr Brougham reviewed Ms Brown and noted some caput⁵⁵ developing on the baby’s head. A vaginal examination revealed Ms Brown was fully dilated, with the baby in a direct occipito posterior (**OP**) position, just below the spines.⁵⁶
56. At this time, Mr and Ms Brown recalled Dr Brougham telling them that the baby was “obstructed” and labour “wasn’t progressing”.⁵⁷ Mr Brown asked if it was time to do a caesarean section (**c-section**), and Dr Brougham told them he had to speak with a senior colleague.⁵⁸
57. Dr Brougham then had a telephone call with the obstetric consultant on call, Dr Pinaki Chavali, and discussed the case. According to Dr Chavali, Dr Brougham told him he had decided to trial an instrumental delivery in the operating theatre (**theatre**) with potential for a c-section, and he mentioned the baby was in a posterior position. He requested Dr Chavali to come and assist him, and Dr Chavali agreed to the plan.⁵⁹

⁵¹ Latrobe Regional Hospital records, CB 424.

⁵² Ibid, CB 425.

⁵³ Ibid, CB 427.

⁵⁴ Ibid, CB 431.

⁵⁵ Swelling that occurs to a baby’s scalp caused by pressure exerted on a baby's scalp during delivery: see statement of Dr Pinaki Chavali, CB 73.

⁵⁶ Ibid, CB 431; T 406.17 - 407.28; T 440.17-18.

⁵⁷ Statement of Ms Brown, CB 57.

⁵⁸ Ibid.

⁵⁹ T 490.20-30.

58. Dr Brougham then advised Mr and Ms Brown about the plan for instrumental delivery in theatre, with potential for a c-section, but there is significant dispute about the contents of the conversation which occurred.
59. Dr Brougham had no specific recollection of his conversation with Ms Brown,⁶⁰ but stated he would have discussed the options for delivery with Mr and Ms Brown and the common risks associated with both instrumental deliveries and caesarean sections. Dr Brougham “believe[d], as is my normal practice, that I would have advised that instruments can cause some marking or bruising to the baby’s head”, including by demonstrating how the forceps would be used on the baby’s head, and that he would have explained that the consultant (Dr Chavali) would make an assessment about which method of delivery was most appropriate.⁶¹
60. Dr Brougham provided the “Consent to Medical Treatment” form (**consent form**) to Ms Brown and hand wrote additional risks on the consent form of “infection”, “bleeding” “perineal tear “and “organ damage”,⁶² being risks to Ms Brown from a c-section. Dr Brougham stated that the consent form that patients sign primarily covers the risks of caesarean sections and the risk of perineal tears from the use of forceps. His evidence was that the risks conveyed are those that are likely to occur, rather than rare risks.⁶³ Dr Brougham could not recall whether he informed the Browns that Dr Chavali would be performing the procedure, and he accepted that it was possible that he did not do so.⁶⁴ The consent form was signed by both Ms Brown and Dr Brougham.⁶⁵
61. The signed consent form included the following text, confirmed by the signing doctor:

I informed the patient about their condition and the various ways in which it may be appropriately treated. I have also explained the relevant foreseeable risks of the chosen procedure/treatment. I have given the patient the opportunity to ask questions and express specific concerns and have addressed these.⁶⁶

⁶⁰ T 374.15-19.

⁶¹ Statement of Dr Pinaki Chavali, CB 68; T 373.3-30.

⁶² Latrobe Regional Hospital records, CB 443; T 379.24-27.

⁶³ T 381.3-9.

⁶⁴ T 427.12-17.

⁶⁵ Latrobe Regional Hospital records, CB 443; T 378.2-14.

⁶⁶ Latrobe Regional Hospital records, CB 443.

62. The patient section signed by Ms Brown stated:

I hereby confirm that I understand the above procedure and associated risks. I also understand that complications may occur or the expected results may not be achieved even though the procedure/treatment is carried out with due professional care.⁶⁷

63. Ms Brown's evidence was that she understood from her discussion with Dr Brougham that forceps would be tried in the operating theatre, and if that didn't work she would have a c-section. She said there was no mention to her of using a vacuum. Ms Brown stated she did not recall being advised of any risks by Dr Brougham except for those associated with undergoing a c-section, such as bleeding,⁶⁸ Ms Brown was adamant that there were no risks outlined in relation to the baby, and specifically no risks regarding use of the forceps.⁶⁹ Both Mr and Ms Brown stated that Ms Brown was asked to sign some forms and did so, but the terms on the forms were not explained and no explanation was given of what was meant by a "trial of forceps".⁷⁰ Mr Brown stated that he thought Ms Brown was being taken to theatre for a c-section and he had no idea what forceps were or what a "trial of forceps" meant.⁷¹

c. The instrumental delivery

64. Ms Brown was transferred to theatre at about 4:20 pm and was separated from Mr Brown for a period of time⁷² before he re-joined her in the theatre. Dr Brougham and Dr Chavali both attended the theatre, with Dr Chavali arriving at about 4:30 pm. What occurred from this point in time was the subject of significant disagreement amongst the witnesses.

65. Dr Chavali states that he first spoke with Ms Brown in the theatre. By that time, she was already on the operating table,⁷³ lying in lithotomy position, meaning that she was lying on her back, with her legs separated and in stirrups.

⁶⁷ Ibid.

⁶⁸ Statement of Ms Brown, CB 57.; T 138.1-2.

⁶⁹ T 139.1-2; T 139.4-9; statement of Ms Brown, CB 57.

⁷⁰ T 138.11-16.

⁷¹ Statement of Mr Brown, CB 53.

⁷² Statement of Mr Brown, CB 53.

⁷³ T 492.26 - 493.

66. Dr Chavali's account is that he introduced himself to Ms Brown using his name and stated that he was there to assist Dr Brougham. He stated that he asked for her consent to perform a vaginal examination to determine the mode of delivery, and that he gained her consent to this examination as he saw that she nodded.⁷⁴
67. Dr Chavali performed the examination and made findings confirming the cervix was fully dilated, the head was not palpable abdominally (meaning it had descended deep into the pelvis), the baby was in OP position, at plus one to plus two station below the spines,⁷⁵ and there was "prominent caput and moulding", which was a sign of obstruction.⁷⁶ Dr Chavali agreed with Dr Brougham's plan for a trial of instrumental delivery.
68. Dr Brougham gave evidence that his care of Ms Brown was transferred to Dr Chavali to deliver the baby.⁷⁷ He regarded the final decision about the management of Ms Brown's delivery as a matter for Dr Chavali when he assessed Ms Brown⁷⁸ and that once Ms Brown arrived in theatre, the decision as to how to deliver the baby was Dr Chavali's.⁷⁹ This was because Dr Brougham felt that the delivery was beyond his expertise and there was an "assumption" by him that Dr Chavali was taking over the care of Ms Brown in the theatre.⁸⁰ He understood that his only role in theatre was to assist Dr Chavali if there was a c-section performed.⁸¹
69. In contrast to Dr Brougham's understanding of their respective roles, Dr Chavali's initial understanding was that he was in the theatre in a "supervisory role". This meant supervising an instrumental delivery by Dr Brougham,⁸² such that if Dr Brougham failed to deliver the baby using instruments, Dr Brougham or he would perform a c-section. The evidence of Dr Chavali was that when he performed the examination he believed Dr Brougham would

⁷⁴ T 493.12-22.

⁷⁵ T 495.9-12.

⁷⁶ T 493.31 - 494.12.

⁷⁷ Statement of Dr J. Paul Brougham, CB 69.

⁷⁸ T 371.28-30.

⁷⁹ T 381.23-29.

⁸⁰ T 428.5-16.

⁸¹ T 383.14-24.

⁸² T 574.20-31.

conduct the procedure.⁸³ After he performed the examination, he asked Dr Brougham if he would like to proceed,⁸⁴ but Dr Brougham indicated that Dr Chavali should continue.

70. Dr Chavali accepted that it was part of his role to provide information and advice to Ms Brown, including the risks of the procedure.⁸⁵ Dr Chavali stated that he explained to Ms Brown, in Dr Brougham's presence, that he agreed with Dr Brougham's recommendation to proceed with an attempt of instrumental vaginal delivery using forceps and/or vacuum and would convert to a c-section if necessary.⁸⁶ He stated that when he then spoke to Ms Brown, he told her he would use Neville Barnes forceps in a posterior position (baby facing the wrong way),⁸⁷ and may need to use a vacuum to bring the baby's head down. If this did not work, a c-section would be needed.⁸⁸ He stated that it was his usual practice to relate the "pertinent findings" back to Ms Brown,⁸⁹ and that Ms Brown "nodded" indicating she understood, with Mr Brown present at that time.⁹⁰
71. Whilst he couldn't recall the exact conversation, Dr Chavali also stated that he "would have" discussed risks with Ms Brown, including that use of forceps sometimes leads to facial marking and bruising, and that use of the vacuum may lead to bleeding.⁹¹
72. Dr Brougham thought he heard Dr Chavali tell Ms Brown that the baby could be delivered vaginally, but he did not recall him discussing risks with Ms Brown or there being further discussion with Ms Brown after the examination.⁹² He could not recall any discussion between Dr Chavali and Ms Brown regarding consent, and he assumed Dr Chavali had already spoken with her in the anaesthetic room.⁹³

⁸³ T 576.15-17.

⁸⁴ T 575.3-14.

⁸⁵ T 575.16-21.

⁸⁶ Statement of Dr Pinaki Chavali, CB 73; T 576.18-31.

⁸⁷ T 576.25 - 577.7.

⁸⁸ T 577.8-21.

⁸⁹ T 497.5-25; T 498.1-3; T 498.13-16; T 575.27; T 576.7-14; T 577.11-21.

⁹⁰ T 577.22-26.

⁹¹ T 577.8-23.

⁹² T 382.30 - 383.2.

⁹³ T 382.9-14.

73. In contrast, Ms Brown’s recollection of events was that she was only briefly introduced to Dr Chavali before Mr Brown arrived,⁹⁴ and this was while she was on the operating table. She stated that he did not speak to her about his proposed course of action or say much at all.⁹⁵ She stated that “Up until that point I thought that it was going to be Dr Brougham who would perform the delivery”.⁹⁶
74. According to Ms Brown, she was not told at any time, nor did she become aware at any time prior to the birth, that Dr Chavali was going to conduct the delivery and not Dr Brougham.⁹⁷ Ms Brown gave evidence that “I was obviously feeling unwell and I was not sure who was doing what, so I was in the hands of the medicos to deliver Baby H. And whoever that may be”.⁹⁸ Whilst she “potentially” understood that Dr Chavali would be involved in the delivery, she did not understand what each doctor would be doing.⁹⁹
75. Mr Brown thought that Dr Brougham would be conducting the delivery.¹⁰⁰ He stated that Dr Chavali did not introduce himself, and he only realised he was the doctor who would perform the delivery when he saw Dr Chavali approach Ms Brown with the forceps.¹⁰¹
76. Ms Brown stated that before the delivery commenced, she thought everything “appeared calm and normal”.¹⁰² However she was feeling unwell and shut her eyes. She states she didn’t hear Dr Chavali say anything for the whole delivery. Mr Brown also stated that Dr Chavali did not speak during the delivery,¹⁰³ with the midwife Hannah Heil the only person talking, by advising Ms Brown to push when there was a contraction.¹⁰⁴ According to Ms Brown, the only other sound in the theatre was the beeping from the CTG.¹⁰⁵
77. Dr Chavali proceeded with the instrumental delivery, applying the Neville Barnes forceps.

⁹⁴ T 140.31.

⁹⁵ T 141.7-11.

⁹⁶ Statement of Ms Brown, CB 57.

⁹⁷ T 141.9-16.

⁹⁸ T 141.12-16.

⁹⁹ T 141.17-19.

¹⁰⁰ T 46.24-25.

¹⁰¹ Statement of Mr Brown, CB 53.

¹⁰² Statement of Ms Brown, CB 58.

¹⁰³ T 142.30; statement of Ms Brown, CB 57; statement of Mr Brown, CB 53.

¹⁰⁴ T 144.22-24.

¹⁰⁵ T 143.5-23.

78. There was another significant factual dispute about the manner in which the delivery was performed, specifically, how many times the forceps were used by Dr Chavali, with what degree of force, and also what consideration was given by him to converting to a c-section.
79. According to Dr Chavali, when he first applied the forceps blades, there was an easy application and the position was checked and correct. The first pull was applied for less than 20 seconds with a contraction. Ms Brown slipped down the bed due to the plastic sheeting underneath her and was repositioned with the assistance of a theatre technician.¹⁰⁶
80. Dr Chavali's evidence was that a deceleration of the foetal heart rate (**FHR**) commenced at the time when the forceps blades were applied.¹⁰⁷ It did not recover to the baseline after the end of the forceps pull with a contraction, which would ordinarily be expected.¹⁰⁸
81. Dr Chavali performed a second pull on the forceps, and gained further station, meaning the baby's head moved further down the birth canal.¹⁰⁹ The deceleration in the FHR still did not cease, but did not meet the definition of bradycardia at that time.¹¹⁰ He then released the locking mechanism on the forceps in an attempt to improve the FHR and to reassess station and vaginal bleeding. He took the forceps out and reapplied them. However, the forceps were "slipping" and could not be reapplied as locking and traction could not be achieved.¹¹¹ Dr Chavali states he did not attempt any further pulls on the forceps.¹¹² At this time, Dr Chavali asked the anaesthetist how long it would take to convert to a c-section and was informed that time would be needed to top up the epidural for a c-section.¹¹³
82. By contrast, Mr Brown gave evidence that there were four pulls on the forceps by Dr Chavali. Mr Brown's evidence was that on the initial pull, "the whole forceps slipped and came loose".¹¹⁴ There was then a second attempted pull where the "same ... technique

¹⁰⁶ Statement of Dr Pinaki Chavali, CB 578 [16]-[17]; T 33.10 – 34.12.

¹⁰⁷ Statement of Dr Pinaki Chavali, CB 73; statement of Dr Pinaki Chavali, CB 578 [18].

¹⁰⁸ Statement of Dr Pinaki Chavali, CB 578 [18].

¹⁰⁹ Ibid, CB 578 [19].

¹¹⁰ Submissions on behalf of Dr Pinaki Chavali (14 October 2024), p.10 [41].

¹¹¹ Statement of Dr Pinaki Chavali, CB 578 [20]-[21].

¹¹² Ibid, CB 578 [21].

¹¹³ Ibid, CB 579 [30].

¹¹⁴ T 30.30 – 31.1.

was used and the same degree of force was used”,¹¹⁵ which was unsuccessful. He stated the pull was “very forceful”¹¹⁶ and a “high level of force” was used that was concerning.¹¹⁷ He stated he “was shocked at this stage with the degree of force that was getting used and how hard I had to hold [Ms Brown’s] arm just to try and stop her from getting pulled. And yeah, this was when I was starting to get very concerned that something’s going horribly wrong”.¹¹⁸ A third and fourth attempt, described in similar terms to the second, were also unsuccessful.

