SHERIFFDOM OF GLASGOW AND STRATHKELVIN AT GLASGOW

[2025] FAI 37

GLW-B59-24

DETERMINATION

BY

SHERIFF BRIAN MICHAEL CAMERON

UNDER THE INQUIRIES INTO FATAL ACCIDENTS AND SUDDEN DEATHS ETC (SCOTLAND) ACT 2016

into the death of

SONNY CAMPBELL AND CAILYN NEWLANDS

GLASGOW, 21st August 2025

DETERMINATION

The Sheriff having considered the information presented at the Inquiry, determines in terms of section 26 of the Inquiries into Fatal Accident and Sudden Deaths etc (Scotland) Act 2016 ("the Act") that :

Sonny Campbell ("Sonny")

1. In terms of section 26(2)(a) of the Act, Sonny Campbell died at 1245 hours on 6 December 2016 within the Emergency Department (resuscitation unit) of the Royal Hospital for Children at the Queen Elizabeth University Hospital , Glasgow. He was 1 year and 10 months old at the time of his death.

2. In terms of section 26(2)(b) of the Act, there was no accident which resulted in Sonny's death and accordingly there is no finding in terms of section 26(2)(d) of the Act.

3. In terms of section 26(2)(c) of the Act, the cause of Sonny's death was acute haemorrhagic leucoencephalitis ("AHLE").

4. In terms of section 26(2) (e) of the Act, there are no precautions which could reasonably have been taken that might realistically resulted in Sonny's death being avoided.

5. In terms of section 26(2)(f) of the Act, there were no defects in any system of working which contributed to Sonny's death.

6. In terms of section 26(2)(g) of the Act, I have set out below the material facts relevant to Sonny's death. Beyond those there are no other facts relevant to Sonny's death.

RECOMMENDATIONS

The Sheriff, having considered the information presented at the Inquiry, makes no recommendations in terms of section 26(1) (b) of the Act.

Cailyn Newlands ("Cailyn")

1. In terms of section 26(2) (a) of the Act, Cailyn Newlands died at 2042 hours on 6 December 2016 within the Emergency Department of the Royal Hospital for

Children at the Queen Elizabeth University Hospital, Glasgow. She was 1 year and 11 months old at the time of her death.

2. In terms of section 26(2)(b) of the Act, there was no accident which resulted in Cailyn's death and accordingly there is no finding in terms of section 26(2) (d) of the Act.

3. In terms of section 26(2)(c) of the Act the cause of Cailyn's death was Streptococcus Pneumoniae Bronchopneumonia.

4. In terms of section 26(2) (e) of the Act, a precaution which could reasonably have been taken and had it been taken, might realistically have resulted in Cailyn's death being avoided was to have admitted Cailyn to the Clinical Decision Unit on 5 December 2016 for further observation.

5. In terms of section 26(2) (f) of the Act, there were no defects in any system of working which contributed to Cailyn's death.

6. In terms of section 26(2) (g) of the Act, I have set out below the material facts relevant to Cailyn's death. Beyond those there are no other facts relevant to Cailyn's death.

RECOMMENDATIONS

The Sheriff, having considered the information presented at the Inquiry, makes no recommendations in terms of section 26(1)(b) of the Act.

NOTE

Preliminary matters

[1] As Sheriff Principal Anwar said in the recent determination into the tragic deaths of *Leo Lamont, Ellie McCormick and Mira-Belle Bosch* [2025] FAI 15 "The death of a child is an unimaginable and deeply painful event in any parent's life; one from which it is undoubtedly difficult to recover." In this inquiry the grief and pain of the families of Sonny and Cailyn was clear to see. On being told by medical staff that Sonny had passed away, his mum said in her affidavit "Never in a million years did I think that was the next thing that was going to happen." Cailyn's mum told the inquiry "My life has been turned upside down."

[2] The inquiry was shown photographs of both Sonny and Cailyn. Those photographs portrayed happy, contented and healthy children. Sonny's gran told the inquiry that he liked to "make a mess and play with his paw patrol toys" and that he liked going to playgroup. Cailyn's mum told the inquiry that Cailyn was healthy and active (she would go to soft play areas) and that "she was desperate to start school." Once again I offer my deepest condolences to the families of both Sonny and Cailyn.

[3] I think it is also important to recognise that the tragic deaths of Sonny and Cailyn will inevitably have taken its toll and weighed heavily on the medical staff involved.

[4] The issue of the delay in holding this inquiry was a concern to all parties and to the court. The children's deaths occurred on 6 December 2016, with the Crown being notified of both deaths only days later. The Notice from the Crown that an inquiry into Sonny and Cailyn's deaths is dated 15 January 2024. That delay will have undoubtedly

taken its toll on the children's families (and it is recognised by the court that the delay will also have impacted on the medical clinicians involved). As at the date of the hearing on submissions no explanation had been given by the Crown for such a delay. In supplementary written submissions the Crown recognised that a full explanation of the circumstances which led to or contributed to the delay should be made available. The Crown undertook to lodge additional supplementary written submissions setting out in detail the history of its investigations and the steps taken to bring this Fatal Accident Inquiry to a conclusion within a period of 2 weeks. I allowed the families of Sonny and Cailyn a period of 2 weeks thereafter to lodge written submissions in response if so advised.

[5] The Crown's additional supplementary submissions in relation to the issue of the delay were received by the court on 13 June 2025. I do not consider it necessary to rehearse those at length, the families in particular will have had the opportunity to consider them. A summary is set out in the paragraphs below.

[6] The Crown acknowledged that the investigation and the initiating of the inquiry had taken an unacceptable length of time. It apologised to the next of kin, friends, medical staff and the participants for the delay and for the adverse impact that the delay has had on them. It also recognised that the next of kin, families, friends and all those impacted by the deaths of the children were intimately concerned in the investigation and that the delay compounded and prolonged, in particular the grief and trauma of all those involved.

[7] It was also recognised that the delay will have had the potential to impact on the efficacy of any inquiry, in particular in relation to person's memories, the gathering of information and the consideration of recommendations in a practical manner may be more difficult given the passage of time.

[8] The Crown advised that it has learned lessons from this inquiry and has put in place and continues to implement measures to address the issues that contributed to the delay and to reduce the risk of such delays in the future.

[9] The Crown identified a number of issues that contributed to the delay in this inquiry. Those included:

- Following the deaths of the children Greater Glasgow & Clyde Health Board instigated a Significant Clinical Incident Review ("SCIR") in each case. It is the usual practice of the Crown to await the outcome of such reviews particularly before a decision to hold a discretionary inquiry can be taken. The findings of such reviews is a relevant and important factor in determining whether a public interest exists for instructing a discretionary fatal accident inquiry.
- The time taken to identify and then instruct suitable experts in the Crown's investigations incurred considerable delay. The Crown's position was that "expert and suitably qualified paediatricians who are willing to accept Crown instructions are not a plentiful resource." Furthermore it was not considered prudent to instruct any expert while the SCIR process was ongoing as (i) the outcome of that process might inform the appropriate

experts to be instructed and (ii) it also limited the availability of experts as it would not have been appropriate to instruct those engaged in the SCIR process.

- The instruction of and receiving of each expert report required further investigation and additional expert opinion evidence.
- The process of instruction of and thereafter obtaining expert reports "stalled" notably during the COVID – 19 pandemic, particularly over the course of 2020 into 2021.
- Further investigation of the causes of the children's deaths was considered in the context of an ongoing investigation into water contamination at the Queen Elizabeth University Hospital in Glasgow. The Crown would not consider holding a discretionary inquiry without considering whether the matter would be more appropriately considered within the scope of another investigation and inquiry.
- The children's deaths were initially investigated separately and it was some time before consideration was given to them being investigated together. The decision to hold a conjoined inquiry was delayed, largely due to the fact that such conjoined inquiries were, at the time unusual.
- The Crown recognised that there have been delays due to staffing and personnel changes. It was accepted that repeated changes in personnel and "ownership" of cases was undesirable, given the inevitable impact on the timely progress of an investigation. The Crown advised that every effort

was made to address the resourcing issues within the Scottish Fatalities Investigation Unit ("SFIU"). The Crown submitted that he staff within the SFIU are all acutely aware of the sensitive and important work they do (acting with compassion and professionalism) and the impact that their work and actions will have on bereaved families in particular.

[10] The Crown advised that the measures implemented as a consequences of the lessons learned from this inquiry included;

- The Crown recognised that it has no statutory authority to compel the NHS to undertake a SCIR or to provide that information to it for the purpose of a death investigation and that it relies on the continuing voluntary support and co-operation of the NHS in that regard. The Crown recognised that the provision of that information within reasonable timescales relies on constructive engagement with health boards at local level and is dependent of the health boards having resources, in time, money and importantly personnel to undertake those reviews. To that end the Crown within the SFIU has done considerable work recently to support, where it can, earlier completion of these reports, including meeting the management teams of all 22 geographic and territorial health boards in Scotland.
- There is now in existence a specialist Crown team tasked with investigating matters of water contamination connected to Queen Elizabeth University Hospital. That team was not in existence at the time of the children's deaths, which as a consequence led to the delays which have been

identified. It was submitted that the establishment of that specialist team represented a "concrete example" of an improvement that the Crown has made to the investigation of deaths in recent years and that its initiation should lead to the delays in the investigation in the present cases not being repeated subsequently.

- Insofar as the conjoining of inquiries, the scope for such inquiries has led to the Crown adapting its processes. Significant progress has been made in respect of this change in thinking and working, across death investigation teams, not least informed by the learning obtained through investigation of Sonny and Cailyn's deaths. It was submitted that the deaths were to occur now, a "theme" and conjoined investigation would be initiated earlier, even if no decision was definitely taken to conjoin any resulting fatal accident inquiry.
- As regards liaison with the Scottish Courts and Tribunals Service, the head of SFIU now writes to all Sheriffs Principal on a quarterly basis to ensure that future fatal accident inquiry business is factored into the court programme as efficiently as possible.
- The Crown submitted that it has made significant changes since 2016 to its working practices, designed to deliver improvements in the investigation of sudden, unexpected and unexplained deaths, acknowledging that in some instances, as in the these cases in the investigation of the deaths of Sonny and Cailyn, the time taken to conclude a thorough death

investigation was too long. The Crown, it was submitted, is committed to managing cases where a prolonged period of investigation is necessary as efficiently as possible.

- SFIU has also implemented changes to the way it manages its work by undertaking a wholesale review of all processes involved in a death investigation. The aim was to reduce the time for completion of death investigations with a particular focus on clearing a backlog of cases. Focus was placed on making improvements to processes in many areas including (i) changes to the electronic recording of data to ensure that the information held was accurate and robust. That information is now used to monitor the efficient progress of death investigations; (ii) the introduction of a system of proactive management of death investigations (including through Case Management Panels ("CMPs") and an escalation process where information is requested from third parties; (iii) the creation of internal guidance is now being prepared to promote consistency and excellence in the investigation of deaths such as a parallel proceedings protocol; (iv) the establishment of a Death Investigation Board to oversee all ongoing pieces of work and new proposals to achieve greater public confidence, to improve the service delivered to bereaved relatives and to reduce the "journey time for concluding death investigations including fatal accident inquiries; (v) every death over 2 years old and death in custody is monitored by senior management through the CMP process; (vi) this

financial year, following a pilot in 2024, a dedicated tem has been established which solely investigates and seeks to progress the oldest unresolved cases across all death investigation teams; and (vii) SFIU is being restructured into a functional model with the aim of reducing the age profile of death investigations and fatal accident inquiries with each area now comprising a team dedicated to dealing with all deaths requiring further investigation including fatal accident inquiries.

- In conclusion the Crown accepted that there is still work to be done to reduce the time it takes to conclude death investigations.

[11] The court is grateful to the Crown for its full and frank submissions on the issue of delay in investigating and holding this inquiry. It is hoped that the lessons learned, the steps that have already been taken and those that will be implemented in the future will help avoid the unacceptable delay such as in this inquiry.

Introduction

[12] This Inquiry is a discretionary inquiry under section 4(1)(a)(ii) and 4(1)(b) of the Fatal Accidents and Sudden Deaths etc (Scotland) Act 2016 ("the Act"). In its supplementary submissions the Crown advised that the children's deaths were reported to the Crown on 7 December 2016. I note, however, that the intimation of death form (Form PF) in respect of Sonny's death is dated 9 December 2016. Likewise the intimation of death form in respect of Cailyn's death is dated 12 December 2016. The Lord Advocate considered that the deaths of Sonny and Cailyn occurred in

circumstances giving rise to serious public concern and that it was in the public interest for inquiries to be held into the circumstances of each death. The Lord Advocate also considered the deaths to have occurred in similar circumstances and accordingly the inquiries were conjoined in terms of section 14 of the Act and a single inquiry held.

[13] Preliminary hearings took place on the following dates:

(i) 8 March 2024

(ii) 29 May 2024

(iii) 22 August 2024

(iv) 17 December 2024

(v) 3 February 2025

[14] The inquiry hearing took place on 17 - 21 March 2025, 24 - 25 March 2025 and 27 – 28 March 2025. A hearing on submissions was held on 30 May 2025 with written submissions being lodged in advance.

[15] The Crown were represented by Isabella Ennis KC. NHS Greater Glasgow and Clyde Health Board ("GGCHB" or "the Board") was represented by Helen Watts KC with Shane Dundas as junior counsel. Sonny's next of kin were represented by Mark Allison, advocate and Cailyn's next of kin were represented by Rosemary Guinnane, advocate.

[16] The inquiry heard from the following witnesses:

(i) Isobel Reilly, Sonny's maternal gran. Ms Reilly had sworn an affidavit which was supplemented by oral evidence.

(ii) Dr Aofie Ryan, who in December 2015 was working in the Emergency Department at the Royal Hospital for Children ("the Emergency Department" or "RHC")). She examined Sonny when he was brought to the Emergency Department on 5 December 2016. At the time she examined Sonny, Dr Ryan was a ST1 doctor (meaning she was in the first year of specialist training in paediatrics) and had commenced working in paediatric emergency medicine in August 2016. Dr Ryan had sworn an affidavit which was supplemented by oral evidence.

(iii) Dawn Anderson, Cailyn's mum. Ms Anderson had sworn an affidavit which was supplemented by oral evidence.

(iv) Allan Newlands, Cailyn's dad. Mr Newlands had sworn an affidavit which was supplemented by oral evidence.

(v) Dr Owen Wilson, who in December 2016 was working in the Emergency Department. He examined Cailyn when she attended the Emergency Department on 2 December 2016. At the time he examined Cailyn, he was a LAT (locum appointment for training doctor) in paediatrics. Dr Wilson had sworn an affidavit which was supplemented by oral evidence. Dr Wilson gave evidence by way of a remote link.

(vi) Dr Galvin Gan, who in December 2016 was working in the Emergency Department. He examined Cailyn when she attended the Emergency Department on 5 and 6 December 2016. At the time he examined Cailyn, Dr Gan was a ST 3 doctor (meaning he was in his third year of specialist

emergency medicine training) and had commenced working in paediatric emergency medicine in August 2016. Dr Gan had sworn an affidavit which was supplemented by oral evidence.

(vii) Dr Dylan Broomfield, a Consultant in Paediatrics and Paediatric Emergency Medicine at the Royal Hospital for Sick Children in Edinburgh. Dr Broomfield had prepared an expert report in respect of the management of Sonny at the Emergency Department on 5 and 6 December 2016. Dr Broomfield spoke to his report and supplemented it by oral evidence. Dr Broomfield gave evidence by way of a remote link.

(viii) Dr Hannah Kendrew-Jones, who in December 2016 was working in the Emergency Department. Dr Kendrew-Jones examined Cailyn on 5 December 2016 when she was within the Emergency Department. At the time Dr Kendrew-Jones examined Cailyn, Dr Kendrew-Jones was a ST 3 doctor. Dr Kendrew-Jones had sworn an affidavit which was supplemented by oral evidence. Dr Kendrew-Jones gave evidence by way of a remote link.

(ix) Dr Joanna Stirling, who in December 2016 was working in the Emergency Department as a Consultant in paediatric emergency medicine (and continues to do so having held that post since 2007). Dr Stirling did not personally examine Cailyn but discussed her case with Dr Gan. Dr Stirling had sworn an affidavit which was supplemented by oral evidence.

(x) Dr Michael Coren, a Consultant Paediatrician at St Mary's Hospital, London. Dr Coren had prepared expert reports in respect of the paediatric care and treatment of both Sonny and Cailyn at the Emergency Department. Dr Coren spoke to both his reports and supplemented them by oral evidence. Dr Coren gave evidence by way of a remote link.

(xi) Dr Anand Kanani, a Consultant in Paediatric Emergency Medicine at Birmingham Women's and Children's NHS Trust. Dr Kanani had prepared an expert report in respect of the management of Sonny at the Emergency Department on 5 December 2016. Dr Kanani spoke to his report and supplemented it by oral evidence. Dr Kanani gave evidence by way of a remote link.

(xii) Professor Shamez Ladhani, a Consultant Paediatrician specialising in the management of children with immunodefiency and infectious diseases and based at St Georges Hospital, London. Professor Ladhani had prepared an expert report in respect of Cailyn's illness and the management of her care at the Emergency Department on 2 December 2016, 5 December 2016 and 6 December 2016. Professor Ladhani spoke to his report and supplemented it by oral evidence. Professor Ladhani gave evidence by way of a remote link.

(xiii) Dr Michael Donald, a Consultant in Emergency and Retrieval Medicine at Ninewells Hospital and Medical School in Dundee. Dr Donald had prepared an expert report on Cailyn's illness, her treatment and condition

at the Emergency Department on 2 December 2016, 5 December 2016 and 6 December 2016. Dr Donald spoke to his report and supplemented it by way of oral evidence. Dr Donald gave evidence by way of a remote link.

(xiv) Dr Paul Eunson, formerly (now retired) a Consultant Paediatric Neurologist at Royal Hospital for Sick Children in Edinburgh and presently working with Children's Hospices Across Scotland caring for children with severe chronic neurodisability and other life-limiting conditions. Dr Eunson had prepared an expert report on Sonny's condition and care at the Emergency Department on 5 December 2016.

(xv) The court also had the benefit of affidavits from Sonny's mum, Amy Reilly, Sonny's Dad, Stuart Campbell, Cailyn's paternal gran, Christine Anderson and Dr Ashutosh Deshpande a Consultant Microbiologist at the Queen Elizabeth University Hospital, Glasgow. I have considered those affidavits and am prepared to accept those as the witnesses' evidence subject to the caveat that none of those witnesses were cross-examined.

(xvi) The factual background to the Inquiry is largely not controversial. Parties had entered into extensive joint minutes of agreement. I do not intend to set out all of the evidence, given that much of it was not controversial. Where there was competing or conflicting evidence on matters central to the issues before the inquiry I have set out the basis of my assessment of that evidence.

(xvii) The court also had the benefit of a glossary of medical terms which is produced at appendix 1 to the determination.

[17] In general terms I found that all witnesses who attended the inquiry were credible in the sense that they doing their best to assist the inquiry by the evidence they were giving. I am conscious however that the witnesses (in particular the witnesses to fact) were speaking to tragic events that occurred some 8 (almost 9) years ago. In assessing the reliability of witnesses in relation to certain parts of the evidence, I have had to bear that passage of time in mind and consider whether has had an impact on witnesses recollections. In certain aspects of the case I have also had the benefit of documentary evidence which has been of assistance in allowing me to assess which evidence should be preferred. I have also sought to assess the evidence of the skilled witnesses where possible by reference to objective materials.

The legal framework

[18] This inquiry was held under section 1 of the Act. The inquiry is a discretionary inquiry in terms of section 4 of the Act. The inquiry is governed by the Act of Sederunt (Fatal Accident Inquiry Rules) 2017.

[19] In terms of section 1(3) of the Act, the purpose of this inquiry is to establish the circumstances of Sonny and Cailyn's deaths and to consider what steps (if any) might be taken to prevent other deaths in similar circumstances.

[20] Section 26 of the Act sets out the matters to be covered in the determination. These include setting out findings on the following:

(a) when and where the death occurred,

(b) when and where any accident resulting in the death occurred,

(c) the cause or causes of the death,

(d) the cause or causes of any accident resulting in the death,

(e) any precautions which—

(i) could reasonably have been taken, and

(ii) had they been taken, might realistically have resulted in the death,

or any accident resulting in the death, being avoided,

(f) any defects in any system of working which contributed to the death or any accident resulting in the death

(g) any other facts which are relevant to the circumstances of the death.

They also include setting out such recommendations (if any) in relation to:

(a) the taking of reasonable precautions;

(b) the making of improvements to any system of working;

(c) the introduction of a system of working;

(d) the taking of any other steps

which might realistically prevent other deaths in similar circumstances.

[21] The procurator fiscal represents the public interest in investigating, arranging and conducting an inquiry. Fatal Accident Inquiries are an inquisitorial and not an

adversarial process. It is not the purpose of an inquiry to establish civil or criminal liability.

Summary

Sonny Campbell

The facts in relation to Sonny

[22] Sonny was born on 20 January 2015. He lived in Glasgow with his twin brother and mum. He was a registered patient at Lightburn Medical Centre in Glasgow. He had received, at the recommended time, all the recommended immunisations for a child of his age.

[23] On Friday 2 December 2016, Sonny's gran, Isobel Reilly, Contacted Lightburn Medical Centre regarding Sonny being unwell. Consequently Sonny was taken to Lightburn Medical Centre by his gran where he was examined by Dr Elizabeth Craven ay 1524 hours.

[24] Dr Caven noted a history of "cold and cough since yesterday. *No vom, no diarrhoea.* Drinking. *Wet nappies. Grant has given him calpol 1 hour ago".*

[25] Dr Caven examined Sonny and noted that:

(i) his temperature was 38.3 degrees

(ii) he had a capillary refill time of less than two seconds

(iii) he was irritable

(iv) he was difficult to assess

(v) he had a runny nose

(vi) his chest was clear with no increased respiratory rate

(vii) nothing abnormal was detected in his ears or throat.

Dr Caven advised she would review Sonny once again if necessary and advised that Sonny's brother would be likely to develop the same symptoms.

[26] Dr Caven prescribed:

(i) 120 mg of paracetamol to be taken every 4 to 6 hours

(ii) 100 mg of ibuprofen to be taken three times a day after food

(iii) chloramphenicol eye drops 0.5 %, one drop to be administered every 2 hours initially, reducing the frequency as his eye infection improved.

[27] On Monday 5 December 2016 Sonny was taken to Lightburn Medical Centre by his mum where he had a consultation with Dr Kate Fleming at 1602 hours.

[28] At this consultation, Sonny presented with a 4-day history of vomiting, which was reported as being worse on the day of presentation.

[29] Dr Fleming examined Sonny. She noted his temperature was 37.8 degrees. Sonny's patient glucose test was recorded as 8.9 millimoles/litre. Dr Fleming noted that:

(i) Sonny was pale

(ii) he was irritable when woken

(iii) he was easily rousable

(iv) he showed no evidence of meningism

(v) his pupils were equal and reactive to light

(vi) his sclera were not jaundiced

(vii) it was difficult for Dr Fleming to properly examine Sonny's abdomen, but she was able to determine that he did not have any acute abdomen issues as he was happily sitting with his mum

(viii) his ears, throat and chest were clear

Dr Fleming was made aware Sonny had been given Calpol at 1.00pm that day.

[30] Dr Fleming referred Sonny to the Royal Hospital for Children, Glasgow. Dr Fleming suspected Sonny was suffering from viral gastritis and an upper respiratory tract infection (URTI).

[31] Dr Fleming gave a handwritten referral letter to Sonny's mum. The letter noted, amongst other things that:

(i) Sonny had been suffering from vomiting for 4 days and had vomited larger amounts that day

(ii) he had preceding coryzal symptoms

(iii) there had been no diarrhoea

(iv) he had been taking less fluids

(v) he had fewer wet nappies

(vi) he had been sleeping more, though was easily rousable

(vii) he had been suffering from a 4 day fever with no clear source

(viii) he appeared mildly dehydrated

(ix) Dr Fleming queried the need for IV fluids and a period of observation

[32] Dr Fleming telephoned the GP referral line at the Royal Hospital for Children to let them know the that Sonny's mum would shortly be arriving with Sonny, having noted that she was happy to take Sonny to the hospital herself.

[33] Sonny arrived at the Royal Hospital for children with his mum and gran at 1718 hours on Monday 5 December 2016. The reason noted for his attendance was "vomiting".

[34] Sonny was assessed at 1738 hours by nurse Tori Shannon. Nurse Shannon recorded that:

(i) Sonny's temperature was 38.5 degrees,

(ii) his heart rate was 160 beats per minute

(iii) his respiratory rate was 30 breaths per minute

(iv) his oxygen saturations were 99 %.

[35] Nurse Shannon recorded within the nursing notes "vomited once Friday and Saturday and has vomited today as well. Pyrexial. Nappies wet but reduced intake. Upset at triage when obs taken". Sonny was allocated a triage category of 4 (triage categories run from 1 to 5 with category 1 being the most serious and category 5 the least serious). Sonny was given 210 mg of paracetamol.

[36] Sonny was seen by Dr Aoife Ryan at around 1800 hours. At that time Dr Ryan was a paediatric emergency medicine ST 1, meaning that she was in her first year of specialist training in paediatric medicine. Dr Ryan had commenced working in the Emergency Department in August 2016. On commencement she had attended a generic hospital induction programme and a departmental-specific induction programme.

Dr Ryan also attended weekly Emergency Department teaching programme. That training and experience of working in the Emergency Department provided Dr Ryan with the knowledge and skills for the recognition of "red flag" warning signs to look out for in assessing whether a child was or was at risk of becoming acutely unwell.

[37] Only part of Dr Ryan's clinical notes in respect of Sonny were completed contemporaneously (in Crown Production 8 pages 163 - 164) those are the notes from "O/E" (on examination) to the end. In relation to the notes written above from "Day 4 vomiting…" to "…no recent foreign travel", those were written the following day (6 December 2016 at about 1300 hours) prior to her commencing her shift that day. The notes transcribed on 6 December 2016 were taken from rough notes Dr Ryan had made whilst taking a history from Sonny's mum. Those rough notes were made on the back of Sonny's patient identification labels sheet. The clinical notes were not completed contemporaneously by Dr Ryan due to "clinical pressures" within the Emergency Department at that time.

[38] Dr Ryan's clinical notes are clear, legible and reasonable (particularly for a doctor of her grade at the time) showing a clinical history and examination of a thorough and high standard.

[39] The General Medical Council guidance states that a doctor should make records at the same time as the events that are being recorded or as soon as possible afterwards. It is common practice for doctors working in the pressurised environment of an emergency department to delay writing clinical notes until a point where there is more

time to write, perhaps even at the end of a shift prior to leaving. It is not common practice to leave the completion of clinical notes until the following day.

[40] Dr Ryan's clinical impression after taking a history from Sonny's mum and examining Sonny was that he was most likely suffering from a viral illness such as viral enteritis (a viral vomiting illness). That impression was owing to his presentation with 4 days of fever, vomiting, development of cortyzal symptoms within the 24 hours preceding hospital presentation, alongside presence of a red throat and red eardrums.

[41] When Dr Ryan examined Sonny on 5 December 2016 there were no clinical factors for her to assess Sonny as having bronchopneumonia. Nor was there a clinical basis for Dr Ryan to have prescribed antibiotics. Furthermore there was not any need, at that stage, for blood tests or a chest x-ray to be carried out; a period of observation was appropriate.

[42] Sonny was discharged at about 1950 hours on 5 December 2016 having been examined by Dr Ryan again at 1855 hours (when Sonny appeared brighter with an improved skin colouring) and 1930 hours. In light of the examination and observations made by Dr Ryan at 1855 hours and 1930 hours it was appropriate (and in accordance with good practice at the time) to discharge Sonny at that time.

[43] On being Sonny being discharged, Dr Ryan gave Sonny's mum and gran "worsening advice" also known as "safety netting advice". In particular Dr Ryan advised of "red flag" features that would warrant Sonny being represented to the Emergency Department for medical review. This specifically included should Sonny take less than 50% of his usual fluid intake; if there was a continued reduction of wet

nappies produced; if his vomiting persisted; or if he became lethargic again. In addition it was at that time Dr Ryan's usual practice to encourage families to seek further medical review of their child should they have any ongoing or new concerns. It is also Dr Ryan's usual practice to mention that paracetamol or ibuprofen can be given if the child is distressed or uncomfortable in the context of the child having a fever. Dr Ryan also usually highlights the importance of children being given regular fluids (ensuring that those are sugary if the child's solid food intake is decreased); that it was important to look out for signs of dehydration; and that children still in nappies should be producing at least one wet nappy every 6-8 hours.

[44] The worsening advice given by Dr Ryan to Sonny's mum and gran was adequate and appropriate.

[45] Sonny was not reviewed by a consultant or more senior clinician to Dr Ryan's grade prior to his discharge.

[46] On 6 December 2016, Sonny's gran attended at her daughter's address to take care of Sonny to allow Sonny's mum to run some errands.

[47] Sonny's mum returned home at approximately 1120 hours on 6 December 2016. She observed that Sonny looked pale and that this skin had a yellow tinge. Sonny's breathing became laboured. He was unable to breathe properly, instead taking short intakes of breath, and his eyes began to roll. Sonny's mum telephoned 999, whilst Sonny's gran commenced CPR.

[48] The Scottish Ambulance Service were contacted at 1142 hours. The telephone call was passed to an ambulance crew at 1143 hours. The ambulance crew arrived at

Sonny's home at 1153 hours. The crew left there at 1200 hours and arrived at the Royal Hospital for Children at 1215 hours.

[49] The information noted by the ambulance crew was as a follows:

> "999 call to above for 23 mth old child?? SOB on arrival of P: R: U child unresponsive, no tone, no interaction, no speech, on full and thorough exam child displaying nasal flaring. Very poor respiratory effort, pale, cyanosed, jaundice in appearance. NB was at RHC last night for? vomiting though discharged latterly. Full obs at scence/ en route. Though despite crew best efforts, child's condition continued to deteriorate rapidly. IPPV commenced at st scene and latterly full CPR commenced in vehicle. Stand by requested at RHC"

[50] The ambulance crew assessed Sonny on arrival at this home. He initially had cardiac output. It was decided he should rapidly be moved to the ambulance and transferred to hospital. In the ambulance Sonny deteriorated further, requiring bag and valve mask ventilation. Approximately one minute prior to arrival at hospital, Sonny's heart rate dropped to 39 beats per minute. His respiratory rate was 0 and as such chest compressions were commenced.

[51] On arrival at the Royal Children's Hospital for children, Sonny was immediately taken into "resus". A team of clinicians had been advised of the imminent arrival of Sonny by ambulance. The team included Dr Lynsey Johnston (Consultant), Dr Eileen Ramsay (Consultant), Dr Fiona Russell (Consultant), Dr Bell (Consultant) and Dr James Paterson (ST3). Dr Johnston recorded the history of Sonny's condition from his mum and gran and from the ambulance crew.