83. The effect of Mr Brown’s evidence was that excessive and inappropriate force was used on all four pulls of the forceps. Mr Brown also gave evidence that he saw that a scalpel was used, or he assumed it was used, by Dr Chavali to perform an episiotomy after one of the forceps pulls, although he used the word “cut”.¹¹⁹ Mr Brown described that Dr Chavali was pulling the forceps forcefully upwards to shoulder height, standing upright and leaning backwards¹²⁰ with his elbows splayed out, the force of which meant he and a male theatre technician had to “hold her down, ‘cause she was actually getting pulled down the delivery table”.¹²¹ He indicated they held her by the biceps “just to try and hold her on the table”.¹²²
84. Ms Brown’s evidence was that she could not feel the individual pulls, but that at one point it stopped and she felt a “thud” of the baby returning back into her abdomen. At this point, Ms Brown says she heard a difference in the CTG monitor, with the noise of the baby’s heartbeat which it was emitting becoming much slower.
85. Dr Chavali reported that when he abandoned delivery with the forceps, the fetal head was very low in the pelvis at the perineum, and the fetal heart rate was not recovering.¹²³ He decided to expedite the delivery with a Kiwicap Vacuum (**vacuum**). According to

¹¹⁵ T 31.16-18.

¹¹⁶ T 32.

¹¹⁷ T 33.10-15.

¹¹⁸ T 32.11-20.

¹¹⁹ T 55.14-19; T 99.23 - 101.4.

¹²⁰ T 51.12-27.

¹²¹ T 31.14-25.

¹²² T 31.21-23

¹²³ Statement of Dr Pinaki Chavali, CB 579 [22].

Dr Chavali, by that stage he regarded the situation as an emergency and this method of delivery as being the fastest and safest.¹²⁴

86. The first attempt to secure the vacuum failed as it “popped off” due to the FSE wire still being in situ on the baby’s head, preventing a proper seal of the vacuum. The FSE wire was removed, and the vacuum was reapplied. At 4:47 pm, a second pull was attempted which resulted in the successful delivery with rotation of the baby’s head on decent to the OA position. Baby H was delivered at 4:48 pm.¹²⁵
87. Baby H was observed by Mr and Ms Brown to be blue in colour, not crying, and to take a singular “gasp”. Ms Brown stated she saw that Baby H was given to Nurse Heil and he was then taken away. Her evidence was that she was not informed at that stage what Baby H’s condition was.¹²⁶
88. At delivery, Dr Chavali noted that the umbilical cord was tightly looped around Baby H’s neck twice. He was “Very Flat” and had gasping respirations and no heart rate.¹²⁷ Baby H’s Apgar score¹²⁸ was noted as 0 at one minute of life, 2 at five minutes of life, and 3 at ten minutes of life. Resuscitation involving CPR and 100% inspired oxygen was commenced.¹²⁹ A neonatal Code Blue was called by Dr Chavali at approximately 4:49 pm.
89. The Code Blue team performing the resuscitation initially consisted of a Consultant Anaesthetist, the Associate Nurse Unit Manager,¹³⁰ a Midwife, a Paediatric Registrar and a Paediatric HMO. At about 4:55 pm, a second anaesthetist arrived. The Consultant Paediatrician arrived at about 5:03 pm with resuscitation efforts continuing, intubation and

¹²⁴ Ibid, CB 579 [28]-[30].

¹²⁵ Ibid, CB 579 [22]-[24].

¹²⁶ T 147.1-9.

¹²⁷ Latrobe Regional Hospital records, CB 450, 534-535, 563.

¹²⁸ The Apgar score (referring to Appearance, Pulse, Grimace, Activity and Respiration) standardises the way healthcare professionals evaluate a baby’s physical wellbeing at birth and how well each baby makes the physical transition to independent life from their mother. The APGAR score utilises five physical signs and is scored when the baby is 1 minute old and again when they are 5 minutes old. The Apgar score ranges from 0 to 10, with a lower score indicating poorer outcome. However, the maximum score is usually 9, since almost all newborns lose 1 point for blue hands and feet (which is normal after birth).

¹²⁹ Latrobe Regional Hospital records, CB 534-537.

¹³⁰ Statement of Dr Pinaki Chavali, CB 579 [25].

intravenous access having been achieved. Baby H had no spontaneous breathing or movements. A heart rate was detected for the first time at twelve minutes of life.¹³¹

90. At 5:48 pm, Baby H was transferred from the resuscitation room to the Special Care Nursery.¹³² At one hour of life he presented with hypoxic ischaemic encephalopathy, subgaleal haemorrhage, and disseminated intravascular coagulopathy (**DIC**) with associated clinical signs.¹³³
91. At some point following the delivery, Mr Brown was taken from the theatre due to his distressed state. It is unclear how long he remained apart from Ms Brown.¹³⁴ Whilst resuscitation was occurring, Dr Chavali delivered the placenta and requested that Dr Brougham suture a tear in the perineum.
92. Ms Brown could not recall if Dr Brougham informed her that he was administering stitches.¹³⁵ Whilst Dr Brougham could not specifically recall communicating to Ms Brown that this was going to occur, he was sure he would have told her.¹³⁶ It is apparent from the documented medical records, and the evidence of Dr Chavali and Dr Brougham, that an episiotomy was not performed, and no cut was made to Ms Brown with a scalpel. The suturing by Dr Brougham was of a tear that occurred during the delivery.
93. Dr Brougham was unaware what Baby H's circumstances were as he was performing the suturing, and he could not recall anyone speaking to Ms Brown about what occurred with Baby H whilst she was in the operating theatre.¹³⁷ Dr Brougham did not speak with Ms Brown again that day.¹³⁸
94. Ms Brown recalled that once Mr Brown had returned to the theatre, the first person to speak with them about Baby H's condition was a senior midwife who advised them that Baby H

¹³¹ VIFM Autopsy Report, CB 3; Royal Children's Hospital records, CB 236.

¹³² Statement of Dr Asmita Arun Mankeshwar, CB 71.

¹³³ VIFM Autopsy Report, 3-4.

¹³⁴ T 147.10-13.

¹³⁵ T 147.14-23.

¹³⁶ T 391.21-28.

¹³⁷ T 392.28-31.

¹³⁸ T 392.1-25.

had a heartbeat but was not breathing.¹³⁹ Mr Brown recalled they were told Baby H had a poor chance of survival.¹⁴⁰

95. Dr Chavali's evidence was that he spoke with Ms Brown in the theatre and apprised her of what was happening¹⁴¹ before she was moved to the ward. Ms Brown could not recall the terms of this conversation but did not think Mr Brown was present when it occurred.¹⁴² She recalled asking Dr Chavali how long a baby could survive without breathing.¹⁴³ Ms Brown was then moved back to the ward. She stated that at that time she did not know where Baby H was,¹⁴⁴ but at some point she was taken to see him in the special care nursery.¹⁴⁵ According to the medical records, this was at 6:12 pm, when there was a discussion between the paediatric team and Baby H's parents.¹⁴⁶ When Ms Brown was back on the ward with Mr Brown, her sister and her parents, there was a further discussion with Dr Chavali.¹⁴⁷
96. At 6:24 pm, the Paediatric Infant Perinatal Emergency Retrieval (**PIPER**) service was called to arrange retrieval and transfer to the RCH.¹⁴⁸
97. At 7:20 pm, the PIPER team arrived at LRH and Baby H was then transferred via helicopter to the RCH.¹⁴⁹ Ms Brown remained at LRH and Mr Brown drove to Melbourne with family to be with Baby H.
98. Baby H arrived at RCH at 10:50 pm, arriving at the Neonatal Intensive Care Unit (**NICU**) at 11:21 pm. Upon arrival he was flat and unresponsive, in poor condition with "active widespread haemorrhage and DIC".¹⁵⁰ His condition was described as being "severe neurological compromise and seizures, with evidence of subgaleal haemorrhage and DIC.

¹³⁹ T 149.11-19.

¹⁴⁰ T 38.10-15.

¹⁴¹ Exhibit 14 - Letter from Dr Pinaki Chavali to Ahpra (14 June 2019) enclosing Summary and Operation Report, CB (Version 11) 1007-1008, 1012, 1013.

¹⁴² T 150.1-2.

¹⁴³ T 148.5-26.

¹⁴⁴ T 149.24-30.

¹⁴⁵ T 150.15-19.

¹⁴⁶ Latrobe Regional Hospital records, CB 534.

¹⁴⁷ T 150.22-31.

¹⁴⁸ Latrobe Regional Hospital records, CB 534.

¹⁴⁹ His medical condition at that time is described in detail in the VIFM Autopsy Report, CB 3-4.

¹⁵⁰ Royal Children's Hospital records, CB 243-244.

He had a profound metabolic acidosis since birth and severe anaemia from acute blood loss”.¹⁵¹ According to the treating Neonatologist at RCH, Dr Julia Charlton, from the time of arrival, “it was very clear that Baby H had a severe brain injury with a likely poor prognosis”.¹⁵²

99. Haematology and Neurosurgical teams were consulted¹⁵³ and treatment was continued. A CT brain scan and other investigations were performed.¹⁵⁴ There was review of the investigation finding by the Neurosurgical team, who determined that there was no surgical option.¹⁵⁵ The findings were regarded by RCH clinicians as consistent with birth trauma-related injuries and diffuse hypoxic ischaemic injury.¹⁵⁶ Baby H had suffered unsurvivable brain injuries.
100. On 24 March 2019, Mr and Ms Brown were advised of Baby H’s poor prognosis. Ms Brown was discharged from LRH and travelled to the RCH to be with her baby.¹⁵⁷ Conversations were held between clinicians and the family, and active treatment was withdrawn. Baby H was palliated, and he passed away on 24 March 2019 in his parents’ arms.¹⁵⁸
101. Baby H’s death was then reported to the Coroner by Dr Julia Charlton¹⁵⁹. As recorded on the E-Medical Deposition Form, Dr Charlton regarded the death as unexpected as the baby and mother had been healthy throughout pregnancy. The death was reported as being the result of “Birth trauma” and it was believed that the death was due to delivery via “rotational Ventouse following unsuccessful forceps”. Death as an outcome had not been reasonably expected prior to the procedure. The issue to be considered by the Coroner was described as being the “[c]ause of the severe brain injury”.¹⁶⁰

¹⁵¹ Statement of Dr Julia Charlton, CB 564.

¹⁵² Ibid, CB 565; Royal Children’s Hospital records, CB 239.

¹⁵³ Statement of Dr Julia Charlton, CB 563.

¹⁵⁴ Royal Children’s Hospital records, CB 239.

¹⁵⁵ Statement of Dr Julia Charlton, CB 564.

¹⁵⁶ VIFM Autopsy Report, CB 4; Royal Children’s Hospital records, CB 238.

¹⁵⁷ Latrobe Regional Hospital records, CB 437.

¹⁵⁸ Royal Children’s Hospital records, CB 238.

¹⁵⁹ Nee “Gunn” at that time.

¹⁶⁰ E-Medical Deposition Form completed by Dr Julia Gunn, CB 44.

Identity of the deceased, pursuant to s 67(1)(a) of the Act

102. On 24 March 2019, Baby H, born 23 March 2019, was visually identified by his mother, Ms Brown.
103. Identity is not in dispute and requires no further investigation.

Cause of death, pursuant to s 67(1)(b) of the Act: Post mortem investigations

104. Forensic Pathologist Dr Yeliena Baber from the Victorian Institute of Forensic Medicine (VIFM) conducted an autopsy on 26 March 2019 and provided a written report of her findings dated 18 November 2019 (**Autopsy Report**).
105. On 29 March 2019, VIFM Forensic Pathologist Dr Linda Iles conducted a neuropathological examination and provided a report of her findings dated 19 July 2019 (**Neuropathology Report**). Dr Iles summarised her neuropathological findings as a traumatic brain injury demonstrated by widespread haemorrhages, tears within the falx cerebri, with traumatic axonal injury within the brainstem and embolic cerebellar tissue in small cerebral arteries.¹⁶¹ In relation to the finding regarding embolic cerebellar tissue, Dr Iles explained that this had resulted from “systemic embolisation of cerebellar tissue” and that this appeared to result from “focal disruption of sinuses about the cerebellum returning cerebellar tissue to the systemic circulation.”¹⁶²
106. In addition to the autopsy and neuropathological examination, Dr Baber reviewed radiology and other testing conducted, including a post-mortem CT scan, a skeletal survey, toxicology, microbiology, histology of the placenta, general histology and microbiological testing. Dr Baber also reviewed available information about the death from police and the medical records.¹⁶³
107. Dr Baber noted findings as follows:

¹⁶¹ VIFM Neuropathology Report, CB 32.

¹⁶² Ibid, CB 32-33.

¹⁶³ VIFM Autopsy Report, CB 3.

- a) scalp haemorrhage;
- b) subgaleal haemorrhages;
- c) left parietal skull fracture;
- d) diastasis of cranial sutures;
- e) extradural, subdural and subarachnoid haemorrhage with tears of the falx cerebri;
- f) intraparenchymal disruption and haemorrhage;
- g) embolic cerebral tissue in the central nervous system, placental and lung vessels;
- h) acute chorionitis and chorionic vasculitis (both low grade) with evidence of prolonged meconium exposure on examination of the placenta; and
- i) no underlying natural disease.

108. All weights and measurements were noted to be appropriate for Baby H's gestational age and development.

109. Toxicology showed the presence of therapeutic medications within blood and urine.

110. Vitreous electrolytes were normal for a post-mortem sample.

111. Inflammatory markers (C-reactive protein and procalcitonin) were marginally raised in keeping with the presence of chorionic vasculitis. Dr Baber explained that these may have indicated early sepsis, which was suspected by clinicians at the time of Baby H's delivery.

112. Microbiology and virology testing of swabs and tissues were negative for bacteria and viral nucleic acids. Dr Baber noted that Baby H had been given intravenous antibiotics during resuscitation efforts, which could account for the negative bacterial testing post-mortem.

113. The postmortem radiology report was in keeping with the clinical findings.

114. Dr Baber also noted the histological examination of the placenta by Dr Jackie Collett at the Royal Women’s Hospital which demonstrated meconium exposure, which was possibly prolonged, acute chorionitis and chorionic vasculitis. However, the main finding was of embolic cerebral tissue in multiple foetal chorionic and stem villous vessels. Dr Collett explained that this had been caused by “sufficient disruption of the cranial tissues prior to delivery that cerebral tissues have entered the fetal circulation in the placenta”.¹⁶⁴
115. Histological examination of the lungs also demonstrated embolic cerebral tissue within a large artery.¹⁶⁵
116. Based on the material available to her, Dr Baber opined that the cause of death was “complications of traumatic head injury in the setting of assisted vaginal delivery of a term infant with foetal distress”.¹⁶⁶
117. Dr Baber described that Baby H had been showing signs of distress (rising baseline heart rate, then sustained bradycardia, the presence of meconium) prior to the delivery. She explained that possible contributions to death occurring prior to the delivery therefore included:
- a) possible prolonged exposure to meconium;
 - b) the umbilical cord being wrapped tightly around the neck (nuchal cord); and
 - c) the presence of brain tissue in the placental and foetal circulation.
118. Dr Baber advised that the possible contribution of these findings could not be answered by the post-mortem examination. However, Dr Baber ultimately concluded that irrespective of other factors:

At the point of delivery there had been severe trauma to the head as a result of instrumentation, enough to have fractured the skull and caused injury to the brain as described in the neuropathology report by Dr Iles. This injury, were it in

¹⁶⁴ Histopathology report, CB 25.

¹⁶⁵ VIFM Autopsy Report, CB 11.

¹⁶⁶ VIFM Autopsy Report, CB 5.

isolation without any of the features described above, was of a degree that it would have been fatal.¹⁶⁷

119. The formulation of the medical cause of death was the subject of submissions following the inquest and is discussed further below.

HOW THE DEATH OCCURRED

The relevance of clinical issues prior to delivery

120. Dr Baber confirmed in her evidence that it was the trauma to the head as a result of the instrumental delivery which caused the death.¹⁶⁸ With regard to her evidence that there were other potential clinical issues in addition to the injuries observed, Dr Baber noted that these would have occurred prior to delivery, but were for clinical discussion, such that she could not state whether they were factors existing prior to delivery, or if they made any contribution. Those matters were potentially relevant to whether there was foetal “distress” during labour prior to the instrumental delivery, and to the likelihood of survival in the absence of the head injuries. However, Dr Baber’s evidence on this point was as follows:

whether [Baby H]y could have survived ... were it not for the traumatic head injury, I don’t think that’s going to be possible to say. Um, but clearly, it’s a very serious head injury and it has to be in the cause of death no matter what contribution or not there’s been from anything else. You know, that really has been the final insult, so that’s why it’s at the beginning of my cause of death.¹⁶⁹

121. Dr Iles confirmed that her examination revealed that there was severe traumatic brain injury. She stated that the areas of haemorrhage and disruption in the brain, as well as the external injury, were sufficient to cause death.¹⁷⁰ Whilst there may have been other factors which contributed, Dr Iles’ evidence was that the traumatic brain injury on its own was sufficient to cause death.¹⁷¹

122. Expert opinion regarding the clinical issues noted by Dr Baber was subsequently provided by Dr Charlton, who opined that Baby H “experienced a degree of in utero compromise

¹⁶⁷ VIFM Autopsy Report, CB 6.

¹⁶⁸ T 185.17 - 186.7.

¹⁶⁹ T 194.17–25.

¹⁷⁰ T 186.16-27; T 187.

¹⁷¹ T 222.20-31.

due to either early chorioamnionitis, nuchal umbilical cord or another undetermined factor”. According to Dr Charlton, the relevance of these issues is that they may explain why Baby H was unable to deliver without medical assistance. His OP position was also a likely contributor to the failure to progress. The combination of these factors “set [Baby H] up for a difficult transition from both and the fetal heart rate suggests he was experiencing some physiological stress prior to birth”.¹⁷² However, ultimately Dr Charlton’s view was that these factors were not sufficient to have induced a life-threatening brain injury,¹⁷³ and she attributed the brain injuries to the use of instruments during the delivery.¹⁷⁴

123. Having regard to the evidence of Dr Baber, Dr Iles and Dr Charlton, I am satisfied that the evidence of clinical issues which existed prior to delivery likely explains why the labour did not progress, but they did not cause the death. I accept the evidence of the experts and I am therefore satisfied that the death was due to traumatic head injuries caused by instrumentation.

The cause of the injuries

124. The cause of the traumatic head injuries suffered by Baby H was the subject of extensive expert evidence. There was detailed questioning of the expert witnesses about this issue throughout the inquest, as well as the extent of their expertise and ability to provide an opinion on this issue. The examination of this issue was necessary to determine whether it was the use of the instruments which had caused the injury, and whether the clinical management and performance of the delivery had been appropriate.

a. The findings regarding brain tissue in the placental and foetal circulation

125. Evidence was given by Dr Iles specifically relating to the finding of embolic cerebellar tissue in small cerebral arteries. This was a finding of brain tissue from the cerebellum, the back part of the brain, in the small blood vessels of the brain. Dr Iles explained that for this to occur there had to have been, firstly, a trauma causing disruption to the structure of the cerebellum, and secondly, a “significant compressive force” to cause the brain tissue to

¹⁷² Statement of Dr Julia Charlton, CB 566 at [4].

¹⁷³ Ibid, CB 567.

¹⁷⁴ Ibid.

enter the bloodstream. Dr Iles gave evidence that she had never seen this finding before and that it was an “extraordinarily rare finding”. In her opinion it was due to trauma.¹⁷⁵ Dr Iles explained that the finding evidenced the occurrence of an external compressive force which increased the intracranial pressure, such that the fragmented brain tissue was “squeezed” into the blood vessel.¹⁷⁶

126. Regarding the similar finding of embolic brain tissue in the lungs and placenta, Dr Baber explained during her evidence that this occurred by the same process described by Dr Iles with regard to the finding of embolic cerebellar tissue in small cerebral arteries.¹⁷⁷ I note that in the Autopsy Report, Dr Baber also referred to these findings and, citing a medical journal article, stated it was possible for embolisation to occur during delivery, and prior to instrumentation. Dr Baber also noted that the process of resuscitation may have further distributed the brain tissue.¹⁷⁸ However, in Baby H’s case, Dr Baber’s evidence was that a normal vaginal delivery could not have caused the degree of traumatic injury documented. and the expert evidence establishes that the brain injuries were traumatic in nature and caused by the use of instrumentation.

127. Consistent with the evidence of Dr Iles and Dr Baber, Professor (**Prof**) Whitelaw described the findings of cells from the cerebellum in the lungs as both a “very, very unusual finding”, and “very, very dramatic and significant”.¹⁷⁹ He concluded that the forceps caused the skull fracture, which squeezed the brain, producing embolisation, meaning that pieces of the brain had gone into the circulation to the lungs.¹⁸⁰ He regarded the amount and distribution of the brain tissue in Baby H’s case as “remarkable”, describing that “a very considerable amount of brain tissues was squeezed into the venous system and subsequently in the circulation of the blood through the heart”, and that this necessitated a “squeezing

¹⁷⁵ T 205.8 - 206.6.

¹⁷⁶ T 206.26 - 207.17.

¹⁷⁷ T 217.25-27.

¹⁷⁸ VIFM Autopsy Report, CB 5-6.

¹⁷⁹ T 854.7-13.

¹⁸⁰ T 852.4-12.

process”.¹⁸¹ Prof Whitelaw also explained that forceps produce pressure, but a vacuum does the opposite, and for this reason the vacuum could not have caused the fracture.¹⁸²

128. However, Prof Whitelaw provided a caveat to his evidence, noting that delivery using forceps was very common and “in the vast, vast majority of cases is of great benefit to the baby with no injury.” He opined that “correctly applied forceps does not produce significant injury”. With regard to how such a “disastrous degree of brain injury” could have resulted in Baby H’s case, he answered as follows:

One has to conclude that there must have been something different about the delivery to produce such a catastrophic result and - okay. So what could’ve been different? And as a non-obstetrician, my conclusion on the balance of probability is that the forceps slipped and were applying force in an area of the skull that is not intended.¹⁸³

129. He explained that in normal application, the forceps grip the jaw and the full pressure of them is therefore not applied to the side of the head. He drew the conclusion that in Baby H’s case, the forceps “must have exerted pressure in the wrong place, and that produced the fracture and squeezed the head and produce the initial haemorrhage”. He opined that the forceps can only cause fractures if they are applied or slip into the wrong place, which causes pressure to be “exerted on areas on the skull which are weaker than other sites around the head”.¹⁸⁴ He regarded application of the vacuum as then producing “further distortion”. As such, his opinion was that the initial injuries were caused by the forceps, with the vacuum contributing by “perhaps increasing the bleeding”.¹⁸⁵

130. Prof Whitelaw and the other experts were unable to say what the exact order of injury was, noting there was more than one attempt at a forceps delivery.¹⁸⁶ Accepting that the forceps caused the fracture and embolisation of brain tissue, the significance of this evidence is that it is not clear which pull on the forceps did so.

¹⁸¹ T 863.14-29.

¹⁸² T 858.17-19; T 859.10-11.

¹⁸³ T 869.8-27.

¹⁸⁴ T 856.25 - 857.20.

¹⁸⁵ T 857.3-19.

¹⁸⁶ T 859.12-24.

131. Further evidence on this topic was provided by Dr Charlton. She stated that she had never encountered a finding of embolic cerebral tissue such as in Baby H's case. She described the findings as "confronting" and found it difficult to explain what would have led to it. However, she agreed with the evidence of Prof Whitelaw as to the mechanism by which this could have occurred. Moreover, she gave evidence that "it would have to be an enormous amount of pressure to cause such a degree of injury that pieces of brain tissue would shear or break off", noting that the skull puts a lot of pressure on the brain during a birth but doesn't usually cause such an injury. Dr Charlton noted that the skull breaking could put sufficient pressure on the brain such that there was direct damage to brain tissue, causing it to break off and enter the blood stream.¹⁸⁷
132. With regard to the mechanism, and consistent with the evidence of Prof Whitelaw, Dr Charlton thought it likely an "inward pressure" (the same as a compressive pressure) could cause such damage, but not a "pulling pressure" such as a vacuum.¹⁸⁸
133. Dr Hargreaves agreed that the "likely conclusion" was that the presence of cerebellum tissue in the placenta was due to too much force with instrumentation during delivery,¹⁸⁹ and rejected the proposition that there was an explanation other than the use of instrumentation for the presence of brain tissue in the circulatory system.¹⁹⁰

b. Expert opinion regarding the traumatic nature of the injuries and the instrument used

134. In addition to commenting upon the rare finding regarding embolisation of brain tissue, the expert witnesses were also questioned about the traumatic injuries more generally, and which instrument could have caused them.
135. In relation to the brain examination, Dr Iles documented eight findings of traumatic brain injury but within the limits of her expertise, Dr Iles was unable to comment on how force was applied.¹⁹¹

¹⁸⁷ T912.28

¹⁸⁸ T 912.31- 913.11.

¹⁸⁹ T 741:18-23.

¹⁹⁰ T 742:21 - 743.2.

¹⁹¹ T 220.6-8.

136. Dr Baber opined that the injuries she documented to Baby H's head in the Autopsy Report¹⁹² were consistent with the use of forceps, but not with the use of a vacuum.¹⁹³ She was unable to express any opinion on the "degree of force" required to cause the various injuries to the head which were documented.¹⁹⁴ Instead, her view was that they were all "in keeping with instrumentation" and that the injuries would not be expected in a normal vaginal delivery.¹⁹⁵
137. Dr Hargreaves' evidence was that prior to arriving in the operating theatre, Baby H had been "coping well" with the prolonged labour and pushing. Yet after the first use of the forceps, there was a "substantial deterioration in the foetal condition" and Baby H was "born in very, very poor condition" without any suggestion in the evidence of "chronic hypoxia or chronic insult". This led Dr Hargreaves to the conclusion "that the insult that was sufficient to unfortunately result in his death must have occurred in that short space of time" and that it was the result of the use of instruments.¹⁹⁶
138. Dr Hargreaves further opined that a difficult instrumental delivery in the posterior position would account for Baby H's injuries.¹⁹⁷ However, she was unable, as an expert obstetrician, to provide an opinion on which instrument caused the injuries, and she deferred to the forensic pathologists regarding the issue of causality.¹⁹⁸ Dr Hargreaves regarded the literature she had referred to in her expert report as indicating it was very difficult to identify which instrument caused which injury.¹⁹⁹ She also did not regard a perinatologist or neonatologist as having any greater expertise in that regard than she had, noting that those specialists were not experts in injury interpretation.²⁰⁰
139. It was the evidence of Dr Charlton that the subgaleal haemorrhage and skull fracture were only associated with the use of instrumentation²⁰¹ and that they occurred during the

¹⁹² VIFM Autopsy Report, CB 8, "Signs of injury".

¹⁹³ T 199.25 - 200.7.

¹⁹⁴ T 198.13-17.

¹⁹⁵ T 199.10-12.

¹⁹⁶ T 786.1-23.

¹⁹⁷ T 739.19-25.

¹⁹⁸ T 740.8-22.

¹⁹⁹ T 800.2-7.

²⁰⁰ T 740.29-31.

²⁰¹ T 917. f3-13

delivery.²⁰² She regarded the subgaleal haemorrhage as likely caused by the use of the vacuum, the fracture as caused by the forceps and the cerebral haemorrhage as caused generally by the instrumental delivery.²⁰³ Whilst she was unable to state that all Baby H's injuries were due to trauma,²⁰⁴ Dr Charlton opined that "the overall pattern of injury was secondary to instrumental delivery".²⁰⁵ As to the degree of injury, Dr Charlton stated that she had never seen injuries of Baby H's level in her practice²⁰⁶ and, alarmingly, she gave evidence that "the image of this child will forever be imprinted on my mind", describing his condition as "gruesome". Dr Charlton deferred to the opinion of the experts who regarded the injury to Baby H's brain as the direct result of instrumental delivery and did not disagree with them.²⁰⁷

140. As outlined above, Prof Whitelaw gave evidence that in his opinion, the fractures to Baby H's skull were due to the use of forceps. He opined that the extent of brain damage which Baby H suffered could not have been from the use of the vacuum. He explained this primarily by reference to the finding of the embolisation of brain tissue, stating that his expert understanding of anatomy and physiology enabled him to provide an opinion that it was only "squeezing pressure" to the brain which could have caused that finding, and that whilst such pressure occurs with forceps, it does not occur with vacuum.²⁰⁸
141. The question of the cause of the injuries was complicated during the inquest by the evidence of Dr Chavali. In response to questions asked by counsel for Mr and Ms Brown (and then with further questioning by Counsel Assisting), Dr Chavali conceded that it was possible that instrumentation including forceps would fracture the skull, but noted this this was extremely rare.²⁰⁹ Whilst Dr Chavali accepted that it was possible that the traumatic head injuries had been caused by the use of instruments in the delivery, he also gave evidence

²⁰² T914.21-28.

²⁰³ T 942.2-17.

²⁰⁴ T929.6-14.

²⁰⁵ T 939.19-25.

²⁰⁶ T 937. 17-19.

²⁰⁷ T 940.20-31.

²⁰⁸ T 852.4-12; T 858.9-20; T 862.14-19; T 868-869.

²⁰⁹ T 632.22 - 633.4.

that it was possible the injuries were caused by other factors.²¹⁰ Those possibilities were described by him as follows:

- a. There was an element of disseminated intravascular coagulation (**DIC**) caused by foetal distress which caused bleeding and swelling through the process of labour which puts pressure on the head.²¹¹
 - b. He suspected that Baby H had a bleeding tendency and he was vulnerable to the use of instrumentation, which worsened bleeding that was already occurring.
 - c. The fractures could possibly have been caused by the forceps, but it was also possible that there was significant obstruction which “predisposed the fracture to happen”,²¹² explaining that due to the OP position, an obstructed labour and Ms Brown pushing for over 2 hours,²¹³ there may have been mechanical injury due to impaction of the foetal head against maternal tissues.
 - d. There was diastasis or overlapping of the foetal skull bones which contributed to the moulding making the baby vulnerable to skull fracture.²¹⁴
 - e. The findings regarding embolic tissue may have been caused by instrumentation but may also have been due to the prolonged second stage of labour and the maternal pushing and moulding of the foetal head.²¹⁵
142. This was the first time evidence of these possible alternative explanations was raised. Essentially, Dr Chavali was suggesting that it was equally possible that the injuries in Baby H’s case had not been caused by of the instruments during the delivery. These possible alternate explanations were not put to Dr Baber and Dr Iles in their cross-examination. Their evidence was not the subject of any challenge by counsel for Dr Chavali or LRH, as no questions were asked of those witnesses by either counsel.