[52] On arrival at Royal Hospital for Children, Sonny was observed to have:

(i) waxy and pale skin

(ii) his lips were blue

(iii) he had no palpable pulse

(iv) on the cardiac monitor his heart rhythm was asystole (no beating)

(v) he had no obvious rashes or marks on his skin

[53] Dr Johnston noted that cardiopulmonary resuscitation had been commenced by the ambulance crew on the journey to the Royal Hospital for Children. The resus team continued with cardiopulmonary resuscitation. Sonny was intubated by Dr Bell alongside Dr James Paterson. Sonny was intubated with a size 4.5 cuffed endotracheal tube and was ventilated. The contents of Sonny's stomach were suctioned. Sonny was then intubated without difficulty. Intraosseous (IO) and Intravenous (IV) access were established. Sonny was administered o.1 millilitres of IV 1in 10,000 of adrenaline. The asystole protocol was followed by continuing CPR alongside pulse checks and administering adrenaline every 4 minutes. Boluses of normal saline, 10% dextrose, hydrocortisone, atropine and calcium chloride were administered throughout.

[54] After 8 minutes there was no cardiac output. All resuscitation efforts were continued but no pulse was found. With agreement of the resuscitation team CPR was discontinued after 26 minutes in the presence of Sonny's mum and dad. Sonny was pronounced dead at 1245 hours on 6 December 2016.

[55] At around 1300 hours Dr Ryan was informed that Sonny had passed away by Emergency Department consultants Dr Fiona Russell and Dr Lynsey Johnston. Dr Ryan was advised by Drs Russell and Johnston to add an addendum to her clinical notes to clearly state which parts of the notes had been completed contemporaneously and which were not (Crown Production 8 page 159).

[56] The lack of contemporaneous clinical notes (from 5 December 2016) on 6 December 2016 within the resuscitation unit of the Emergency Department did not impact on the treatment of Sonny nor the tragic outcome of his death.

[57] On 8 December 2016 Sonny's body was examined at the Queen Elizabeth University Hospital, Glasgow by Dr Paul French, Consultant Paediatric and Perinatal Pathologist.

[58] In terms of the post-mortem report the cause of Sonny's death was:

1(a) Acute haemorrhagic leucoencephalitis and bronchopneumonia ("AHLE")

1(b) Bacterial infection (most likely Streptococcus Group G).

[59] AHLE is a rare, rapidly progressing disease of the central nervous system. It is usually triggered by an infection (the most common being an upper respiratory tract infection such as influenza virus) suffered up to 2 weeks beforehand. It results in damage to the myelin (the protective covering of the nerve fibres) that surrounds the nerves of the brain and spinal cord. The features in the early stages are very non-specific including fever, nausea and vomiting progressing to lethargy, neck stiffness, seizures and death. It is an invariably fatal condition (around 70% of patients in the first week). It is a diagnosis that is invariably made at post-mortem.

[60] It is likely that Sonny was beginning to develop some impairment of neurological function during the evening of 5 December 2016. There were no specific signs or symptoms on 5 December 2016 that would have suggested a diagnosis of AHLE.

[61] There are no well-developed guidelines on management of AHLE. The principles of management are full supportive care including blood tests, a lumbar puncture and a CT or MRI and reversing the excessive immune reaction, predominantly through the use of steroids. Steroids do not have an immediate effect on reducing inflammation in the central nervous system (and in any event it is likely that steroids would not have been started until early morning of 6 December 2026). Sonny had a particularly aggressive form of AHLE. Given the rapid progression of Sonny's illness, even if he had been admitted to hospital rather than being discharged home, it is unlikely that specific treatment, including steroids, would have been started in time to prevent Sonny's deterioration, collapse and death. Given the rapidity of the illness, regrettably Sonny had no realistic chance of survival.

[62] A Significant Clinical Incident Review was undertaken by Greater Glasgow and Clyde Health Board following the death of Sonny. The Review was undertaken by a team who had no prior involvement in the care of Sonny. It comprised of staff from paediatrics, accident and emergency, clinical risk and neonatology. The Review report, dated 22 May 2018 details the findings of the Review.

[63] The terms of reference for the Review were:

(i) to review the circumstances surrounding the death of Sonny in the Emergency Department on 6 December 2016

(ii) to determine what learning can be taken

(iii) whether there were any missed opportunities which would have resulted in a different outcome

[64] The Review panel found

(i) no significant fault with the care provided to Sonny

(ii) that there was not a clearly indicted, different course of action that should have been taken at Sonny's first presentation

(iii) that at that time , many children presented each day with a feverish illness to the Royal Hospital for Children Emergency Department, the great majority of whom had a non-serious childhood illness

(iv) that the issue of differentiating those with a more serious illness from the great majority is a continual challenge that faces all such teams and has done for many years

(v) that Sonny's illness was even more challenging than most as the underlying infection that triggered it did not show clear signs of being a serious one based on the assessment recorded and would not have been predictable.

[65] The Review panel made the following recommendations:

"A more structured 'safety netting' process should be developed that gives guidance to staff and families on how and when to re-attend. Consideration should be given to a written information leaflet that can be personalised for individual patients. The impact of this on re-attendance rates should be prospectively audited along with parental / patient feedback on their understanding of the information.

Steps must be taken to facilitate contemporaneous completion of all medical and nursing notes. Shift timings and the arrangements for the end of shifts should be looked at, as well as the layout of the 'ED cards' used as a record of attendance which should have an area for rough note taking which can be retained for future scrutiny.

> The ED paperwork, processes and guidelines should be reviewed to ensure that they are conducive to a structured assessment of the feverish child. The current assessment involves an initial triage, Early Warning Scoring, Sepsis 6 assessment and the RHCG/NICE guidance. All of these cover similar areas but using differing terminology, consideration should be given to a harmonised approach that better integrates these elements.
>
> GG & C management should meet with the Procurator Fiscal and develop a joint approach to any future cases where there is a fiscal interest that provides better support and information for the family pending the conclusion of an SCI."

Submissions

The law

[66] Mr Allison and Ms Watts made full and detailed submissions on the law as it applied to an inquiry of this nature. Their views differed at times as to the approach that should be taken by the court. I set out those submissions as follows.

Submission on behalf Amy Reilly

[67] The statutory questions to be addressed in your inquiry's determination are set out in section 26 of the Act. The proper approach to much of that was unlikely to be controversial. There are, however, three points of principle upon which comment was offered.

[68] Firstly, precautions in terms of section 26(2)(e) and discretionary recommendations in terms of section 26(1)(b) and (4) are distinct steps, which should not be conflated. Even if the court concludes there are no precautions that fall to be made under section 26(1)(e) viz. Sonny (or Cailyn), the court is still entitled to make recommendations in terms of section 26(4), and should go on to consider same (subject

to being satisfied of the requirements under that section). That may be of particular importance in a case, such as Sonny's, where there is doubt over whether his death could have been avoided.

[69] Secondly, these proceedings are not to be confused with clinical negligence proceedings. The purpose of the Inquiry is that prescribed by section 1(3) of the Act. It is explicitly not to establish civil or criminal liability [section 1(4) of the Act]. More generally, it is not a "fault finding exercise" and "necessarily involves use of the benefit of hindsight" (*Sutherland Petitioner* 2017 SLT 333 per Lord Armstrong at paragraph 29). Accordingly, the Hunter/Hanley test for negligence has no part to play in these proceedings, directly or indirectly: *Duncan, Petitioner* 2025 SLT 47, per Lady Haldane at paras [43] and [48]. The court is not looking at what was done through the prism of what should have been done; it is, instead, looking at the broader question of what might have been done so as to achieve the intended purpose of preventing other deaths. Accordingly, the statute should be given its plain, ordinary meaning, contextualised by that purpose. The constraints on the findings/recommendations made are only those explicitly prescribed in the statute (eg the qualifications of reasonableness and "realistic possibility").

[70] It follows that, when the court comes to consider reasonable precautions (whether under section 26(2)(e) or section 26(4)(a)), the court is not precluded from making a recommendation simply because the course of action actually taken was also reasonable: *Duncan Petitioner*, at para [44] to [51]; *FAI concerning the death of Marion Bellfield*, per Sheriff Braid (as he then was), unreported, at para [46]. The court should

not shy away from making a finding/recommendation simply because of a concern at being perceived to criticise clinical judgement. Any findings the court makes are not only through an entirely different prism with the benefit of hindsight; they have no bearing upon any question of negligence and risk no consequence to any professional concerned, standing the prohibition in section 26(6). Similarly, the court should not be put off making any finding/recommendation because of a concern that it risks trespassing into judgements regarding the allocation of resources or other managerial decisions. The court is making recommendations, not directions. The procedure in section 28 exists for the very purpose of allowing those affected the opportunity to investigate and offer an informed position on any recommendation, including its practicability. If there is further information not before the court that bears upon whether the recommendation can, or should, ultimately be implemented, that process allows for that to be stated and explained. Those to whom the recommendations are directed are thereafter under no obligation at all to implement the recommendation. As long as the court is satisfied that the statutory requirements are met, the court should not elide its responsibility to make relevant - and potentially significant - recommendations simply because a different outcome might follow.

[71] Thirdly there was comment on what the two qualifications in section 26(2)(e) (and their counterparts in section 26(4)) mean might be of assistance. The explanatory notes to the Act provides some guidance at note 72 which states that "reasonably" relates to the reasonableness of taking the precaution not the foreseeability of death. Thus, even if a death or the cause of it was entirely unexpected, the taking of a

precaution may still be reasonable. In terms of the second requirement that the precaution might reasonably have prevented the death, that threshold is said to be met "if there is a real or likely possibility, rather than a remote chance that it might have so done." The terms real possibility and likelihood are not further elucidated in the notes nor are they used in the Act. They are, necessarily, open to subjective interpretation and not readily reducible to empirical quantification. However, some assistance can be found elsewhere in Scots Law and outwith. In *Dunn* v *M* 2013 SLT (Sh Ct) 34, Sheriff S Reid held that "likely" (at least in the context of an offence under section 12 of the Children and Young Persons (Scotland) Act 1937) meant "a real or substantial [possibility] that it may occur, which [possibility] need not be more probable than not, but which be more than a bare possibility." Real possibility has been said in England and Wales (albeit in a different context) to mean "more than 'an outside chance or bare possibility' but less than a 'probability or likelihood or a racing certainty'": *R* v *Criminal Cases Review Commission ex. P. Pearson* [2000] 1 Cr App R 141, per Lord Bingham at 149. The Scottish Government's policy memorandum to the Bill which became the Act stated that "the use of the word 'realistically' is intended to imply an actual rather than fanciful possibility that the recommendation might have prevented the death". All of that phraseology still leaves a margin for subjective interpretation, however it is clear that the court is looking for something that is at least more than a remote, bare or fanciful possibility, but which need to be more likely than not, or even probable.

Submission on behalf of GGCHB

[72] In determining what did or did not happen, the court exercises its traditional fact finding function. In making findings of fact, the standard of proof is the balance of probabilities (*Inquiry into the deaths of Katie Allan and William Brown* per Sheriff Collins at paragraph 25). If a finding is to be made under section 26(2)(e) the precaution must be reasonable and there must be an evidential basis to conclude that the death might realistically have been avoided if the precaution had been adopted. It must be a precaution that could reasonably have been taken: that is, it must have been available, suitable and practicable, even if not one that was required or indicated by guidance or practice at the time (*Inquiry into the deaths of Katie Allan and William Brown* per Sheriff Collins at paragraph 28). The court does not require to be satisfied on the balance of probabilities that the death in question would have been avoided with the taking of a reasonable precaution, only that it might have been. The use of the word "might" is qualified by the inclusion of the word "realistically" (*Inquiry into Death of James McAlpine* (Glasgow, 17 January 1986) per Sheriff Kearney). What is envisaged by the statutory scheme is a real or lively possibility (Carmichael, *Sudden Deaths and Fatal Accident Inquiries*, 3rd Edn (Edinburgh 2005) paragraph 5.75). That possibility must have substance: the 2016 Act does not intend to refer to a remote possibility that the death might have been avoided. That is clear from the language of section 26(2)(e) which refers to a realistic possibility – not any chance at all no matter how slim (Scottish Government's Policy Memorandum to the 2016 Act paragraphs 178 - 179). Any recommendations must also be grounded in realism so that they can be given practical

effect. It is not the purpose of an inquiry to make recommendations which cannot, as a matter of fact, be implemented. To do so would strip the inquiry process of practical benefit.

[73] The question of whether any defects in any system of working contributed to the death is a matter of fact. The evidence relating to this issue should be assessed and findings made on the balance of probabilities. A defect may consist of the absence of a proper system of working, not merely a defect in a system which already exists. A system may also be classified as defective not because of what it stipulates as a matter of form, but because those charged with operating it routinely fail to do so without effective correction or sanction. The use of the word "contributed" requires there to be a causal relationship between an identified defect and the death. However, it is not necessary to conclude that but for the defect the death would not have occurred. It is sufficient that it was at least a significant or material cause, whether alone or in combination with other factors, but not so remote from the death as to have played no real part in it. (*Inquiry into the deaths of Katie Allan and William Brown* per Sheriff Collins at paragraphs 30 - 31).

[74] Under section 26(2)(g) the court is required to record "any other facts which are relevant to the circumstances of the death." This includes the recording of matters which are relevant to the death in relation to reasonable precautions or defective systems of work, but where the necessary causative connection for a finding under sections 26(2)(e) or (f) is absent. It enables the court to highlight a precaution which it would have been reasonable to take, even it has not been established that there was a

realistic possibility that the death might have been avoided if it had been. Similarly, it enables the court to identify a defect in a system of work, even if it has not been established that this defect contributed to the particular death (*Inquiry into the deaths of Katie Allan and William Brown* per Sheriff Collins at paragraph 32). In essence, it provides another way in which the inquiry can enable lessons for the future to be learned from the circumstances of the death *(Inquiry into the deaths of Katie Allan and William Brown* per Sheriff Collins at paragraph 32).

[75] The court is empowered to make recommendations that face to the future with regard to reasonable precautions, improvements to, or introduction of, a system of work, or the taking of any other steps. Such recommendations are made if the sheriff considers them to be "appropriate", indicating that what is called for is an exercise of judicial discretion and judgment in considering any recommendations which the inquiry is asked to make. Any recommendations must be reasonable, grounded in the evidence and made on the basis that they might realistically prevent other deaths occurring in the future in similar circumstances to the death in question death *(Inquiry into the deaths of Katie Allan and William Brown* per Sheriff Collins at paragraph 33). Otherwise, the recommendations would be stripped of any practical meaning, effect and learning.

[76] The Board submitted that the specific context in which this FAI arises must be factored into the court's approach to the statutory questions. The starting point are the observations of Sheriff Stephen (as she then was) in the *Inquiry into the death of Lynsy Myles* (27 February 2004). Sheriff Stephen observed that lawyers should be slow to comment upon medical practice (and far less criticise it) unless there is clear appropriate

testimony which challenges the treatment. Thus, before the court can find a precaution to be reasonable in the context of a medical issue, there must be either (i) an admission by the treating doctor that they failed to take a precaution or course of action which they clearly ought to have taken, and thus their practice was not reasonable or (ii) the inquiry must accept evidence from a suitably and sufficiently qualified expert that the doctor's practice has not been reasonable (p.25 of the Myles determination).

[77] The observations of Sheriff Braid (as he then was) in *Inquiry into the death of Marion Bellfield* [2011] FAI 21 were also commended:

> "However, that is not to say that every single thing which might have been done and which might have avoided the death should, if it was a reasonable step to have taken, make its way into a finding under section 6(1)(c). Not only would that not be helpful in avoiding future deaths, but it would involve placing an unjustifiably wide construction on the word 'precaution'. Whatever that word means, it must place some limit on the sort of acts or events which should be included in a 6(1)(c) finding. The natural meaning of 'precaution' is an action or measure taken beforehand against a possible danger or risk. Further, since one purpose of a fatal accident inquiry is to inform those with an interest of what precautions should be taken in future, a finding under section 6(1) (c) must carry with it the implication that the precaution ought, with the benefit of hindsight, to have been taken in the case which resulted in the death, albeit without any necessary implication that the failure to take it was negligent. That being so, I agree that when one has a situation which solely involves the exercise of clinical judgment, where a range of reasonable actions might be taken, and the choice as to which to take rests on the skill and experience of a doctor based upon such information as is available to him at the time, and the doctor happens to choose a course which results in death, it would be wrong to hold that the selection of another option within the range, which might have prevented the death, was a reasonable precaution which ought to have been taken. Not only does that involve straining the meaning of precaution, but such a finding would be of no real practical benefit to others in the future. A Fatal Accident Inquiry cannot prescribe how doctors or nurses should exercise their judgment".

[78] Lord Armstrong made similar observations in *Sutherland v Lord Advocate* 2017 SLT 333 at paragraph 34:

> "It was submitted that it would be possible to envisage a situation, involving the exercise of clinical judgment, whereby a doctor was presented with two or more options and could not know which was in the patient's best interests. I accept that in such a situation where the optimal course was not taken, it would not be appropriate to determine that the selection of another of the available options would have been a reasonable precaution. I accept that to do so would distort the ordinary meaning of 'reasonable precaution' and would in any event be of no assistance for the future…"

[79] Medical FAIs have recently been the subject of a petition for judicial review in the Outer House of the Court of Session (*Duncan, Petitioner* 2025 SLT 47). In *Duncan*, the Lord Ordinary held that, where there is evidence before a sheriff that a course of action would have been reasonable, and that course of action was a precaution which might have avoided the death, the sheriff was mandated to include a finding to that effect in their determination even though there was another reasonable course of action open to the doctor (see paragraph 51). The Lord Ordinary's decision has been reclaimed and it is understood that the reclaiming motion will be heard later this year. The Board respectfully submitted that the Lord Ordinary's approach in *Duncan* was wrong in law and sits contrary to decades of established FAI practice. It also strips the FAI process of any meaningful learning: in medicine there are invariably different options available to clinicians and if, in the circumstance of any specific case, the doctor, acting entirely reasonably and competently, happens to select an option which with the benefit of hindsight is observed to have resulted in death, nothing can be learned from pointing out that the doctor could have adopted another course. It is not the purpose of a Fatal

Accident Inquiry to retrospectively blame a doctor who acted appropriately at the time for the death of a patient. Each exercise of clinical judgement is patient specific. This court is not bound by *Duncan*. A recent determination by Sheriff Principal Anwar (in this jurisdiction) did not follow *Duncan* and instead endorsed the approach set out in *Bellfield* and *Sutherland* (*Inquiry into the deaths of Leo Lamont, Ellie McCormick & Mira-Belle Bosch* [2025] FAI 15 at paragraph 128). It is submitted that this court should follow the *Bellfield*/*Sutherland* approach recently favoured by Sheriff Principal Anwar rather than *Duncan*.

[80] The Crown made less detailed submissions on the approach in law to be taken, but I did not understand those to differ to any great extent from the submissions made on behalf of the Board.

The Statutory questions

Section 26 (2) (a) – place and time of Sonny's death

[81] Parties were agreed that Sonny's death occurred at 12.45pm on 6 December 2016 within the Emergency Department of the Royal Hospital for Children, Glasgow.

Section 26 (2) (b) & (d) – accident

[82] None of the parties made any submission that any accident resulted in Sonny's death.

Section 26 (2) (c) – cause of Sonny's death

Crown submission

[83] The Crown's submission on the cause of Sonny's death, at least initially, was that the cause of death mirrored the post-mortem results namely acute haemorrhagic leucoenephalitis and bronchopneumonia and bacterial infection (most likely Streptococcus Group G). In supplementary submissions the Crown noted the "modest variation" sought in this regard by Sonny's mum. The Crown submitted that it was a matter for the court as to whether the findings of the post-mortem should be varied.

Submission on behalf Amy Reilly

[84] Mr Allison's submission was that the cause of death should be found to be AHLE which was of unknown (either bacterial or viral) origin.

[85] Mr Allison submitted that it was appreciated that the cause of death proposed was modestly different from that identified at post-mortem. He submitted, however, that the court had had the benefit of additional expert evidence. That evidence seemed unanimous in identifying AHLE as the cause of death, however, its origins were less clear. The post-mortem report suggests that a bacterial infection was the initial trigger. Professor Ladhani doubted this, and thought a viral origin was more likely (but could not discount a bacterial origin). He did not think, however, that a Strep G infection would have been likely to cause Sonny to be sufficiently unwell to lead to AHLE. Dr Broomfield doubted that the bronchopneumonia played any part, understanding the literature to suggest that AHLE will usually have an infectious trigger. Mr Allison

submitted that what the court could say was that the cause of death was AHLE. None of the experts were able to definitely exclude viral or bacterial origin. Whilst it was suggested that viral origin is more common, that general probability told the inquiry nothing about the probability in Sonny case. Moreover, in circumstances where bacterial causation in the general population was possible (even if less common), the findings of Strep G at various sites at post-mortem cannot be ignored.

[86] On bronchopneumonia, whilst there was no doubt on the evidence Sonny suffered from this at the point of his death, it was not clear what role this played. In particular, it was not clear whether this was the cause of the AHLE, or was caused by the same origin cause as the AHLE. In the circumstances, it was unsafe to make any finding on what (if any) role the bronchopneumonia played. Overall, it was not possible to be more specific as to the origins of the AHLE than to say, generally, it was of (unknown) bacterial or viral origin.

[87] The only potential importance of establishing whether the cause was bacterial or viral would have been in the event the court proposed to make any recommendation about the administering of antibiotics. However, the evidence of Dr Eunson was that those would have had to be administered at least 24 hours previously to have effect. As the relevant effect here was preventing the onset of AHLE, then, logically, they would have had to have been administered 24 hours prior to the onset of AHLE (the timing of which is unknown, but which is certainly some point before 6 December 2016). Further, Dr Eunson's evidence was that antibiotics can worsen the situation if the AHLE process was already settled. For these reasons, it would not be possible for this court to identify

any precaution or make any recommendation relative to antibiotics. Accordingly, it was unnecessary to be any more specific than what is proposed.

Submission on behalf of GGCHB

[88] The submission on behalf of GGCHB was that the cause of death should be found to be that identified in the post-mortem report, namely Acute haemorrhagic leucoenephalitis and bronchopneumonia and bacterial infection (most likely Streptococcus Group G).

Section 26 (2) (e) – precautions

Crown submission

[89] The Crown submitted that it was for the inquiry to consider whether precautions could be identified which could reasonably have been taken and which, had they been taken, might realistically have resulted in Sonny's death being avoided. Of the statutory predecessor to the provision in section 26(2)(e) of the Act, it had been said that the court is concerned here with reasonable precautions that, "might" have avoided the death: certainty or probability is not required, only "a real or lively possibility" that the death might have been avoided (Carmichael, *Sudden Deaths and Fatal Accident Inquiries* (3rd Edition) at paragraph 5-75). According to the Explanatory Notes (note 72) to the 2016 Act, the "precautions" relate to the deaths which are the subject of the inquiry and may, but do not require to be, the same as those recommended to prevent other deaths in the future under section 26(4)(a); "reasonably" relates to the reasonableness of taking

the precautions rather than the foreseeability of the death. A precaution, "might realistically have prevented a death if there is a real or lively possibility, rather than a remote chance, that it might have so done".

[90] It was submitted that the inquiry had heard from Dr Bloomfield, Dr Coren, Professor Ledhani and Dr Eunson that the cause of Sonny's death, acute haemorrhagic leucoencephalitis [AHLE] was an extremely rare condition. It was one which none of these expert clinicians, all possessing very considerable experience, had encountered previously. The evidence before this inquiry was that it was a condition generally diagnosed at post-mortem (Dr Broomfield's report paragraph 3.19). It was an auto-immune reaction triggered by a viral infection. The reasons why Sonny's body reacted as he did are unknown and thus not understood. As a consequence of this auto-immune reaction, his brain was assaulted, causing an "intense attack of inflammation in the brain and spinal cord that damages myelin" (post-mortem report page 13). This was irreversible and fatal.

[91] While Sonny was diagnosed by his GP and by Dr Ryan with a virus, the clear evidence before this inquiry was that such viruses do not respond to anti-biotic treatment. Even had Sonny been treated with prophylactic antibiotics by his GP on either visit or by Dr Ryan [notwithstanding that there were no clinical indicators to do so - see Dr Broomfield's evidence], the evidence of Dr Eunson was that such a prescription might have in fact exacerbated the progress of the destructive auto-immune response on Sonny's system.

[92] The inquiry heard evidence that while AHLE was extremely rare, it was similar to Acute Disseminating Encephalomyelitis [ADEM]. Had Sonny been admitted to the Clinical Decision Unit [CDU] or onto a ward and then been investigated for this condition, such investigations would have taken a significant amount of time. In particular, it was, on the evidence before this inquiry, unusual for an MRI scan to have been undertaken overnight, leading to, at best, this being undertaken on the morning of 6 December. Treatment of steroids may have been initiated. Sonny may have been admitted to intensive care and ventilated. However, Dr Eunson considered that Sonny's likely prognosis was poor.

[93] The Crown considered that even taken at its highest, the potential course of care as set out by Dr Eunson would not enable the court to determine that admission to the CDU or into RHC Intensive Care would have provided Sonny with even a "lively possibility" of survival beyond 24 hours. Dr Eunson's evidence was clear that even had Sonny survived on a ventilator for an initial 24 hours, the damage reeked upon his system was such that his neurological impairment would have led to his death within a short time thereafter. The distress and bewilderment of his family who would have had to endure this prolonged decline, it was submitted, should not be the subject of speculation.

[94] The Crown accepted that insofar as the death of Sonny is concerned, having regard to the evidence before this inquiry, the terms of section 26(2)(e) of the Act are not engaged and that there should be no determination in that regard. Equally, it was

submitted, having regard to the evidence there should be no determination in terms of section 26(2)(f) of the Act in relation to Sonny's death.

Submission on behalf Amy Reilly

[95] Mr Allison submitted that the inquiry ought to find that the following precaution could reasonably have been taken and had it been it might reasonably have resulted in Sonny's death being avoided:

> "for Sonny to have been admitted to the ICU on 5 December 2016, to have administered to him intravenous steroids, and provided with full supportive treatment for management of presumed swelling of his brain."

[96] It was submitted that such a finding was justified, on the evidence. It was founded on two principle sources. Firstly reliance was placed on Dr Eunson's evidence.

[97] It was submitted that his evidence was unique, in the sense that he was the only paediatric neurologist who gave evidence. His evidence was, therefore, unchallenged. Notwithstanding the position in his written report lodged by the Health Board, he explained that he had reflected on the case since drafting his report. In particular, he had reflect on his experience of ADEM, given how rare AHLE is (it was noteworthy than none of the clinicians who had given evidence had direct experience of the condition). Having done so, he described the following:

(a) If Sonny had been admitted to hospital, he would have been observed, and broad screening for infection carried out. That may have included a lumber puncture, the results of which would have been abnormal with a high protein count.

(b) It is likely that a CT scan would have been carried out. That would have shown abnormality in the white matter of Sonny's brain.

(c) That abnormality would have prompted urgent discussion. The default assumption would have been to suspect ADEM. This would have triggered a move to ICU.

(d) The treatment for ADEM and AHLE are the same, albeit the prognosis is different. That would have been fully supportive treatment for management of presumed swelling of the brain, fluid restriction, and commencement of intravenous steroids (high dosage).

(e) The combination of swelling of the brain and necrosis (loss of brain tissue) ultimately caused Sonny's death. Steroids would not have repaired damage, but could have halted it.

(f) In Dr Eunson's judgement, based upon both his experience of ADEM, and his reflection on the literature about AHLE, if Sonny had been admitted on 5 December 2016 rather than discharged, and if he was commenced on the full intensive care described above, it is possible he could have survived the onset of his symptoms, but with severe complications. It would still be less likely that he would survive than not. On the issue of likelihood, it was not possible to be more specific in quantifying the likelihood. Dr Eunson described it as a small possibility, but also agreed that it was a real possibility.

[98] The first issue for the court is whether the treatment identified by Dr Eunson would have been reasonable. As that has nothing to do with the foreseeability of Sonny's illness or its cause, the answer to that must unquestionably be "yes". The court heard unchallenged evidence from Dr Eunson about the appropriate (and likely) treatment that would have followed from Sonny's admission. Most of that evidence was given in examination in chief. The clear gravamen from Dr Eunson's evidence was that this was, unquestionably, what would have been done. As he explained that the treatment for AHLE is the same as that for ADEM, and this treatment plan was based upon his direct experience of ADEM, the court can have some confidence that this is the reasonable treatment plan in the circumstances. Questions as to its likely effect are a separate matter, unless the outcome was so remote that it would have been a disproportionate step. It was not suggested to Dr Eunson that any aspect of what he recommended would have been an unreasonable step to take in the circumstances, either because it was doomed to fail or otherwise.

[99] The more challenging issue was whether the treatment carried a realistic possibility of avoiding Sonny's death. It has already been noted that the nature of the threshold does not lend itself to easy quantification, and unavoidably invites a subjective element to its assessment. Dr Eunson explicitly agreed that Sonny's survival was "a real possibility". As that arose in cross-examination under direct suggestion, it is still useful to look at the broader manner in which he described this. He described the possibility as "small", and less than the alternative outcome. However, in the context of life saving medical treatment, a small possibility is not the same as one which is "remote" or

"fanciful". Dr Eunson did not, at any point, use those words or express himself in a way that conveyed the possibility as being at that end of the spectrum. It was significant that Dr Eunson volunteered his evidence about this treatment plan. It did not arise from suggestion or pressure in cross-examination. Instead, it arose from careful thought and reflection, unsolicited, in his preparation for his evidence. It was not speculative, because he had carefully considered the position by both reflecting on his own relevant experience and by looking at the literature specific to AHLE. Indeed, it was submitted, that the court may take the view that a medical treatment recommended by an experienced clinician as being appropriate, and which had some possibility of avoiding a person's death is, axiomatically, one which might have a realistic prospect of avoiding the death. If such a treatment did not have such a prospect, then it is unlikely that such a clinician would take nor recommend that treatment.

[100] Objective support for Dr Eunson's assessment is found in the literature on AHLE mortality rates, quoted variously to the court, by clinicians who gave evidence. Mr Allison helpfully produced a copy of that literature with his submissions. He submitted that whilst it may be of general interest to the court, it was referred to simply for confirmation of the quoted mortality rate of 70%. Such a mortality rate means, necessarily, than 30% of persons who contract AHLE survive it. Whilst it is readily accepted that individual cases turn upon individual variables, it is a useful cross-check to aid the broad-brush judgement the court is making here. Taken together with Dr Eunson's evidence, that gives a clear, and consistent, basis for the finding that such a course of treatment might have a realistic possibility of avoiding Sonny's death.

[101] It was submitted that it was important to reiterate that such a finding is not a judgement on what was or was not done at the time. It is, necessarily, predicated upon facts known now which were not know at the time. It is, however, a reflection on what might have been done in the hypothetical scenario that the clinicians involved then know what we now know. That is entirely consistent with the statutory purpose of such a finding, which is all about contributing to future decision-making that aids, in any meaningful way, the aim of avoiding other deaths in similar circumstances. That the exact circumstances of what was going on for Sonny in this case were unforeseen (or even unforeseeable) is nothing to the point.

Submission on behalf of GGCHB

[102] The Board submitted that the expert evidence did not disclose any sufficient basis upon which it could be held that had another course of action been taken Sonny's death might realistically have been avoided. That expert evidence is set out in the following paragraphs.

[103] Expert evidence was led by the Board from Professor Ladhani, Consultant in Paediatric Infectious Diseases and Dr Paul Eunson, Consultant Paediatric Neurologist. Both experts prepared reports which were adopted as forming part of their evidence and which the court can therefore have regard to in determining questions of causation. It was submitted that both are highly eminent and experienced clinicians.

[104] Professor Ladhani explained that he is an expert in the identification and management of infectious diseases in children. Sonny died from acute haemorrhagic

leukoencephalopathy ("AHLE"). Professor Ladhani explained that AHLE is a vanishingly rare immune response to an infection. The exact aetiology is not understood, but in essence bacteria which are common in the community will, on very rare occasions, trigger an altered immune response in certain people following an infection. In trying to control the infection the body triggers an auto-immune response which leads to the attacking of self-antigens in brain tissue. In Sonny's case, that post infectious response resulted in a necrotising brain damaging complication.

[105] Professor Ladhani explained that such a complication is almost always fatal. It is very difficult to diagnose and indeed is often only diagnosed at post-mortem. In Sonny's case, Professor Ladhani thought that the most likely explanation was that Sonny initially suffered from a viral infection followed by a secondary bacterial bronchopneumonia that was caused by haemophilus influenzae (not streptococcus Group G) which led to AHLE. Professor Ladhani explained that, although streptococcus Group G was found on post-mortem, it was likely not the causative agent because it is a common bacteria that very rarely causes infections in otherwise healthy children such as Sonny. It is often an incidental finding on post-mortem. The infection triggered an inflammatory response which caused inflammation in Sonny's spine and brain and irreversible damage. Professor Ladhani gave evidence that the underlying cause (whether bacterial or viral) did not really matter: once triggered the condition (that is the AHLE) has to be treated rather than the cause.

[106] Professor Ladhani gave evidence that the diagnosis of AHLE can only be made by way of an MRI scan of the brain with specialist radiology input due to the rarity of

the condition in young children. Blood tests would not have been of any assistance in due to the non-specificity of raised CRP. Professor Ladhani stated that the administration of antibiotics to Sonny on 5 December would not have made any difference if AHLE was triggered by a viral infection. Likewise, the administration of antibiotics would have made no causative difference even if the AHLE was bacterial in origin. Working back from the findings at post-mortem, Sonny's condition had persisted for some time even though he was not manifesting symptoms. There was, unknown to his caregivers, an aggressive process of inflammation subsisting within his brain. The underlying process was attacking the tissue within Sonny's brain leading to tissue death (the process of necrotisation). Once the process of AHLE has been triggered, which it had before 5 December, it was irreversible. Thus, when Sonny was reviewed by Dr Ryan, he was, in hindsight, already suffering from both bronchopneumonia and AHLE: this intracranial immune reaction was always going to be fatal.

[107] In summary, Professor Ladhani's firm view was that, even if Sonny had been admitted to hospital on 5 December, he would sadly still have died as a result of AHLE. Sonny would not have been diagnosed with AHLE overnight. There would have been no effective treatment for his condition. There was no realistic chance of survival.

[108] Dr Eunson also gave evidence about Sonny's condition. He noted that he had never come across such a case in the entirety of his career as a paediatric neurologist (having become a consultant in 1999), which was consistent with Professor Ladhani's estimate of its rarity. Dr Eunson considered that both he and Professor Ladhani had the

expertise to comment on AHLE. Dr Eunson agreed with Professor Ladhani that streptococcus Group G was not the cause of Sonny's AHLE and also agreed that the condition is much more common where the infection has been caused by a virus.

[109] Dr Eunson gave evidence on the likely treatment pathway had Sonny been admitted to hospital on 5 December. That pathway is well explained at paragraphs 31 to 36 of his report;

> "31. If he had been admitted on evening of 5th December for observation or fluid management, it is likely that he would have had blood investigations and probably a chest X-ray. The blood investigations would have included CRP which would have been raised. He would have been reassessed to decide what further investigations were required. He would have been started on broad-spectrum antibiotics, most likely intravenous in view of his vomiting. If a lumbar puncture had been performed, this would have shown a raised cerebrospinal fluid (CSF) protein level, possibly raised CSF white blood cell, and normal CSF glucose prompting consideration of an inflammatory CNS disorder. If CSF opening pressure had been measured, it is likely that this would have been raised.
>
> 32. The next investigation would have been neuroimaging, ideally magnetic resonance imaging (MRI). Depending on his conscious level, he would have needed sedation or anaesthetic for this which may not have been done as an urgent procedure out of hours. An alternative imaging technique would have been CT scan. This is less sensitive and typical findings are less specific. If he had been admitted to the ward at, for example, 2000, it would have taken a number of hours for blood investigations, CSF analysis, and imaging to have been performed. I would defer to opinion of general paediatrician on how long this would usually take in an acute unit.
>
> 33. By the time neuroimaging was performed, both CT and MRI would have been abnormal. This would have prompted a discussion between paediatrician, radiologist and ideally paediatric neurologist. This discussion would have most likely led to a diagnosis of ADEM with a plan to start intravenous steroids. As CSF pressure was raised, and his conscious level would have been dropping, it is likely that intensive care would have been involved with a view to admitting him for full supportive care.

> 34. Although there are some subtle differences between results of investigations of ADEM and AHLE, ADEM is much commoner in children and it would be difficult to make the diagnosis of AHLE in the acute setting.
>
> 35. Steroids do not have an immediate effect on reducing inflammation in the central nervous system. Even if the above plan of investigations and discussions had gone to plan, it is likely that steroids would not have been started until early in the morning of 6th December. It is unlikely, therefore, that the collapse later that morning would have been prevented.
>
> 36. The quoted mortality rate in the review paper is 70%. Given the rate of progression of Sonny's illness from non-specific symptom and signs to acute irreversible collapse within 15 hours, he had a particularly aggressive form of AHLE."

Dr Eunson repeated that in evidence. If Sonny had been admitted, he would have been prescribed antibiotics. Dr Eunson did not consider that the prescription of antibiotics would have made any difference to the trajectory of Sonny's condition because viruses are not susceptible to antibiotics. Indeed, Dr Eunson went further and explained that the prescription of antibiotics may actually have exacerbated the underlying immune response which was damaging the tissue in Sonny's brain: in short, that is because the immune system misinterprets the antigens released by antibiotics and produces antibodies directed against the nervous tissue. He would have been observed, undergone a lumbar puncture which would have shown cerebrospinal fluid with abnormally high protein which would then have prompted a CT scan at around 0400 or 0500 hours on 6 December. A CT scan would have shown abnormalities in the white matter of brain suggestive of swelling. He would have been moved to the ITU and received full supportive treatment.

[110] Dr Eunson explained that death was caused by a combination of swelling of the brain and necrosis. In short, the swelling interferes with the blood supply, the blood supply to the critical areas of the brain becomes insufficient and the ability of blood pressure to provide oxygenated blood to the brain tissue is reduced leading to tissue death. Treatment would have been with steroids (aiming to reduce the swelling, although they would not have repaired the necrotic damage which had already been done). Having reflected on the case, Dr Eunson considered that, if full intensive care and support and steroids were started on 6 December, it was possible (but highly unlikely) that Sonny may have survived the initial insult on the morning of 6 December, but Sonny was in a very poor prognostic group and would still ultimately have succumbed to his condition. In his evidence, Dr Coren agreed with Dr Eunson that the outcome would have been fatal for Sonny even with admission.

[111] It was submitted that whilst Dr Eunson conceded that Sonny might (with the emphasis very much on the "might" – it was clearly not the import of his evidence that this was thought by him to be a likely scenario) have survived for an initial period of time in ICU, Dr Eunson's evidence was clear that Sonny would very sadly have succumbed shortly thereafter due to the significant irreversible brain injury that would inevitably occurred. The question of whether the possibility is "real" for the purposes of the Act is a question for the court, not expert witnesses.

[112] Against that background, the Board agreed with the Crown submission: there is, upon a proper consideration of the full weight of all the evidence, no sufficient basis to

conclude that there was a realistic or lively possibility of Sonny's death being avoided even if he had been admitted to hospital on 5 December 2016.

Section 26 (2) (f) – defects in any system of working

[113] None of the parties made submissions that a defect or defects in any system of working contributed to Sonny's death.

Section 26 (2) (g) – any other facts relevant to the circumstances of the death

Crown submission

[114] Whilst the Crown recognised that in the circumstances of the death of Sonny there were no medical interventions or clinical decisions that could have been taken which might have altered the outcome for Sonny, it was submitted that a number of the circumstances of Sonny's death may be considered by the court as relevant:

- Record keeping.

  There was evidence heard at the inquiry that Dr Ryan completed her medical notes on Sonny the following day and before beginning her shift that day. The SCIR considered that this was not appropriate. It was recognised by all those experts and clinicians [and Dr Ryan herself] that this was, at best, poor practice. None the less, it was recognised by Dr Broomfield that it can on occasions occur due to unforeseen pressure of work within a busy Emergency Department. On this occasion the lack of contemporaneous notes for Sonny had no impact u.pon the care and treatment he received in the Emergency Department on 6 December.

The inquiry may consider that, at most, it is appropriate simply to comment upon the need to undertake as near contemporaneous record keeping as is possible and practicable, in accordance with hospital and indeed GMC practice guidelines.

- Senior supervision

Dr Ryan diagnosed Sonny with viral enteritis. It was submitted that both Dr Coren and Dr Broomfield considered that this diagnosis was "insecure" given the absence in his presentation of diarrhoea after 4 days. Dr Coren wished to emphasise to the inquiry that the commonality of this diagnosis, without considering more complex and concerning diagnosis was generally to be guarded against. One way of doing so, he noted, was to ensure that more experienced clinicians reviewed each child patient before discharge. The Crown did not accept that the evidence of Dr Coren on this matter should be rejected. It was submitted that he is a highly experienced consultant paediatrician. While not "at the front door" of a paediatric Emergency Department his experience and expertise in the diagnosis of childhood illness is clear. He is well qualified to opine on this and to offer his expertise and assistance to this court, so far as it might find that helpful and informative. Evidence should be before an inquiry that is of assistance to it.

The inquiry was reminded of the terms of the Act of Sederunt (Fatal Accident Inquiry Rules) 2017/103 (Scottish SI) which provides, in Rule 4.1 that, "Any rule

of law or enactment that prevents evidence being led on grounds of inadmissibility does not apply in an inquiry." The Crown considered that the evidence of Dr Coren taken together with that of Dr Broomfield in respect of Dr Ryan's diagnosis of Sonny should be accepted. The Crown accepted that regardless of the insecurity of the diagnosis of Sonny as suffering from viral enteritis, Dr Ryan [nor indeed any other clinician in the circumstances] could have diagnosed Sonny's true condition. Whether or not this diagnosis of viral enteritis was accurate, that diagnosis played no part in the cause of Sonny's death. The discussion of more senior clinical supervision arose in the evidence of Dr Kanani. He gave evidence that in his department a child referred by a GP required to be seen by a more senior clinician, again ST4 and above. It was submitted that he gave clear reasons for this, which this court may consider [in addition to being evidence which fell squarely within the scope of his experience and expertise] made perfect common sense: in short, an experienced GP who had seen many children has taken the view that this child requires to be referred to hospital. It would then make little sense if that child was examined and discharged by a hospital clinician with less experience than the referring GP. This expert opinion and common-sense logic was the reasoning provided by Dr Donald too, though his department organised GP referrals differently. He noted that children referred by a GP were always seen by more senior clinicians, by which he meant ST4 and above. Dr Donald advised the Inquiry that an ST1 in his department would not be able to discharge a patient without more senior

clinical input into that decision-making. There was considerable unanimity of expert evidence of the difficulty in separating out the many children presenting with viral illness from the very few presenting with serious and potentially life-threatening bacterial infections. The identification of these "needles in the haystack" required experience and training. The review of junior doctor diagnostic decision-making was discussed in the evidence of Dr Stirling. She noted that "Almost all the trainees that come to me at ST3 are only starting out on their paediatric experience." When asked if it was possible that every child was seen by or at least discussed with a middle grade doctor, Dr Stirling considered that this would be "impossible" and in any event, her "middle grade" doctor would be these ST3's who are only starting out on their paediatric experience. Accordingly, within Royal Hospital for Children this would not overcome the difficulty avoided by the policy within the Emergency Department of Ninewells and Birmingham Children's Hospital. Dr Stirling was asked if children referred by a GP were treated differently. She advised that a system had been trialled but was not successful and the original system of all children being triaged "at the front door" had been reverted to.

The Crown noted that there was much discussion about the RCPCH "Facing the Future" Guidance and the RCPCH "Standards for Young People in Emergency Medicine" Guidance on the issue of senior review. The discussions in evidence centred around the application of this Guidance. The references within the former to review by more senior clinicians was described by Dr Broomfield as

"aspirational," to which Dr Stirling agreed, going on to consider it was "unworkable", having regard to available resources. The Crown does not consider that this court requires to decide which of these is the applicable Guidance or to find as a matter of fact that such Guidance is advisory or simply aspirational. While some time and considerable discussion centred on this Guidance on behalf of GG&CHB and those representing the next of kin of Sonny Campbell, the Crown submitted that little assistance is given to this court from that evidence.

The Crown further noted that this Inquiry heard evidence that had Sonny been referred either to Ninewells and to the care of Dr Donald's ED or Birmingham Children's Hospital and the care of Dr Kanani's ED, Sonny would have been triaged and then automatically examined by a more senior clinician at that stage. The Crown position was that it was appropriate that this court considers that the evidence of practice in other hospitals, for example Ninewells and Birmingham Children's Hospital regarding GP referral and senior clinical review, show that such practices are achievable on a practical level. The Crown considers, having regard to this evidence that this court should consider that when children attend following referral by a GP, their examination should be undertaken by a more experienced doctor [ST4 or above] or, if undertaken by a junior and inexperienced practitioner, that any decision to discharge should be reviewed by a more experienced practitioner [again ST4 and above]. While this would not, sadly, have impacted positively on the outcome for Sonny, it would have so far

as Cailyn was concerned, as is discussed below and has the potential to impact upon other children presenting in the future.

- Safety netting advice

The court heard evidence that Ms Reilly and her mother were not clear in their own minds about the circumstances in which they should return with Sonny. This was also discussed insofar as Ms Anderson and Mr Newlands were concerned.

It was submitted that the inquiry heard a great deal of evidence describing how providing safety netting advice was difficult. Dr Stirling gave evidence that there remained a dispute among the many Royal Colleges and practitioners on the best way to resolve the difficulties inherent in providing written safety netting advice that was sufficiently detailed to be of assistance without being so complex as to defy understanding. Dr Broomfield in particular [though it is fair to say there was broad agreement on this among those experts asked] considered that this was a difficult area of practice, improved over time and with experience. In his evidence he noted that it raised a range of difficulties:

1. Care givers required to understand the advice and have confidence in it. Ensuring this was achieved often took experience.
2. Written advice, while useful, might not meet every scenario.
3. Care had to be taken with written advice that the carer of the child was able to read that written advice; both that the carer had literacy skills to enable

them to meet the task and that the written advice was in the correct language. His department had, he thought 72 separate pieces of written advice, in several languages.

4. While written advice in the form of a leaflet might be useful, there was no universal written advice leaflet which would meet all circumstances in every child's case. Dr Broomfield resolved this conundrum by providing written advice in the form of one of his department's leaflets and then adding to it in his own writing additional advice. He did though recognise that even this might not be wholly adequate or helpful in every case. The inquiry heard evidence that following the SCIIR's for both Sonny and Cailyn, leaflets with written advice, in several languages, have now been produced at RHC as a consequence of the two SCIR's into Sonny and Cailyn's death. It may be that this court considers that, on the evidence heard, particularly from Dr Broomfield, a more experienced and practiced senior clinician than Dr Ryan might not have left Ms and Mrs Reilly with the impression that they had formed that they were not welcome to return. The provision of a leaflet may have assisted them. Such leaflets are now available. While this would not have altered the outcome for Sonny, it may have eased the distress and anxiety spoken to by both care-givers at that particular time.

Submission on behalf of Amy Reilly

[115] Sonny's family concurred with the Crown's invitation to the court to make findings about record keeping, senior supervision, and safety-netting advice. As they require to be expressed as findings in fact, the court was invited to record the following additional facts under this section:

- Record keeping

(1) Dr Ryan did not complete her written record of Sonny's attendance on 5 December 2016 in full contemporaneously. She wrote up a portion of that when she attended for her next shift on 6 December 2016. It was submitted that it was not possible to determine the exact extent of what was written up contemporaneously and what was written up retrospectively.

(2) Her doing so was contrary to expected practice within the RCH at the time, and contrary to good practice in terms of GMC guidance.

(3) The consequence of her doing so was that, at the point of Sonny's emergency attendance on 6 December 2016, there did not exist a complete and accurate record of Sonny's attendance, the investigations carried out, and the treatment received. Had the need arose for the clinicians treating Sonny on an emergency basis on 6 December 2016 to access his records, their ability to do so would have been compromised.

- Senior input

(4) That, at the relevant time, the RHC operated a practice whereby a junior doctor at grade ST1 assessing a child in accident and emergency had absolute autonomy to discharge a child without input from a more senior doctor. That was irrespective of the circumstances by which the child came to present.

(5) That, at the relevant time, the RHC had in place no formal or informal policy regulating the circumstances in which such a junior doctor ought to seek advice from, or secure the input of, a more senior doctor.

(6) Sonny was not examined or reviewed by a more senior doctor prior to Dr Ryan discharging him on 6 December 2016. Dr Ryan did not discuss Sonny's case with a more senior doctor prior to doing so.

- Safety netting advice

(6) The safety-netting advice given by Dr Ryan to Ms and Mrs Reilly on 6 December 2016 at the point of Sonny's discharge was limited, and did not include full details of the red flags to look out for, as recorded in the note;

(7) That more general safety-netting advice of the type recorded in Dr Ryan's affidavit at paragraph 36 was not given;

(8) That nature, extent, and manner of communication of the safety-netting advice left Ms and Mrs Reilly feeling dismissed and that Dr Ryan wished to get Sonny out of the hospital as soon as possible. In the circumstances,

they did not feel adequately sign-posted on what to do, and when, in relation to Sonny's deteriorating condition;

(9) That perception was compounded by the failure to provide written safety netting advice, either in terms of leaflets or bespoke advice specific to Sonny prepared for the family.

[116] Mr Allison went on to analyse those issues and the proposed additional findings in a little more detail.

[117] In doing so Mr Allison stressed that it was important to note that the court's ability to make additional findings in terms of section 26(2)(g) was not circumscribed by any qualifications as to causation or materiality. That sub-section is not linked, expressly or by implication, to any limitations contained in the prior sub-sections (and, in particular, to the limitations imposed by section 26(2)(e)). The only qualification is that the facts are relevant to "the circumstances" (not the cause) of Sonny's death. That is a broad test which is not difficult to meet. Whilst it was for the court to decide what specific facts to find on these issues, on any reasonable view these three issues are matters which are relevant to the circumstances of Sonny's death, and thus issues upon which the court should make factual determinations (whatever those might be). They are all key parts of the picture. Esto the court needs to be satisfied of their materiality, the court could be so satisfied be for the following reasons:

(i) The issue of record keeping was something that was acknowledged as being a significant departure from good practice. Whether or not already

resolved by Dr Ryan, or addressed in the SCIIR, it was submitted, the issue is one of some importance that justifies comment.

(ii) On the issue of senior review, as the court heard contested evidence on what was said around this issue, and where there appears both (i) evidence of divergent practises between RHC and both hospitals in England and Wales and another hospital in Scotland, that issue is one which justifies comment. That is particularly so whether the court is being asked to make recommendations: to be able to reach a view on the reasonableness and causation qualifications in section 26(4), the court requires to establish the facts in this case.

(iii) On the issue of safety-netting advice, again there appeared to be an uncontentious fact that there was a departure from good practice by the failure to provide safety netting advice in writing. Given the importance of safety-netting advice generally, it is important for the court to be satisfied as to what advice was, or was not, given. There is a material factual dispute which requires to be resolved; it can only be resolved by the court making findings in fact.

Submission on behalf of GGCHB

[118] It was submitted that the Board did not understand what (if any) specific findings the Crown sought under section 26(1)(g). On one reading the issues raised read

more as recommendations rather than findings under that section. Notwithstanding that the Board offered the following observations on the Crown's submissions:

- Record keeping

i. The Board did not disagree with the premise that medical records should, as far as possible, be prepared contemporaneously. However, the Board wished to emphasise that Dr Ryan prepared notes at the time that she reviewed Sonny. Whilst she completed her entry in Sonny's medical records the following day, her own were recorded contemporaneously. Moreover, as the Crown submission recognised, on occasions it is not simply not possible to complete notes contemporaneously. Dr Ryan gave evidence that the department was particularly busy at the relevant time. This was consistent with Dr Broomfield's practical experience. The Crown noted that the court may consider it appropriate to emphasise the need to undertake as near contemporaneous record keeping as is possible. That, it is submitted, is a matter not relevant to Sonny's death but of more general application. Thus, the Board submitted that no finding should be made under this head and instead, if the court considers it appropriate to emphasise the importance of contemporaneous note taking, the appropriate section of the 2016 Act in which to do so is section 26(2)(a) (ie by way of recommendation).

ii. The inquiry can in any event by satisfied that the particular issue that arose in relation to Sonny's notes is in any event highly unlikely to reoccur.

Dr Ryan was clear that she has never come in early to update her notes before her next shift since she saw Sonny; she always does her notes before leaving. Dr Stirling also explained that the manner in which notes are taken at RHC is now more efficient. That is because notes are now taken electronically. The notes are written up on iPads as clinicians review a patient. Thus, it is now "much easier" to record contemporaneous notes.

- Senior supervision

iii. The Board rejected the proposition that Dr Ryan's diagnosis was "insecure". Dr Broomfield was clear that there were elements of the diagnosis that were less secure (compared to if Sonny had developed diarrhoea) but that does not mean that the diagnosis was "insecure" and nor does it mean that the diagnosis was in any way unreasonable. Insofar as Dr Coren purported to criticise Dr Ryan's diagnosis, he stepped outwith his area of expertise. Dr Coren does not work in an emergency department. He cannot therefore properly comment on the security of Dr Ryan's diagnosis in the emergency department context. It was submitted that the court had the benefit of evidence from clinicians who can properly comment on this issue, and Dr Coren's evidence on this matter should be rejected in favour of that evidence. Thus, the basis on which the Crown sought this finding is not consistent with the evidence heard at the inquiry. Nor was there any sufficient evidential basis to conclude that a senior

clinician would have taken a different approach to Dr Ryan. Dr Broomfield was clear that he did not disagree with the diagnosis made by Dr Ryan. These are important considerations, when one considers the practical consequences of the proposed finding.

iv. It was submitted that the proposed finding struck at the very heart of an important issue in this inquiry: the management of an emergency department which operates on the appropriate allocation of resources to meet its demands. Dr Stirling gave clear evidence at the inquiry as to the capabilities of the department at RHC. At that time around 60,000 children attended the emergency department each year. She subsequently confirmed that the department sees more than 200 patients per day on average (which equates to at least 73,000 attendances per year). Dr Stirling explained that she is asked questions by junior members of staff many times during a shift Dr Broomfield stated that when on shift he is asked a question every 30 seconds to a minute. Dr Donald stated that the decision-making density on shift is higher than a question every 30 seconds. Dr Stirling clearly explained that resourcing prevented all children being reviewed by a middle grade doctor and above. The Crown suggested that the court ought to have regard to the departments in Ninewells (in which Dr Donald works) and Birmingham Women's and Children's Hospital (in which Dr Kanani works) in considering the proposed finding. The Board submitted that is not appropriate.

Dr Donald's department sees 20,000 children per year. He described the volume of patients being seen at RHC as enormous. When Dr Kanani was asked whether RCH and his hospital were comparable in size, he quite properly stated that he did not have information about RCH's size but could comment on his own hospital. He went further under cross-examination and confirmed he had no direct or detailed knowledge about staffing at RHC. He also gave evidence that, in his unit, where a GP referral to hospital is made and urgent care is not required, the patient is streamed away to general paediatric services (in a unit similar to the CDU, rather than the emergency department, where they are reviewed by general paediatricians) and then cannot be discharged without having been discussed with or seen by a senior doctor. He gave evidence that no ST1s worked within his department, that there was consultant cover over a longer period of time than at RHC and that his hospital had the resources to ensure that all patients were discussed with an ST4 or above prior to discharge. That is clearly a different system to the system implemented at the RHC. The Crown suggested that, because in Ninewells and Birmingham all paediatric patients are reviewed by an ST4 or above, it follows that the practice is achievable at a practical level. There is no proper evidential basis to reach that conclusion. Indeed, it is contrary to the evidence given on this critical issue by the Crown's own expert Dr Broomfield, who stated that it was not possible to ensure senior review

of every patient who presents at the emergency department. When asked whether he thought it would be possible to implement a recommendation that every child is seen by a senior doctor before review he answered that it would not.

v. The Crown submission noted that there was discussion during the inquiry about the applicability of the 2015 guidelines (the RCPCH "Facing the Future" Guidance) and the 2012 guidelines (the RCPCH "Standards for Young People in Emergency Medicine" Guidance). The Crown suggested that no finding may be required on their applicability. The Board respectfully disagreed standing the findings and recommendations sought by the Crown. It is clear, from an ordinary reading of the 2015 guidelines that they did not, and do not, apply to the emergency department. The guidance says:

> "This standard [Standard 5] concerns all children referred for an urgent paediatric opinion, whether the source of that referral is general practice or the emergency department."

Dr Stirling, who worked in the department at the relevant time, clearly explained that the guidance applied where a child was being reviewed not in the emergency department but in acute care (such as the CDU) having been referred from the emergency department to another department. Dr Broomfield interpreted the guidance in the same way. Insofar as the other standards are concerned, Dr Stirling explained that the crucial distinction is in the word "admitted": children in the emergency

department have not been "admitted" to hospital. Children presenting at the emergency department are either admitted to a ward in the hospital (including the CDU) or they are sent home It is only when they are referred for further hospital care outwith the emergency department that they assume the status of an admitted patient. It is also important to bear in mind the status of guidance. It is just that: guidance. Dr Broomfield described the guidance as aspirational recommendations from the Royal College rather than an absolute minimum. Dr Donald agreed with that characterisation and indeed was evidently not familiar with the guidance at all, which would tend to suggest that it is not particularly significant in informing the way in which care was delivered in his department. Guidance is not binding and does not therefore dictate minimum standards of care. Dr Broomfield also observed that the Royal College of Emergency Medicine did not contribute to the 2015 guidelines. The absence of input from the Royal College of Emergency Medicine, it is submitted, strongly cautions against imposing these standards into the emergency department given that it is the Royal College who oversees the practice of emergency medicine in the UK. If the 2015 guidelines were to apply in an emergency department, Dr Broomfield considered that the Royal College of Emergency Medicine ought to have been consulted. He gave evidence that, in his unit in Edinburgh, Dr Ryan would not have been mandated to discuss Sonny's presentation with a senior doctor. Dr Broomfield stated

that his department is a busy, but well-staffed, emergency department, and they could not deliver the standards set out in the 2015 guidelines. He observed that it was disingenuous to write about standards which could not be achieved in practice. In that context, the Board submits that the court should not place any reliance on the 2015 Guidance in making any findings or recommendations.

vi. It was further submitted on behalf of the Board that it was also imperative to consider what changes have been made in the Emergency Department since the deaths. In particular, there has been an increase in doctors operating within the Emergency Department. Dr Stirling explained that there are now four additional senior doctors to assist with the demands of the Emergency Department: two are located within the Emergency Department and two are located elsewhere. There is consultant cover in the department from 4.00pm to 11.00pm Monday – Friday. There is a registrar (that is, an ST4 or above) based in the department 7 days a week from 4.00pm to midnight. During winter months there are an additional two medical consultants on hand to assist (not located in the Emergency Department), and in the summer this reduces to one additional consultant. Whilst that has allowed more children to benefit from the input of a middle grade doctor or above, it is not enough to facilitate senior review of every child who presents at the department. Notwithstanding that, Dr Stirling was clear that the increased resources have had positive effects in the

department. It was also submitted that is also essential to bear in mind that the Crown's proposal that all patients referred to the Emergency Department by a GP are reviewed by a senior doctor is not consistent with the open door policy operated within Greater Glasgow & Clyde Health Board and would thus require an overhaul of the existing system.

Dr Stirling explained the rationale behind the single front door policy:

> "[RCH] operate[s] [a] single front door like most paediatric emergency departments because if we don't children seen in primary care with minor things get priority over children with serious illnesses. So [we] triage at [the] door."