²¹⁰ T 685.21-23; T 686.1-2.

²¹¹ T 686.17-27.

²¹² T 633.9-6.

²¹³ T 686.3-12.

²¹⁴ T 634.1-4.

²¹⁵ T 687.17-31.

143. The inquest was adjourned for Dr Baber, Dr Iles and Dr Hargreaves (who was yet to be called) to consider the alternative hypotheses. Ultimately, Dr Hargreaves did not wish to change any aspect of her expert report, whilst Dr Iles and Dr Baber provided additional written evidence in response.
144. Regarding the issue of DIC, Dr Baber opined that the DIC in Baby H's case was likely secondary, caused by subgaleal haemorrhage (blood loss) and the brain tissue in the circulation.²¹⁶ She noted that Baby H was not critically unwell prior to birth, having regard to the report of Dr Charlton, and that in any event foetal distress does not cause DIC.²¹⁷ Furthermore, she stated it was unlikely Baby H had a bleeding tendency which contributed to his death, noting that none of the factors indicating a bleeding disorder were present in Baby H's case.²¹⁸
145. Dr Iles acknowledged that DIC may be precipitated or contributed to by numerous conditions, and that brain tissue in fetal circulation is likely to contribute to DIC. She also noted that if DIC was present prior to the head trauma, it may have exacerbated bleeding that occurred as a result of head trauma. However, her opinion was that the haemorrhages observed at neuropathological examination were not sufficient to have exerted mass effect on the brain, and the intracranial bleeding did not have an injurious effect on the brain.²¹⁹ Specifically, Dr Iles opined that:

There is unequivocal evidence of traumatic injury to [Baby H's] brain evidenced by traumatic tears to the falx cerebri, extrusion of cerebellar tissue into the systemic circulation and traumatic axonal injury in the brainstem, cerebellum and posterior internal capsule and DIC did not contribute to those injuries.²²⁰

146. Dr Iles acknowledged that traumatic injuries associated with birth can be due to obstruction of the foetal head during labour, disimpaction of the obstructed foetal head, and/or the use of instruments to the head. Based on her brain examination, which was the limit of her

²¹⁶ CB 609.

²¹⁷ Exhibit 5d - Response of Dr Baber to questions, dated 6 December 2023, CB 610.

²¹⁸ Ibid, CB 609.

²¹⁹ Exhibit 5c – Response of Dr Iles to questions, dated 15 November 2023, CB 606.

²²⁰ Ibid, CB 606.

involvement in the case, Dr Iles could not provide an opinion on which factor was operative in Baby H's case.²²¹

147. Dr Baber dismissed the possibility that the injuries were caused other than by instrumentation. Dr Baber opined that the “diastasis” recorded in the autopsy report was an abnormal separation of the skull in the context of fracture and raised intracranial pressure,²²² meaning that it was not, as suggested by Dr Chavali, a pre-existing factor that made the baby more vulnerable to skull fracture.
148. Dr Baber regarded it as highly unlikely that the death was due to obstruction with or without a bleeding tendency, and highly unlikely that the head injury was due solely to impaction of the fetal head against maternal tissue.²²³ Dr Baber provided this opinion by reference to the nature of the fracture in Baby H's case, which aligned with the location behind the ear where the forceps would have been placed, as seen from the marks on the scalp which she documented in the Autopsy Report.²²⁴
149. Dr Baber acknowledged that there was a “remote possibility” that an atypical skull fracture was sustained prior to instrumentation and exacerbated by forceps being used.²²⁵ However, having regard to “the clinical course after delivery, autopsy findings, the opinions of the experts, and review of the relevant medical literature”, her opinion was that on the balance of probabilities, the head injury was due to the use of instruments during delivery.²²⁶ She did not regard the explanations provided by Dr Chavali as a plausible explanation for the injuries sustained.²²⁷

²²¹ Ibid, CB 606.

²²² Exhibit 5d - Response of Dr Baber to questions, dated 6 December 2023, CB 609.

²²³ Ibid.

²²⁴ Ibid.

²²⁵ Exhibit 5d - Response of Dr Baber to questions, dated 6 December 2023, CB 610.

²²⁶ Ibid.

²²⁷ Ibid.

c. Conclusion regarding the cause of the traumatic injuries

150. I am satisfied that each of the expert witnesses gave evidence as to the cause of the traumatic head injuries within the limits of their expertise, and by reference to the evidence, explaining the pathway of reasoning that they relied upon in forming that opinion.
151. Having regard to the totality of the expert evidence, and the consistency of it, I am satisfied that the findings made regarding embolisation of the brain tissue was the result of a type of force that can only be consistent with the use of forceps having caused the skull fracture. My level of satisfaction in this regard is also established by the further evidence regarding the nature of the injuries which was provided by the expert witnesses.
152. In my view, it was the consistent evidence of the expert witnesses that the injuries suffered by Baby H resulted from trauma, and that this was from the use of instrumentation during the delivery. Whilst some of the expert witnesses could not identify which instrument caused what specific injury, and to what degree, I regard the weight of the evidence from those who could offer such an opinion as sufficient to prove that the forceps fractured the skull and this caused injury to the brain as described in the Neuropathology Report by Dr Iles. I note that it was the brain injury which was fatal in Baby H's case.²²⁸
153. Dr Chavali conceded that it was possible the use of the forceps would fracture the skull and he accepted that it was possible that the traumatic head injuries had been caused by the use of instruments in the delivery. Whilst Dr Chavali proffered alternative possible explanations for what occurred, I accept the expert evidence of Dr Iles and Dr Baber. That evidence establishes that the alternative explanations proffered were either not viable (the DIC and the bleeding vulnerability) or were so remote in nature (injury from vaginal birth) as to be discounted. In my view, the opinions of Dr Iles and Dr Baber in this regard are also corroborated having regard to the evidence of the other experts that the injuries were traumatic in nature and caused by instrumentation, particularly, the use of forceps.

²²⁸ VIFM Autopsy Report, CB 6.

a. The initial decision for trial of forceps in theatre

154. There was no evidence of any antenatal complications during Ms Brown’s pregnancy, and no indication that she should have been recommended for a caesarean section prior to her spontaneous rupture of membranes on 22 March 2019.²²⁹ When Ms Brown presented to LRH, there was no evidence of fetal compromise, and proceeding with vaginal delivery at that time was reasonable.²³⁰ Ms Brown was known to be a carrier of GBS, and it was standard clinical practice to proceed with inducing labour with syntocinon infusion, and to administer IV antibiotics.²³¹
155. It was not contested that Dr Brougham’s management of the second stage of labour was in accordance with applicable guidelines and practice. After an hour of pushing, when there was no head on view and macroscopic haematuria, Dr Brougham reassessed Ms Brown and determined that the head of the baby was in OP position. He contacted Dr Chavali, the Consultant Obstetrician at LRH, who agreed with Dr Brougham that Ms Brown needed a trial of instrumental delivery in the operating theatre.
156. At this time, there were no concerns for fetal wellbeing and this plan was appropriate.²³² Whilst there was no indication that delivery was urgent, Dr Hargreaves described a plan to trial forceps in theatre as a “high-risk situation”. As such, she regarded the situation as requiring an expert obstetrician for the delivery.²³³ I am therefore satisfied that Dr Brougham’s escalation to Dr Chavali constituted appropriate management, and the clinical decision-making by Dr Brougham to this point in time was appropriate.
157. It was uncontested that a spontaneous vaginal delivery was not an option in Ms Brown’s case.²³⁴ Nor was it contested that the decision to attempt a trial of forceps in theatre was

²²⁹ Statement of Dr Samantha Hargreaves, CB 76.

²³⁰ Ibid.

²³¹ Ibid.

²³² Ibid, CB 77-78.

²³³ T 707.15-26.

²³⁴ T 784.1-6.

appropriate clinical decision-making.²³⁵ Once Ms Brown was in the operating theatre, she was examined by Dr Chavali. Having regard to the findings from the vaginal examination, Dr Hargreaves regarded the clinical decision to undertake an operative vaginal delivery in the operating theatre, where rapid recourse to a c-section was available, as reasonable.²³⁶

158. I am therefore satisfied that there was no clinical basis for a delivery by c-section in the absence of a trial of instrumental delivery first. However, there was substantial dispute about Ms Brown's consent to the instrumental delivery. This dispute suggested that Ms Brown had not given her informed consent to the planned delivery and that she may have elected to have a c-section performed if she had been fully apprised of the risks of a forceps delivery.

b. Consent to the instrumental delivery

159. Regarding the issue of consent, Dr Hargreaves referred to the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (**RANZCOG**) guidelines on *Consent and provision of information to patients in Australia regarding proposed treatment (consent guidelines)*, and there was no dispute that this document was applicable in Ms Brown's circumstances.

160. The consent guidelines listed several matters which should be discussed with patients before an examination and/or treatment is commenced, including the "Common side effects and material risks (Test: Would a reasonable person in the patient's position attach significance to the risk if it were explained to them fully?)". Reference was also made to the need to advise the patient "who will conduct the intervention".²³⁷

161. Furthermore, the consent guidelines state as follows:

Treating doctors should also keep in mind that their legal obligation to inform a patient of a proposed treatment and/or examination is non-delegable. Therefore, while time constraints, for instance, may cause a treating doctor to have a junior doctor explain to the patient the nature of the proposed operation, if a junior

²³⁵ T 806.23-25.

²³⁶ Statement of Dr Samantha Hargreaves, CB 77.

²³⁷ Statement of Dr Samantha Hargreaves, CB 79.

doctor fails to properly discharge the treating doctor's responsibility, the fault lies with the treating doctor.²³⁸

162. Referring to the consent guidelines,²³⁹ Dr Hargreaves agreed that consent required a full discussion of the risks of procedure, the benefits and alternatives. This included determining the “appetite” of the patient for the procedure planned, describing the type of forceps being used, the plan to revert to c-section if the delivery was not straightforward, and if an instrument not recommended for the position of the baby was intended to be utilised.²⁴⁰
163. Dr Hargreaves gave evidence that if, during discussion about the trial of forceps process, a strong aversion was indicated, it would be incumbent on the treating doctor to suggest proceeding by way of c-section.²⁴¹ It was also the opinion of Dr Hargreaves that informed consent in Ms Brown's case required a “thorough understanding of what Mr and Ms Brown expected and an assessment of their ‘appetite’ for instrumental delivery verses caesarean section” as an “essential part of the process”. She regarded it as “unreasonable” if that detailed discussion did not occur.²⁴²
164. However, Dr Hargreaves did not believe that it was either necessary or desirable to mention risk of death from the procedure. In relation to forceps, Dr Hargreaves' practice would be to only mention the risk of scalp laceration or markings on the baby's face due to forceps. Nor did she regard it as standard for obstetricians to mention risks of death or serious injury in relation to either forceps or vacuum, as it is not a common event.²⁴³ I note also that the consistent evidence given at the inquest was that most deliveries using forceps, vacuum or c-section are safe deliveries which save the life of mother and baby.²⁴⁴

²³⁸ Statement of Dr Samantha Hargreaves, CB 79.

²³⁹ Statement of Dr Samantha Hargreaves, CB79.

²⁴⁰ T 747.8-15.

²⁴¹ T 808.10-18.

²⁴² Statement of Dr Samantha Hargreaves, CB 80.

²⁴³ T 806 - 807.

²⁴⁴ T 808.3-9.

i. Consent process by Dr Brougham

165. The consent form signed by Ms Brown is the only contemporaneous evidence of what occurred in relation to her informed consent to the trial of instrumental delivery in theatre. I am satisfied that the document establishes that Ms Brown was aware that there was a plan to take her to the operating theatre for a trial of an instrumental delivery and, if that was unsuccessful, a c-section. By reference to her evidence, Ms Brown was aware there was a plan to use forceps, but no information was provided to her about a vacuum.
166. I am satisfied, as documented on the consent form, that it was outlined to Ms Brown that there were general risks to her from c-section, as annotated by Dr Brougham and described in his evidence. However, whilst Dr Brougham's evidence was that it was also his "usual practice" to outline potential risks to the baby, he had no specific recollection of the conversation with Ms Brown, and I am unable to accept Dr Brougham's evidence on this point. In combination with the evidence of Mr and Ms Brown that no such risks were outlined, it is significant that those risks were not documented on the consent form, and it makes no rational sense that they would not be if they were also discussed.
167. It was the expectation and hope that an instrumental delivery would succeed. The c-section was in effect, a "plan B". It is illogical that risks from the primary procedure were discussed but not annotated, when risks from the backup procedure were. I therefore accept Ms Brown's evidence that she was not warned of any risks to her baby from the planned use of forceps. In this regard, the consent process by Dr Brougham was deficient.
168. Whilst Ms Brown was aware that Dr Brougham was seeking advice from a senior colleague, her evidence was that at the time she signed the consent form, she believed that Dr Brougham would perform the procedure in theatre. Dr Brougham accepted it was possible he did not inform her that Dr Chavali would be performing the procedure. Again, having regard to his lack of recall that Ms Brown was so informed, and her evidence that she was not, I am satisfied that this did not occur. Having regard to the consent guidelines, Dr Brougham should have informed Ms Brown that Dr Chavali would be performing the procedure. I am satisfied that the consent process by Dr Brougham was inadequate in that regard.

169. Having regard to the evidence of Dr Hargreaves, I am satisfied that it was not incumbent upon Dr Brougham to advise Ms Brown that a risk of forceps delivery included a rare risk of significant injury, and death. I accept Ms Brown's evidence that she would not have agreed to the procedure if advised of those risks, but it is not standard obstetric practice to do so.
170. Whilst Ms Brown should have been advised of the material risks such as marks or lacerations to the baby's face, I am unable to conclude that had such advice been given, this would likely have led to Ms Brown voicing a strong aversion to a forceps delivery and preferring a c-section at that stage. There is no evidence to that effect. Similarly, whilst Ms Brown was not aware Dr Chavali would perform the procedure, there is no evidence that she would not have consented to delivery by an expert obstetrician in circumstances where Dr Brougham, a GP, did not believe he had the expertise needed to deliver the baby in theatre.
171. Moreover, I note that the evidence generally suggests that Ms Brown quite understandably and justifiably trusted the judgment of the medical staff caring for her. She was entitled to do so. I therefore have no reason to think she would not have trusted their judgment to perform a forceps delivery, even noting the potential for marks or laceration to the face, as that is not a risk of serious injury endangering the baby. Whilst the details of a forceps delivery were not explained to her, Ms Brown had no in-principle objection to the use of forceps or c-section, and Ms Brown understood that her labour had stalled and intervention was needed to deliver her baby.
172. Thus, whilst the consent process by Dr Brougham was deficient, I am unable to conclude that it is likely that a c-section would otherwise have occurred. However, I also accept that there was not a sufficient exploration of Ms Brown's appetite for instrumental delivery and I cannot rule out the possibility that had an appropriate exploration of this issue occurred in combination with discussion with her husband Mr Brown, that there would have been a preference for c-section expressed by the Browns.
173. Finally, I make the observation that it is difficult to understand the purpose of the written "consent process" which occurred with Ms Brown in light of Dr Brougham's plan for

Dr Chavali to conduct the delivery. I can only conclude that there was some intention by Dr Brougham that the consent obtained would “cover” the instrumental delivery by Dr Chavali, noting that it otherwise makes no sense that it was undertaken by him at all. I also note that there was no discussion between Dr Brougham and Dr Chavali about the consent process. The fact the process commenced in this manner with Dr Brougham appears to have contributed to the confusion about who was responsible for obtaining Ms Brown’s consent for the procedure in theatre and her lack of clarity about of who was performing the procedure. The consent process being conducted in this manner was highly unsatisfactory and there was clearly no satisfactory procedure in place for consent when there was an intended transition/review by another clinician.

ii. Consent process by Dr Chavali

174. When Ms Brown was taken to theatre, the delivery was not regarded as an emergency.²⁴⁵ Dr Brougham agreed that prior to the delivery by Dr Chavali, there was time for Dr Chavali to have discussed consent with Ms Brown.²⁴⁶ Similarly, I accept the evidence of Dr Hargreaves that there was ample time prior to the delivery for Dr Chavali to have discussed with Ms Brown and her husband what was planned to occur in the theatre, as well as their appetite for an instrumental delivery and their attitude to c-section. This should have included a discussion about whether the anaesthetic was sufficient to perform a c-section if the delivery with forceps did not succeed.²⁴⁷
175. According to Dr Hargreaves, the transfer to theatre of a labouring woman presented a high risk regarding documentation and adequacy of consent. She noted that the transfer of a labouring patient from one practitioner to another can also result in failures of adequate communication between patient and doctor, and the trial of forceps in theatre “is notorious for potential ‘blurring of the lines’ of who is responsible for what”.²⁴⁸
176. Having regard to the evidence of Dr Hargreaves and the consent guidelines, I am satisfied that it was Dr Chavali’s responsibility to ensure he had Ms Brown’s informed consent for

²⁴⁵ T 707.1-6.