In other words if that policy is not adhered to children seen in primary care with minor illnesses will be given priority over children with serious illnesses and true "emergency" presentations. It was submitted that the Crown did not challenge Dr Stirling on that evidence or seek to suggest that that decision was anything other than sound and based on clinical experience. It was further submitted that the inquiry has no proper basis to second guess or challenge Dr Stirling on this and is being asked by the Crown to implement a system that they took a positive decision not to implement because they thought it resulted in reduced safety. That, it was submitted, was on any view not the purpose of a Fatal Accident Inquiry.

vii. The Board commented that the Crown's general submission that all children are seen by a ST4 grade doctor or above and submitted that in

making that submission the Crown was asking the inquiry to do the following:

a. Rely on the evidence of Dr Donald, whose unit sees 20,000 children per year - only a third of the patients that are seen at RHCG every year, and whose own evidence was not that he thought review by an ST4 or above ought to be achieved at RHCG (indeed, Dr Donald acknowledged the comparatively "enormous" volume of patients being seen at RHCG).

b. Rely on the evidence of Dr Kanani, who works at a unit in England, which operates under an entirely different organisational structure, and who gave evidence that he has no knowledge of how health services are set up and delivered in Scotland (including the number of attendances at the Emergency Department; the number of staff; or the ability of middle graders to review patients).

c. Disregard the evidence of the Crown's own expert, Dr Broomfield, who is the only Accident and Emergency clinician that the inquiry heard from working in a unit that is actually analogous to the unit in question, who said that this is not what happens in his department, and that they could not deliver this in their unit because there are simply not enough paediatricians in Scotland to do so.

d. Finally, and most importantly, ignore the evidence of Dr Stirling, who explained that her hospital simply does not have enough ST4 or

above grade paediatricians to implement this system. The setup in Glasgow is not comparable to the set up in Birmingham.

viii. The Board understood the rationale behind the Crown's submission on this issue. But the reasoning is superficially attractive and removed from reality. Dr Stirling was clear that the Board could not implement any recommendation to the effect that all children required to be reviewed or discussed with an ST3 grade doctor or above. It was submitted that this inquiry is not the appropriate way in which to decide how finite resources are allocated. The proposed finding has resource implications that cannot be properly addressed in the context of a Fatal Accident Inquiry. This inquiry cannot fully assess what range of consequences such a finding or recommendation would have for the practical operation of the emergency department. This inquiry cannot assess what consequences it would have for patient safety. If the more senior doctors were required to review or discuss every single patient then that would inevitably give them less time to devote to their other duties (including caring for the most seriously ill and injured children in the department). It is also important to emphasise that, as the system currently operates, if a doctor considers that senior input is required it can (indeed will) be sought. That allows each patient to be assessed in their individual circumstances. A flowchart has also been devised by the Board to assist its clinicians in making that decision: if there is any dubiety, the child is admitted. For completeness, the Board objected

to the Crown's characterisation of their staff as "junior and inexperienced practitioners": the doctors working in the paediatric emergency department have all at the very least attended 6 years of medical school, and successfully completed 2 years of working as doctors in training (Foundation Year 1 and Foundation Year 2) and undergone further training upon the commencement of their placement in the Emergency Department. They are properly equipped to differentiate between those children who, though unwell, are not critical and those patients in respect of whom senior review is required.

ix. In that context, the Board submitted that this inquiry should not make a finding that all children referred to the Emergency Department by a GP either require to be reviewed by a "more experienced" (and it is not clear what that means) doctor or all decisions to discharge reviewed by a senior doctor. The only evidence on how this would operate in practice at the relevant hospital came from Dr Stirling who explained very clearly why they had tried this approach and rejected it on the basis that it was delaying the treatment of the most seriously ill and injured children.

x. It was further submitted that the Board could see that the inquiry might prefer that all children are seen by a ST4 doctor or above on being discharged. If the inquiry wished to make a recommendation about this, then it was submitted, it should be directed at the Scottish Government (section 26(5)(b) of the 2016 Act), and would require to relate to the

provision of funding for the recruitment of more specialist paediatric trainees on a Scotland wide basis. That in turn would either require (i) fewer trainees in other specialties or (ii) the creation of more training places for junior doctors as a whole which would require the creation of more FY1 and FY2 posts, which feed into the training programs, and ultimately might require the creation of more medical school spaces to ensure that the new FY1 and FY2 spaces are actually filled by qualified doctors. The inquiry heard no evidence about what the extent of such a recommendation would need to be to be effective, or what the knock-on effects might be of reduced funding in other areas. It was submitted in conclusion that it was not appropriate for this inquiry to make recommendations the consequences of which go well beyond the circumstances of these deaths in an unpredictable way.

- Safety netting advice

i. The Board submitted that it did not understand what finding the Crown proposed in relation to the provision of safety netting advice. If the suggestion was that the Board ought to give consideration to the provision of standard safety netting advice by way of a leaflet as supplemented by oral advice (a change that has in any event already been implemented) then the appropriate section of the 2016 Act under which this matter would fall is 26(1)(b): recommendations. Dr Stirling explained that there is now a

more structured safety netting process in place. On discharge, families are provided with a written leaflet (of which there are many) providing standard worsening advice. In addition, clinicians can personalise the leaflet by adding case-specific worsening advice. Translations are available.

ii. In any event, the Crown submission was that:

> "It may be fair for this Court to consider that, on the evidence heard, a more experienced and practiced senior clinician than Dr Ryan might not have left Ms and Mrs Reilly with the impression that they were not welcome to return."

There is no evidential basis whatsoever for such a finding. Dr Ryan gave clear evidence as to what the content of her worsening advice was. She was supported in her worsening advice by Dr Broomfield. There was no evidence that a senior doctor would have tendered different worsening advice. As the Crown recognises, Dr Broomfield, an extremely experienced consultant, spoke of the difficulties even at his level in communicating effective worsening advice which parents understand. Insofar as there is any factual dispute about the content of Dr Ryan's worsening advice, for the reasons previously stated, the Board submitted that Dr Ryan's evidence should be preferred.

iii. In that context, the Board submitted that no finding should be made in relation to the provision of safety netting advice.

Cailyn Newlands

The facts in relation to Cailyn

[119] Cailyn was born on 30 December 2014 at the Royal Alexandra Hospital, Maternity Unit, Paisley. She lived in Renfrew with her mum and dad and brother. Cailyn was a registered patient at Kingsinch Medical Practice in Renfrew. Cailyn had received at the recommended time all the recommended immunisations for a child of her age.

[120] On 2 December 2016 Cailyn's mum contacted Kingsinch Medical Practice regarding Cailyn be unwell. At 1536 hours that same day Dr Allie Lochhead spoke with Cailyn's mum by telephone. Cailyn's mum reported that Cailyn had been unwell since the previous day with cold like symptoms, Cailyn had slept all day. She was not wanting to take food or fluids (although she had taken juice). Cailyn's mum reported that she was struggling to get paracetamol into Cailyn, she felt feverish, heart pounding, breathing fast, had a rash on her chest (which faded when she pushed down on skin) and that Cailyn was groggy and not herself.

[121] An appointment was made for Cailyn to attend Kingsinch Medical Practice at 1630 hours on 2 December 2026. Cailyn was examined at 1655 hours by Dr Allie Lochhead. On examination Cailyn was found to have a fever, her temperature was 39.5 degrees, her heart rate was 136 bpm, her respiratory rate was 32 bpm, she had no cervical lymphadenopathy, pure heart sounds, a clear chest with no increased work of breathing or us of accessory muscles and her capillary refill time was 4 seconds. Cailyn's mum explained that over the preceding few days Cailyn had been sleeping all

the time and had been more lethargic that day. Cailyn's skin was checked by Dr Lochhead and there were no new rashes. Dr Lochhead requested an urgent ambulance to take Cailyn and her mum to the Royal Alexander Hospital and Emergency Department. In her letter of referral, Dr Lochhead, amongst other things, wrote: "Imp – unwell child, temp not responding to paracetamol, ?viral? related to chickenpox".

[122] The decision was taken to instead take Cailyn to the Royal Hospital for Children in Govan by the Scottish Ambulance Service. Cailyn was examined by paramedics whilst within the ambulance at 1745 hours and was found to have a fever, her temperature was 38.7 degrees, her pulse was 148, her respiratory rate was 34 bpm and her capillary refill time was > 2 seconds.

[123] The ambulance proceeded to the Royal Hospital for Children. It arrived in the resuscitation department at approximately 1804 hours in the area of the hospital where children brought in by ambulance are initially assessed and treated. Nurse Heather Gillies conducted a physiological examination of Cailyn at 1810 hours. She was given a triage category of 4. It was recorded that Cailyn had cough/cold like symptoms. She weighed 11.7kg. She was lethargic. She had a fever. She was alert. She was upset during observations. Throughout the period of observations, her temperature fluctuated between 38.3 and 39.5 degrees. Her heart rate was 179 bpm. Her respiratory rate was 45 bpm. Her oxygen saturation levels were at 99%.

[124] Dr Owen Wilson (LAT 1) reviewed Cailyn at approximately 1820 hours. Dr Wilson was advised by Cailyn's mum that Cailyn was coryzal and had had a cough for a few days. Dr Wilson documented that Cailyn's mum had reported Cailyn had

been sleeping a lot on 2 December 2016 and the previous day had been passing looser stools that normal. Dr Wilson documented that Cailyn had been referred to hospital, by her GP, via ambulance, for pyrexia and a prolonged CRT. On assessment in resus, Cailyn's CRT was 2 seconds. She was bright and active. It was noted that she had been off food but was drinking very well. There were no signs of neurological impairment. Cailyn was breathing by herself. It was decided to move Cailyn to the Majors section of the Accident and Emergency Department. Cailyn was upset and combative. She became difficult to examine but she settled in her mother's arms. Dr Wilson carried out an examination of Cailyn. Dr Wilson noted that she was "coryzal +++". He found that she had inflammation in her ears and throat. She had wax in both ears. Her tympanic membranes were inflamed. There were generalised upper airways noises in Cailyn's chest. There were blanching spots on the nape of her neck. Cailyn's presentation was consistent with a viral upper respiratory tract infection. Cailyn was given 100mg of Ibuprofen at 1820 hours. Cailyn was kept at the Royal Hospital for Children for a short period of observation as the family were anxious after attending hospital via ambulance.

[125] Cailyn was re-examined by Dr Owen Wilson at around 1930 hours. Her temperature had dropped to 38.2 degrees and her heart rate had dropped to 144 bpm. Cailyn was noted as being settled and sleepy but appearing better. Cailyn was discharged home at approximately 1930 hours. Cailyn's mum was given Ibuprofen, 100 mg to be administered three time a day for the following 3 days. Dr Owen Wilson proceeded to give "worsening advice" to Cailyn's mum and dad. Dr Wilson recorded that Cailyn's parents were happy with the advice given.

[126] When Cailyn attended the Emergency Department on 2 December 2016 she did not have pneumonia.

[127] On and between 3 December 2016 and 5 December 2016 there was no deterioration in Cailyn's condition. There was also no significant improvement. On the morning of 5 December 2016 Cailyn's mum made an appointment for Cailyn with the GP surgery at 1230 hours. Cailyn continued to be really sleepy and her temperature was fluctuating. Cailyn's mum decided to bypass the appointment at the GP surgery and take Cailyn straight to the hospital. Cailyn's mum thought Cailyn would be seen quicker given that she had already been to the hospital and that they would know the background.

[128] At approximately 1154 hours on 5 December 2016 Cailyn re-attended the Royal Hospital for Children with her parents. The triage category assigned to Cailyn on this attendance was 4. It was noted that Cailyn was suffering from an ongoing temperature and vomiting. Cailyn was physiologically assessed at approximately 1213 hours by Nurse Agnes Thomson. Cailyn's mum explained to Nurse Thomson that this was Cailyn's second attendance in recent days and she had an ongoing fever with occasional vomiting. On assessment by Nurse Thomson, Cailyn was bright and alert. Her lips were moist. Her peripheries were cold to touch. Her temperature was 37.1 degrees. Her heart rate was 169 bpm. Her respiratory rate was 32 bpm. Her oxygen saturation levels were 99%.

[129] Cailyn was assessed by Dr Galvin Gan (ST3) at around 1300 hours. Prior to seeing Cailyn Dr Gan reviewed Cailyn's clinical notes from her attendance at the

Emergency Department on 2 December 2016. He noted that Cailyn had been seen by Dr Wilson and that she was thought to have an upper respiratory tract infection. Dr Gan also noted from those clinical notes that that was based on Cailyn having a red and inflamed throat, tympanic membranes (eardrums) and a runny nose. Her capillary refill time was noted as 2 seconds.

[130] On examining Cailyn Dr Gan found her to appear alert, well and hydrated. She had moist mucous membranes, normal skin turgor and had a capillary refill time of less than 2 seconds. Dr Gan listened to Cailyn's chest using his stethoscope) and heard normal vesicular breathing sounds in both lungs. Dr Gan listened to Cailyn's heart and found her heart sounds to be normal. Cailyn's abdomen was soft without tenderness. Her right ear had wax that occlude the view of her eardrum. Her left ear and throat appeared normal.

[131] Based on Cailyn's previous presenting history and the examination he had carried out Dr Gan suspected that Cailyn might be suffering from an upper respiratory tract infection (viral) that was slow to resolve. On that basis Dr Gan did not consider that there was any indicators for an x-ray or the need or blood tests to be carried out. Because of the prolonged nature of Cailyn's illness, however, Dr Gan decided to perform a urinalysis to exclude a urinary tract infection. He gave Cailyn's mum a sterile foil bowl to try and catch a urine sample.

[132] Dr Gan re-reviewed Cailyn at about 1345 hours. Cailyn had been given 177mg of paracetamol at 1340 hours. Dr Gan requested a repeat set of observations. The results of

those were that Cailyn's oxygen saturation levels were at 96%, her respiratory rate was 29, her heart rate was 160 and her temperature was 37.8.

[133] Dr Gan felt that as those observations were satisfactory (apart from the high heart rate which Dr Gan felt was because Cailyn was upset) and because Cailyn appeared well he made the decision to discharge Cailyn home. At that time Dr Gan did not consider there was any clinical indicators that Cailyn needed antibiotics. Dr Gan considered that Cailyn had a viral infection.

[134] When Cailyn presented at the Emergency Department for the first time on 5 December 2016 (and on the second occasion) she was already suffering from pneumococcal pneumonia (and septicaemia). There was, however, no clinical evidence of a lower respiratory tract infection (pneumonia) and nothing in Cailyn's clinical presentation at the time of being discharged that would have alerted Dr Gan to prescribe antibiotics, or carry blood tests or an x-ray. There was nothing to suggest that Cailyn was suffering from a serious or significant bacterial illness.

[135] Dr Gan gave Cailyn's mum a urine sample kit and asked her to catch a urine sample at home and take it to the GP surgery or bring it back the next day. Dr Gan also gave Cailyn's mum worsening advice including that she was to come back if Cailyn developed a non-blanching rash, took less than half her usual oral intake or if there were any concerns. Cailyn was discharged at about 1355 hours. On being discharged Dr Gan prescribed and dispensed liquid paracetamol (120mg to be taken orally, as required, 4 to 6 hours apart with a maximum of four doses a day).

[136] On 5 December 2016 shortly after being discharged from the Royal Hospital for Children, whilst in the car with her parents Cailyn vomited. The vomit was dark green in colour. Cailyn's mum made the decision to re-attend at the Royal Hospital for Children with Cailyn. Cailyn re-attended the Emergency Department at 1551 hours.

[137] Upon re-attendance, Cailyn was triaged as a category 5 and was assessed by Nurse Toni Shannon. Nurse Shannon noted that Cailyn had been seen once in the Royal Hospital for Children Emergency Department that day and had only recently been discharged home. Cailyn was upset when she was being physiologically examined at triage. It was noted that she had one vomit in the car. Her observations at triage were oxygen saturations 95% heart rate 150 and a temperature of 38. She was given 90mg of Ibuprofen at 1600 hours.

[138] Dr Galvin Gan again assessed Cailyn at approximately 1645 hours. Cailyn's mum explained that on their way home Cailyn had vomited and that she had noticed that the vomit was dark green. Cailyn's mum was worried about this after a previous discussion she had had with Dr Gan when he had specifically asked whether any of Cailyn's vomit had been green. Dr Gan did not explain the green vomit to Cailyn's mum.

[139] On examining Cailyn Dr Gan found that Cailyn presented as well, hydrated and had a capillary refill time of less than 2 seconds. Dr Gan examined Cailyn's ears, chest and abdomen.

[140] There was nothing in Cailyn's clinical presentation at that time to suggest that Cailyn had pneumonia or that she should be prescribed antibiotics or had blood tests or an x-ray.

[141] Dr Gan sought advice from Dr Joanne Stirling. His reason for doing so was that he was unsure about the significance of the green vomit in the absence of an obstruction in Cailyn's intestines and that this was Cailyn's second attendance at the Emergency Department that day (and her third since 2 December 2016).

[142] Dr Gan and Dr Stirling had a discussion about Cailyn. At the time of that discussion Dr Stirling was treating a patient who had suffered significant injuries in a road traffic accident.

[143] Dr Stirling did not examine Cailyn. Dr Stirling's recollection of those discussions was that she informed Dr Gan that as this was Cailyn's third presentation within a week she required a prolonged period of observation. Dr Stirling anticipated that this period of observation would take place in the Clinical Decision Unit ("CDU") for a period of perhaps up to 24 hours. Dr Stirling did not in express terms tell Dr Gan that the period of observation was to take place in the CDU but considered that she did not require to stipulate to Dr Gan that the further observations were to take place in the CDU.

[144] Dr Gan's recollection of the discussions with Dr Stirling was that Dr Stirling's advice was that Cailyn was to have a longer period of observation, which he interpreted to be an extended period of observation within the Emergency Department "up to the four hour target time" which would have been until 1951 hours.

[145] Dr Gan did not tell Dr Stirling that he did not know what to do regarding Cailyn's care. Had he done so Dr Stirling would have reviewed Cailyn (or had a medical registrar in CDU to review her). Dr Stirling would then have been the clinician in charge of Cailyn and make the decision to refer Cailyn to CDU or discharge her.

[146] Cailyn was not admitted to the CDU as Dr Stirling had intended.

[147] At about 1800 hours, at the end of his shift, Dr Gan handed the care of Cailyn over to Dr Kendrew-Jones. Dr Gan advised Dr Kendrew-Jones that Cailyn had represented with green coloured vomiting and his clinical impression was of a viral illness. Dr Gan further informed Dr Kendrew-Jones that he had discussed Cailyn's case with Dr Stirling. The plan communicated to Dr Kendrew-Jones was that Cailyn was to be observed in the Emergency Department for an extended period which she understood to be more than the standard period of time of between 45 – 60 minutes and in general is for a period of 4 hours. There was no discussion between Dr Gan and Dr Kendrew-Jones about referring Cailyn to the CDU. Had Dr Gan communicated to Dr Kendrew-Jones that Dr Stirling had said Cailyn was to be referred to the CDU, Dr Gan would have made that referral.

[148] Dr Kendrew-Jones reviewed Cailyn at 1910 hours, some 3 hours and 20 minutes after Cailyn representing at the Emergency Department. Nursing staff had taken observations of Cailyn at 1840 hours and found Cailyn to have a temperature of 37.7, respiratory rate of 34, oxygen saturations of 98% and a heart rate of 146 beats per minute. Cailyn had a pews (or cews) score of 1. Cailyn's observations were all within

normal limits, with the exception of the slightly increased heart rate which did not concern Dr Kendrew-Jones as the observation notes recorded that Cailyn was upset.

[149] Dr Kendrew-Jones' clinical impression was that Cailyn was brighter and clinically improving. There was nothing in Cailyn's clinical presentation that made Dr Kendrew-Jones change her view that Cailyn was suffering from a viral infection. Dr Kendrew-Jones did not consider that there was a need for Cailyn to be treated with antibiotics. Dr Kendrew-Jones was satisfied that Cailyn was fit to be discharged home.

[150] After discussion with Cailyn's parents (which included the possibility of Cailyn being admitted should they want that given that Cailyn had represented at the Emergency Department) the decision was made to discharge Cailyn. Dr Kendrew-Jones reassured Cailyn's parents that it was likely that Cailyn was suffering from a viral infection. Dr Kendrew-Jones gave Cailyn's parents worsening advice on Cailyn being discharged. This included advice about ensuring that Cailyn stayed adequately hydrated, that Cailyn should be brought back to the Emergency Department if her rash appeared to be non-blanching or if there were concerns about increased vomiting or a reduction in drinking. Cailyn was thereafter discharged.

[151] At the time Cailyn was being discharged there was no clinical indication for admission for overnight observation and no clinical signs or symptoms suggestive of serious underlying illness such as pneumonia or septicaemia.

[152] Had Cailyn been admitted to the CDU on 5 December 2016 it is likely that Cailyn would have undergone additional investigations including a blood test (and potentially a chest x-ray) which would have supported a diagnosis of an underlying serious

bacterial infection. This would have led to Cailyn being treated with empiric intravenous antibiotics. Had Cailyn been prescribed and treated with antibiotics on 5 December 2016 either before or during her second attendance at the Emergency Department, she would have survived her infection.

[153] On 6 December 2016 Cailyn re-attended the Royal Hospital for Children along with her parents at approximately 1854 hours. She was assessed as triage category 1. The reason for Cailyn's re-attendance was recorded by Nurse Pauline Sie as due to vomiting and a rash on the back of her thighs. Cailyn was escalated to Consultant level and taken into resus at 1915 hours. Dr Stephen Foster was asked to attend resus by nursing staff. Upon his arrival Cailyn was already being attended to by Dr Claire Anderson and Dr Galvin Gan.

[154] Dr Stephen Foster was at that time a Paediatric Emergency Medicine Consultant and was the "team leader" of the resus team treating Cailyn on 6 December 2016. He took a brief history from Cailyn's parents. He documented that Cailyn had been unwell with intermittent fever, vomiting, cough, diarrhoea and reduced oral intake. She had been seen in the Royal Hospital for Children on 2 December 2016 and twice on 5 December 2016. Dr Foster recorded that Cailyn had previously been diagnosed as suffering from a viral URTI. He further recorded that Cailyn's mum re-presented Cailyn on 6 December 2016 due to concerns about marks appearing on the posterior and upper thighs which were first noticed at 1800 hours on 6 December 2016.

[155] Dr Foster found Cailyn to be pale, quiet and passive to interaction. She was then crying and calling for her mum. Cailyn was tachypnoeic: her oxygen saturation levels

could not be obtained: she was tachycardic: her CRT was 4 seconds centrally and peripherally; her blood pressure was 106/70; her skin was mottled with her legs worse than her arms and she was hypoglycaemic.

[156] Upon his assessment Dr Foster initially instructed the team to gain intravenous (IV) access. Blood gas tests showed: H+61, pCO3 11.2, BE- 15.3, Lactate 8.7, Na 129, K6.1, Hb87, glucose 2.7, 0.9% sodium chloride bolus and 10% glucose bolus were administered. A second round of IV boluses were given and repeat blood tests were taken. These showed; H+ 80.1, pCO2 4.5, HCO3 10.6, BE -17.4, Lactate 7.2, Na 128, K 5.9, Hb 53, glucose 5.4. Cailyn was administered a bolus of hydrocortisone intravenously. A chest x-ray was requested.

[157] After the second round of IV boluses were given, Dr Altaf Ansary, the PICU registrar was asked to attend at around 1935 hours, as there was no improvement in Cailyn's heart rate and her blood pressure was low. O.5ml of calcium gluconate (10% solution) was administered and a bair hugger was applied to Cailyn. Cardiovascular deterioration in Cailyn's condition was observed: she had decreased systolic and narrowing pule pressure, her peripheral pulse was weak and she had bradypnea. Cailyn required augmented PEEP support at 1940 hours. It was decided that Cailyn was to be intubated following discussion between Dr Foster and Dr Alistair Turner, Consultant Paediatric Intensivist. Cailyn appeared distressed, pale and her sclera were icteric.

[158] Whilst Dr Alastair Turner was preparing to intubate Cailyn, no pulse was detected, and her heart rate showing PEA. Full resuscitation was commenced. Chest

compressions were started and 1.2ml of 1 in 10,000 of adrenaline was given. Heart rhythm checks after 2 minutes demonstrated there was PEA. Cailyn was successfully intubated and fitted with a 4.5 cuffed ETT. Pulmonary oedema was noted. CPR was continued. However Cailyn subsequently had a prolonged cardiac arrest. She was treated with three doses of calcium gluconate and seven doses of 1 in 10,000 of adrenalin. During this time Cailyn was given continuous CPR and heart rhythm checks were completed every 3 minutes. A transient pulse was felt but the pulse was lost again shortly thereafter. During full resuscitation, further blood gases were taken, which demonstrated worsening metabolic acidosis despite adrenaline being administered. There was a decrease in Cailyn's blood glucose, and she was administered 10% dextrose bolus. She was transfused with 20ml of 0 negative blood. An ECHO was completed by Dr Turner. The ECHO initially demonstrated Cailyn's heart was well filled but functioning poorly with no pericardial effusion. Cailyn developed pulseless VT and as such was defibrillated once with 50 joules, which returned the heart rhythm to PEA. Cailyn's condition deteriorated to asystole despite all reversible courses of cardiac arrest being administered. Cailyn's pupils became fixed and dilated, her body was rigid, her peripheries were cool to the touch and she remained asystole. This was discussed amongst the team and after 40 minutes of full resuscitation, having discussed the position with Cailyn's mum and dad, the decision was taken by the team to cease resuscitation.

[159] The time of Cailyn's death is recorded as 2042 hours on 6 December 2016.

[160] On 9 December 2016 Cailyn's body was examined at the Queen Elizabeth University Hospital, Glasgow by Dr Paul French, Consultant Paediatric and Perinatal Pathologist. In terms of the post-mortem report which contains a record of Dr French's findings, the cause of Cailyn's death was:

1a: Streptococcus Pneumoniae Bronchopneumonia

[161] A significant Clinical Incident Review was undertaken following the death of Cailyn by Greater Glasgow and Clyde Health Board. This review was undertaken by a team who no prior involvement in the care of Cailyn. It was made of staff from paediatrics, accident and emergency, clinical risk and neonatology. Their report which is dated 17 July 2018 details the findings of the review.

[162] The terms of reference for the investigation were:

(i) to review the circumstances surrounding the death of Cailyn in the Emergency Department on 6 December 2016

(ii) to determine what learning can be taken and whether there were any missed opportunities which would have resulted in a different outcome.

[163] The review concluded that Cailyn's death was not foreseeable or readily preventable. The clinical information and post-mortem findings were in keeping with the development of overwhelming Streptococcus pneumonia sepsis following a human metapneumovirus infection. The review team was clear in their view that Cailyn did not succumb to an infection before the first presentation, rather it was a new and unpredictable infection that caused her death.

[164] The review panel made the following recommendations:

"Review systems for triage, PEWS scoring, sepsis 6 and NICE guidance on management of febrile illnesses in the under-fives and consider development of a more cohesive structured approach.

Review arrangements for providing support and oversight of junior medical staff when the uty ED consultant is attending another patient.

Consider development of a structured worsening advice/safety netting process including giving written information for those being discharged with a febrile illness and review of the booking in process when re-attending for the same illness.

Undertake an audit/review of the number of patients re-attending with febrile illnesses to gauge the frequency that this occurs with a view to reviewing the current policy for the review of repeat offenders.

Review training and guidance for reception staff to ensure that they are able to respond appropriately when severely ill patients present to them."

Submissions

The Statutory questions

Section 26 (2) (a) – place and time of Cailyn's death

[165] Parties were agreed that Sonny's death occurred at 2042 hours on 6 December 2016 within the Emergency Department at the Royal Hospital for Children, Glasgow.

Section 26 (2) (b) & (d) – accident

[166] None of the parties made any submission that any accident resulted in Cailyn's death.

Section 26 (2) (c) – cause of Cailyn's death

[167] Parties were agreed that the cause of Cailyn's death was Streptococcus Pneumoniae bronchopneumonia.

Crown submission

General

[168] In order to put the Crown submissions in context, it was considered to be helpful to say something more about the circumstances of Cailyn's life and her subsequent death. Those were as follows.

[169] Ms Anderson (Cailyn's mum) spoke of how Cailyn was a lively and healthy, strong little girl, who lived in family with her brother, mother and father. She looked up to her brother and strove to copy all that he did. It was a matter of agreement that Cailyn had received all of her immunisations at the appropriate time. She had had a bout of chicken pox at the end of November 2016 but was none the less in good health.

[170] On 2 December Ms Anderson was concerned about Cailyn's health: she was feverish and lethargic and unusually [for her] unwell. She was taken by her mother to see her GP, Dr Lockhead. Dr Lockhead examined Cailyn and was sufficiently concerned by the result of that examination that she sought advice from the Royal Alexandria Hospital and summoned an ambulance to take Cailyn to hospital. The ambulance crew paramedics also examined Cailyn and decided that they would take Cailyn to the Royal Hospital for Children ("RHC"). This crew contacted the hospital ahead of their arrival as they too were concerned about the clinical observations of Cailyn. Cailyn was taken

by "blue light" ambulance to hospital; an experience Ms Anderson found, quite understandably, "scary." She had overheard the GP discuss Cailyn with the Royal Alexandria Hospital and understood that the concern was that Cailyn may have sepsis.

[171] On arrival at hospital, Cailyn was examined and triaged. She was then transferred from the trauma receiving area, where she had been taken by the ambulance, to "majors" where she was examined by Dr Owen Wilson. He concluded that Cailyn had an upper respiratory tract infection, a viral infection, which would subsist for, Ms Newlands remembered, 3 - 5 days. Cailyn was discharged.

[172] Over the weekend, Cailyn did not improve. By the Sunday, Ms Anderson had decided that another GP appointment was required. However, Cailyn's condition declined and so she decided to return to RHC. Cailyn was triaged at this time at 11.54 and thereafter examined by Dr Gan, a ST3 who had commenced his first formal paediatric training rotation in August 2016. Dr Gan undertook a thorough examination of Cailyn and considered that the diagnosis of Dr Wilson from 2 December remained appropriate. Cailyn was discharged. Ms Anderson considered that she was confused by the advice given by Dr Gan, which was to obtain a urine sample and "any changes, bring her back".

[173] During this consultation and subsequently, Ms Anderson considered that Dr Gan was not listening to her or explaining the reasons why he was asking her questions regarding Cailyn's presentation. For example, Ms Anderson explained that Cailyn was vomiting. Dr Gan asked her to advise him of the colour of this vomit with reference to a chart [showing varying and increasing shades of green] while not explaining to

Ms Anderson the relevance of this discussion. She understood that "green vomit" had been asked about but was given no reason why or if that was a matter of concern. Consequently, she left feeling uncertain about the circumstances in which she should return with Cailyn.

[174] On this 3rd presentation Dr Gan sought the advice of the consultant on duty, Dr Stirling. At the time of seeking this advice, Dr Stirling was engaged in treating another patient and in particular was organising a CT scan for that child, who had been involved in a road traffic accident. She none the less accessed Cailyn's electronic medical records and was aware of Cailyn's previous admissions.

[175] There are two different accounts of the conversation between Dr Gan and Dr Stirling:

- Dr Gan recollected that he told Dr Stirling about Cailyn's first presentation on 2 December and her further presentation on 5 December. He told her about the green vomit. In his evidence, he could not recall whether he used the word "normal" to describe Cailyn's observations and agreed in evidence that in any event these were not "normal". Dr Gan's affidavit evidence was that Dr Stirling replied that Cailyn's family were "not coping with the illness" and that "It sounds like they need more time." In evidence in court, it was revealed that this affidavit was, in its entirety, exactly the same, as the statement that Dr Gan had given to the SCIR in 2018. There is no reference to that in the affidavit. The earlier statement was not before this inquiry.

- Dr Gan's understanding, he said, as a consequence of this conversation with Dr Stirling, was that Cailyn should be observed within the Emergency Department for a further period of time, up to the 4-hour time limit: a time limit set by target makers in respect of waiting times spent in the Emergency Department and which had no clinical significance. The reason for this period of observation was, as Dr Gan understood it, because Cailyn's parents were "not coping" or similar wording used by Dr Stirling when instructing him on what to do. When writing up Cailyn's notes, Dr Gan translated, he thought, Dr Stirling's comments about "not coping" into the word "acopia": a recognised pejorative description of a patient or parent's presentation.
- Dr Stirling recollected that she told Dr Gan that Cailyn required to be admitted "for a prolonged period of observation". She was clear in her affidavit and in her evidence to the inquiry that Dr Gan should have known that this could only mean that Cailyn should be admitted to the Clinical Decision Unit [CDU]: a unit aligned with the Emergency Department but where children would be observed for up to 24 hours by a paediatric doctor. Dr Stirling considered that Dr Gan should have known this because:
    i. he would have been told of it at his induction and
    ii. because by that time in the Emergency Department, it would have been clear to him that this was what was meant.

> At no time did Dr Stirling discuss with Dr Gan, she said, that Cailyn's parents were "not coping" or similar. Dr Stirling candidly accepted that she did not specifically say, "admit to the CDU" though she was equally clear that this was and should have been clear to Dr Gan given his time in the Emergency Department. She has since changed her practice to be clear on giving such instructions.

[176] In all the circumstances of this inquiry, it was submitted, the court may consider that it is not necessary to resolve the specifics of what exactly was said and by whom. This court may consider that it is sufficient to consider that regardless of what was said and by whom there was a critical breakdown in communication which led, on the evidence this court heard and on a balance of probabilities, to Cailyn's death. Dr Stirling had intended that Cailyn be admitted that afternoon to the CDU. However, as she accepted in her evidence, she did not say that, in clear terms. Dr Stirling accepted that she was not clear and unambiguous. She has since changed her practice to be clear and specific when requiring a child to be admitted to the CDU. Dr Gan did not know "what to do." he did not tell Dr Stirling that he did not know what to do. He did not understand or interpret correctly the instructions of Dr Stirling as being an instruction to admit Cailyn to the CDU. He did not seek to have Cailyn admitted to the CDU.

[177] The Crown went on to submit that if the court considered it necessary to resolve the conflict in the accounts of Dr Gan and Dr Stirling, it may prefer the account given by Dr Stirling over the account of Dr Gan for the following reasons:

- Dr Gan's affidavit to this inquiry and by extension to the SCIR in 2018 did not disclose that he had felt that he did not know what to do when treating Cailyn. Both Dr Donald and Dr Stirling, in their evidence noted that where a colleague was in that position, seeking advice, that should be made clear to them. Dr Gan did not tell Dr Stirling he did not know what to do. When pressed in his evidence before this inquiry, he said that this was, in fact, the case. This admission was completely new and not foreshadowed in his affidavit. It was not before the SCIR. It was not disclosed to Dr Stirling at the time of seeking her advice nor was it disclosed to those undertaking the SCIR. It is of course a matter for this court, but the Crown submits that the manner in which this passage of evidence as given was revealing; showing that Dr Gan, when seeking the advice of Dr Stirling, was uncertain, anxious and bewildered by the position he found himself in when treating Cailyn. He did not acknowledge that to Dr Stirling. Not only was he anxious about what to do for Cailyn, the reality, the Crown submits, went further: he did not know what he was doing. He was quite at sea. This court might consider that this anxiety impacted on his ability to take in, understand and appreciate the direction being given to him by Dr Stirling.
- Further evidence of Dr Gan not listening properly was reflected in the evidence of Ms Anderson. She was clear that she did not consider that Dr Gan was listening to her and was not appreciating her level of instinctive concern for Cailyn's deteriorating condition. Both Dr Coren and

Dr Broomfield noted in their evidence the importance of listening carefully to the parents of a sick child, who knew their child best and so their concerns should be taken seriously. This court may consider that the evidence illustrates a pattern of behaviour of Dr Gan not listening: his lack of careful listening to Ms Anderson and his lack of careful listening to Dr Stirling.

- Dr Gan noted in Cailyn's notes the word "acopia". This is a pejorative term which indicated a negative view of the persistence and presentation of Cailyn's symptoms by her parents. Dr Stirling was quite clear that this was not a word that she would ever use. Furthermore, she would not have engaged in any discussion about any perceived parental coping difficulties. Taken at its most benign, Dr Gan's use of the inappropriate word "acopia" illustrated his clear lack of understanding of Dr Stirling's directions to him. Dr Gan, fairly, recognised now that such a term was inappropriate.

[178] Regardless of whether the inquiry prefers the account of Dr Gan or Dr Stirling about this conversation, it was submitted that there are two important matters which flowed from it that the Crown invited this court to have regard to in the Recommendations as proposed by the Crown:

- In his evidence, Dr Gan said in clear terms that he "did not know what to do". As has been noted above, his clear demeanour, this court may have thought, was such as to extend to not only did he not know what to do but that he did not know what he was doing in respect of treating Cailyn.

While he did not communicate that lack of knowledge [and indeed anxiety] to Dr Stirling at the time, Dr Stirling clearly did not appreciate it either. Dr Stirling gave evidence that had Dr Gan told her that he did not know what to do or had she formed the impression that he did not know what he was doing, then she would have examined Cailyn herself. She did not examine Cailyn. Dr Donald was clear that he would expect a colleague in Dr Gan's position to be clear and candid about their state of knowledge.

- Dr Stirling accepted that she told Dr Gan that Cailyn should be observed for a "prolonged period". While she thought that was a clear instruction with a recognised meaning, she was not in fact clear and unambiguous in her instruction to Dr Gan. She accepted that she did not say, in terms, that Cailyn was to be admitted to the CDU. She also accepted that, with hindsight, she should have said this, in clear and unequivocal terms. Since Cailyn's death Dr Stirling has changed her practice. It would be fair that this was in recognition of the consequences of the breakdown in communication in this case between herself and Dr Gan.

[179] Flowing from that the Crown considered that the inquiry should find that had Dr Gan candidly admitted to Dr Stirling that he was at a loss when treating Cailyn then Dr Stirling would have examined her and admitted her to the CDU. It also followed that had Dr Stirling been explicit in her instruction to Dr Gan that Cailyn should be admitted to the CDU, then Cailyn would have been so admitted at that time. This admission to the CDU, on the expert evidence heard by this Inquiry would, on a balance of

probabilities, have led to Cailyn being prescribed antibiotics, which prescription would have prevented her death. This unchallenged evidence, from both Dr Coren and Professor Ledhani, it is submitted, reached a standard well beyond a "real or lively possibility".

[180] Following this conversation between Dr Gan and Dr Stirling, Dr Stirling was firmly of the understanding that Cailyn would not be discharged but would be admitted to the CDU for 24 hours of observation. Had that occurred, Cailyn would have been admitted at about 6.00pm to this unit. It did not occur. Dr Gan continued Cailyn's observations in the Emergency Department, transferring her to the care of Dr Kendrew-Jones. She attended on Cailyn at about 1910 hours. She did not undertake another examination of Cailyn, having available to her the results of observations taken at 1840 hours. She did examine Cailyn's foot, her attention to it having been drawn to spots on it by Ms Anderson.

[181] Again, there is difference of evidence of the presentation of these spots. The court may consider that it does not require to resolve this difference when considering any recommendations. Ms Anderson was clear that when she had rubbed her finger over these spots, these were "non-blanching". Non-blanching spots are a clinical indicator of a potentially serious infection. Dr Kendrew-Jones, on examination, considered that these spots were blanching, leading to the conclusion that these were clinically benign. The Crown respectfully considers that this dispute of fact does not require to be resolved in this inquiry. Had Cailyn been admitted to the CDU, as Dr Stirling had expected her to be, the matter would have been clarified during that

prolonged period of observation. No spots were noted on Cailyn's foot at the post-mortem examination though there were clear marks noted on her leg which had been identified by Mr Newlands on Tuesday 6 December 2016 leading to Cailyn's return to hospital on that day.

[182] It was further submitted that on each separate occasion that Cailyn was examined at the RHC by Dr Wilson and Dr Gan and when she was seen then discharged by Dr Kendrew-Jones, there were no clear clinical indicators that she should be treated with antibiotics. Each doctor made appropriate clinical decisions having regard to the information before them. On both occasions when she was examined by Dr Gan and then seen by Dr Kendrew-Jones, she was suffering from pneumonia. Notwithstanding that, the expert evidence before this court was that there were no clinical indicators on each set of her observations in isolation to suggest that she should have an x-ray or blood tests or be prescribed antibiotics. Had such an x-ray been undertaken, the pneumonia would likely have been indicated on that x-ray. Dr Broomfield, relative to the evidence in Sonny's case, described lung sounds in a child with pneumonia as sounding like "crackles" and used the description of these sounding like the noise of sucking through a straw at the bottom of a drink. Dr Gan had listened to Cailyn's chest and found it to be clear. While there was no explanation to reconcile these two findings, Professor Ladhani noted that there were presentations of "silent pneumonia" where there are no lung sounds present, notwithstanding clinical findings on x- ray.

[183] Cailyn returned home following her discharge at 1907 hours from the RHC. Throughout the night she was feverish and restless, coughing and vomiting, seeking

juice and comfort from her mother. Ms Anderson administered Calpol and ibuprofen through the night and into the next day. She kept a record of the times when she gave this to Cailyn. Cailyn was listless through the day, inactive and not eating.
Mr Newlands returned home at about 6pm. Cailyn, he said, was, "Just sitting, lethargic. I had a wee interaction with her, but she certainly was not well … she was really lethargic, but she was definitely aware of my presence." Mr Newlands noticed marks on Cailyn's leg which had not been there earlier as Ms Anderson had been watchful for such changes when changing Cailyn's nappy through the day. The decision was taken to return to the RHC. On arrival there, after a short delay, Cailyn was triaged at 1, the most serious level and treated in resus, where she sadly died.

Evidence of Dr Coren and Professor Ledhani: Admission to CDU

[184] As previously submitted Cailyn was discharged from the Emergency Department by Dr Kendrew-Jones at 1907 hours on 5 December and taken home by her parents. There was clear evidence of her condition overnight and into the 6th of December from her parents.

[185] Within the RHC the CDU is staffed by a paediatric registrar. Dr Stirling's evidence was that she expected Cailyn to have been observed there for 24 hours. Accordingly, the observations noted, particularly by Ms Anderson, from Cailyn's return home after 7.00pm on the 5th to her re-admission on the 6th and described to this court would have been observed within this clinical environment of the CDU over a 24-hour period.

[186] Dr Coren, an expert paediatric consultant gave evidence of what would have been likely to have occurred within the CDU over this period of 24 hours had Cailyn been admitted to it and observed within it. He did so under reference to the evidence of Cailyn's parents of her presentation in this 24-hour period from 5th and into the 6th of December.

[187] There was clear and uncontradicted evidence from Dr Coren, Professor Ledhani, the SCIR and Dr Donald that by Sunday 4 December Cailyn's pneumonia would have shown up on an x- ray of her lungs, had one been taken.

[188] By at least Sunday 4 December, Cailyn had pneumonia. This was treatable with antibiotics. There was unanimity among the expert evidence on this matter that had such antibiotics been prescribed to Cailyn on 5 December 2016, she would have survived.

[189] Professor Ledhani was clear in his evidence and in his report at p37 in particular that there were discreet windows of opportunity for Cailyn to have been prescribed antibiotics, leading to her survival. While the Crown accepts that there were no clinical indicators to do so, there was clear evidence that notwithstanding this, on the third Emergency Department admission [and second admission on 5 December 2016] Cailyn should have been admitted to the CDU where Dr Stirling had expected her to go and where she had expected her to remain for 24 hours.

[190] Dr Stirling's evidence was that observations of children in the Emergency Department were taken about every hour and that on admission to the CDU Cailyn's observations would have been taken again.

[191] Dr Coren explained that had Cailyn been admitted at about 6.00pm on 5 December, then, in this calmer environment, there would have been, "objective observations and that the parents would have had more chance to interact with the clinicians". Dr Coren considered that the input of a parent into assessing their child's health was "very" important, because, he said, "The parents know the child much better than any doctor and if they are worried then you take that seriously." He went on to describe how, "if she had hour after hour objective documentation, we have to say she would have had the chance to have her care stepped up." This would have involved a blood test which Dr Coren considered would have alerted the clinicians then to prescribing Cailyn antibiotics: "I suspect that test would have been quite abnormal because she was on day 4 and probably it would have led to her being given antibiotics." While Dr Coren was unable to say precisely when this "trigger" to step up Cailyn's care would have occurred, he was quite clear that it would have occurred while she was in the CDU and well within the 24-hour period prior to her re-admission in a critical and unsavable condition on 6 December.

[192] Finally it was submitted that Dr Coren was taken, in detail through the expert report of Professor Ledhani with reference to the windows of opportunity identified by the Professor for treatment of Cailyn with antibiotics. Dr Coren was clear in his evidence that he agreed with the conclusions of Professor Ledhani in respect of the impact on Cailyn of having such antibiotic treatment within the CDU over these 24 hours.

Section 26 (2) (e) - precautions

[193] The Crown considered that there were 3 reasonable precautions, which, had these been taken, would have, on the higher standard of a balance of probability, avoided Cailyn's death.

- Firstly, Dr Gan should have been clear and frank with Dr Stirling.

  Had Dr Gan been clear and frank with Dr Stirling that he did not know what he was doing, Dr Stirling's evidence was that she would have examined Cailyn and admitted her to the CDU where she would have been observed for 24 hours. Had she been admitted, the evidence of Dr Coren together with Professor Ledhani would likely have led to Cailyn being prescribed antibiotics at some point during this period of observation which would have led to her survival.

- Secondly, Dr Stirling should have been clear and unambiguous in her instruction to Dr Gan.

  Had Dr Stirling been clear with Dr Gan that her statement of a "prolonged period of observation" meant that she was issuing an instruction that she be admitted for this to the CDU then Cailyn would have been so admitted. Had she been admitted, the evidence of Dr Coren together with Professor Ledhani would likely have led to Cailyn being prescribed antibiotics at some point during this period of observation which would have led to her survival. Dr Stirling frankly and fairly accepted to the inquiry that she has since changed her practice to be clear and

unambiguous in these instructions. As has been noted above, had this precaution been taken, Cailyn would have been admitted to the CDU, [where she would have been prescribed antibiotics] which precaution, had it been taken, would in all probability have prevented Cailyn's death.

- Thirdly discharge review by senior clinician.

  Had the Emergency Department within the RCH, like both the Emergency Departments in Ninewells and in Birmingham Children's Hospital, a procedure which did not permit returning patients to be discharged by a junior doctor [below ST4] then Dr Kendrew-Jones would not have been able to have discharged Cailyn without discussing this with Dr Stirling. Dr Stirling did not know that Cailyn had been discharged. That had not been her intention. She was the senior clinician on duty. Had it been brought to her attention at a later time by Dr Kendrew-Jones then Cailyn would have then been admitted to the CDU at that time. Had she been admitted, the evidence of Dr Coren together with Professor Ledhani would likely have led to Cailyn being prescribed antibiotics at some point during this period of observation which would have led to her survival.

[194] It was submitted that each of these precautions are reasonable. Each is achievable. Insofar as precaution 3 is concerned, the practicability of that is demonstrated within Ninewells Hospital Emergency Department and Birmingham Children's Hospital. Insofar as both precautions 1 and 2 were concerned, these are rooted in simple, clear, unambiguous and frank professional communication. There is

clear evidence that so far as the 2nd precaution is concerned, that has been implemented by Dr Stirling in her professional practice.

Section 26 (2) (f) – defects in system of working

[195] It was submitted that the court heard evidence that in two other hospitals, children returning to the Emergency Department within 72 hours and presenting with the same condition have their condition observed by a more senior clinician. This evidence was given by Dr Donald, of his Emergency Department in Ninewells and from Dr Kanani of his Emergency Department in Birmingham. Both systems existed in 2016. Both systems, as has been discussed earlier, engaged more senior clinicians who had more experience in identifying those children whose condition was not a viral one from which they would recover but a serious bacterial infection which required treatment. Dr Donald's report noted that:

> "It is well recognised that these individuals have a higher morbidity and mortality and/or there is a degree of complexity to the reasons behind them returning that warrants a more senior clinician to review them."

This system of work was in place in both of these hospitals in 2016. The absence of this system of work at RCH in December 2016 contributed to the death of Cailyn Newlands.

[196] Following the SCIR into the death of Cailyn Newlands and Sonny Campbell, the RHC introduced a system of work which required those children returning within 72 hours at the Emergency Department with the same condition to be reviewed by a more senior clinician. The system for that review as it is now in place was illustrated by the flow chart lodged on behalf of the RHC by GG&CHB.

[197] The Crown accepted that on each clinical presentation of Cailyn, seen in isolation, there were no indicators to take further clinical investigative steps. This court may consider that the 3rd precaution as outlined may also be considered a failure of a system of working which contributed to Cailyn's death. The RHC's system of working at that time did not require the review of the discharge of a returning patient. Dr Stirling considers that it is not achievable on current levels of resources. This court has heard that following the findings of the SCIIR's in these cases, there has been an increase in available resources. Had this system been in place at that time, Cailyn would have been reviewed by Dr Stirling and admitted to the CDU and would, on a balance of probabilities, have been prescribed antibiotics timeously, leading to her survival.

Submission on behalf of the Newlands family

Introduction

[198] In opening her submissions Ms Guinnane agreed that this inquiry was a discretionary inquiry in terms of section 4 of the Act. Ms Guinnane advised that Cailyn's family accepted that there had been some remedial action implemented by the Board since Cailyn's death.

[199] It was submitted that the Newlands family accepted the Crown's submission and adopted it that reasonable precautions could have been taken and would have had the "real or likely possibility" that she would have survived. The family agreed that had such precautions been taken as submitted by the Crown, this would have led to Cailyn's survival and indeed a complete recovery rather than her death. It was agreed that there

was a need to identify precautions. It was reiterated that the position of the Newlands family throughout had been that they would like to see practices and systems in place which would prevent deaths of children such as Cailyn presenting to the Emergency Department in the future.

[200] It was submitted that, with some reluctance, the family agree with and accepted the Crown's submission regarding the attribution of blame. It is well established that it is not the function of this court to attribute blame for the death of Cailyn. It was submitted, however, that it is a matter for this court to determine whether there is criticism of those personnel involved and the systems in place within the Emergency Department, in the context of whether or not Cailyn's death could have been avoided in terms of the Act.

[201] Whilst the family noted the condolences proffered sincerely on behalf of the Board, it was submitted that it was necessary to remind the court that the evidence in relation to Cailyn confirmed that she would have survived if she had either been given an antibiotic or had been re-examined and treated by a more senior doctor.

Evidence

Miscommunication

[202] It was submitted that Dr Stirling's evidence that she no longer gives advice in the way in which she did to Dr Gan and is more careful in the advice and direction she gives, amounts to an admission by her of a failing or omission in relation to the communication within the Emergency Department at that time in 2016. It was

submitted that she was the face of the Emergency Department and was in charge irrespective of how busy she was on the evening of 5 December 2016.

[203] The question posed by the family was that in searching for answers as to why their daughter was not admitted on 5 December as Dr Stirling now says was her intention, it is far from clear why she did not simply tell Dr Gan to admit her. If the only choices in the Emergency Department are "admit" or "discharge", why didn't she tell him to admit this child?

[204] It was submitted that if Dr Stirling's experienced medical opinion was that Cailyn ought to have been admitted, then that is what should have happened. Dr Stirling did not tell Dr Gan to admit her. She was in charge. It was impossible for Dr Gan to know what was in her mind. She was aware of the level of Dr Gan's experience some 4 months after he commenced in her department.

[205] Whether the further observations of Cailyn were to be "prolonged" or not, Dr Gan did as he was advised, namely, to keep the child for observation and to continue with urinalysis. The evidence heard by this court is that the urinalysis had already been identified as necessary by Dr Gan. It is regrettable that he did not explain the need for this to the family.

[206] It was further submitted that Dr Stirling did not communicate the need to admit the child. It is a matter for the court as to whether this was a "miscommunication". It can be characterised, on one view, as a failure to communicate.

[207] Ms Guinnane submitted that when Dr Kendrew-Jones came to discharge Cailyn, she indicated that nothing further would happen if she remained in the Emergency

Department and so the parents elected to take their child home. There was no discussion about admission to the CDU. It was not explained to the parents that this was a family centric decision. They did not make the decision to discharge their daughter. They were guided by the doctor in charge, namely Dr Kendrew-Jones. It was this doctor who decided to discharge Cailyn. This responsibility for discharge was not, with respect, a shared decision. Cailyn was discharged without either Dr Gan knowing or Dr Stirling, for that matter too. Dr Gan's evidence was that he did not expect Cailyn to be discharged that evening.

[208] It was submitted that whilst the Crown relied on the evidence of Dr Stirling that she accessed the electronic notes for Cailyn and was aware of her medical records, it was far from clear if she read them. It was submitted that her evidence did not make sense. She indicated that the abdominal examination sounded normal. She knew Dr Gan needed advice where he interrupted her at the computer terminal. He was asking her for advice. One could have inferred that he did not know what to do and that was the reason for seeking her out. If she had accessed Cailyn's electronic records why was there no record of this?

[209] In the medical records before the court there is no information or sign or trail that Dr Stirling accessed the records. When Dr Kendrew-Jones advised on discharging Cailyn, she has no record of the advice that Dr Stirling gave. There was no record of the need for admission. Dr Kendrew-Jones did not check with Dr Stirling. On her evidence, she had no clinical need to check anything with Dr Stirling.

[210] Furthermore, if Dr Stirling could access the records as she was at the computer terminal when approached by Dr Gan, she could have indicated on those records the need for the child to be admitted. She did not do so. Such an entry in the electronic records would have prevented any such "miscommunication" or error. It would have prevented any assumptions being made that the junior doctor knew what was in the mind of the senior doctor. It would have removed the risk of a discharge and the consequences of such, given what is now known was a case of "silent pneumonia". Dr Stirling would have been well aware of the risks of "silent pneumonia".

[211] When it came to discharging Cailyn, there was no way of Dr Stirling being made aware that she had been discharged. There was nothing in the system to flag up that Cailyn had been discharged. There was no systemic review here by Dr Stirling as to whether her advice had been followed. In the circumstance, if Cailyn was to be admitted, there ought to have been a way of logging this advice so that she was not discharged either in contravention of this advice/opinion or that she is not discharged without seeing a "more senior doctor" namely a Consultant or ST4. Being discharged without reference to Dr Stirling should not have happened.

Record keeping

[212] It was submitted that it would have been reasonable and appropriate for Dr Stirling to have logged her advice in the records at the same time that she accessed Cailyn's records. This would have assisted Dr Kendrew-Jones when she came to make the decision to discharge Cailyn.

Resources

[213] It was submitted that the circumstances surrounding the care of Cailyn was not an issue of resources. The failure to communicate did not rely upon resources. Whilst Dr Gan told the court he did not know what to do, the family submitted that Dr Stirling ought to have been aware of this. His lack of experience of paediatric emergency medicine would have been in the training records when he commenced in the Emergency Department in August 2016.

Discharging without examination v Review by Dr Kendrew-Jones

[214] Ms Guinnane submitted that whilst the Board has characterised Dr Kendrew-Jones' interactions on 5 December 2016 as a "review", the evidence did not support this. She offered the parents a discharge on the basis that there was nothing that would be offered on the Emergency Department. She made no reference to the involvement of Dr Stirling. She did not examine Cailyn prior to discharge. Although she looked at Cailyn's leg, this did not amount to a review. She relied upon the brief discussion with Ms Anderson about Cailyn's presentation. The word "bright" has been used in the evidence. On Ms Anderson's account, her child was not normal. She had had medication and may have appeared brighter, but she was still very unwell. Her parents were still worried about her. They were not listened to. If Ms Anderson had been told that her child had been referred to Dr Stirling, then she would have asked for her further involvement. At no point prior to discharge was she offered the opportunity

of a second opinion from a more senior doctor than Dr Kendrew-Jones. This ought to have happened.

[215] It was further submitted that another opportunity was missed at discharge. If Dr Kendrew-Jones was reviewing Cailyn, why didn't she examine her and check in with Dr Stirling about the need to admit her? Much has been made in this case about the length of time the child ought to have been observed and why. However, if by the time of her "review", why didn't Dr Kendrew-Jones consider all of the attendances at the Emergency Department before discharging her? Why was the whole picture not considered, and the parents listened to by her? Without a record by Dr Stirling, then how was Dr Kendrew-Jones to know that Dr Stirling considered Cailyn should be admitted?

[216] The family's position was that the "miscommunication" between Dr Gan and Dr Stirling and the failure to record the advice given affected the decision to discharge Cailyn who was already suffering from pneumonia by this point.

[217] Ms Guinnane noted that in its submissions, the Crown quote that given the induction training, Dr Stirling was confident that Dr Gan knew that "a prolonged period of observations" meant admission to the CDU. What was not addressed in her evidence was if a ST1 would be told this then a ST3 such as Dr Kendrew-Jones would also have known this. The question is unanswered as to why a ST3 did not admit Cailyn to the CDU? The notes made by Dr Gan about "observations" were there for her to read. In her handover from Dr Gan, she would have discussed this.

The SCIR

[218] It was submitted that Dr Gan explained that he was not required to give oral evidence to the review. This was not conducted orally. Rather than him concealing information, it seems that in seeking out her advice, he presumed Dr Stirling knew he did not know what to do. The workings of the SCIR are not before this court. However, if that process was flawed then rather than assuming that Dr Gan concealed his admission, which he made candidly in these proceedings, it follows that it is illogical to assume that their conclusion of a "miscommunication" being at the heart of the failures in relation to Cailyn is safe. It is clearly incorrect.

Training of Junior Doctors, ST1

[219] The family's position was that it was unclear what further training was delivered to Dr Gan regarding referral to the CDU from the Emergency Department apart from the half hour talk in August 2016. Although Dr Gan was a ST4, he was at the level of a ST1 in the Emergency Department. Ms Guinnane wondered if that was also part of the confusion regarding the advice tendered by Dr Stirling.

[220] The question posed on behalf of Cailyn's family was, if other training hospitals whether in Dundee or Birmingham did not permit unsupervised ST1s to treat and discharge patients like Cailyn, why was it thought acceptable in the RHC? That was a question, it was submitted, which remained unanswered.

Worsening advice

[221] It was submitted that it is an obvious precaution to ensure that such advice is clear and unambiguous. Written material, one would assume, would be read by parents, whether anxious or not. Whilst this has changed since Cailyn's death, it is unclear why the parents were not given such written advice upon each of the discharges.

Admission to CDU

[222] Cailyn's family agreed with the Crown that the evidence of admission to the CDU would on the balance of probabilities led to Cailyn being prescribed antibiotics which would have prevented her death. The evidence of Dr Coren and Professor Ladhani on that point was unchallenged. It was, however, far from certain that Dr Stirling would have examined Cailyn and admitted her to the CDU. If Dr Stirling had told Dr Gan to admit her then there would have been no need for her to examine Cailyn as she would have been examined by a paediatrician in the CDU.

Urinalysis

[223] In relation to Dr Stirling's evidence on the question of urinalysis, whilst she advised that this was to be done, both Dr Gan and Ms Anderson's positions were that this was already in place as far back as 1345 hours on 5 December 2016. Attempts proved unsuccessful. A kit was issued. When asked about this in cross-examination, Dr Stirling confirmed that was not good practice to send the parents off to do this.

However, if the plan was to admit Cailyn, why was there an expectation that her parents would have to do this at home when the plan was to admit the child? It is clear that no one explained to either parent the importance of obtaining such a sample.
Dr Kendrew-Jones does not offer admission to the CDU. She does not offer any further assistance with obtaining such a sample.

Acopia

[224] Cailyn's family adopted the Crown submissions on this point. It was a matter for the court what to make of such evidence. In some respects, the anxiety displayed by the parents was real and identified by Dr Gan in his note but not acknowledged by any of the treating doctors on 5 December as a factor in how she was presenting and how she should be assessed.

Review by a Consultant – A second opinion?

[225] There was no review by a consultant of Cailyn's care. She could have been reviewed in the Emergency Department or in the CDU. Her parents were not offered the opportunity of seeking a second opinion as they might have done in England. Why was there no offer of a second opinion into the care of their child? Again, if Dr Coren's opinion was that no one was listening to the parents and that no clinician was taking an overall view regarding the multiple admissions, this also contributed to the failure to prevent her death. If Cailyn's parents had been able to rely upon the practice introduced in England in April 2024 by virtue of Martha's Rule, they would have been

entitled to ask for the consultant on the Emergency Department or CDU to review her care.

[226] Martha's Rule, as referred to by Dr Coren in his evidence, is a patient safety initiative which gives families who have concerns about a patient's deteriorating condition access to a rapid review. This was not provided to them. This court is entitled to recommend that such a rule be introduced in Scotland for children such as Cailyn. Such a review would meet the concerns of parents such as Mr Newlands and Ms Anderson and may have led to Cailyn's death being prevented.

Conclusion

[227] In conclusion it was submitted on behalf of Cailyn's family that if there had been an opportunity for Cailyn's care to have been reviewed (as would have happened in England with reference to Martha's Rule) during the hours of 5 December when she was in the RHC and after her parents had observed her not getting better over the weekend between her attendances on 2 and 5 December, in essence if someone had actually listened to their concerns, it is clear that she could have been given antibiotics or even an x-ray. The condition described as "silent pneumonia" should, albeit rarely occurring, have been on the clinicians'' radar. It was not.

Submission on behalf of GGCHB

[228] In opening the submissions on behalf of the Board Ms Watts looked at the history of Cailyn's attendance at RCH.

2 December 2016

[229] Cailyn first attended RHC on 2 December 2016. She was reviewed by Dr Wilson at 1820 hours. Dr Wilson gave evidence at the inquiry and adopted his affidavit as forming part of his evidence. All children who arrived at RHC by ambulance were seen in the resus department, which is where Dr Wilson initially assessed Cailyn. At the time of Dr Wilson's first review Cailyn looked bright and active. Dr Wilson reviewed Cailyn and, having discussed her with a consultant who was also present in the resus department, considered that Cailyn could be safely transferred to the majors section of the department as there was no immediate threat to her life. During her time in the Emergency Department Cailyn's observations improved. Based on his review and findings Dr Wilson diagnosed Cailyn as suffering from an upper respiratory tract infection. Dr Wilson explained that there was no indication, based on Cailyn's presenting symptoms, to prescribe antibiotics. There was no criticism at the inquiry of the diagnosis which Dr Wilson arrived at or of his management of Cailyn. Indeed, Dr Donald gave evidence that Dr Wilson's review was appropriate. There were no red flags and Cailyn's presentation was consistent with an upper respiratory tract infection. There was, in particular, no indication to prescribe antibiotics or undertake further investigations.

5 December 2016: first attendance

[230] Cailyn next presented at RCH on 5 December 2016. She was reviewed by Dr Gan. During his evidence Dr Gan adopted his affidavit as forming part of his evidence. The Board will not rehearse the content of that affidavit to avoid unnecessary duplication. At the time that Dr Gan reviewed Cailyn he was a ST3. He had previously spent time working with paediatric patients (he had some limited experience during his emergency medicine training and had worked in a paediatric haemato-oncology unit during his foundation training). He had, by the time that he reviewed Cailyn, been working in paediatric emergency medicine for around 4 months and had undergone training at the commencement of his placement. Dr Stirling thought, by the time of his review of Cailyn, Dr Gan would have treated around 800 children.

[231] In his affidavit, Dr Gan sets out in detail the examination that he undertook, his findings and diagnosis. In short, Dr Gan suspected that Cailyn was suffering from an upper respiratory tract infection which was slow to resolve. Having made that diagnosis, Dr Gan discharged Cailyn. Prior to doing so, he provided Cailyn's family with worsening advice.

[232] Dr Donald gave evidence that, at the time of the first review by Dr Gan, Cailyn's physiology, demeanour and presentation were not indicative of a serious bacterial infection and there was no indication to prescribe IV or oral antibiotics. Nor was there any indication to undertake blood tests or an x-ray. There was no criticism by Dr Donald of Dr Gan's management of Cailyn on her first attendance.