²⁴⁶ T 431. 16-20.

²⁴⁷ T 705.28-706.19

²⁴⁸ Statement of Dr Samantha Hargreaves, CB 83.

the procedure which he performed. It was the view of Dr Hargreaves that, despite some discussion by Dr Brougham with Ms Brown regarding consent, Dr Chavali should have also undertaken such a conversation with Ms Brown. Moreover, when there is a transition of care from one clinician to another, the physician needs to satisfy themselves that the consent procedure has been satisfactory, and consent for the new physician effectively starts from scratch.²⁴⁹

177. I note it was conceded by Dr Chavali that he was required to advise Ms Brown of the procedure he was performing and the risks that this entailed. However, he had assumed (incorrectly) that Dr Brougham had already satisfactorily explored the Brown's appetite for delivery in this manner and established that their preferred mode of delivery was instrumental delivery. He assumed this on the basis that Dr Brougham advised him there had been consent for instrumental delivery, with recourse to c-section if that failed.²⁵⁰
178. From the outset, it was "suboptimal" that Dr Chavali was having his first conversation with Ms Brown in theatre when she was already in position for the instrumental birth. Dr Hargreaves noted that Ms Brown was in a "position of powerlessness" at this point, with her legs in stirrups, having already been labouring for some time in circumstances where the labour had not gone according to plan.²⁵¹
179. To the extent that Dr Chavali relied on Dr Brougham having obtained Ms Brown's consent or appetite for instrumental delivery with forceps, that process was inadequate and Dr Chavali must be regarded as having accepted that risk by proceeding in this manner. Whilst he accepted it was his role to discuss the risks from the procedure,²⁵² the crucial missing step was that he did not have a correct basis for assuming the appetite for delivery in this manner had been sufficiently explored.

²⁴⁹ T 809.6-20.

²⁵⁰ T 502.18-30.

²⁵¹ T 708.

²⁵² T 575.16 - 577.21.

180. To the extent that Dr Chavali did not rely on Dr Brougham, but instead sought to obtain Ms Brown’s consent for the procedure, I am satisfied that process was inadequate for the following reasons.
181. I accept that Dr Chavali introduced himself to Ms Brown and obtained her consent for a vaginal examination. I also accept he indicated to Ms Brown that he agreed with Dr Brougham’s assessment, as this was corroborated by Dr Brougham. However, he did this in a “supervisory” capacity, thinking Dr Brougham was going to conduct the procedure. I am satisfied that there was no clear understanding between Dr Brougham and Dr Chavali regarding their respective roles in the delivery when Dr Chavali came into the theatre. It is therefore unlikely there was a discussion between Dr Chavali and Ms Brown that amounted to informed consent in circumstances where such confusion existed between Dr Brougham and Dr Chavali about who was going to conduct the procedure.
182. Even by reference to Dr Chavali’s “usual practice”, there is no indication it was adequately explained to Ms Brown that Dr Chavali, and not Dr Brougham, was conducting the procedure. At best, she understood that Dr Chavali would have some role, but did not know what the division of responsibility was between the doctors. Dr Chavali’s own evidence that Ms Brown “nodded” in response to him, when she had only just met him, does not indicate informed consent. Moreover, Ms Brown was already in lithotomy position, and it was unsatisfactory that a detailed consent conversation would occur in that manner.
183. I note also that a discussion regarding risk was not recorded in any of Dr Chavali’s statements,²⁵³ and there was no written consent form signed by Dr Chavali. It was conceded on behalf of Dr Chavali that such a course is preferable, and that “the person performing the procedure, unless in an emergency, should be provided with the opportunity to obtain written consent outside of the operating theatre”.²⁵⁴ In my view, there was sufficient time for this to have occurred, but due to confusion in the transfer of care from Dr Brougham, it did not. Whilst not ideal circumstances, it remained Dr Chavali’s responsibility to obtain

²⁵³ See statement of Dr Pinaki Chavali, CB 73.

²⁵⁴ Submissions on behalf of Dr Pinaki Chavali (14 October 2024), [13].

informed consent from Ms Brown for his performance of the procedure prior to commencing the delivery.

184. On balance, I prefer the evidence of Ms Brown that she was not apprised of the relevant risks by Dr Chavali. As such, her appetite for instrumental delivery was not explored. Nor did she fully understand the role Dr Chavali was performing in the delivery of her baby. I am therefore satisfied that the consent process by Dr Chavali was deficient.
185. It was the evidence of Dr Chavali that during a discussion about consent for forceps, it was his usual practice to state that a rare complication of forceps is that it can cause fracture of the skull.²⁵⁵ I note that the evidence is that this is not standard obstetric practice, but I must take Dr Chavali's evidence into account in determining what may have occurred if the consent process was performed as he would usually conduct it. It was the unchallenged evidence of Ms Brown that she would have opted for a c-section straight away if she had known about the head trauma which could be caused by instruments.²⁵⁶ As such, I accept that Ms Brown may not have agreed to the delivery via forceps if an adequate consent process had been performed by Dr Chavali in accordance with his usual practice. The caveat is that it is unknown how such a discussion would have evolved and what Ms Brown would have been advised about the comparative risks from a forceps delivery compared to c-section at this stage of labour. It remains possible that delivery may still have occurred via a trial of forceps. I acknowledge that hypothesising about what was likely to have occurred in different circumstances is largely a speculative exercise, and there is inherent difficulty in making an assessment of this type after the death has occurred as it did. Nonetheless, I cannot rule out the possibility that an appropriate consent process may have led Ms Brown to a different view about her delivery in which she ultimately preferred a c-section.

²⁵⁵ T 634.7 - 635.4.

²⁵⁶ T 182.4-14.

c. The decision to use Neville Barnes forceps without rotation

i. Best practice regarding rotation from OP to OA position

186. Dr Chavali performed the delivery using Neville Barnes forceps with a baby in an OP position. This was the subject of criticism. It was also the subject of extensive examination in relation to the potential that it was delivery in this manner which primarily caused or contributed to the injuries which were suffered and caused the death.
187. It was the “strong belief” of Dr Hargreaves that when faced with a baby in a posterior position, it is necessary to try and effect delivery by correcting the malposition as this “may result in rapid and easy descent of the foetal head into the pelvis and delivery”. Her preferred method of doing so is with a vacuum.²⁵⁷ Dr Hargreaves noted that if an obstetrician does not have the requisite experience to rotate a foetus from OP to OA manually or with instruments, they should perform a c-section,²⁵⁸ but Dr Chavai’s evidence was that he had this skill set and this was not the subject of challenge,
188. Significantly, Dr Hargreaves gave evidence that the training received from the Royal Australian College of Obstetricians and Gynaecologists (**RANZCOG**) directed correction of the malposition before attempting delivery of the baby²⁵⁹ and described correcting the malposition as “best practice”.²⁶⁰
189. The evidence of Dr Hargreaves was that Neville Barnes forceps were designed for a baby in the OA position, not an OP position.²⁶¹ Her experience on occasions when she had (inadvertently) delivered a baby in the OP position using Neville Barnes forceps (by misidentifying the position), was that it was a much more difficult delivery and exertion of a lot more force was needed.²⁶²
190. The opinion of Dr Hargreaves was that the delivery by Dr Chavali should never have occurred in the manner that it did. This was two reasons. Firstly, there was no ability to

²⁵⁷ T 722.18-26.

²⁵⁸ Statement of Dr Samantha Hargreaves, CB 79.

²⁵⁹ T 737.29 - 738.8.

²⁶⁰ T 736.23-26.

²⁶¹ T 723.21-30.

²⁶² T 724.2-13.

immediately proceed to a c-section as the anaesthesia had not been appropriately managed. I note in this regard that it was not contested that Dr Chavali did not ensure that the epidural block was sufficient for a c-section prior to commencing the instrumental delivery. Secondly, because there was no attempt to rotate the baby. Dr Hargreaves regarded the initial decision making to proceed without correction of the position as “unreasonable”. As such, Dr Hargreaves found that it was difficult to comment upon the reasonableness of Dr Chavali’s clinical management in response to the difficulties which Dr Chavali experienced with the delivery from that time, as the original decision to proceed in that manner was unreasonable in her view.²⁶³

191. Dr Hargreaves gave evidence that a practitioner needed to look at the usual practice of their peers and that “The majority of our peers would not do this”, meaning attempt delivery using Neville Barnes forceps for a baby in OP position. She went so far as to state the following:

[T]he majority of obstetricians in Melbourne would correct the malposition first or make an attempt to do so before attempting traction on the baby to bring the baby down, simply because if you do that, sometimes the delivery becomes very easy indeed. In other words, it’s the malposition that’s holding the baby in the mid-pelvis. If you correct that, you might effect a very easy and straightforward delivery.²⁶⁴

192. Dr Hargreaves explained that if a corrected position did not bring the head down, it may be an indicator that the head is too big for the pelvis.²⁶⁵ Hence, if there is no attempt to reposition the baby, cephalopelvic disproportion may not be recognised, increasing the pressure being used to bring the baby down the pelvis.²⁶⁶
193. Dr Hargreaves therefore regarded Baby H’s case as an opportunity for reflection, “as the most important issue is what would your peers do, what would the majority of your peers do”. She also stated that in her view, delivery using this method posed risks.²⁶⁷

²⁶³ T 806.4-22.

²⁶⁴ T 797.24-31.

²⁶⁵ T 797.10-4.

²⁶⁶ T 803.14-21.

²⁶⁷ T 797.10-21.

194. By contrast, it was the evidence of Dr Chavali that he had utilised Neville Barnes forceps in the OP position on many occasions without incident, and without attempting to correct the malposition of the baby first. His evidence was that prior to Baby H's delivery he had delivered approximately 750 babies by instrumental delivery, mostly forceps. Regarding whether use of Neville Barnes forceps was appropriate in the OP position, Dr Chavali gave the following evidence:

...it comes down to the clinician and their level of comfort with using those instruments... if the head is a little bit higher then you may need to use them to gain a little more traction and descent of the head through the pelvis.²⁶⁸

195. Dr Chavali's evidence was that he had the skill necessary to perform a delivery in this manner, and that he did not regard an attempt at manual rotation as appropriate in Baby H's case.

196. Dr Brougham also gave evidence that he had seen specialists use Neville Barnes forceps in the OP position, and that he had himself performed deliveries with Neville Barnes forceps in the OP position.²⁶⁹ Similarly, Prof Whitelaw recounted that he had seen babies in the OP position safely delivered with Neville Barnes forceps on "scores of occasions"²⁷⁰ without injury and he regarded this as "perfectly safe" if the forceps were applied correctly.²⁷¹

197. I have found this expert evidence difficult to reconcile. The accounts by Dr Chavali, Dr Brougham and Prof Whitelaw regarding their experience with delivery of this type on many occasions was not contested. I note that Prof Whitelaw does not practice in Australia and is not an obstetrician, and as such his observations about a commonly accepted practice in delivery does not carry the same weight as Dr Hargreaves. However, it remains as evidence indicating that delivery in this manner is not attended by a higher rate of injury, as do the observations and experience of Dr Brougham and Dr Chavali.

198. I remain unable to explain how Dr Chavali and others are utilising Neville Barnes forceps with a baby in the OP position if it is contraindicated by RANZCOG training, not best

²⁶⁸ T 433.11-16.

²⁶⁹ T 433.2-17; T 398.25-26.

²⁷⁰ T 893.1-24.

²⁷¹ T 874.10.

practice, and not what would be done by the majority of obstetricians. Moreover, the evidence of Dr Hargreaves regarding the majority practice was not contested, although Dr Chavali disputed other aspects of Dr Hargreaves' evidence. Instead, it has been submitted on behalf of Dr Chavali that the RANZCOG guideline *Instrumental vaginal birth* does not stipulate that a baby in the OP position is required to be rotated before instrumental delivery,²⁷² and that he had an appropriate basis from his own clinical experience to judge that it was appropriate to perform the delivery in this manner.

199. The issue was further complicated by the evidence of Dr Hargreaves who agreed that an obstetrician will have exercised correct clinical judgment if they have done something on many occasions previously without incident, even if another practitioner would regard it as risky.²⁷³ For this reason, Dr Hargreaves was not of the view that Dr Chavali delivering Baby H in this manner constituted a lack of due care and skill on his behalf, as he had experience of performing that type of delivery on many occasions without incident.²⁷⁴

ii. The cause of the injuries: Delivery with Neville Barnes forceps in OP position

200. The decision to use the Neville Barnes forceps when the baby was known to be in an OP position was relevant due to evidence suggesting that this method of delivery was responsible for the fatal injuries which occurred.

201. Throughout her evidence, Dr Hargreaves was firm in her view that Neville Barnes forceps should not be used to deliver a baby in the OP position, although she was unable to refer to any evidence which demonstrated that the use of Neville Barnes forceps in the OP position was more likely to cause birth trauma. Instead, she “intuitively” believed this was the case because the position of the forceps on the baby’s head would be different as the forceps were designed for a baby in the OA position. According to Dr Hargreaves, these forceps were designed for traction on the baby’s jaw, protecting the baby from the force of the traction as the jaw is one of the strongest parts of the baby’s head. Dr Hargreaves explained that in the OP position, the forceps would not be placed in that protective

²⁷² Submissions on behalf of Dr Pinaki Chavali (14 October 2024), [27].

²⁷³ T 796.6-11.