5 December 2016: second attendance

[233] Cailyn re-presented at the emergency department at 1551 hours. The details of Dr Gan's examination and findings are narrated within his affidavit. The Board does not repeat those here. In his evidence, Dr Gan explained that the working diagnosis at that time was a viral infection. He was asked whether he considered undertaking further investigations. Dr Gan explained that blood tests would not have been indicated, in the presence of a viral infection, as they would have been expected to be normal. Nor was there any indication to undertake an x-ray. Dr Donald was not critical of Dr Gan's management of Cailyn. In particular, he gave evidence that there was no indication that Cailyn was suffering from pneumonia. There was no indication to prescribe antibiotics or to undertake either an x-ray or blood testing. In other words, taken in isolation Dr Gan's clinical management of Cailyn was reasonable.

[234] In his affidavit, Dr Gan stated that he was unsure of the significance of the green vomit which Cailyn presented with upon re-attendance on 5 December. In his evidence, he explained that there were no signs of intestinal obstruction which might have explained the same. Accordingly, he sought advice about Cailyn's presentation from Dr Stirling. There was a significant amount of evidence from both Dr Gan and Dr Stirling about what was discussed between them at that time. What, in fact, was discussed is ultimately a matter for the court. Whilst both clinicians did their best to assist the court, so many years having passed since the conversation the Board submits that it is difficult to reliably state, on the balance of probabilities, what precisely was said. The Board also submits that there is no sufficient basis in the evidence to conclude,

on the balance of probabilities, what their respective demeanours were at the time of the conversation. Taking the evidence in the round, the Board submitted that the most likely explanation is that there was a misunderstanding between Dr Stirling and Dr Gan. That is, Dr Gan genuinely believed that Dr Stirling had intended for Cailyn to be observed in the emergency department. Dr Stirling genuinely believed that she had been clear enough that Cailyn ought to be admitted to the CDU for observation. That resulted in the error that, instead of being admitted to the CDU as the consultant had intended, Cailyn remained in the Emergency Department for observations. It would have been reasonable to admit Cailyn, as Dr Stirling intended, but which was not appreciated by Dr Gan. The Board addressed the consequences of this omission, for the purposes of the statutory test, in later submissions.

[235] Ms Watts then turned to what the Board submitted was undue criticism of Dr Gan by the Crown, noting that the Crown went as far as to say that he simply did not know what he was doing. That general submission on the part of the Crown was, apparently, based on evidence from Dr Gan that he did not know what to do for Cailyn given the history of green vomiting without intestinal obstruction, hence why he approached Dr Stirling for advice. The Board submitted that the Crown's criticism of Dr Gan goes too far. First, Dr Donald (the Crown's own expert) expressed no concerns about Dr Gan's competency. There was no suggestion that Dr Gan took an incompetent history. There was no suggestion that the examination that he undertook was incompetent. There was no suggestion that his working diagnosis was incompetent. There is no suggestion that his notes were anything other than competently prepared.

There is no criticism whatsoever of Dr Gan's first review on 5 December. On the contrary, Dr Donald gave evidence that no further investigation or treatment was required. Indeed, that Dr Gan recognised that he required senior input (due to the clinical inconsistency between green vomit on the one hand and a lack of evidence of obstruction on the other) is not the characteristic of a doctor who is "uncertain, anxious and bewildered" as described in paragraph 54 of the Crown submission: it is the characteristic of a careful doctor who has recognised that a situation is unusual and thus requires senior input. It was submitted that the general criticism of Dr Gan's competency is inappropriate, unsupported by the evidence, and that this inquiry should reject it.

[236] Ms Watts then turned to what was said to be an accusation by the Crown of Dr Gan "concealing" from Dr Stirling and the SCIR that he did not know what he was doing at the relevant time. The Board in its submissions described this as an "extremely serious allegation" to make against a doctor in any context and where there is no foundation in the evidence which the inquiry heard it was simply unacceptable. The Board invited the Crown to withdraw that submission before final submissions were lodged but in any event invited the court to reject it for the following reasons:

a. It was not put to Dr Gan that he had concealed information from Dr Stirling and the SCIR. He was not given the opportunity to respond to a serious allegation which goes to his credibility before the inquiry, and more broadly to his professional honesty and integrity. It ought to have been put to him, to allow him to explain his position, if the submission was going to

be made. The procedural unfairness and prejudice arising from the Crown's approach is of itself a compelling reason to reject the Crown's submission on this matter.

b. In any event, approaching a senior clinician for advice would, on any view, be a curious way for a junior doctor to attempt to conceal from a senior doctor that they did not know what they were doing. It is clear from the very fact that Dr Gan sought advice that he did not consider that he could manage Cailyn without the benefit of senior input. The fact that he sought assistance from a senior clinician is properly reflected in his affidavit. It is remarkable to suggest, as the Crown does, that Dr Gan has somehow sought to conceal information by documenting that he sought senior assistance both in his affidavit and contemporaneous notes and then candidly stating, during the inquiry, that he did not know how to manage Cailyn's re-presentation on his own.

c. Dr Gan is now a consultant. He was giving evidence about events that occurred 8 years ago. That evidence is given in the knowledge of the tragic outcome in this case. Dr Gan's experience is significantly greater now. He would obviously approach matters differently. It is unfair, when evidence is given in that context, to question his credibility because he recognises on reflection that at the time he did not know how to manage Cailyn's condition on his own.

d. Dr Gan is very clear in his affidavit that he had regard to other sources of information when preparing it. Dr Gan did not say, as the Crown suggests, that his affidavit was "in its entirety, exactly the same". In cross-examination by the NOK of Cailyn Newlands, Dr Gan said:

> "this [the affidavit] is word for word my statement from the significant clinical review. I don't think I refer to the admission of 2 December. I just based it on my notes."

The answer was given in response to a question about when he had access to the clinical notes. The 2017 statement was not before this inquiry. It was not explored with Dr Gan what his answer meant. There is no sufficient basis in the evidence to conclude, as the Crown purports to do, that the earlier statement was "in its entirety, exactly the same" as his affidavit for this inquiry. For completeness, the 2017 statement and the affidavit are not, in their entirety, exactly the same.

[237] In oral submissions Ms Watts re-affirmed the Board's position that the Crown's approach to Dr Gan was neither fair or appropriate, which was reflected in the Crown's use of pejorative and hyperbolic terms not reflected in the evidence. Dr Gan was described by the Crown as having been "all at sea" and "at a loss". It was submitted that none of that reflected the evidence he actually gave.

[238] It was submitted that the emphasis placed on Dr Gan's evidence that he "did not know what to do" was done in a manner in a manner that stretches logic and reasonableness. The starting premise of anyone asking for the guidance of a senior professional colleague is always that they are unsure as to what to do in a particular

situation, and therefore they are seeking the senior colleague's input. If Dr Gan was not unsure as to what he should do, then he would not have been speaking to Dr Stirling at all. As was heard at the inquiry, junior doctors will often seek support from a senior doctor when they do not know how to manage a patient on their own.

[239] Ms Watts went on to submit that the Crown's submission proceeded on a basis that Dr Gan deliberately concealed from Dr Stirling some sort of fundamental lack of knowledge or competency and by doing so caused the death of Cailyn. That, it was submitted, was grossly unfair and was not reflected in the evidence that was led before the inquiry.

[240] It was submitted that the miscommunication that occurred between Dr Gan and Dr Stirling arose as a result of (i) Dr Stirling giving what she intended to be a specific instruction about where Cailyn was to be observed without specifically mentioning the location in which that observation should take place and (ii) Dr Gann making an assumption about what Dr Stirling meant to convey because she had not specifically named the location for the intended observation rather than asking her to clarify.

[241] Ms Watts emphasised that Dr Stirling's evidence was that, following what happened to Cailyn, she would now always give a specific instruction that prolonged observations required to be undertaken in the CDU and Dr Gan's evidence was that, following what happened to Cailyn, he would always ask for a specific instruction rather than making an assumption.

[242] In relation to the Crown repeatedly referring to a conflict between Dr Gan and Dr Stirling, the Board's submission was that there was no conflict or at least not one of

any material substance. The Board's position was that neither of them substantively disputed what the other had said, rather they were at cross purposes as to what was intended to be conveyed. The Board submitted that the Crown's suggestion that Dr Gan's use of the word "acopia" should be used to inform the inquiry's resolution of the Crown's perceived conflict was wholly inappropriate and seeks to conflate entirely unrelated issues.

[243] It was accepted by NHSGGC that the miscommunication between Dr Gan and Dr Stirling led to Cailyn not being admitted to the CDU, and that if she had been admitted to the CDU there is a realistic possibility for the purposes of the statutory test that the inquiry is actually applying (as opposed to the balance of probabilities test referred to by the Crown) that Cailyn's death would have been avoided. NHSGGC offers its sincere apologies to Cailyn's family for the fact that this miscommunication occurred and for their loss. It was submitted that both Dr Stirling and Dr Gan have changed their practice and accordingly the inquiry can be satisfied that a miscommunication of this nature will not occur again. It is a matter for the inquiry to determine how this miscommunication should be recorded in its determination. It is not, for the reasons outlined above, appropriate to characterise the miscommunication as arising from Dr Gan's withholding of the fact that he was "all at sea" or "at a loss" in the manner contended for by the Crown.

[244] Ms Watts accepted that there was evidence from Cailyn's mum that she felt as though Dr Gan was not listening to what she said. The Board has already submitted, under reference to *Gestmin*, that this inquiry should be wary of making findings based

on recollections that are not reflected in objective evidence. That is particularly so in the wake of the tragic outcome of this case. The Board submits that there is no sufficient evidential basis to conclude that Dr Gan was not listening to Ms Anderson's concerns. Each doctor is different. Each has their own personalities and characteristics. Each has their own way of treating patients. What may be perceived by a family member as not listening properly may have reflected a concerned doctor who was undertaking a careful examination of an upset patient (as Cailyn was) in an attempt to ingather as much objective clinical information as possible before speaking to their consultant. Indeed, the inquiry will note that Dr Gan's clinical notes are thorough. A detailed history is recorded, which can only have come from Cailyn's family. This objective contemporaneous evidence supports the proposition that Dr Gan was in fact listening to what he was being told by the family. Notwithstanding that, Dr Gan, very properly, did not seek to dismiss Ms Anderson's evidence. His position was that if that is how she felt, he could not possibly second guess that. But it does not automatically follow, as the Crown seems to suggest, that Dr Gan was not in fact listening to Ms Anderson. In that context, the Board submits that there is an insufficient evidential basis to make findings of fact (on the balance of probabilities) about Dr Gan's demeanour (including whether he listened to what was being told to him by Ms Anderson) either way.

[245] Finally, the Board acknowledged that the use of the word "acopia" in the notes was inappropriate. It was submitted that when asked about it, Dr Gan immediately apologised for using the phrase. He stated that he now appreciates that its use was wrong and that he should not have documented it. Dr Gan explained what he

understood it to mean (that is, that it literally meant "not coping"). He further understood it to mean, based on his experience of adult medicine, that a patient required to be managed in a holistic way rather than simply focusing on the acute illness. The Board regretted that a member of its clinical team used the phrase, but submitted that it was not intended in a pejorative way. Dr Gan stated that he had not intended to be critical of Cailyn's family. Nonetheless, the Board offered a sincere and unreserved apology to Cailyn's family for the use of this term in Cailyn's medical notes.

Review by Dr Kendrew-Jones

[246] Ms Watts set out the details of Dr Kendrew-Jones evidence as follows. Dr Kendrew-Jones reviewed Cailyn on 5 December. She gave evidence at the inquiry, in which she adopted her affidavit. The details of Dr Kendrew-Jones' review are set out in her affidavit. Dr Kendrew-Jones explained that she commenced her shift at 1600 hours at which point Dr Gan handed Cailyn over to her. Dr Gan advised her that Cailyn was to be observed within the Emergency Department for an extended period. He told Dr Kendrew-Jones that he had discussed Cailyn with Dr Stirling and thus Dr Kendrew-Jones' understanding was that the plan for observation in the Emergency Department had followed discussions with the consultant.

[247] Dr Kendrew-Jones reviewed Cailyn at 1910 hours, which was around 3 hours and 20 minutes after she arrived at the emergency department (thus allowing for what she considered to be an extended period of observation within the department). At the time of that review Cailyn's observations were all within normal limits save for a

slightly increased heart rate. Dr Kendrew-Jones noted that, by the time of review, Cailyn appeared brighter and Cailyn's mother reported that she had been chattier. She was clinically improving. Dr Kendrew-Jones considered that Cailyn was suffering from a viral illness. She considered that she was fit for discharge. There was no indication to carry out a full systems-based examination or to prescribe antibiotics. A full physical examination had been carried out earlier and Cailyn had not deteriorated since that time. Dr Kendrew-Jones explained, having formed that view, that she discussed management of Cailyn with Ms Anderson. She advised Ms Anderson that, whilst she thought Cailyn was safe to be discharged home, Dr Kendrew-Jones was happy for Cailyn to be admitted if the family wished to do that given that Cailyn had re-presented to the Emergency Department. She described it as a "family centred decision". When asked in cross-examination why she offered admission, Dr Kendrew-Jones explained that this was because Cailyn had presented twice on that day, and because if a family is still concerned about a child, it is appropriate to offer admission to hospital. She explained that there does not have to be any black or white reason, so it was her practice at the time to offer admission to a family whenever she considered it appropriate. Having discussed matters with Dr Kendrew-Jones, the family's preference was for Cailyn to go home that evening. In her evidence, Ms Anderson recalled that Dr Kendrew-Jones used the words "I am obliged" when offering admission. Dr Kendrew-Jones' position was that she would not have used those words, and it is submitted that they are not consistent with the nature and tone of Dr Kendrew-Jones'

evidence when explaining that the question of admission is a "family centred decision" which she would offer without any black or white reason.

[248] Dr Kendrew-Jones provided worsening advice to Ms Anderson. Dr Kendrew-Jones explained at paragraph 14 of her affidavit what her standard worsening advice would have been at the time and confirms that she would have provided advice of that nature to Cailyn's mum.

[249] Dr Donald was not critical of Dr Kendrew-Jones' management of Cailyn. In particular, he gave evidence that there was no indication that Cailyn was suffering from pneumonia. There was no indication to prescribe antibiotics or to undertake either x-ray or blood testing. Nor did he consider that a full examination of Cailyn was required (including, but not limited to, an examination of the chest) because there was no change in physiology.

[250] Ms Watts went on to submit that one issue which arose during the evidence was whether Cailyn was suffering from blanching or non-blanching spots at the time of Dr Kendrew-Jones' review. The evidence of Ms Anderson was that prior to discharge she noticed that Cailyn was suffering from two spots on her foot. She stated that the spots were "not disappearing" when being stretched out which is why she showed them to Dr Kendrew-Jones. In her evidence, Dr Kendrew-Jones confirmed that the spots had been brought to her attention by Ms Anderson. Dr Kendrew-Jones' recollection was that the spots had been brought to her attention towards the end of the review because Ms Anderson was concerned about whether the spots meant that further investigations were required (specifically, blood tests). Dr Kendrew-Jones' evidence was that she ran

her thumb over the spots to check that they were blanching (that is, that they disappeared on pressure). Within the contemporaneous medical records, Dr Kendrew-Jones noted that Cailyn had "a few blanching spots on [her] [left] foot". Blanching spots, Dr Kendrew-Jones explained, were in keeping with viral illness and were thus consistent with her diagnosis.

[251] It was submitted that if the court considered that it requires to resolve the factual dispute, the court should find that the spots were blanching. In cross-examination Ms Anderson's recollection was put to Dr Kendrew-Jones. Dr Kendrew-Jones gave a considered response. She explained that she had reflected on this issue. She reiterated that she could specifically recall checking the spots on the upper aspect of Cailyn's left foot when she was asked to do so. The spots disappeared on examination. They were therefore blanching. Dr Kendrew-Jones explained that her recollection fits with the contemporaneous notes. She also observed that non-blanching spots represent bleeding in the tissue under the skin. It is a finding which tends to present for a prolonged period of time. These spots were not present the following day when Cailyn was readmitted, which is consistent with Dr Kendrew-Jones' recollection of her examination.

Ms Anderson's recollection was also that there had been no discussion about blood tests. Again, that was put to Dr Kendrew-Jones in cross-examination. Dr Kendrew-Jones' recollection was that they had been discussed because, at the time that she checked whether the spots were blanching, she explained that blood tests are not routinely undertaken for a blanching rash (as it is an invasive test associated with pain) but were done for a non-blanching rash. Dr Kendrew-Jones stated she would "absolutely" do

blood tests for a non-blanching rash in any child. She could not countenance not doing that. The fact that she did not undertake blood tests, the Board submitted, is also consistent with the spots having been blanching in nature at the time. Whilst the Board wishes to emphasise that nothing said here is intended to detract from Ms Anderson's belief in the evidence that she gave, or how she understood the spots to appear, again under reference to *Gestmin* it is submitted that the objective and contemporaneous evidence supports the account given by Dr Kendrew-Jones who was at that time aware of the risks associated with non-blanching spots and the steps required to investigate them further.

Causation

[252] The Board agreed with the Crown's submission that, on each clinical presentation of Cailyn, seen in isolation, there were no indicators to take further clinical investigative steps. Professor Ladhani described Cailyn's symptoms as "silent pneumonia": without hindsight, none of her specific symptoms were concerning. The Board also accepted that Dr Stirling's intention, after speaking to Dr Gan, was for Cailyn to be admitted to the CDU. It submitted that, due to a miscommunication between Dr Stirling and Dr Gan, that was not done. The Board further accepted that, had Cailyn been admitted to the CDU as Dr Stirling intended, it is likely that she would have undergone investigations which would have led to the prescription of empiric intravenous antibiotics on 5 December. Antibiotics would have treated the bacterial infection from which Cailyn was suffering. Under reference to the evidence of

Professor Ladhani and Dr Coren, the Board accepted that, had Cailyn been prescribed antibiotics on 5 December, her death may (in the sense of it being a lively possibility, rather than on the balance of probabilities) have been avoided.

Statutory Questions

[253] The Board submitted that Cailyn's death arose in materially different circumstances to Sonny's death. Unlike in Sonny's case, there was an indication to admit Cailyn (her repeat visits to the department). Indeed, that is what was intended to happen by Dr Stirling. There was also evidence before the inquiry that, with admission, Cailyn's death might realistically have been avoided. That context is reflected in the Board's approach to the statutory questions.

[254] The Board proposed that the inquiry make the following findings in terms of section 26(1)(a) of the Act (under reference to section 26(2) of the Act):

(a) Cailyn Newlands died on 6 December 2016 at 2042 hours within the trauma unit of the emergency department of the Royal Hospital for Children.

(b) The cause of Cailyn's death was streptococcus pneumoniae bronchopneumonia.

(e) The following precaution could reasonably have been taken which might realistically have resulted in Cailyn's death being avoided.

On 5 December 2016 Cailyn could have been admitted to the Clinical Decision Unit for further observation.

(f) The Board proposed no findings under this ground.

(g) The Board proposed no findings under this ground.

Response to findings sought by the Crown

[255] Whilst the Board did not disagree with the underlying thrust of the proposed findings (that is that Cailyn ought to have been admitted to the CDU on 5 December, rather than discharged, as was intended by Dr Stirling) the Board respectfully submitted that as framed the first two proposed findings did not have a sufficient evidential basis (in short, after so many years, it is exceptionally difficult to state on the balance of probabilities exactly what was in fact said during the conversation between Dr Gan and Dr Stirling and it is even harder to state on the balance of probabilities what the demeanour and style of communication of each was). Moreover, it was submitted, as framed, the proposed findings are not consistent with the meaning of "precaution" for the purposes of the 2016 Act: instead they relate to the manner in which particular individuals (often inadvertently) present. The exact manner of communication between two doctors, it is submitted, does not fall within the statutory definition of "precaution". The reasonable precaution was admitting Cailyn, not the manner of communication which leads to that precaution. It was respectfully submitted that the finding proposed by the Board evades these difficulties but still encapsulates the thrust of the Crown's proposed finding. The Board submitted that it addresses the substance of the third proposed finding (iii) in the submission that follows, and for those reasons it was submitted that the inquiry should not make a finding in relation to senior review under section 26(1)(e) of the 2016 Act.

[256] In relation to the finding proposed by the Crown under section 26(1)(f) the Board submitted that the system which they operated was not defective. At the time that Dr Kendrew-Jones reviewed Cailyn, she was a ST3. She was in the third year of her specialist paediatric training programme. She was, therefore, a middle grade registrar who had substantially more experience in paediatric medicine than Dr Gan. She was competent to safely discharge Cailyn. There is no evidence that a ST4 (that is, a doctor one year more senior than Dr Kendrew-Jones) would have decided not to discharge Cailyn on the basis of Dr Kendrew-Jones' reported findings. The Crown's proposed finding is periled on the proposition that the review should have been undertaken by Dr Stirling, who would have known that Cailyn was not to be discharged. For the reasons narrated above, it is not realistic to suggest that every patient requires to be reviewed by or discussed with a consultant prior to discharge. Whilst, in the particular circumstances of Cailyn's case, that would obviously have been desirable as it would have revealed the breakdown in communication between Dr Stirling and Dr Gan, it does not automatically follow that the system was defective because there was no consultant review prior to discharge (particularly in this context where discharge was never intended to happen). Whilst the Board did not resist the finding that Cailyn should have been admitted to the CDU which might realistically have avoided her death, it submitted that the death was not contributed to by any system defect. Indeed, the fact that Cailyn was properly brought to the attention of the consultant who intended to admit Cailyn would tend to suggest that the system was working properly – it was

miscommunication between clinicians which led to the failure to admit her, not any systemic defect.

Discussion and conclusions

Sonny Campbell

Section 26 (2) (c) – cause of Sonny's death

[257] On the evidence led I am not satisfied on a balance of probabilities as to the extent to which (if any) bronchopneumonia could be said to have caused Sonny's death. Professor Ladhani, in his report, is of the view that Sonny suffered from a relatively mild (viral) infection of the upper respiratory tract and went on to suffer a very rare and very severe immune complication (AHLE) after infection. Professor Ladhani added:

> "Whether the bacteria identified in the ears and respiratory tract were the primary infection that triggered the aberrant immune reaction or whether it was a preceding viral infection that led to the secondary bacterial infection is difficult to speculate."

In conclusion Professor Ladhani's opinion was that:

> "Sonny suffered a mild self-limiting viral infection of the upper respiratory tract. This initial infection then led to a secondary bacterial infection, initially of the ear, which then progressed to into the lower respiratory tract to cause bronchopneumonia. At the same time, Sonny's immune response to the infection, in trying to control the infection, triggered an auto-immune response which led to attacking of self-antigens in the brain tissue. It is this aberrant intracranial immune reaction that was ultimately fatal for Sonny."

It is clear from that evidence that the cause of Sonny's death was AHLE, most likely triggered by a viral infection. In relation to Streptococcus Group G being a cause of Sonny's death again I am not satisfied as to the extent to which (if any) this condition

could be said to have caused Sonny's death. Professor's Ladhani's description of the issue of Streptococcus Group G as being a "red herring" is instructive in this regard, as is his clear evidence that it was very unlikely that Streptococcus Group G would have caused Sonny to be ill and certainly would not have made him unwell enough to develop AHLE. I did not find the affidavit of Dr Deshpande to be of assistance in relation to the cause of Sonny's death. His affidavit appears to me to focus on a Streptococcus infection, in particular Streptococcus Group G, which as I have said, Professor Ladhani described as a "red herring".

Section 26 (2) (e) – precautions

[258] In my view I agree with the submissions made by the Crown and GGCHB; there were no precautions which could reasonably have been taken and had they been taken, might realistically have resulted in Sonny's death being avoided.

[259] The finding sought by Mr Allison on behalf of Sonny's family is as follows:

> "A precaution which both could have reasonably been taken and which, had it been taken, might have realistically resulted in Sonny's death being avoided would have been for Sonny to have been admitted to the ICU on 5 December 2016, to have administered to him intravenous steroids, and provided with full supportive treatment for management of presumed swelling of his brain."

[260] Before considering this proposed finding further I think it important to bear in mind other evidential matters relevant at the time of Sonny's discharge on 5 December 2016:

- Dr Kanani's evidence that the NICE guideline NG 143 has a traffic light system to support clinicians in predicting the risk of serious illness in

children aged under 5 years presenting with fever (with red representing high risk, amber representing intermediate risk and green representing low risk) (see his report at paragraph 5.8.3).

- Dr Kanani's evidence regarding the specific terms of NICE guideline NG 143:

  > "NICE 143, section 1.3.5 states 'children with 'green' features and none of the 'amber' or 'red' features can be cared for at home with appropriate advice for parents and carers, including advice on when to seek further attention from the healthcare services."(see his report at paragraph 5.11.5)

- Dr Kanani's evidence that based on Dr Ryan's assessments of Sonny at 1855 hours and 1930 hours all the amber features had changed to green features and that it was therefore appropriate for Sonny to be discharged (see his report at paragraph 5.11.5).

- Dr Kanani's evidence that:

  > "In my opinion, although Sonny deteriorated after being discharged, during the ED attendance, there were no signs or symptoms which should have alerted the Doctor to a diagnosis of sepsis, bronchopneumonia or acute haemorrhagic leucoencephalitis" (see his report at paragraph 3.2)

- Professor Ladhani's evidence that:

  > "In my opinion Sonny was suffering from both bronchopneumonia and acute haemorrhagic leucoencephalitis when he presented to the ED on 05/12/2016. The paucity of symptoms and signs of either respiratory infection or an intracranial pathology, however, as well as the lack of progression of symptoms or development of new symptoms while Sonny was observed in the Emergency Department on 5/12/2016 **precluded any further investigations or a need to keep**

> **<u>Sonny longer in hospital for further observations</u>**" (my emphasis) (see his report at page 36 line 1106)

- Dr Broomfield's evidence that:

> "It is my opinion that it was not possible to make this diagnosis (AHLE) based on Sonny's presentation on the 5 December 2016" (see his report at paragraph 3.19) and "Sonny's presentation on 5 December 2016 did not distinguish itself significantly enough to alert the clinicians that Sonny had a process affecting his central nervous system" (see his report at paragraph 3.21)

- Dr Broomfield's evidence was that it was also not possible to diagnose Sonny with bronchopneumonia on his presentation at the emergency Department on 5 December (see his report at paragraph 33.18).

- Dr Coren's evidence that:

> "Haemorrhagic leuko-encephalitis is an idiosyncratic and very rare reaction to an acute infection in children, as I understand it often involving otitis media. That specific diagnosis could never have been made and the whole course of (Sonny's) illness, particularly the fluctuating course followed by very rapid collapse was quite unusual in my opinion." (see his report at paragraph 12).

[261] In my opinion all of the evidence points to the decision by Dr Ryan to discharge Sonny on 5 December 2016 as having been reasonable. That decision was one which involved the exercise of clinical judgment which has not been criticised as being outwith the range of reasonable decisions. Indeed it might be said, standing Dr Kanani's opinion and that of Professor Ladhani, that that was the most obvious decision to be taken. In my opinion (for the reasons submitted on behalf of GGCHB and following the reasoning in the decisions in *Bellfield*, *Sutherland* and of Sheriff Principal Anwar in the *Inquiry into the deaths of Leo Lamont, Ellie McCormick & Mira-Belle Bosch* at paragraphs 127 and 128 and contrary to the approach taken in *Duncan Petitioner*) it is not for this inquiry to then

look, with the benefit of hindsight, as to whether there was another option that could have been taken. I agree with Sheriff Braid (as he then was) that the natural meaning of "precaution" is "an action or measure taken beforehand against possible danger or risk." It is important therefore in my view to bear in mind that at the point of discharge Sonny had signs and symptoms placing him at low risk of serious illness.

[262] In any event on the basis of the evidence before the inquiry I am not satisfied that there is a sufficient basis that would lead to the conclusion that had Sonny been admitted to hospital on 5 December 2016 that admission (and any treatment) might realistically have resulted in Sonny's death being avoided.

[263] In considering whether a death might realistically have been avoided the inquiry must consider whether there was "a real or lively possibility" that the death might have been avoided (Carmichael, *Sudden Deaths and Fatal Accident Inquiries* paragraph 5.75.). It cannot be a "remote chance" (paragraph 72 of the explanatory notes to the Act).

Mr Allison candidly and helpfully submitted that the word "likely" had in other areas of law been held to mean something that was "more than a bare possibility" and that "real possibility" to mean something more than "an outside chance or bare possibility". He further submitted that the Scottish Government's policy memorandum to the bill which became the Act stated "the use of the word 'realistically' is intended to imply an actual rather than fanciful possibility that the recommendation might have prevented the death" (paragraph 179). As Ms Watts submitted the memorandum also stated that "The Scottish Government does not believe that it was the intention that the interpretation of the word "might" should be construed as "any chance at all no matter how

slim"(paragraph 178). In short what the court is looking for is something which is at least more than a remote, bare or fanciful possibility.

[264] One matter that was not clear to me from the evidence is, had Sonny been admitted to hospital rather than discharged, when he would have started on the treatment pathway described by Dr Eunson after his admission. That is of particular significance when one bears in mind, as I have already stated, that Sonny presented as being of low risk of serious illness, but I leave that to one side for present purposes.

[265] Whilst Dr Eunson explained the treatment pathway that Sonny would have undertaken he was clear in his evidence that (i) Sonny's condition may have got to the stage that steroids may not have had any effect; (ii) Sonny was in a poor prognostic group; it was still less likely that Sonny would have survived; (iii) it was much more likely that he would not have survived and that he would have succumbed to his condition on 6 December 2016.

[266] I was not left with the impression at all that Professor Eunson had moved from his opinion in his report where he stated (at paragraph 41):

> "If rather than being discharged home on evening of 5th December, he had been admitted to hospital for observations and investigations, it is likely that this would have resulted in him having neuroimaging. This would have been abnormal. However, given the rapid progression of his illness, and the high mortality rate, it is unlikely that specific treatment (steroids, and management of raised intracranial pressure) would have been started in time to prevent his deterioration, collapse and death."

[267] Professor Ladhani was equally clear in his evidence; (i) "the outcome (for Sonny) was unavoidable "; (ii) "given the rapidity of the symptoms there was really no chance

of survival. I don't think he would have been diagnosed or treated quickly enough"; and "he did not have any realistic chance of survival".

[268] The evidence of Dr Eunson and Professor Ladhani, in my view leads the inquiry to the conclusion that there was not a realistic or lively possibility of Sonny's death being avoided even if he had been admitted to hospital on 5 December 2016.

[269] For all of those reasons I do not make any finding under section 26(1)(e) of the Act.

Section 26 (2) (g) – other facts relevant to the circumstances of the death

[270] Both the Crown and Mr Allison submitted that there were three discreet factual matters that might (in the case of the Crown) or should (in the case of Sonny's family) be seen as relevant to the circumstances of Sonny's death; (i) the issue of record keeping (ii) senior supervision (or senior input) and (iii) safety netting advice.

[271] On the issue of record keeping (or note taking) I do not consider it necessary to make any comment or finding in that regard. I agree with the submission made on behalf of the Board that it would serve no useful purpose. The GMC guidelines are in place and are clear. As I have Dr Broomfield noted in his evidence his own practice is to take rough notes at the time and write up the clinical notes later, but that nobody is "infallible" and that he had "missed a note recently and wrote it up later." Dr Ryan has since then not repeated what she did but perhaps most importantly the lack of the full notes were ultimately not relevant to Sonny's death. As I have Dr Broomfield noted "if someone is brought into me in cardiac arrest, what has happened the day before is

inconsequential…my focus would be on Sonny rather than the notes." Dr Broomfield went on to say that the absence of those notes on 6 December 2016 would not have made any difference to the treatment of Sonny. Dr Kanani gave very similar evidence to that of Dr Broomfield on this point, saying that if Sonny had presented to resus the "notes are less important". I am therefore satisfied that the issue of record keeping is not a fact relevant to Sonny's death.

[272] In relation to senior supervision, the first matter to deal with is Dr Ryan's examination of Sonny and in particular her diagnosis that Sonny was suffering from viral enteritis. My understanding of Dr Broomfield's evidence was that the absence of diarrhoea in Sonny's presentation made Dr Ryan's diagnosis "less secure". I have him noted a short time later that in relation to the diagnosis "there is a level of insecurity in the diagnosis but I am not saying she was wrong". I agree with the submission on behalf of the Board that in general terms he was supportive of the care and treatment afforded to Sonny by Dr Ryan (saying that there was nothing in the notes to suggest that her observations of Sonny were anything other than "thorough"). Dr Kanani told the inquiry that he would not have used the term "viral enteritis". His "working diagnosis" was that given Sonny's fever and vomiting, Sonny probably had a viral infection, possibly an upper respiratory tract infection. He went on to say that vomiting without diarrhoea was common amongst children, before reminding the inquiry that "medicine is an art not a science." It is clear from Dr Kanani's report (leaving to one side the issue of senior review for the time being) that he considers Dr Ryan's care of Sonny to have been nothing other than adequate and in accordance with good practice at the time.

Professor Ladhani's evidence was that based on Dr Ryan's notes the examination of Sonny by Dr Ryan was of a "high" standard.

[273] The Board have objected to the evidence of Dr Coren's evidence in relation to the issue of Dr Ryan's diagnosis of Sonny as "not at all secure" and "unsound"(and on the question of worsening advice). The basis of the objection is that Dr Coren's expertise does not lie in paediatric emergency medicine rather in paediatric medicine. In my view whilst that is perhaps a subtle differentiation, it is an important one. The focus of this inquiry, and therefore this determination, is the care and treatment of Sonny and Cailyn (and for others in the future) in a paediatric emergency setting, not in a paediatric ward setting. Dr Coren was frank and candid in his evidence from the outset when he said "I have no experience in paediatric emergency medicine…that is beyond my expertise". For that reason alone (for this particular purpose), I am not satisfied that Dr Coren has the necessary knowledge and experience (in paediatric emergency medicine) that would assist the court in its task, namely making findings and potentially recommendations in relation to the care, management and treatment of children in a paediatric emergency setting. I therefore sustain the Board's objection to Dr Coren's evidence in that regard. The inquiry has the benefit of the evidence of Dr Broomfield and Dr Kanani on this point, both of whom do have the necessary knowledge and experience in paediatric emergency medicine that will assist the court. That is not to say that there were areas of Dr Coren's evidence (on more general matters of paediatric medicine) that I did not consider.

[274] The Board, however have two distinct criticisms of Dr Kanani's evidence, which led to its submission that the evidence of Dr Broomfield should be preferred (at least in relation to matters on which they disagreed). Those criticisms are (i) that due to a misinterpretation of the relevant NICE guidance, Dr Kanani suggested in his evidence that Dr Ryan could reasonably have undertaken blood tests if there was familial anxiety and (ii) that it was not in accordance with good practice that Dr Ryan did not seek senior input before discharging Sonny.

[275] I was left a little confused by Dr Kanani's evidence in relation to the question of whether Dr Ryan should have undertaken blood tests on Sonny. His report is quite clear that in accordance with the relevant national guidance (NICE NG 143 section 1.5.11) given that Sonny did not demonstrate any features of serious illness (ie he was within the green group) "blood tests were not indicated". On looking at those guidelines again in writing this determination, I noted the terms of section 1.5.12: "Do not perform blood tests and chest x rays in children with fever who have no features of serious illness (that is, the 'green' group") Dr Kanani does refer to that section in his report (at paragraph 6.3.4) in the context of a chest x-ray but for some reason does not mention it is the context of taking blood. In any event the guidance appears clear; do not take blood from a child who presents in the green group.

[276] It is noted that Dr Kanani does not refer at all to Sonny's fever being "without apparent source" which is, plainly read, an integral part of the application of the guidance. It is of significance that his evidence was that Sonny had a fever and vomiting and that he probably had a viral infection, possibly an upper respiratory tract infection

or gastroenteritis (in other words an identified source for Sonny's fever, as confirmed by Professor Ladhani in his evidence). Dr Kanani's report only mentions section 1.5.10 of the NICE guidance in passing without any comment or opinion expressed as to whether Sonny (when in the Amber group) should have had a blood test at that stage. I did not form the view that Dr Kanani was saying that blood tests should have been be taken at that stage rather I took from his evidence (both in his report at paragraphs 6.1.4 - 6.1.6 and orally) that it was in accordance with the NICE guidance to continue observations on Sonny. His oral evidence was that at 6pm it was a reasonable course to take to continue to observe Sonny.

[277] I think the confusion with Dr Kanani's evidence arises when he seems to come to equivocate slightly when introducing the issue of having discussions with an anxious family. As I have him noted what he said was:

> "On the evidence in the notes, I did not feel that there was any need for blood tests and that a longer period of observations would be appropriate but if the family was concerned you would need to come to an agreed position and moving ahead with blood tests may be appropriate."

I did not find that particularly helpful but overall I took Dr Kanani's evidence to be as stated in his report that blood tests were not required. For those reasons I do not make any finding that blood tests ought to have been taken from Sonny by Dr Ryan. I do not consider there is any evidential basis to do so.

[278] The second criticism made of Dr Kanani by the Board is in relation to his opinion as set out at paragraph 6.2.1 of his report under reference to the standards publication issued by The Royal College of Paediatrics and Child Health – Facing the Future;

standards for acute general paediatric services in 2015 ("the 2015 guidelines"). The relevant standard states:

> "Every child with an acute medical problem who is referred for a paediatric opinion is seen by, or has their case discussed with a clinician with the necessary skills and competencies before they are discharged. This could be: a paediatrician on the consultant rota, a paediatrician on the tier two (middle grade) rota, or a registered children's nurse who has completed a recognised advanced children's nurse practitioner programme and is an advanced children's nurse practitioner."

Dr Kanani's opinion was that as Dr Ryan was a speciality trainee, year 1 ("ST1") she should have arranged and documented a senior (consultant or clinician on the middle grade rota) discussion or review. It was his opinion on that basis that it was inadequate and not in keeping with good practice at the time that the input of a senior was not sought prior to Sonny's discharge.

[279] Dr Kanani's report makes no mention of the Standards for Children and Young people in Emergency Care Setting 2012 ("the 2012 guidelines"). When that report was introduced in cross-examination I found his evidence as to which was the appropriate guideline to become confused. At one point he stated that both the 2012 and 2015 guidelines would apply. I do not see how that could be the case. On a plain reading of the guidelines they appear contradictory. As already mentioned the 2015 guidelines states that every child referred for a paediatric opinion is to be seen by (or their case discussed with) a senior clinician before discharge. In contrast the 2012 guidelines state (page 18):

> "Clinical guidelines for any condition must include parameters for safe discharge, for example, ensuring that a child who is tachycardic (an increased

> heart rate above normal) is not discharged without discussion with a senior doctor."

Dr Kanani accepted in his evidence that Sonny was not tachycardic when he was discharged. The 2012 guidelines go on to state (page 19): "Children presenting for a second time with the same illness or injury should not be discharged without review by a consultant or equivalent." On 5 December 2016 Sonny was not presenting for a second time, he was presenting for the first time.

[280] In short the 2012 guidelines did not require Sonny to have senior input prior to discharge.

[281] It is also clear to me that on a plain reading of the guidelines that the 2012 guidelines are the more apposite in Sonny's case (that is in an emergency care setting). The 2012 guidelines state (page 8):

> "The 2012 Standards for Children and young people in emergency care settings provides healthcare professionals, providers, service planners and commissioners with clear standards of care applicable to all urgent and emergency care settings across the UK … (and) are designed to improve the experience and outcomes of children and young people in their journey through the urgent and emergency care system."

[282] On the other hand the 2015 guidelines state (page 11): *"This standard concerns all children referred for an urgent paediatric opinion, whether the source of that referral is general practice* ***or the emergency department****."*(my emphasis). That suggests to me that that standard does not concern children being treated or cared for in the Emergency Department.

[283] Dr Broomfield's evidence on this point was straightforward, namely that if Dr Ryan been in his department she would not have spoken with a more senior

colleague and that he would only have expected her to speak to a more senior colleague if she had concerns. It (speaking to a more senior colleague) would not have been mandated.

[284] I am not satisfied that Dr Kanani's evidence on the issue of senior input in Sonny's case can be relied on. The 2012 guidelines and Dr Broomfield's straightforward evidence lead me to conclude that in the circumstances of Sonny's death the issue of the lack of senior input prior to Sonny being discharged is not relevant to the circumstances of Sonny's death. That is particularly so when the evidence before the inquiry was that it was appropriate to discharge Sonny. There was no evidential basis that I could see that would allow a finding that had a senior clinician provided input prior to Sonny's discharge, a different view would have been taken and Sonny not discharged.

[285] In relation to the issue of safety netting advice I wish to make it clear at the outset that I do not doubt the honesty of Sonny's mum (in her affidavit) or Sonny's gran (in her affidavit and oral evidence) as to what they believe the worsening advice was that was given. Sonny's mum said in her affidavit that:

> "Dr Ryan had told us to see how he was the following day and go back if he was not any better. It all felt as though the ward was too busy and they were just treating this as though nothing was wrong…….I felt like we were being discouraged from bringing Sonny back."

Sonny's gran in her affidavit said that in answer to a question from Ms Reilly to the effect of "what if he is still like this tomorrow", Dr Ryan said bring him back. In evidence Mrs Reilly said Dr Ryan gave advice but that she did not feel reassured by Sonny's discharge; "I felt they wanted us in and out." She did, however, go on to add

that she understood that if Sonny did not improve they were to bring him back. I am conscious that in this case not only are we dealing with a situation from some 8 or 9 years ago but also I am considering discussions which have taken place in a busy emergency department with a family understandably deeply anxious, worried and concerned about how Sonny was presenting. Dr Broomfield's evidence perhaps highlighted how difficult those conversations can be when he said "what is being said and what is being heard maybe different" and "It is difficult to know the level of understanding."

[286] On the other hand, Dr Ryan's evidence was that she could not remember specifically the worsening advice given other than what is in her notes (paragraph 35 of her affidavit) and that her usual practice (although not in the notes) was to encourage families to seek further medical review of a child should they have any ongoing/new concerns (paragraph 36 of her affidavit). In her evidence Dr Ryan said that she would always say that the child should be brought back in those circumstances. That indeed accords with what Sonny's mum and gran said in evidence.

[287] At the conclusion of her evidence I made a note that I found Dr Ryan to be a truthful witness, that she did not strike me as the "dismissive type" and indeed struck me as a diligent medic. Given the worsening advice that is recorded in the notes, I am drawn to the conclusion that Dr Ryan did give the worsening advice set out in the notes prior to Sonny's discharge and likely expanded on that advice as was her usual practice. Dr Broomfield's evidence was to the effect that there was no exact science (in relation to worsening advice) and that Dr Ryan has given appropriate advice as to when Sonny

should be come back. Dr Kanani, in his report describes the worsening advice given by Dr Ryan to be "appropriate" (paragraph 5.11.6 of his report) and "adequate" (paragraph 6.1.7 of his report). I do not consider that, on the evidence I heard, it could be said that a senior doctor would have given different, or in some way clearer, worsening advice. For those reasons I make no finding that the tendering of worsening or safety netting advice is a fact relevant to the circumstances of Sonny's death.

[288] I do not consider that there are any further facts relevant to Sonny's death in respect of which a finding should be made.

Cailyn Newlands

Section 26 (2) (c) – cause of Cailyn's death

[289] There was no disagreement amongst parties, and no evidence to say otherwise, that the cause of Cailyn's death was as found in the post-mortem report being Streptococcus Pneumoniae Bronchopneumonia.

Section 26 (2) (e) – precautions

[290] At the centre of the inquiry into Cailyn's death are the discussions that took place between Dr Gan and Dr Stirling on 5 December 2016. Given the passage of time I agree with the submission made on behalf the Board that it is extremely difficult, even on a balance of probabilities, to come to a view as to what was said precisely between the two. Both Dr Gan and Dr Stirling both struck me as honest witnesses doing their best to assist the inquiry. Dr Stirling's evidence was that she said to Dr Gan that Cailyn

required a "prolonged period" observation. Dr Gan does not recall the phrase "prolonged period" being used. Whatever was said it is clear (from Dr Stirling's candid evidence) that she did not say to Dr Gan that Cailyn was to be admitted to the CDU. I think it fair to say that there was an expectation on Dr Stirling's part that Dr Gan would have known that the observations were to take place in the CDU (in her evidence I have her noted as saying "I know of no reason why he would not have known that "prolonged observations" would mean a referral to CDU"). It is also clear that Dr Gan interpreted Dr Stirling's advice to mean that Cailyn was to be observed for a longer period in the Emergency Department. That miscommunication in turn led to Dr Kendrew-Jones not being told that Cailyn was to be referred to CDU and her subsequent discharge from the Emergency Department.

[291] I agree with the submission made on behalf of the Board, that the Crown proposed findings (i) and (ii) are not consistent with the meaning of "precaution" for the purposes of the Act. In my view "precaution" means a positive act or action to be taken. It does not in my view mean the manner or way that a conversation between two doctors takes place or should take place. As regards Crown proposed finding (iii) there was no evidence before the inquiry that a ST4 doctor (one year more senior to Dr Kendrew-Jones) or indeed a consultant (other than Dr Stirling perhaps) would have decided not to discharge Cailyn. Indeed Dr Donald's report tends to confirm that where he states (having noted that at 1840 hours Cailyn's observations were all within normal physiological values for her age):

> "I am of the opinion that there was no clinical indication for admission for overnight observation and no clinical signs or symptoms suggestive of serious underlying illness."

[292] Dr Stirling did not review Cailyn. As I understood her evidence she did not do so as Dr Gan ought to have known that her intention was that Cailyn was to be referred to the CDU, where she would be cared for by a medical registrar with further assessment and decisions as to further management of her condition. Dr Stirling would have reviewed Cailyn herself had Dr Gan told her he did not know what to (which he did not do) or he was worried and wanted her to look at Cailyn (which he did not do). As Dr Stirling said in her evidence (as a reason for not examining Cailyn, albeit that she had given advice to Dr Gan that she intended to be that Cailyn was to be referred to the Clinical Decision Unit) she was the single handed consultant on a shift when there are often more than 100 attendances. She could not review every patient and she required to prioritise patients. I think it fair to assume that had Dr Stirling reviewed Cailyn a referral to CDU would have been made. But that is what she intended anyway; in other words her decision to refer Cailyn to CDU was made without a review having taken place. Her evidence in her affidavit confirms that:

> "I had a clear idea in my head that Cailyn was going to be admitted to the clinical decision unit for observation for a more prolonged period….that is what I expected to happen to Cailyn after I had spoken with Dr Gan."

[293] Dr Donald in his report does comment that in his opinion it would have been:

> "best practice for Dr Stirling to have reviewed Cailyn prior to discharge however this was deferred to a ST3 who would appear to have examined and reviewed Cailyn appropriately prior to the decision to discharge."

Three comments flow from that in my view: (i) it is not the case that Dr Stirling deferred the decision to review Cailyn prior to discharge to a ST3; Dr Stirling's evidence was that she intended Cailyn to be referred to CDU for further observation not discharged home; (ii) the review of Cailyn by Dr Kendrew-Jones was appropriate; and (iii) in his report Dr Donald accepts that "Due to concomitant pressures" it may not have been possible for Dr Stirling to have personally reviewed Cailyn. (see page 16 of his report)

[294] I am satisfied that a precaution that could reasonably have been taken (and indeed should have been taken) was to admit Cailyn to the Clinical Decision Unit for further observation and care management.

[295] I am also satisfied, and I understood this to be accepted by all parties, that had Cailyn been admitted to the CDU in the evening of 5 December 2016, there was a realistic possibility that her death would have been avoided. Professor Ladhani's evidence was that had Cailyn remained in hospital, within the CDU, her deteriorating condition would have been noticed by clinical staff. Professor Ladhani's opinion was that in that case there would have been additional investigations, including a blood test and potentially a chest x-ray, all of which would have supported a diagnosis of an underlying bacterial infection, followed by the initiation of intravenous antibiotics. Professor Ladhani's opinion was that had she received antibiotics on her second attendance at the Emergency Department on 5 December 2016, Cailyn would have survived her infection. Dr Coren agreed with Professor Ladhani, describing Cailyn's condition as "survivable".

Section 26 (2) (f) – defects in any system of working

[296] The Crown submission was, as I understood it, that the absence of a system at the Emergency Department in 2016, whereby a returning patient would be reviewed by a senior doctor before discharge might be considered a defect in a system of work which contributed to Cailyn's death. For the reasons submitted on behalf of the Board I did not find the comparison with the systems in place at Ninewells or in Birmingham to be particularly helpful (the evidence of Dr Broomfield was helpful in that the department in which he operated in Edinburgh appeared much more comparable to the operations at the Emergency Department). In any event one must not lose sight of the fact that Cailyn's case was discussed between Dr Stirling and Dr Gan. Whilst a review by Dr Stirling would likely have led to Cailyn being admitted to the CDU, that is what Dr Stirling intended (but as said previously there was no evidence that another senior doctor reviewing Cailyn would have decided not to discharge Cailyn). The system in place (a ST3 seeking out a senior doctor's advice) was not defective because Dr Stirling having discussed Cailyn with Dr Gan decided that she should be observed in the CDU. What led to Cailyn not being admitted was the miscommunication between Dr Gan and Dr Stirling.

Section 26 (2) (g) – any other facts relevant to the circumstances of Cailyn's death

[297] There are no other facts which I find relevant to the circumstances of Cailyn's death.

Parties proposed recommendations

Crown

[298] In opening her submissions on the recommendations proposed by the Crown, Ms Ennis emphasised that while some of the recommendations proposed by the Crown may, coincidentally resonate across other areas of practice, this inquiry was concerned with the deaths of Cailyn and Sonny within the Emergency Department. Accordingly it was submitted any recommendations must relate to those deaths and flow from the evidence before the inquiry.

Recommendation one:

[299] That a child returning to the Emergency Department within 72 hours and re-presenting with the same condition is reviewed by a more senior doctor, being ST4 or above.

Rationale for recommendation:

[300] At present the system in the RHC is that a clinician of ST3 and above would fall within those reviewing a returning and representing child. As was noted, Dr Gan was a ST3 and Dr Stirling noted in her evidence that the ST3's within the Emergency Department are generally on their first paediatric rotation. Accordingly, the ST3's within the Emergency Department are not sufficiently senior to undertake this important review task. As had been noted, further allocation of resources was made available following the SCIIR's in these two cases.

Recommendation two:

[301] That children attending the RHC Emergency Department and who have been referred to that Emergency Department by their GP should also be reviewed by a more senior clinician, being a ST4 or above.

Rationale for recommendation:

[302] As was set out in the evidence of Dr Kanani in particular, an experienced GP has more clinical experience than a junior ED doctor. It is illogical that a more senior clinician [the GP] should have their patient treated and potentially discharged by a doctor less experienced than the referring GP. Within Ninewells Hospital, such a review policy operates also, having regard to the same logic. Dr Stirling advised that a trial at the RHC had been undertaken but not continued, where children referred to the Emergency Department by a GP were triaged differently. This failed because it led to other "walk ins" who were more seriously ill being delayed in favour of less ill but "referred in" children. The Crown accepted that re-instatement of the failed programme would be illogical. However, the instigation of a system in line with those at Ninewells and Birmingham Children's Hospital would be reasonable.

Recommendation three:

[303] That the induction training of those beginning their rotation within the paediatric Emergency Department is clear and unambiguous in its instruction to all practitioners that:

- Periods of observation which require to extend beyond the Scottish Government's arbitrarily fixed period of 4 hours within the paediatric Emergency Department must be undertaken within the CDU
- If they are unclear or uncertain about their diagnosis, they should make that clear to the senior practitioner in charge.

Rationale for recommendation:

[304] This FAI comes more than 8 years after the deaths of these children. It is almost 9 years since the August 2015 induction training programme undertaken by Dr Gan, among others beginning their rotations in late summer. Consequently, when asked, there was a lack of recollection of what precisely was included in that induction programme. Dr Stirling was of the view that Dr Gan should have known that "prolonged observation" meant within the CDU. Dr Gan clearly did not understand that to be the case. Dr Stirling candidly admitted that she has since changed her practice on this matter and is now clear in her instruction on this. That may guard against a similar situation (and death) where she is the supervising senior practitioner. It does little to ensure that others do not have a similar experience. Accordingly, clear training within the current induction programme should inform and emphasise to those training

within the paediatric Emergency Department that where observation are to be undertaken within the CDU, this is specified in terms.

Recommendation four:

[305] That the training of those senior practitioners [ST4 and above], to whom more junior medics look to for guidance, sets out the need for clarity in providing advice and guidance to junior colleagues. Instructions should be given in a clear and unambiguous manner which leaves no scope for misunderstanding.

Rationale for recommendation:

[306] The rational for this recommendation is the same as that for recommendation three: this is simply the other side of that training "coin". The training for those undertaking supervision within the paediatric Emergency Department should ensure that they provide clarity of instruction when asked by junior colleagues for advice. This would remove doubt and ambiguity or mistaken reliance on knowledge which was in fact absent. Clear communication between colleagues must be emphasized as vital to prevent misunderstandings or miscommunication such as to have led in this case to the death of Cailyn. Dr Stirling, who gave evidence that she contributed to the induction training, noted that she individually has changed her practice. She did not suggest [though in fairness was not asked] if that was individual to her or a learning experience passed on when training and induction into the paediatric ED. There should be no room for doubt on this matter; therefore, fixing the clear rationale for this recommendation.

Recommendation five:

[307] That a patient may not be discharged from hospital by junior doctors [ST3 and below] without review by a more senior clinician.

Rationale for recommendation:

[308] Dr Ryan was an ST1 who discharged Sonny without reference to "the boss". Sadly, in Sonny's case it would not have led to a different outcome for him had Dr Ryan sought advice or review of Sonny's condition from a more senior colleague. However, this would not have been true in Cailyn's case. Had Dr Kendrew-Jones sought permission to discharge Cailyn from a more senior colleague, this would have been Dr Stirling at that time, which would have prevented Cailyn's death. The Crown recognized the pressures upon lead consultants in paediatric Emergency Departments. It also recognized that because of SCIR's in these cases, the RHC has increased the number of senior staff available. Dr Stirling gave evidence that there are now two additional consultants in the Emergency Department in the evenings: one in the CDU and one in the Emergency Department, 4.00pm to midnight, 7 days per week. In the summer this drops down to one such consultant. There is also an additional medical paediatrics registrar based in the department between 4.00pm and midnight 7 days per week. Given these extra personnel at this more senior level, such a recommendation should be feasible.

Amy Reilly

[309] Mr Allison submitted that Sonny's next of kin supported Crown recommendations two and five (on the basis that recommendations one, three and four arise from the circumstances of Cailyn's case). In addition Sonny's family invited the inquiry to make the following additional recommendations:

> Family recommendation 1 – That any clinician reviewing a child in an accident and emergency context should, unless not practicable, complete their written record of that review contemporaneously. In the event they are unable to do so, they should, in any event, complete that record prior to their departure at the end of their shift.
>
> Family recommendation 2 - That, at the point of discharge of a child from hospital, their parent or carer should be provided with comprehensive safety netting advice, both generally and specific to their presenting condition. The discharging clinician should, prior to the parent or carer's departure, satisfy themselves that the parent or carer has understood that advice. That advice should then be confirmed in writing, or another format, which is accessible to the individual in question.

[310] Mr Allison expanded on the reasoning behind Sonny's family's support for Crown recommendations two and five.

[311] In relation to recommendation 2 it was submitted that whilst not uniform, in the vast majority of cases where a GP refers a child to hospital (and it was noted that the recommendation is specific to a GP, rather than any other member of staff at a GP

surgery – eg a nurse or health visitor), that GP will have a number of years' of clinical experience. They will also likely - unlike any assessing clinician at the hospital - have a degree of pre-existing knowledge about the child and their health. It is reasonable to infer that a GP would only refer a child to hospital if such a step were reasonable, and thus that their presenting circumstances had a reasonable potential to justify treatment or intervention that could not be provided by the GP. Accordingly, such a step should attract a degree of deference to that decision. Support for that approach was found in the evidence of Dr Kanani and Dr Coren. The fact that a small number of children might be seen by inexperienced GPs and referred onwards is not a reason which makes that step unreasonable, nor one which compromises its effectiveness.

[312] Whilst Dr Stirling gave evidence that a trial of triaging children referred to the Emergency Department by GPs was undertaken but not persisted with, due to it leading to more seriously unwell walk ins being delayed in favour of less unwell children referred by GPs. It was acknowledged that whilst that is a legitimate concern, it is one which is a question of management, rather than principle. The recommendation sought is not, in any way, drafted such that it would gainsay the exercise of judgement by the hospital as to the order of priority of children being seen. It requires that a child referred in is seen by a more senior clinician; it does not dictate when that is done, nor what priority is to be given to an individual child. That is, it was recognised, a matter which requires the careful exercise of ground level judgement. What it does do, it was submitted, is ensure that a child referred in has the benefit of review by an appropriately skilled clinician commensurate with such a step being taken.

[313] Mr Allison submitted that if the gravamen of Dr Stirling's evidence was that GP's were referring too many children in, that there was no consistency in when they were referred or not, or that there was a lack of information about their presenting circumstances, then all of those issues can be addressed by the enactment of an effective scheme of referrals. As each hospital operates a triage categorisation system, the starting point would be for GP surgeries in the area of that hospital to be familiar with that categorisation and to offer a view on the severity of the child's situation under reference to that same scale. That would have two effects. Firstly, it would ensure that senior clinicians have relevant information about the seriousness of the child's condition, avoiding a need to prioritise all GP referrals simply because of that fact. Secondly, the availability of that information would allow for judgement calls to be made in real time about priorities, in the same way that would be done if the child had been triaged at hospital. A system could be enacted which included a pro-forma to be completed by a referring GP which captured this information, and also gave relevant information to the treating clinician about the child's background health, presenting conditions, steps taken, and reasons for the referral. That could be accompanied with guidance, in broad - but not prescriptive – terms about when referrals should generally be made. That might be as simple as: when a GP is unable to diagnose or treat a child (for whatever reason), or when a GP considers that there is a realistic possibility that the child may require treatment at hospital or which the GP practice is unable to provide (for whatever reason). Such systems of working are likely to achieve better consistency in approach. If implemented in that way, it is difficult to see how the mischief Dr Stirling identified

would then arise, or at least arise in a way which was wholly unmanageable and counter-productive.

[314] It was submitted that the benefits of this step outweighed any perceived difficulties in its implementation. It was both a reasonable precaution and a new (or improved) system of working. It is one which might realistically prevent other deaths in similar circumstances. Whether it would have prevented Sonny's death is irrelevant; it has the potential to realistically prevent other deaths by minimising children flagged for attention receiving sub-standard care. It appears that the management at the RCH Glasgow considered it a reasonable and worthwhile step, given they implemented something akin to it previously. It was not withdrawn because of any concern of principle.

[315] In relation to Crown recommendation five Mr Allison submitted that whilst Sonny's family supported the recommendation, it might be better framed in the following terms to ensure it is as clear and unambiguous as possible:

> "That a child shall not be discharged from hospital by a junior doctor (being a grade ST1 to ST3, or the equivalent) without having their case reviewed by a clinician of at least ST4 (or equivalent) grade."

[316] Mr Allison submitted that Sonny was discharged with no involvement of a senior clinician. In Cailyn's case, the position was somewhat more complex, but we know she was not directly reviewed by a senior doctor, and the doctor who actually discharged her did not discuss her case with a more senior doctor. Whilst the point had been emphasised that such a recommendation under section 26(4) is not focussed on what difference it would have made to the case of the child in question, it is clear from

the evidence that Cailyn's death could have been avoided if Dr Jones had discussed her case with Dr Stirling prior to discharge (as any miscommunication between Dr Stirling and Dr Gan as to Cailyn's treatment plan would have become apparent, and been resolved). That itself, it was submitted, may make plain the real potential for such a recommendation to prevent other deaths.

[317] Mr Allison went on to say that Dr Ryan was a ST1 with around 4 month's A+E experience. Dr Gan was a higher grade, but with similarly modest A+E experience. The court could reasonably anticipate that the general public, and in particular parents, would be concerned – if not alarmed – at the suggestion that inexperienced doctors were unilaterally making important decisions about care for children, both children who have re-attended and children referred in this case by an experienced GP. Such an approach means that the said junior doctor is the absolute gatekeeper on treatment for that child. That is particularly so where – Mr Allison made it clear that no discourtesy was intended – the level of formal training appears limited, and the guidance given about when to seek advice general. It was appreciated those are consequences of this being a teaching hospital, but they give rise to greater justification for safeguards. As Dr Kanani eloquently put it, "you don't know what you don't know". Such a state of affairs, objectively, causes an unacceptable risk to the safety and wellbeing of children attending a hospital such as RHC Glasgow (or, indeed, RHC Edinburgh, given the evidence of Dr Broomfield). Further, as an important aim of recommendations is to drive consistency in care - thereby (hopefully) making failures of outcome less likely and more easily preventable - the court will no doubt also be concerned at the suggestion that a

child in Glasgow or Edinburgh receives a different service than a child in Dundee or Birmingham. If Sonny had been taken to Ninewells Hospital or Birmingham Children's Hospital, he would have been seen by a middle-grade doctor before discharge.