²⁷⁴ T 794.10-23.

position, which caused her concern.²⁷⁵ Dr Hargreaves therefore believed that there is an “inherent problem” with using Neville Barnes forceps in the OP position, because the traction force is being applied to parts of the skull which are not as strong.²⁷⁶

202. Dr Hargreaves was also adamant that correction of the baby’s malposition resulted in a better vaginal delivery rate and noted that this was supported by the relevant literature.²⁷⁷ According to Dr Hargreaves, the use of Neville Barnes forceps in the OP position is “a more difficult delivery requiring greater force” and “the instrument is not designed to be used in that fashion”.²⁷⁸ She explained that in Baby H’s case, the presence of caput and moulding indicated that Baby H’s delivery was already difficult, and that there was a “tight fit between the mother’s bony pelvis and the foetus, his head”. She explained that bringing the baby down in the posterior position only increased the head diameter, causing the head to de-flex further. This was an additional reason that Dr Hargreaves expressed concern that it was not an effective way to deliver the baby safely.²⁷⁹
203. Regarding the contested issue of how much force was used in the delivery, Dr Hargreaves repeatedly framed the issue by reference to the mechanics of a delivery in OP position. She explained as follows:

The judgment about how much force is enough force is a very difficult one to answer in a generalised sense, as we are all taught in our training that we have to arrive at that point ourselves. Obviously, how hard I can pull versus how hard a bigger, stronger person can pull could be very different and so we all have to arrive at what’s an excessive amount, when should I know to stop, but that’s one of the reasons I have a problem with the application of the Neville Barnes forceps in the OP, because I believe that you require a lot more force to bring that baby down into the lower pelvis.²⁸⁰

204. As I understood this evidence by Dr Hargreaves, she assessed that a delivery in the OP position using Neville Barnes forceps should not be attempted as it exerts too much force upon the baby, being the pulling force used to effect the traction from the instrument to the

²⁷⁵ T 723:25 - 724:1, T 724:14-23.

²⁷⁶ T 803.4-13.

²⁷⁷ T 725:14-19.

²⁷⁸ T 794:24-30.

²⁷⁹ T 757:20 - 758:6.

²⁸⁰ T 802:6-27.

baby. Her evidence raises a concern that additional pulling force attributed to the use of Neville Barnes forceps in the OP position may have caused the injuries.²⁸¹

205. Dr Hargreaves assessed the degree of force which must have been used by reference to the injuries suffered by Baby H, opining as follows:

[T]he nature of the injuries suggest that a considerable amount of force was used. It is easy to call it excessive, knowing the outcome of the case, but given all that we've heard about the caput, the moulding, the position of the baby after a very long labour, it is possible that it was because of cephalopelvic disproportion and that would lead to those forces creating potentially the damage that we saw in [Baby H].²⁸²

206. Although Dr Hargreaves agreed that the question of the degree of force was a difficult issue, she still concluded "that the nature of the injuries that Baby H sustained, suggest to me that there was a considerable amount of force used".²⁸³ Dr Hargreaves also agreed that the degree of injury in Baby H's demonstrated that there must have been a deficiency in the use of the instruments.²⁸⁴

207. I understood Dr Hargreaves' evidence to be that this deficiency was attributable to the use of Neville Barnes forceps in an OP position, for the reasons she outlined: the need for additional force due to expanded head diameter, the application of force on a weaker part of the skull, and the possibility of cephalopelvic disproportion obstructing delivery, also leading to greater use of force. The effect of Dr Hargreaves' evidence was that when utilised in this position, the forceps had caused the fatal head injuries, either by the degree of force used or misapplication of instruments, or a combination of both.

208. The issue of how the forceps caused the injury was complicated by the evidence from Prof Whitelaw, whose evidence differed in important regards from that of Dr Hargreaves.

209. Prof Whitelaw conceded that he was unable to comment upon the technique (meaning the amount of force) to be used by an obstetrician in carrying out a forceps delivery, as this

²⁸¹ T 802:28-31.

²⁸² T 804: 1-11.

²⁸³ T 804: 1-11.

²⁸⁴ T 804:30 - 805:11.

was outside his expertise.²⁸⁵ However, he observed that he had witnessed “obstetricians sweating and pulling and putting their – putting a foot up on the bed, in order to exert extra traction”,²⁸⁶ stating:

I’ve seen big, you know, rugby players putting their foot up on the end of the bed and pulling and the baby is absolutely fine and in those cases, the forceps are applied in the right place and there was no injury, but here, in [Baby H’s] case, I strongly suspect that it was the misplacement of forceps which resulted in the force being too much for the area of skull that was underneath.²⁸⁷

210. As such, Prof Whitelaw opined that it was only the fact of the force being applied in the wrong place which made it “excessive” rather than the degree of physical force utilised. He explained that:

[I]t’s perfectly possible for a normal amount of force to be applied, but if the forceps are not in the right place, then it becomes dangerous, because the force is applied to areas of the skull which are more vulnerable than the places where the forceps is normally applied. So the question of excessive force doesn’t necessarily mean that, in terms of kilograms of force, it was greater than many obstetricians use. It’s that it becomes excessive because it’s applied in a vulnerable place.²⁸⁸

211. Having regard to his own observation of many successful deliveries in the OP position using Neville Barnes forceps, Prof Whitelaw specifically rejected the proposition that “the normal application” of Neville Barnes forceps in the OP position could result in the type of catastrophic injuries that were caused to Baby H. He suggested instead that “the forceps must have slipped and were not being applied in the desired position, which is usually perfectly safe”.²⁸⁹

212. In support of this theory, Prof Whitelaw stated that forceps delivery was very common and “in the vast, vast majority of cases is of great benefit to the baby with no injury”.²⁹⁰ As such, he concluded that “correctly applied forceps does not produce significant injury”.²⁹¹

²⁸⁵ T 860:20-30.

²⁸⁶ T 861:28-31.

²⁸⁷ T 872:11-20.

²⁸⁸ T 871.29 - 872.10.

²⁸⁹ T 874.4-10.

²⁹⁰ T 869.13-16.

²⁹¹ T 869.16-17.

When considering how it could be that such a “disastrous degree of brain injury” had resulted in Baby H’s case, he answered as follows:

One has to conclude that there must have been something different about the delivery to produce such a catastrophic result and - okay. So, what could’ve been different? And as a non-obstetrician, my conclusion on the balance of probability is that the forceps slipped and were applying force in an area of the skull that is not intended.²⁹²

213. However, Prof Whitelaw conceded that he deferred to an obstetrician’s expertise regarding the correct placement of forceps.²⁹³ He also conceded he was unable to provide any opinion on the limit of force that an obstetrician could safely apply, or the techniques required for a difficult instrumental vaginal delivery.²⁹⁴ Having regard to this concession, there is a basis to prefer the evidence of Dr Hargreaves that the mere placement of forceps in an OP position is an inherently problematic obstetric technique and not in accordance with standard practice. Yet, Prof Whitelaw is a highly experienced Neonatologist with relevant expert knowledge about infant anatomy who has observed over many years of professional experience that delivery in OP position with Neville Barnes forceps does not cause injury. His pathway of reasoning that there must therefore have been some additional factor present to cause injury through the use of forceps in Baby H’s case is logical.

214. Consistent with Dr Hargreaves, both Dr Brougham and Dr Chavali agreed that using Neville Barnes forceps in an OP position meant pulling on a foetal head that was not favourably descending as the diameter of the head is larger than in the OA position.²⁹⁵ However, Dr Brougham also rejected the proposition that there was a greater degree of injury from Neville Barnes forceps used in the OP position on the basis of his own experience of such deliveries.²⁹⁶ Whilst he does not have the expertise of Dr Hargreaves, this is evidence that many deliveries occur in this manner, and without injury being occasioned. Dr Chavali also rejected the proposition that the use of Neville Barnes forceps in the OP position led to higher injury rates as his clear evidence was that he has, over a

²⁹² T 869:8-27.

²⁹³ T 874:29 - 875:1.

²⁹⁴ T 883:28-31.

²⁹⁵ T 442.7-11; T 583.15 - 584.2.

²⁹⁶ T 434.31- 436.11.

significant period of time, delivered babies in this manner without incident.²⁹⁷ This is further evidence that many deliveries occur in this manner, and without injury being occasioned. I note that unlike Prof Whitelaw and Dr Brougham, Dr Chavali's qualifications and expertise as an Obstetrician cannot be distinguished from that of Dr Hargreaves. This evidence is therefore difficult to reconcile with the firm opinion of Dr Hargreaves.

215. Having regard to the totality of the evidence, I am satisfied that a potential explanation for the injuries from the forceps is the mechanics of a delivery in OP position necessitating either additional force, or the misapplication of the forceps, or a combination of both. With regard to the latter explanation, I accept that the forceps were either misapplied due to Neville Barnes forceps not being designed for a head in OP position, or due to misplacement for some other reason, including operator error. In either case, pressure will be placed on a more vulnerable part of the baby's skull, providing less protection from the force exerted and potentially causing injury. Whilst such injury is clearly not inevitable, it appears that delivery in this manner may offer less protection from the instrumentation and make the foetal head more vulnerable to force.
216. Having regard to the evidence that many deliveries occur in this fashion without incident, I accept that it is also possible that there is an explanation for the injuries from the forceps that is unrelated to the OP position. There may simply have been a misapplication of the forceps, and/or utilisation of a degree of force that was too much in the circumstances, which was not appreciated by Dr Chavali at the time.
217. Ultimately, I have been unable to reconcile this conflict in the evidence. I cannot be comfortably satisfied that one explanation for the injuries is more likely than the other. The opinion of Dr Hargreaves about the "majority" approach used and the training provided, has the caveat that there is no specific evidence of increased risk of injury from use of Neville Barnes forceps in an OP position. When combined with evidence that this type of delivery is not occurring infrequently, the totality of evidence in this individual case indicates that this is not a settled issue in obstetric practice and the degree of risk of injury from delivery in this manner has not been quantified. As such, I am unable to conclude to

²⁹⁷ T 484.31 - 485.24.

the requisite standard that the injuries are more likely attributable to the mere fact of delivery using Neville Barnes forceps in the OP position.

iii. The cause of the injuries: Degree of force, “slipping” and number of pulls

218. There was extensive evidence regarding the “degree of force” used by Dr Chavali and his technique in using the forceps, and whether these factors were causally related to the head injuries sustained by Baby H. These were vexed questions throughout the investigation and inquest, in large part due to the different versions of events given by Mr Brown and Dr Chavali about the conduct of the delivery.
219. The effect of Mr Brown’s evidence was that the force used by Dr Chavali when utilising the forceps was needlessly excessive and inappropriate, having regard to the number of pulls, the degree of physical force used, and/or the misapplication of the forceps which came loose.
220. In contrast to the version of events provided by Mr Brown, none of the medical witnesses who were present during the delivery and provided evidence to the Court observed any unusual or inappropriate use of force or technique during the delivery by Dr Chavali.
221. The instruments nurse in the theatre, Beverley Anderson, had the responsibility of passing the instruments to Dr Chavali, and stated that she would have been watching his hands in that role. She could not recall the specific number of pulls on the forceps but thought “it was not many”. She recalled that the pulls by Dr Chavali were “not too forced” and “there was not a high strength to the pulls”. Ms Anderson stated that she had seen other deliveries where more force was used, and she was very surprised to hear about the outcome for Baby H, as she did not consider the birth to have been particularly difficult.²⁹⁸
222. Dr Brougham also did not observe any unusual force being utilised by Dr Chavali. He stood behind him during the instrumental delivery, and whilst he did not have a full view of what was occurring,²⁹⁹ he had a clear view of the introitus and a view of the instruments being

²⁹⁸ Statement of Beverley Anderson, CB 554.

²⁹⁹ T 387.7-12.

used.³⁰⁰ He observed Dr Chavali apply the forceps blades, and noted they appear to have locked, and he thought this process proceeded normally.³⁰¹

223. It was the evidence of Dr Brougham that Dr Chavali used a normal amount of force when he first pulled the forceps.³⁰² He had no actual memory of the number of times that the forceps was pulled or the vacuum was used,³⁰³ but he disagreed with the description provided by Mr Brown. He observed that Dr Chavali had his hands at his navel height and that the traction on the Neville Barnes forceps required horizontal and vertical traction, a pulling down in a diagonal position.³⁰⁴ He stated it would not be possible to hold the forceps with elbows out or the hands in the position as described by Mr Brown.³⁰⁵
224. Dr Brougham did not observe anything unusual about the delivery but did think Dr Chavali said the forceps “slipped”. He recalled that this was said after Dr Chavali applied the forceps, locked them and applied some traction on the first pull, but his evidence was uncertain in that regard. He understood the forceps were reapplied by Dr Chavali and a second pull occurred.³⁰⁶ Dr Brougham did not recall Dr Chavali saying Ms Brown had slipped down the bed at any point, but he agreed that there was some movement of Ms Brown down the bed, noting that it was not uncommon for this to occur with traction from forceps.³⁰⁷
225. On the question of how the forceps could slip, Dr Brougham didn’t know if Dr Chavali meant they had slipped from locking or he had moved position. He had not ever experienced forceps “slip”, or seen that occur in any other delivery, but he noted that sometimes they do not lock and they need to be reapplied.³⁰⁸ Dr Brougham could not see how Neville Barnes forceps could become “loose” or apply traction if they were not locked

³⁰⁰ T 432.11-20.

³⁰¹ T 385.16-23.

³⁰² T 387.13-24.

³⁰³ T 387.28 - 388.14.

³⁰⁴ T 446.3-25, T 447.24 - 448.15.

³⁰⁵ T 449.1-11.

³⁰⁶ T 466.1-12.

³⁰⁷ T 15-31.

³⁰⁸ T 385.24 - 386.4, T 443.12-13.

properly.³⁰⁹ He also clarified he did not actually see the forceps lock, or any “slippage” as he was behind Dr Chavali during the delivery.³¹⁰

226. The Nurse and Midwife who was present, Hannah Heil, had no memory of the forceps slipping or the vacuum having popped off, due to the passage of time.³¹¹ I note also that her focus was on the CTG monitor, Ms Brown, and the timing of the contractions.
227. Dr Chavali’s consistent evidence from materials in the coronial brief and his oral evidence during the inquest was that he applied only two pulls of the forceps before he tried to reapply them. They then “slipped” causing him to convert to a vacuum delivery, noting the continued deceleration of the FHR deteriorating into bradycardia.
228. The first account of this sequence of events by Dr Chavali is in the typed and signed “Operation Report” made at about 6:00 pm on the evening of the delivery.³¹² The report refers to an easy application and locking of the Neville Barnes forceps prior to two pulls of the forceps, with station being gained on the second pull. It records the forceps then “slipping” with fetal bradycardia noted, and the forceps taken out. The vacuum was then applied, first with a pop-off, and delivery of the baby with the second pull of the vacuum, rotating to the OA position.³¹³ Later that evening, Dr Chavali made a “retrospective” record of the delivery in the handwritten “Progress Notes”. He recorded the same sequence of events.³¹⁴
229. Subsequent statements authored by Dr Chavali regarding the delivery essentially outlined the same sequence with regard to use of the forceps and vacuum. Additional information was also provided in the statements including: the time of the first application of the forceps blade; the traction on pulls coinciding with a contraction; deceleration of the FHR being noted at the application of the forceps blade; the times when the pulls on the forceps occurred; the duration of the first pull; Ms Brown slipping on the plastic sheeting on the first pull; the incident where the forceps were unlocked and reapplied; and the timing of

³⁰⁹ T 453.1-28.

³¹⁰ T 387.1-6.

³¹¹ Statement of Hannah Heil, CB 65.

³¹² Latrobe Regional Hospital records, CB 450-451.

³¹³ T 490.20-26.

³¹⁴ Latrobe Regional Hospital records, CB 435.

the occurrence of bradycardia.³¹⁵ Dr Chavali authored these further statements by reference to the CTG trace print-outs.

230. Dr Chavali's oral evidence was also generally in accordance with this sequence of events, with additional information provided that the forceps were applied without a contraction, as per standard obstetric practice,³¹⁶ and that the uses of traction on both the forceps and the vacuum occurred with contractions.³¹⁷ Dr Chavali also clarified that when he referred to "slipping" of the forceps, this occurred when the forceps were in a locked position. He stated he had never experienced this "slipping" before or since, and described it as "not a comfortable grip on head by the forceps" and a feeling that the blades were slipping both towards him and around the head.³¹⁸
231. Dr Chavali rejected the version of events provided by Mr Brown about the number of pulls of the forceps, as well as his technique.³¹⁹ He explained his hands were at waist height during the delivery, in line with the operating table, he was bent forward and pulling the forceps downwards. Like Dr Brougham, he described Mr Brown's version as "impossible".³²⁰ He stated he used a "moderate" degree of force which in no way resembled the description given by Mr Brown.³²¹
232. Dr Chavali rejected the proposition put to him that he was "pulling with the forceps excessively" causing Ms Brown to be pulled down the table.³²² He also rejected the proposition that the injuries were caused by "excessive force or traction on the forceps", or the "number of pulls with the forceps beyond two", and he did not regard the delivery as difficult.³²³ Furthermore, he rejected the proposition that despite his usual practice, which

³¹⁵ This was inconsistently stated by Dr Chavali as occurring at 16:38 and also 16:40: statement dated 14 February 2020, CB 73; amended statement dated 24 August 2023, CB 577-579; statement dated 14 June 2019 for Ahpra, CB 1003; Exhibit 15 - Supplementary statement of Dr Chavali dated 26 June 2024, CB 1015.

³¹⁶ T 510.23-25.

³¹⁷ T 511.6-8.

³¹⁸ T 676.3-25.

³¹⁹ T 528.6 - 530.17.

³²⁰ T 529.17-24.

³²¹ T 546.16-20.

³²² T 608.25-26.

³²³ T 635.5-16, T 635.30 - 636.8.

was safe, on this occasion he did not follow his usual practice and that was why the traumatic injuries were caused to Baby H.³²⁴

233. In addition to the Operation Report and Progress Notes entries by Dr Chavali, which I regard as near to contemporaneous records, the other near-contemporaneous record of the delivery was made by the Nurse and Midwife, Hannah Heil. She made her own record in the “Progress Notes” at 6:30 pm prior to that of Dr Chavali, and the sequence of events described accords with that by Dr Chavali, namely, two pulls on the forceps prior to delivery by vacuum.³²⁵ Her later statement was also consistent with that version of events.³²⁶
234. The most contemporaneous record of what occurred during the delivery was the printout of the CTG trace which was being annotated by Ms Heil in the theatre. However, it was identified during the inquest that there were two versions of the CTG trace annotated by Ms Heil which differed between the copy of the CTG trace in the LRH records and the copy of the CTG trace in the RCH records.³²⁷ Whilst there was variation in the handwritten annotations, both records have an identical annotation noting two pulls of the forceps and delivery by vacuum. They are therefore, on the face of the documents, also consistent with the version of events given by Dr Chavali.
235. There was detailed and extensive questioning at the inquest regarding the CTG trace and the meaning of the various annotations written by Ms Heil.³²⁸ Dr Chavali also created an annotated CTG record in accordance with his recollection of what occurred and was questioned in relation to it.³²⁹ The questioning of witnesses was directed to what the CTG trace indicated about the time the instrumental delivery commenced, the number of contractions, the time at which deceleration and bradycardia occurred, and the potential that this could corroborate the conflicting versions that there were two pulls on the forceps by Dr Chavali, or four pulls as indicated by Mr Brown. Dr Chavali maintained that the

³²⁴ T 640.29 - 641.10.

³²⁵ Latrobe Regional Hospital records, CB 433-434.

³²⁶ Statement of Hannah Heil, CB 63-64.

³²⁷ Royal Children’s Hospital records, CB 224; Latrobe Regional Hospital records, CB 476.

³²⁸ Exhibit 2 - CTG trace marked by witness Hannah Heil, CB 581.

³²⁹ Exhibit 3 - CTG trace marked by witness Dr Pinaki Chavali, CB 582.

CTG record corroborated his account of the delivery,³³⁰ and submissions were made to that effect, whilst submissions on behalf of Mr and Ms Brown maintained that the CTG evidence favoured the account provided by Mr Brown.

236. Despite the exhaustive examination of this issue, written submissions filed by Counsel Assisting submitted that the question of the number of pulls did not ultimately need to be determined. This was accepted on behalf of Mr and Ms Brown, because the number of pulls would not itself determine whether there was, or was not, excessive force or a misapplication of the forceps. It was also accepted on their behalf that it was not necessary to make a definitive finding regarding this issue to determine whether there was “an inappropriate choice of procedure, excessive force or misapplication of the forceps”.³³¹
237. In my view, this is correct. There is substantial evidence which accounts for how the forceps caused the fatal injuries, and it is not reliant on the number of pulls used. I also note the opinion of Dr Hargreaves that she did not believe there was evidence for the proposition that more than two pulls using forceps was likely to lead to injury, only that more pulls was indicative of a more difficult delivery.³³²
238. I have therefore determined that it is not necessary to resolve the issue of the number of pulls for the purpose of determining the cause of the fatal head injuries. However, I am cognisant that it has been alleged against Dr Chavali throughout the investigation and the inquest that his conduct of the procedure was inappropriate, inferring that there was a lack of care, professionalism and skill by Dr Chavali which led to Baby H’s death, and in my view this still necessitates resolution if possible.
239. I regard the evidence of the witnesses interpreting the CTG, including the annotations, as largely unreliable and unclear and not determinative of the issue of the number of pulls. The CTG trace could arguably support either account as to the number of pulls, particularly when overlaid with memory about what occurred. However, the weight of the contemporaneous evidence from both Dr Chavali and Ms Heil supports a finding that there

³³⁰ T 644.31 - 645.15.

³³¹ Submissions on behalf of Mr and Ms Brown (11 November 2024), p.12 [80]-[81].

³³² T 715:10-24.

were two pulls on the forceps. This was recorded separately by them both in the medical records, within hours of the procedure, at a time when it was not apparent that there was any dispute about the number of pulls used. I have found no reason to doubt the accuracy of those records.

240. In my view, the contemporaneous evidence demonstrates that there were only two pulls on the forceps, and a third “slipped” application. I therefore prefer Dr Chavali’s account regarding when the forceps slipped, to Dr Brougham’s account of which there is no contemporaneous note.

241. Regarding Mr Brown’s recollection, though I do not doubt his intention to give truthful evidence or that he gave evidence according to what he thought he saw, I am unable to accept his account of Dr Chavali’s conduct of the delivery. Having regard to his position next to Ms Brown, he cannot have had a full and unobstructed view of what was occurring during the delivery. Also, Mr Brown was a first-time parent with no prior experience of a forceps delivery, who was unprepared for what it would entail. It is apparent from the evidence of both Dr Brougham and Prof Whitelaw that physical force may be utilised in a forceps delivery and it is not necessarily unusual for there to be movement of the birthing mother during a forceps delivery. I accept that there was some movement of Ms Brown down the operating table, but I am unable to determine that this was due to an inappropriate amount of force as I cannot discount Dr Chavali’s explanation that this was due to the plastic sheeting underneath Ms Brown. It may be that Mr Brown’s perception about an inappropriate amount of force being used was understandably explained by his unfamiliarity with the situation he was in.

242. I have also considered the evidence of both Dr Brougham and Dr Chavali that it would not be possible to effect a forceps delivery in the manner described by Mr Brown. Additionally, at the time the forceps were utilised by Dr Chavali, the delivery was not an emergency and as an experienced Consultant Obstetrician, there was no reason for Dr Chavali to depart from standard obstetric technique in the manner described by Mr Brown. He was not observed to do so by medical staff present in the theatre.

243. Lastly, there is no evidence before me supporting a correlation between an observed use of physical traction on the forceps, and the likelihood of injury. Similarly, the evidence does not support a finding that the occurrence of the traumatic head injury, which must have been occasioned by misapplication of forceps or excessive force, would necessarily correlate with an observable departure from standard practice during the delivery. I refer to the evidence of Prof Whitelaw that an observed “normal” amount of traction may still cause catastrophic injury if the forceps are misapplied. I also refer to the evidence of Dr Chavali, who did not regard the delivery as difficult, and of Dr Brougham, who did not regard it as unusual. Yet plainly, something went entirely awry having regard to the catastrophic nature of Baby H’s injuries. I am satisfied that the degree of injury was not expected having regard to the manner in which the delivery was conducted.
244. As such, on balance, I am unable to accept the evidence of Mr Brown on this point. I am satisfied that Dr Chavali utilised two pulls on the forceps, with “slipping” on the third attempt before he converted to a vacuum delivery.
245. An explanation for the slipping of the forceps remains elusive. Whilst various explanations have been provided as to how this may have occurred, I have been unable to determine to a comfortable degree of satisfaction why it occurred, having regard to the evidence by the witnesses that this was not something they had previously encountered.
246. According to Dr Hargreaves, the degree of caput and moulding as described by Dr Chavali was not an explanation for the forceps “slipping”, as they were designed for a head with caput and moulding, although not in the OP position. Nor was the slipping explained by the position of the baby in the lower pelvis. Dr Hargreaves preferred as an explanation that the forceps would slip if the handles were not locked together, indicating the application is not correct.³³³ Dr Brougham’s evidence was consistent with Dr Hargreaves, as he did not know how forceps could “slip”, but the forceps could fail to lock properly and need to be reapplied to get them in the correct position. Whilst Dr Brougham believed the forceps were locked by Dr Chavali, he did not see the “slipping” or the locking of the forceps.³³⁴

³³³ T 743:16-26, T 744:3-7.

³³⁴ T 386.1 - 387.6.

247. Dr Chavali's evidence was that he was certain that the forceps were locked. However, in the absence of any other compelling explanation for the "slipping" I cannot discount that Dr Chavali was mistaken in that belief, as the evidence is that forceps would not grip the head appropriately if not locked and this is consistent with his description of what occurred during the "slipping". Whatever the cause, I am satisfied that this "slipping" of the forceps constituted a misapplication of the forceps on the head, with some rotational and forwards movement and some degree of traction. Considering the expert evidence that misapplied forceps can cause injury, I am satisfied that the "slipping" is another possible explanation of how the head injuries occurred.

d. Unresolved issues: The attempt at vacuum delivery and the level of anaesthesia

248. It was conceded by Dr Chavali that his use of the vacuum after use of forceps was uncommon, and that there is a risk to the baby in proceeding that way, the risk being that it can fail and cause subgaleal haemorrhage.³³⁵ Dr Chavali explained that he resorted to vacuum at the time he did as he viewed the situation as being an emergency. He assessed that the vacuum was the best way to deliver the baby quickly, noting that the baby was by that time low in the pelvis at the introitus. Dr Chavali also referred to confirming with the anaesthetist that the epidural was not sufficient for a c-section, leading him to select the vacuum as the quickest means of delivery in the circumstances. The clinical judgment by Dr Chavali regarding both these matters was a contested issue examined in the investigation and inquest.

249. Dr Hargreaves was critical of the decision to proceed with the instrumental delivery without ascertaining and ensuring that the anaesthesia was sufficient for a c-section.³³⁶ Dr Chavali did not accept that criticism and gave evidence of potential adverse complications arising from ensuring that level of anaesthesia prior to instrumental delivery. It was also submitted on Dr Chavali's behalf that the relevant RANZCOG guideline did not mandate such a course.³³⁷

³³⁵ T 572.18 - 573.12.

³³⁶ Statement of Dr Samantha Hargreaves, CB 77.

³³⁷ Submissions on behalf of Dr Pinaki Chavali (14 October 2024), p.5 [23].

250. There was also evidence that consideration should have been given by Dr Chavali to proceeding with a c-section, rather than vacuum, after the time that the forceps delivery failed. This was also contested by Dr Chavali.

251. Having regard to the cause of death, which was primarily due to fatal head injuries from the use of forceps, I am satisfied that by the time Dr Chavali abandoned the forceps delivery, Baby H had already suffered injury sufficient to have caused death. Therefore, the decision to proceed to either vacuum or c-section at that time did not cause or contribute to Baby H's death. As such, I do not regard it as necessary to resolve the contested evidence about Dr Chavali's clinical decision-making in relation to the selected use of vacuum instead of c-section, or the level of anaesthesia.

FORMULATION OF THE CAUSE OF DEATH

252. Dr Baber provided her opinion regarding the cause of death in the Autopsy Report as “complications of traumatic head injury in the setting of assisted vaginal delivery of a term infant with foetal distress”.³³⁸ On behalf of Mr and Ms Brown, questions were put to Dr Baber during her evidence suggesting that a different formulation of the cause of death should be preferred in which there was no reference to “foetal distress” and an amendment to the use of the phrase “assisted vaginal delivery” to “instrumental vaginal delivery”. Subsequently, in written submissions filed on behalf of Mr and Ms Brown, it was submitted that there be a finding made that the cause of death was “traumatic head and brain injury due to excessive force by Neville Barnes Forceps in occipito-posterior position”.³³⁹

253. During the evidence of Dr Baber, she confirmed that her reference to “foetal distress” in the cause of death was included due to information available to her at the time she completed the Autopsy Report. Dr Baber agreed during her evidence that she did not have the necessary expertise to determine whether there had been foetal distress “of a compromising kind” prior to the delivery.³⁴⁰ Dr Iles agreed that she also had no expertise regarding the interpretation of a CTG trace, and deferred to the expert opinion of

³³⁸ VIFM Autopsy Report, CB 5.

³³⁹ Submissions on behalf of Mr and Ms Brown (28 November 2024), p 14, [101].

³⁴⁰ T 216:9-14.

Dr Hargreaves on the significance or otherwise of a rising baseline on the CTG.³⁴¹ It was therefore accepted by the Forensic Pathologists that the question of whether there was foetal distress was a matter for other clinical expertise.

254. The evidence is that prior to Ms Brown arriving in theatre, Baby H's baseline heart rate had been rising. It was still within the normal range of 110-160, but it had increased from 110 to 135. Dr Brougham gave evidence that an increasing baseline indicates that the baby is tiring and working harder to maintain oxygenation.³⁴² Therefore, when questioned about Baby H's condition prior to the delivery, Dr Brougham did not agree with the proposition that there were "no concerns" with the baby by reference to the rising baseline, OP position, caput and the station.³⁴³
255. Dr Chavali also expressed that due to the prolonged second stage of labour, with signs of obstruction, there would have been "some element of foetal distress beforehand".³⁴⁴ Dr Chavali stated that there was therefore "some urgency" in delivering the baby.³⁴⁵
256. The evidence of Dr Charlton on this topic was that the heart rate changes were "a sign of stress in utero".³⁴⁶ However, the blood gasses from the placenta suggested that there was not a prolonged period of hours or days of stress in the womb before Baby H was born.³⁴⁷
257. Similarly, Dr Hargreaves opined that Baby H did not demonstrate signs of significant compromise prior to birth. The umbilical cord wrapped around the neck could account for the sustained bradycardia if the cord was compressed, and Dr Hargreaves noted that if there was a sustained bradycardia of more than 10 minutes, this could have contributed to Baby H's poor condition at birth.³⁴⁸ The cord gases from the umbilical artery and vein at delivery suggested an acute insult such as cord compression. Whilst there was also a finding regarding prolonged exposure to meconium, stained liquor was not noted during delivery,

³⁴¹ T215.22, T 216.3.

³⁴² T 430.22-28.

³⁴³ T 420.11-17.

³⁴⁴ T 501.28 - 502.5.

³⁴⁵ T 502.10-14.

³⁴⁶ T 919:18-22.

³⁴⁷ T 920:17-22.

³⁴⁸ Statement of Dr Samantha Hargreaves, CB 83.

and it was therefore either missed or not obvious. Overall, Dr Hargreaves was not of the view that Baby H was compromised before the instrumental delivery commenced.³⁴⁹ I accept the expert opinion of Dr Hargreaves.

258. Having regard to the totality of the evidence, I am satisfied that Baby H was not significantly compromised before birth. Any in utero distress prior to delivery may account for the failure of the labour to progress, but did not significantly contribute to the death. The foetal distress that occurred after delivery commenced, evidenced by deceleration and bradycardia, was likely due to the use of the forceps, including the occurrence of injury, or if it was some other cause, its significance was overridden by the traumatic injuries which caused the death. I have therefore determined that cause of death need not refer to “foetal distress” as it was not an operative factor in the cause of death.

259. It was also put to Dr Baber by counsel for Mr and Ms Brown during her evidence that she should alter her opinion on the cause of death by using the words “instrumental vaginal delivery” rather than “assisted vaginal delivery”. Dr Baber did not accept this proposition, stating that she would not change the cause of death as the terminology used indicated that the delivery was not a normal vaginal delivery without medical assistance. Dr Baber was of the view that the role of the cause of death was not to provide commentary on the circumstances of the delivery or the injuries.³⁵⁰

260. I am satisfied that the traumatic head injuries which caused the death were due to the occurrence of an instrumental vaginal delivery. Both forceps and vacuum were used during the delivery, and the term “traumatic head injury” refers to the totality of head and brain injuries inflicted during the delivery. I am satisfied that there was brain injury sufficient to cause death inflicted by the forceps. However, there was also a potential contribution to the death from injuries likely caused by the vacuum, even though these would not themselves be sufficient to cause death in isolation. This included a potential contribution to the bleeding and hypoxic ischemic encephalopathy from the subgaleal haemorrhage and

³⁴⁹ Ibid, CB 84.

³⁵⁰ T 223.30 - 224.6; T 207.18 - 208.24.

cerebral haemorrhage.³⁵¹ As such, reference to the “instrumental vaginal delivery” accurately reflects the cause of the injuries.

261. Whilst Dr Baber did not adopt the term “instrumental vaginal delivery” in her formulation of the cause of death by reference to her specialisation as a Forensic Pathologist, I am not so limited, and I have had regard to the entirety of the evidence from the coronial investigation. I have determined that the cause of death is “traumatic head injury due to instrumental vaginal delivery of a term infant”. The medical cause of death is the traumatic head injury, and it is the findings regarding the circumstances in which the death occurred which explain how the injuries were likely occasioned by the instrumental delivery.

WHETHER THE DEATH WAS PREVENTABLE

262. In submissions filed following the inquest, Counsel Assisting and the Interested Parties all addressed the question of whether the death was preventable. Counsel Assisting submitted that a finding was open that the death was preventable if a c-section had been performed instead of an instrumental delivery.³⁵² On behalf of Mr and Ms Brown it was submitted that the death was preventable.³⁵³ LRH submitted that a finding that the death was preventable was not open.³⁵⁴ On behalf of Dr Chavali, it was submitted that the evidence did not enable a finding that “prospectively the decision as to mode of delivery ought to have been caesarean section.”³⁵⁵
263. The available evidence establishes that the head injuries occasioned by the forceps may have resulted in several ways. First, from the use of additional force needed to utilise forceps delivery in this position as the diameter of the baby’s head is wider, or potentially, due to a failure to recognise that the pelvis was too narrow, also requiring more pulling force on the forceps for delivery. Second, due to a misapplication of the forceps, which were designed for delivery in the OA position. It may be that this resulted in too much pressure being placed on a weaker and less protected part of the skull that the forceps were

³⁵¹ T 942.2-18.

³⁵² Submissions of Counsel Assisting (29 August 2024), p.16.

³⁵³ Submissions on behalf of Mr and Ms Brown (11 November 2024), p.14 [102] – [103], and Submissions in response (28 November 2024), p.2 [15] – [19].

³⁵⁴ Submissions on behalf of LRH (13 November 2024), p.9.

³⁵⁵ Submissions on behalf of Dr Chavali (14 November 2024), p.12-16; and Submissions in reply (25 November 2024).

not designed for. Third, the forceps “slipped” by either not being correctly locked, or misapplied in some other manner, and the traction applied when this occurred may also have resulted in too much pressure being placed on a weaker and less protected part of the skull. Similarly, there may have been a misapplication of the position of the forceps for some other reason which was not appreciated during the first two pulls.

264. The evidence certainly raises a concern that delivery using Neville Barnes forceps in an OP position is not best practice and should not occur due to an existing, but unquantifiable, risk of head injury. It is a possibility that this led to fatal injuries in this case. However, having regard to the divergence of expert opinion and clinical experience about the safety of this practice, I am unable to determine this issue. On the evidence before me, it does not appear to be a settled question in obstetric practice. For this reason, I will make a recommendation that the issue be considered further by RANZCOG.
265. Whilst I cannot determine exactly how the forceps caused the injuries, I am satisfied that it was not due to any grossly inappropriate or unprofessional conduct by Dr Chavali in his conduct of the delivery. On the available evidence, Dr Chavali acted in good faith and exercised his clinical judgment in a manner intended to achieve the safe delivery of Baby H. Regardless, something went terribly wrong during Baby H’s delivery. Fatal head injuries were caused by the forceps. It is self-evident from the catastrophic nature of the injuries, that utilisation of the forceps has somehow resulted in an excessive amount of force being applied to the fetal head sufficient to inflict a degree of injury that has caused death. Whether this was due to the technique with which the forceps were used, or the circumstances of the position of the baby, or a combination of both, remains unclear.
266. It is a logical conclusion that the fatal injuries would not have occurred at the time and manner in which they did if the forceps delivery was not attempted. This was the consistent view of the expert witnesses. In this sense, Baby H’s death was preventable.
267. Dr Hargreaves opined that recourse to a c-section without an attempt at instrumental delivery almost certainly would have meant that Baby H would not have sustained the injuries that he did, and that on the balance of probabilities his death would have been

prevented.³⁵⁶ Dr Charlton concurred with Dr Hargreaves' opinion that if a c-section was undertaken without the use of instruments, it was highly likely Baby H would not have sustained injury.³⁵⁷ Prof Whitelaw opined that if a c-section had occurred without instrumental delivery, Baby H "would've been born in good condition".³⁵⁸ Dr Chavali agreed with the opinion of Dr Hargreaves that Baby H's death would have been prevented if a c-section was performed without attempted instrumental delivery.³⁵⁹

268. Yet, it was uncontested that it was appropriate to attempt and trial use of forceps in theatre when a normal vaginal delivery was no longer a viable option. It was also uncontested that it was not clinically indicated that there be recourse to a c-section in the first instance. I am therefore unable to make a finding that Baby H's death should have been prevented at that time by recourse to a c-section. The caveat to this is that it remains possible that Ms Brown would have expressed a preference for a c-section if there had been no deficiencies in the consent procedure. However, as I regard that possibility as speculative, I am still not comfortably satisfied that Baby H's death should have been prevented by recourse to a c-section, in preference to a trial of forceps.

269. The difficulty with making any further assessment as to whether Baby H's death could have been prevented is the uncertainty in the evidence regarding how the injuries occurred, and what may have resulted if there was a different delivery method pursued. The evidence establishes that the fatal injuries were potentially caused in several ways, and possibly by a combination of those factors and it is therefore not possible to assess which alternate pathway, on the balance of probabilities, may have changed the outcome, other than a delivery by c-section without attempting delivery via instrumentation at all.

270. Some of those factors are attributable to the OP position and would not have occurred if the position was successfully changed to OA by rotation. As rotation was not attempted, it is not known if such an attempt would have succeeded. It is also not known why Baby H was "obstructed", and it remains possible that forceps delivery in an OA position would

³⁵⁶ T 730.7-18.

³⁵⁷ T 940.1-6.

³⁵⁸ T 885.18-20, T 862.14-19.

³⁵⁹ T 690.18-29.

still not have succeeded. What may have occurred with a recourse to c-section after the use of instruments in such circumstances also cannot be assessed.

271. The evidence of Dr Hargreaves suggests that there should have been a c-section, in the absence of rotation from OP to OA position. It is possible that had an attempt at correction of the position been attempted, but not successful, a different obstetrician, including Dr Hargreaves, would have converted to a c-section. However as outlined above, it remains unknown whether an attempt at correction of the position would have succeeded or not. I also note that Dr Hargreaves was less certain about the likely outcome when scenarios were put to her that involved variations of a vacuum being used to correct the malposition first, where a c-section resulted, although she still thought it “highly likely” that the injuries would be less.³⁶⁰ Generally, Dr Hargreaves considered that c-sections during labour are high risk. Dr Hargreaves also opined that if correction of a malposition was attempted and unsuccessful, leading to a c-section, she could not say that the outcome would have been any different.³⁶¹ There were clear risks inherent in performing a c-section at the second stage of labour and these increased the lower the fetal head descended into the pelvis.
272. The possibility of prevention is even less certain after the point at which the forceps delivery commenced. It was the evidence of Dr Hargreaves that “it’s almost impossible to know at what point each of the injuries that Baby H sustained occurred and as a result of what particular part of the attempted delivery was responsible, it is impossible to answer that question”.³⁶² Dr Hargreaves’ evidence was that she could not identify “at which point injury could have been prevented or even the nature thereof”.³⁶³
273. On the basis of that evidence, and accepting that the injuries which caused death were caused by the forceps, it cannot be known whether Baby H would have survived if Dr Chavali had reverted to a c-section after the first or second pull on the forceps, or the occasion when they “slipped”. Although, Dr Hargreaves also opined that if Dr Chavali had

³⁶⁰ T 730.19-29.

³⁶¹ T 781.23 - 782.20.

³⁶² T 729.27-31.

³⁶³ T 730.6-7.

switched to a c-section delivery following the first pull, she believed that the injuries would have been mitigated.³⁶⁴

274. It therefore cannot be known whether the outcome would have been different if a c-section was performed after the first or second pull of the forceps when station was gained, as it is unknown if Baby H had suffered the fatal injury by that time, noting that there was a third “slippage” of the forceps which may also account for the head injuries. It is unclear whether a c-section at a time after the commencement of the forceps would have assisted in preventing the death, but it likely would not have.
275. The variation in this evidence and analysis demonstrates how speculative the alternate possibilities are. All that can be said is that Baby H’s death was preventable if a forceps delivery did not occur in the manner that it did. However, I am unable to determine on the balance of probabilities that the death should have been prevented due to the uncertainty in the evidence about how the forceps caused the injuries, and the uncertainty about the standard of acceptable obstetric practice regarding the use of Neville Barnes forceps in the OP position.

FINDINGS

276. Having investigated the death of Baby H, and having held an inquest in relation to this death on 28 August–1 September 2023, 18 December 2023 and 24–26 June 2024 at Melbourne, I find that:
- a) the identity of the deceased was Baby H, born 23 March 2019;
 - b) the death occurred on 24 March 2019 at The Royal Children’s Hospital, Melbourne, 50 Flemington Road, Parkville, Victoria 3052; and
 - c) the cause of death was 1(a) traumatic head injury due to instrumental vaginal delivery of a term infant.

³⁶⁴ T 792.30 - 793.10.

d) the death occurred in the circumstances as described above.

COMMENTS

277. I make the following comments connected with the death under section 67(3) of the Act.

278. There was a previous Ahpra investigation concerning Dr Chavali's conduct of the delivery of Baby H. The investigation occurred prior to the completion of the coronial investigation, which has considered a substantial volume of expert evidence that was not available to Ahpra at the time of their investigation. As such, I have included Ahpra on the distribution list and directed that a copy of the finding be provided to them for consideration.

279. The findings have identified deficiencies in the consent procedure and transfer of care from Dr Brougham to Dr Chavali. Since Baby H's death, changes have been made to practices and procedures at LRH as a result of recommendations arising from the Root Cause Analysis conducted by LRH and SCV, and there was evidence provided to the Court of other changes made by LRH in relation to consent procedures for obstetric patients.³⁶⁵ I am satisfied that these changes have addressed the issues which contributed to the deficiencies in the consent process for Ms Brown and I have not identified a need for any further comment or recommendations in relation to that issue.

RECOMMENDATION

280. I make the following recommendation connected with the death pursuant to section 72(2) of the Act:

That RANZCOG review any relevant guidelines concerning instrumental delivery and consider:

a. Whether delivery using Neville Barnes forceps in the occipito posterior position is contrary to best practice;

³⁶⁵ Submissions on behalf of Latrobe Regional Hospital (13 November 2024), p.4 [12]-[13].

- b. Whether reference should be made in any RANZCOG guidelines to any concerns with the safety of using Neville Barnes forceps in the occipito posterior position.*

CONCLUSION

281. I acknowledge the profound grief of Baby H's parents. This was evident from the concerns they raised with the Court regarding Baby H's death, and through their coronial impact statements. Mr and Ms Brown attended Court throughout the lengthy inquest proceedings, which entailed exposure to detailed evidence of the injuries suffered by their baby, as well as the details of his critical medical condition during the short time before his passing. The inquest canvassed many contested issues and Mr and Ms Brown also both gave evidence regarding what occurred, reliving a painful and traumatising experience. I acknowledge that this process may have been both confronting and distressing for them. I offer my sincere condolence to Baby H's family for their loss.

ORDERS AND DIRECTIONS

Pursuant to section 73(1) of the Act, I order that this finding be published on the Coroners Court of Victoria website in accordance with the rules.

Pursuant to section 49(2) of the Act, I direct the Registrar of Births, Deaths and Marriages to amend the cause of death to the following "1(a) Traumatic head injury due to instrumental vaginal delivery of a term infant".

I direct that a copy of this finding be provided to the following:

Ms Brown, Senior Next of Kin (c/- Blumers Personal Injury Lawyers)

Latrobe Regional Hospital (c/- K & L Gates)

Dr Pinaki Chavali (c/- Avant Law)

The Royal Children's Hospital

Dr Samantha Hargreaves

Safer Care Victoria

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists

The Australian Health Practitioner Regulation Agency

Signature:



Catherine Fitzgerald
Coroner

Date: 1 July 2026

NOTE: Under section 83 of the *Coroners Act 2008 (the Act)*, a person with sufficient interest in an investigation may appeal to the Trial Division of the Supreme Court against the findings of a coroner in respect of a death after an inquest. An appeal must be made within 6 months after the day on which the determination is made, unless the Supreme Court grants leave to appeal out of time under section 86 of the Act.