[318] Mr Allison moved on to consider the issue of resources commenting that "much will no doubt be made about resources." He accepted that resources will always be finite and will always, necessarily, be a consideration in whether any recommendation could, or should, be implemented. He submitted, however, that to make a recommendation unreasonable on resource grounds alone, the court ought to be satisfied that the recommendation was wholly unworkable or impracticable such that it is not even worth exploring. The court has not heard sufficient, informed evidence to allow such a conclusion to be reached here. It was recognised that Dr Stirling and Dr Broomfield each questioned the achievability of such a step in their respective A+E departments. However, with great respect to each, they themselves are not well-placed to give a definitive view. Neither is responsible for the allocation of resources in their respective hospital. Neither would be responsible for a decision about such a recommendation (albeit maybe able to give some relevant input). Dr Broomfield's evidence is a step detached, because he is not in a position to offer comment on resources in RHC Glasgow. Dr Stirling did not give any meaningful evidence about the resources, how such a step would impact on allocation, or why, ultimately, it was not achievable. She did not give evidence about what resources would be required to achieve this, either in monetary or practical terms. Her evidence was given in the abstract, in wholly general terms. It was submitted that it was unfortunate that such

evidence was led from Dr Stirling at all by the health board without any notice being given of the intention to do so prior to the commencement of the inquiry. Dr Stirling was led by the Crown as a witness to fact, not a skilled witness. Had notice been given, then the court can take it that more expansive exploration of this issue would have been undertaken by counsel for Ms Reilly in respect of this issue. We are where we are, and the evidence given on this – such as it was – is opinion skilled witness evidence. As with all such evidence, what matters is the reasoning rather than the headline opinion. Effectively no reasons were given, and such an opinion (with no disrespect to Dr Stirling) falls into the category of "bare ipse dixit" which the Supreme Court in *Kennedy* v *Cordia LLP* 2016 UKSC 59 (at para [48]) described as "worthless". It is far from sufficient for the court – if otherwise satisfied this recommendation is reasonable in principle, and might realistically prevent other deaths in similar circumstances – to abandon doing so. That is particularly do when, on Dr Stirling's evidence, significant additional resources which move part of the way towards this recommendation have already been put in place since December 2016 (making it all the less clear why this would not be achievable). Both the non-mandatory effect of this recommendation, and the procedure in the act as to how those are dealt with, ought to reassure the court that any potential resources issues can be assessed and properly accounted for.

[319] As regards Sonny's family's first recommendation, it was submitted that there had been an unacceptable failure in appropriate record keeping. Dr Stirling confirmed that that there was no policy or accepted practice at the time which permitted doctors in the Emergency Department to defer completion of their records until the next day. The

relevant GMC guideline (guideline 69) provides: "You must make sure that formal records of your work (including patients' records) are clear, accurate, contemporaneous, and legible." The footnote to contemporaneous explained that this meant: "making records at the same time as the events you are recording, or as soon as possible afterwards". It was submitted that on the basis of that alone, such a recommendation was reasonable, because it reflects something that unquestionably should be done.

[320] On the issue of avoiding other deaths, Mr Allison stressed that there was no suggestion that the failure by Dr Ryan caused or contributed, in any way, to Sonny's outcome. It was submitted, however, that it was not difficult to see the potential for it to impact upon children in similar circumstances, up to and including having a negative impact on their outcome. It is plain on the evidence that Sonny's deterioration was quick and unexpected. The onset of AHLE is clearly unpredictable. In his case, matters were overtaken by the serious deterioration on 6 December 2016 which led to his second attendance being on an emergency basis, and the focus being on resuscitation. If Sonny's illness trajectory had been delayed by 24 hours behind where it was, then it is perfectly possible that he would have represented on 6 December on a non-emergency basis. His family were clearly concerned, on an ongoing basis, by his presentation. It is plain from the evidence of Ms and Mrs Reilly that their concerns were not assuaged by Dr Ryan's assessment and advice. In general, it would be important, if not essential, for a doctor seeing a child such as Sonny on a second non-emergency basis to have access to reliable information about his presenting history, the investigations carried out, and the treatment thus far given. To have to rely upon non-medically qualified family - who

might also be in a state of distress - to give that information rather defeats the purpose of keeping records in the first place. Here, an obvious example arises because of Dr Eunson's evidence that providing antibiotics after the onset of AHLE could make the brain swelling worse, rather than better. Dr Eunson was also clear that there was a chain of assumed events which would have given rise to any prospect of Sonny surviving the onset of AHLE. Accordingly, informed decision-making (or decision-making that is as informed as it can be) would make a material difference to outcomes.

[321] As regards the family's second recommendation, it was submitted that it was not contested that Sonny's mum and gran were not provided with written safety-netting advice. It was submitted that that was contrary to the most recent guidance issued by the Royal College of Paediatrics and Child Health specific to the emergency department setting: "Facing the Future: Standards for children in emergency care settings" June 2018 {standard 7, pages 26-28]. As well as making clear that both verbal and written advice should be provided, they emphasise the importance of understanding. That makes abundant sense: safety-netting advice is not given to tick a box, it is given purposefully and to be meaningful. If the person to whom it is not directed does not understand it, or remains unclear on what to do, then that is no better than not giving safety-netting advice at all.

[322] It was submitted that in Sonny's case, there was a factual dispute on the issue of safety-netting, but what was plain, irrespective of what was said exactly, is that Ms Reilly and Mrs Reilly did not feel that they were clear on what to do. Each of them appeared to feel that they had been discouraged from representing with Sonny. It was

accepted that that would no doubt not have been Dr Ryan's intention, however it was submitted it was an unsatisfactory situation for a parent or caregiver to ever feel that way and it is something which, plainly, risks a delay in seeking adequate or timeous treatment. Mr Allison's position was that it was not difficult to see how that could extrapolate out to a risk to health and even a fatal risk in similar cases.

[323] However the court was to resolve the factual dispute on this issue, it was Sonny's family's position that it is reasonable for the court to make a recommendation about safety-netting advice in the terms given. It is positive that steps have been taken by the Hospital Trust following their own SCIIR. However, the anecdotal evidence about safety-netting advice now given (eg by Dr Stirling about the plethora of leaflets available) gives insufficient assurance that there is an overall system of working where those charged with giving safety-netting advice are doing so consistently and effectively. In Sonny's case, the failure did not arise from the absence of a relevant leaflet: it arose from the failure of Dr Ryan to consider providing written safety-netting advice at all. The court will be concerned to ensure such a possibility of reoccurrence is minimised, if not eradicated. It is reasonable, in the circumstances that a recommendation is made in the terms sought.

The family of Cailyn Newlands

[324] Ms Guinnane submitted on behalf of Cailyn's family that the court should consider the following additional recommendations:

Family recommendation A:

> "Before being discharged from the (a) Emergency Department, each child who has already come to the attention of a Senior Doctor, either a ST4 or a Consultant, is to be logged for discharge. Such recording is to be brought to the attention of either a ST4 or a Consultant before discharge."

Family recommendation B:

> "When providing a doctor in training with advice, all Consultants should record that advice, if practicable, in the electronic records for the patient child at the time or as close to the time of the advice being sought in order that other doctors can access that advice in the Emergency Department."

GGCHB

[325] Ms Watts submitted that section 26(1)(b) of the Act allowed the court to make any recommendations which are considered appropriate. It followed from that the appropriateness or otherwise of any proposed recommendation must be borne in mind by the court in determining what recommendations (if any) to make. Further, it was submitted that any recommendation should be grounded in realism so that they can be given practical effect, otherwise the underlying purpose of the inquiry would be stripped of any practical meaning, effect and learning.

[326] The Board responded to each of the recommendations sought by the Crown as follows:

Crown recommendation one:

> "That a child returning to the Emergency Department within 72 hours and re-presenting with the same condition is reviewed by a more senior doctor, being an ST4 or above."

[327] The Board submitted that it was not appropriate to make this recommendation. It was submitted that this proposed recommendation related to the allocation of resources and as such goes to the very heart of the organisation and operation of the Emergency Department. It was submitted that the inquiry was not in any reliable position to evaluate what the consequences are of this proposed recommendation for patient care (including unintended consequences). The evidence heard at the inquiry was that, since these deaths further senior resources are now available in the Emergency Department. In addition, a standardised flowchart has been put in place which provides clear advice to clinicians operating within the Emergency Department as to when the re-presenting patient requires senior review. Amongst other things, diagnostic uncertainty, concerns from nursing staff, concerns about patient safety and parental concern are all factors which trigger senior review. It was submitted that this flowchart, which has been devised by the Board and which is based on the Board's knowledge of its resources, addresses the underlying rationale for the recommendation. Not only does it ensure that more junior staff are aware of when senior review is required, but it also strikes a balance between those patients who truly require senior review and those who do not (thus also ensuring that resources are allocated responsibly and appropriately).

Crown recommendation two:

> **"**Children attending the RHC Emergency Department and who have been referred to that Emergency Department by their GP should also be reviewed by a more senior clinician, being an ST4 or above."

[328] The Board submitted that it was not appropriate to make this recommendation. The Board's submission continued that this recommendation relates to the allocation of resources. It goes to the very heart of the organisation and operation of the Emergency Department. It was submitted that this inquiry is not in any reliable position to evaluate what the consequences are of this proposed recommendation for patient care (including unintended consequences). It is not appropriate to superimpose the practice of other departments (which serve a different population of patients) onto the Emergency Department at RHC. The Board repeated its earlier submission that neither Dr Kanani nor Dr Donald can reliably guide the court about the consequences of the proposed recommendation for the population served by RHC. There is also clearly a variation in practice across Scotland, as Dr Broomfield gave clear evidence that in his department Dr Ryan would not have been obliged to discuss Sonny's presentation with a more senior clinician.

[329] Ms Watts submitted that the only relevant evidence about the practicality of this recommendation came from Dr Stirling. She was clear in her view that requiring all patients to be seen by a senior doctor could not be given practical effect. Dr Stirling explained that systems which pre-emptively seek to triage patients based on the circumstances in which they present to the emergency department may result in an inappropriate system of priority. They had tried this in the past and found it counter-productive in that it led to inappropriate triage outcomes. It was submitted that Dr Stirling's evidence reflects the difficulties imposed in trying to adopt a one size fits all

approach to a certain category of patient and emphasise the care which requires to be taken in making any recommendations.

[330] Ms Watts further submitted that the Crown suggestion that it is illogical that a more senior clinician (the GP) should have their patient treated and potentially discharged by a doctor less experienced than the referring GP was based on a false premise which Ms Watts came on to in later submissions.

[331] There was, it was submitted, however, an alternative analysis of parents with an acute concern that a child is seriously unwell by-passing the GP altogether and instead take their child straight to the Emergency Department on the basis that urgent treatment in hospital should not be delayed by attending the GP. On the Crown's proposed recommendation, the former child automatically requires senior review whereas the latter child does not. It was submitted that that was illogical and is exactly the problem that was spoken to by Dr Stirling in her evidence.

[332] Ms Watts continued that, in any event, the recommendation is based on the entirely erroneous assumption that if a child has been seen in a GP practice they have been seen by more senior clinician than they will see in the emergency department. If the Crown had explored this in the evidence, which they did not, they would have identified their own error. Ms Watts explained that GP surgeries are not unlike hospitals in that a variety of clinicians see patients ranging from fully qualified General Practitioners who have completed specialist training in General Practice (and are the general practice equivalent of a consultant) and GPSTs who are specialist trainee doctors who are training to be GPs. Some teaching practices also have Foundation Year 1 and

Foundation Year 2 doctors who are doing a rotation in general practice. Many children will therefore present at hospital having been seen in a GP practice by a GPST1, or even by Foundation Year doctor.

[333] The Board's position was that all of this was that all of that cautioned against the appropriateness of making a general recommendation which does not account for the specific context in which a patient presents. It was submitted on behalf of the Board that the question of how its resources are allocated is best left to the Board itself. Patient safety is at the heart of the Board's priorities. To achieve that, the Board's system must take each patient in their own context.

Crown recommendation three:

> "The induction training of those beginning their rotation within the paediatric Emergency Department is clear and unambiguous in its instruction to all practitioners that:
>
> i. Prolonged periods of observation must be undertaken within the CDU
> ii. If they are unclear or uncertain about their diagnosis, they should make that clear to the senior practitioner in charge."

[334] It was submitted that the use of the word "prolonged" in this recommendation is ill advised in the circumstances of the present case and might be thought likely to increase, rather than reduce, the likelihood of a further miscommunication about observation periods and locations. The relevant question is not whether the observation period is "prolonged" but rather whether it is more or less than the 4 hour target time limit set by the Scottish Government for admission to hospital or discharge from the Emergency Department. This was the subject of detailed evidence. The Board's position

was that there was no evidence that the training provided by the Board to its trainees was in any way ineffective. The Board submits that the training which it did provide was appropriate and equipped its trainees with the requisite knowledge and skills to safely practice within the Emergency Department.

[335] It was submitted that this recommendation gives further scope for confusion due to the overly prescriptive approach to what trainees must be taught about where a prolonged period of observation requires to take place. An example given was that a child may present with a condition which requires a period of observation of more than 4 hours in a department other than the CDU. A period of observation of longer than 4 hours should not take place in the Emergency Department, but it does not follow that such a period of observation requires to take place in the CDU. If a child requires observation following a head injury for example, it might well be appropriate for them to receive that observation on a neurology ward where the staff available have the appropriate expertise. In addition, reference to "the senior practitioner in charge" is also unclear: it may be interpreted as meaning consultant, whereas it is also reasonable to seek advice from an ST4 or above who, if necessary, can escalate the case to the consultant.

[336] In concluding its submissions on this recommendation, it was submitted that both Dr Gan and Dr Stirling indicated in their evidence that they had learned from what happened in Cailyn's case and would now be more specific in their communication. The Board's position was that there was no evidence to suggest that the recommendation sought is required or would be beneficial.

Crown recommendation four:

> "That the training of those senior practitioners, to whom junior medics look to for guidance, sets out the need for clarity in providing advice and guidance to junior colleagues. Instructions should be given in a clear and unambiguous manner which leaves no scope for misunderstanding."

[337] The Board's position on this recommendation was straightforward. There was no evidence at the inquiry that the training provided by the Board to its senior member of staff was in any way deficient. The failure to admit Cailyn to the CDU was the result of a miscommunication between Dr Stirling and Dr Gan. Dr Stirling was clear that she has already changed her own practice to ensure that a repeat does not occur. The Board does not accept that that it is indicative of a wider systematic issue. Finally the proposed wording is in any event too vague to be useful.

Crown recommendation five:

> "A patient may not be discharged from hospital by junior doctors without review by a more senior clinician."

[338] It was submitted that there are a number of significant problems with this recommendation. As framed the recommendation goes beyond the paediatric emergency department and appears to apply to all patients regardless of age and regardless of their location within any hospital. The term "junior doctor" is not understood. Any doctor who is not a consultant is, technically, a junior doctor. The term "more senior clinician" is also not understood.

[339] A more fundamental problem, however, was that for reasons already submitted, the Board's position was that it was not appropriate to make such a recommendation. It relates to the allocation of resources and, it was submitted, goes to the very heart of the organisation and operation of the Emergency Department. As previously submitted, this inquiry is not in any reliable position to evaluate what the consequences are of this proposed recommendation (including unintended consequences). The Board submitted that the need for senior review ought to be determined on a case- by- case basis, as guided by the protocol and policies operating within the Emergency Department. There was no sufficient basis in the evidence to recommend that all patients require to be reviewed by a senior doctor prior to discharge. Dr Stirling's position was that any recommendation to that effect simply could not be implemented by the Board. It was submitted that the recommendation was not realistic and that to make it would strip the inquiry of any practical meaning, effect and learning.

[340] The Board responded to the recommendations sought by Cailyn's family as follows:

Recommendation A

> "Before being discharged from the(a) Emergency Department, each child who has already come to the attention of a Senior Doctor, either a ST4 or a Consultant, is to be logged for discharge. Such recording is to be brought to the attention of either a ST4 or a Consultant before discharge."

[341] It was the Board's position that there was no evidence before the inquiry about how this recommendation would be implemented. Such evidence as was heard at the

inquiry was that senior doctors are already under immense strain: Dr Broomfield gave evidence that he is asked a question every 30 seconds to a minute; Dr Donald noted that the decision-making density on shift is higher than a question every 30 seconds. Requiring a senior member of staff to be informed before a patient is discharged would place further strain on an already strained system and may be of little practical benefit. The proposed recommendation proceeds on the erroneous assumption that senior doctors are, at all times, contactable (in other words, not dealing with an immediately life threatening emergency), have time to receive the necessary information, and will be in a position, presumably, to either allow or stop discharge depending on the child's presentation (otherwise there is no purpose in requiring the senior doctor to be informed at all). That would require a detailed conversation about each patient and what had changed since any initial discussion between the senior and junior doctor. If the same senior doctor was not contactable, there is no reason to expect that a different senior doctor would take a different decision if being told by a junior doctor that the patient was now being discharged following the implementation of advice from another senior doctor. It would not be reasonable to delay discharge of a patient pending the same senior doctor becoming available (not only in light of waiting times targets, which NHS GGC do not set, but also out of fairness to the patient and their family). The Board submitted that there was no evidence that such a system is workable in practice. The court should, in these circumstances, treat the proposed recommendation with caution.

[342] The miscommunication that arose in relation to Cailyn was a result of a lack of specification in instruction from Dr Stirling and an unsafe assumption by Dr Gan. The

giving of insufficiently specific instructions, and the making of assumptions about what advice from a senior colleague is intended to convey, are potentially of significance in scenarios beyond simply whether or not a child is leaving the department. No accident and emergency expert gave evidence to the inquiry which criticised NHS GCC for not having the system contended for in place, there is no evidence before the inquiry about how it would work in practice, and it is submitted that it would not be appropriate to make the recommendation sought.

Recommendation B

> "When providing a doctor in training with advice, all Consultants should record that advice, if practicable, in the electronic records for the patient child at the time or as close to the time of the advice being sought in order that other doctors can access that advice in the Emergency Department."

[343] It was submitted that since these deaths occurring (over 8 years ago) there have been significant changes for note taking implemented at RHC. In particular, Dr Stirling gave evidence that the system of note taking was now fully electronic which facilitates contemporaneous note taking. The consequences of the electronic system is that it is easier for senior doctors to review, and write up, notes.

[344] The Board agreed with the underlying proposition that, where practicable, it is good practice for a Consultant to record the advice given about any specific patient to a junior doctor. Indeed, it was submitted that the system which has been implemented makes that task easier. However, the Board submitted that the recommendation sought is not appropriate for the following reasons. First, senior doctors are frequently asked to

provide advice on the management of patients. Junior doctors will ordinarily record the details of that advice in their own written notes (as Dr Gan in fact did after speaking to Dr Stirling). Thus, the proposed recommendation may simply result in duplication of the same information. Secondly, "if practicable" is unclear. What might be considered practicable by one doctor may not be practicable to another. The recommendation has the potential to cause confusion, which is not desirable. On one view, it may never be "practicable" to write up notes if it takes time away from senior doctors reviewing patients. But that does not mean that notes should not, in certain circumstances, be written up. Rather, it was submitted that the writing up of notes ought properly to be left to the senior doctor to decide if it is necessary for them to write in the notes in the context of the specific patient.

[345] In conclusion it was submitted that there is also the issue of resources. Given the decision-making density on shift, a senior doctor may, by virtue of this proposed recommendation, be forced to spend the majority of their time writing up notes. That is not consistent with the role of a senior doctor which is to manage the overall department, see that those children who do require admission are admitted and manage the most acute life threatening emergencies. It was submitted that it is plainly not possible for a senior doctor to write in the notes of every patient that comes to their attention. Again, it is submitted that the question of note taking ought to be left to the doctor in question. This inquiry can be reassured, however, that if a senior doctor considers it to be necessary to record their advice in the notes contemporaneously, the Board has implemented a system which facilitates that.

[346] The Board responded to the recommendations sought by Sonny's family as follows:

Recommendation one:

> "That any clinician reviewing a child in an accident and emergency context should, unless not practicable, complete their written record of that review contemporaneously. In the event they are unable to do so, they should, in any event, complete that record prior to their departure at the end of their shift."

[347] Ms Watts submitted that it was the unanimous evidence of every witness that notes should be prepared contemporaneously where possible and that it was not necessary for the inquiry to make this recommendation when it was already clinical practice, and when the late completion of notes made no difference in circumstances of the present case.

Recommendation two:

> "That, at the point of discharge of a child from hospital, their parent or carer should be provided with comprehensive safety netting advice, both generally and specific to their presenting condition. The discharging clinician should, prior to the parent or carer's departure, satisfy themselves that the parent or carer has understood that advice. That advice should then be confirmed in writing, or another format, which is accessible to the individual in question."

[348] It was submitted that, again, it was unanimously accepted that parents should be provided with safety netting advice. There was evidence about the pitfalls of providing either too little or too much, by way of safety netting information and ultimately that has to be left to clinical judgment to some extent. It was also unanimously agreed that safety

netting advice should be provided in writing and that is now done at RHC. In those circumstances it was submitted that the recommendation is unnecessary.

Discussion on recommendations

[349] Section 26(1)(b) of the Act provides the court with a discretion whereby the sheriff, if it is considered appropriate, can make such recommendations (if any) in relation to the four matters set out at section 26(4) of the Act being:

- the taking of relevant precautions
- the making of improvements to any system of work
- the introduction of a system of working
- the taking of any other steps

The recommendations (if any are made) are to be those which it is considered which might realistically prevent other deaths in similar circumstances.

[350] For the reasons set out in the following paragraphs I have decided that there are no recommendations which it would be appropriate to make in either Sonny's or Cailyn's case.

[351] Whilst I will look at the recommendations proposed by the Crown and on behalf of Sonny's family and Cailyn's family in more detail, I think it important to pause and remind oneself that the aim or purpose of any recommendation is to *"prevent deaths* ***in similar circumstances."*** (my emphasis). As the evidence in relation to Sonny's tragic death showed the circumstances of his death were extremely rare, making the

consideration of any recommendations to prevent any future deaths in similar circumstances difficult if not impossible.

Crown recommendation one

[352] I do not consider that it is appropriate that this recommendation should be made. I agree with the submission made on behalf of the Board that this recommendation relates to the allocation of resources and goes directly to the organisation and operation of the Emergency Department. The question of resources is not limited to RHC. I am mindful of Dr Broomfield's evidence that there are not enough senior paediatric doctors to see every child before discharge. He said he did not see that as being practicable and re-iterated that had Dr Ryan been working in his department she would not have spoken to a more senior colleague and he would only expect her to if she had concerns. Dr Donald spoke of the issue of resources saying that it was for management, Scottish Ministers and the Royal Colleges to decide on the question of appropriate staffing resources. When it was put to him that Dr Stirling had estimated that (in 2016) the Emergency Department saw in the region of 60,000 children each year he described that as "enormous". Dr Stirling's evidence was that if it was possible children should be seen by a middle range doctor or consultant but there was a resource issue.

[353] I also agree with the submission made on behalf of the Board that this inquiry is not in a position to evaluate what the consequences (including unintended consequences) are of the proposed recommendation. If I were to make such recommendation, it would be straying into the management of the Board's (and other

Health Boards) resources both financial and personnel. In my view that would not only not be appropriate but the evidence heard would not allow me to come to the conclusion that any such recommendation could realistically be implemented.

[354] In my view the issue of senior review and the circumstances in which it should (and could) be implemented should be left to the Board (and any discussions it may have with the Scottish Government and the Royal Colleges). The Board have taken significant steps since the reports of the Significant Clinical Incident Reviews were issued. In particular there has been a noticeable increase in the number of senior doctors (in particular consultants and medical paediatric registrars) based in the Emergency Department. That decision would no doubt have been taken by the Board with the benefit of knowing the available resources and the consequences of the changes (and how those can be managed). In addition the introduction of the flow-chart giving clear advice to clinicians within the Emergency Department as to when senior review is required will no doubt have been designed and implemented by the Board knowing its available resources. The flowchart is produced at appendix 2 to the determination.

Crown recommendation two

[355] Much, if not all, of what I have said in relation to Crown recommendation one applies to this proposed recommendation and I do not intend to repeat that here other than to say that the issue of resources is front and centre to the issue of senior review and that in my view is a matter for the Board.

[356] In any event there are clear flaws in the recommendation for the reasons submitted by the Board. In particular the question of a worried parent by-passing the GP and bringing a seriously unwell child directly to the Emergency Department is precisely what happened in Cailyn's case. I appreciate that in Cailyn's case this recommendation would have to be looked at in the context of the first proposed recommendation, but the point remains: if a child as seriously unwell as we now know Cailyn was, presents directly at the Emergency Department for the first time, that child would not automatically require senior review according to this proposed recommendation.

[357] I also agree that the proposed recommendation would appear to be based on an assumption that the referring GP is "more senior" than the clinician seeing the child in the Emergency Department. Although I did not hear any evidence on that point I can see that there must be a possibility that that situation would arise.

[358] For those reasons I again agree with the Board's position that it would not be appropriate for me to make such a general recommendation which does not account for specific context of how a patient presents at the Emergency Department. In my view the allocation of resources and how the Emergency Department is organised and managed is best left to the Board.

Crown recommendation three

[359] I heard no evidence that could or would lead me to conclude that the training (particularly training on periods of observation, the location of such observation and how to deal with any issues or queries that may arise) provided to trainees was

inadequate. On that basis alone I do not consider that it would be appropriate to make such a recommendation.

[360] Subject to what I say below, the use of the phrase "prolonged period of observation" would appear (at least in a training context) to be somewhat vague. As I have said I heard no evidence on the specifics of the induction training and whether this phrase is used and if so whether it is given a broader context in terms of what it means.

[361] The recommendation is prescriptive in its terms in so far as it states that the observation **must** be undertaken within the CDU. Such a recommendation would appear to exclude observation within the Emergency Department (if less than 4 hours) or within another department or ward should the particular context of the patient's condition require that. The Crown's proposed recommendation appears to be based on an assumption that all patients will be referred to the CDU.

[362] Whilst I appreciate that the flowchart now being used within the Emergency Department is for the specific context of unplanned re-attending patients it is worthy of note that (i) if there is diagnostic uncertainty in that context there is to be a Senior Review and (ii) if there remains such uncertainty the patient is to be referred to the "appropriate specialty" for "prolonged period of observation" and that the patient must be reviewed by the "appropriate registrar". The use of the phrase "appropriate speciality" seems to me to mean it could be somewhere other than the CDU. The use of the phrase "prolonged period of observation" in the flowchart might at first blush seem to be contrary to the point made on behalf of the Board in its submissions (that its use is

ill-advised) but the point is that (at least in that context) it is a senior clinician who is making that decision.

Crown recommendation four

[363] Again there was no evidence before the inquiry that the training provided to its senior members of staff was inadequate or defective in some way. I agree with the Board's submission that in any event the proposed wording is too vague. For those reasons I do not think it would be appropriate to make such a recommendation.

Crown recommendation five

[364] I agree with the submission made on behalf of the Board. The recommendation is too wide and too vague. Even if it was to be framed in the context of the Emergency Department alone there would still be a vagueness that would make it unworkable. It is framed in such a way as to apply to every patient which would include those attending with a minor injury, perhaps a broken finger or laceration. There was no sufficient basis in the evidence to recommend that all patients require to be reviewed by a senior doctor prior to discharge. To use the minor injury example why would a senior doctor require to review such a patient prior to discharge? That scenario would strike me as not being a particularly good or useful use of resources and which may have consequences for the care of more seriously ill or injured patients. In my view the proposed recommendation is not realistic and as such it would not be appropriate to make such a recommendation.

[365] For completeness I do not consider that the change to Crown recommendation five proposed by Mr Allison makes the recommendation any less wide or less vague.

Sonny's family's recommendation one

[366] I do not consider it necessary or appropriate that such a recommendation is made. It was clear from the evidence that all witnesses were in agreement that notes should be prepared, where possible. In any event, as I understand it, the GMC guideline reflects the proposed recommendation. In addition the lack of contemporaneous notes did not have any impact in the tragic and sad circumstances of Sonny's death (and therefore a child presenting in similar circumstances). I do not therefore see the need for such a recommendation nor do I consider it appropriate to do so.

Sonny's family's recommendation two

[367] I agree with the Board's submission that this recommendation is unnecessary. Furthermore I am unclear how the discharging clinician could "*satisfy* themselves that the parent or carer has understood" the advice. In my view Dr Broomfield's evidence on this issue was instructive. The inquiry had the benefit of seeing the safety netting advice leaflet in relation to discharge advice for carers of children younger than 5 years who have a fever from an unknown cause now used in the Emergency Department and an extract from the RHC website dealing with fever in children under 5 years. The inquiry heard no evidence that these were in some way deficient. Copies of these are produced

as appendices 3 and 4. I do not consider it appropriate or necessary to make such a recommendation.

Cailyn's family's recommendation A

[368] I am unclear as to what this proposed recommendation achieves in practical terms. As framed the proposed recommendation is that the fact that a child who has already come to the attention of a senior doctor is to be logged or recorded (presumably, but it is not said, in the child's clinical notes) and that fact should be brought to the attention of a senior doctor before discharge.

[369] I am also unclear as to what "already come to the attention of a senior doctor" means. I can envisage that there must be many ways in which child comes to the attention of a senior doctor. On the evidence of Dr Broomfield and Dr Donald the frequency of a child "coming to their attention" could be as much as every 30 seconds.

[370] What is envisaged the senior doctor is to do with the fact that the child has previously "come to the attention of a senior doctor"? It may be that that senior doctor is not the same senior doctor whose attention was drawn to the child previously. Is that doctor to examine the child?

[371] The inquiry heard no evidence as to how such a recommendation would (or indeed could) work in practice. It would not be appropriate to make the recommendation sought.

Cailyn's family's recommendation B

[372] Whilst I note that the Board agrees with the underlying proposition within the recommendation, I do not consider that it would be appropriate to make such a recommendation. It strikes me (taking on board the evidence of Dr Broomfield and Dr Donald) that there must be doubts as to the practicality of such a recommendation ever working or at least working to an effective level (and the inquiry heard no evidence as to how the recommendation would work in practice). I can envisage situations where the senior doctor would want to (and should) write up the child's clinical notes following discussions with a doctor in training, but that in my view is best left to the judgment of the senior doctor.

Observations

Dr Gan's evidence

[373] The Board in its written submissions raises concerns about the how the Crown sought to unfairly and unduly criticise Dr Gan. Indeed in its written submissions the Board refers to the Crown accusing Dr Gan of "concealing" from both Dr Stirling and the SCIR that he did not know what he was doing at the relevant time. I cannot see any use of the word "concealing" in the Crown's submissions (I am not sure whether the initial draft submissions contained that word and the Crown have reconsidered that in response to Board inviting the Crown to withdraw it prior to final submissions being lodged). I think it only appropriate that I comment on that.

[374] The Crown's submission appears to be based on the fact that, for the first time at this inquiry, Dr Gan accepted that he did not know what to do when treating Cailyn. That was not foreshadowed in his affidavit before the inquiry and had not been disclosed to the SCIR or Dr Stirling. The Crown submitted that Dr Gan's "clear demeanour" was that he was "uncertain, anxious and bewildered" and "all at sea" to the extent that not only did he not know what to do but that he did not know what he was doing in respect for the Crown. The difficulty for the Crown with that submission is the evidence of Dr Stirling where she states that whilst she cannot recall Dr Gan's demeanour (which is not surprising given the passage of time) there was nothing that made her worried that he did not know what he was doing. There was no evidential basis for this inquiry to reach the conclusion that Dr Gan was "bewildered and all at sea".

[375] I agree with the submission on behalf of the Board that the suggestion by the Crown that Dr Gan said that his affidavit was "in its entirety exactly the same" as the statement he had given to the SCIR is taken out of context. In cross-examination by Ms Guinnane, Dr Gan said it (his affidavit) was "basically the same".

[376] Saying "I did not know what to do" is different to saying "he did not know what he was doing". It may be a subtle difference but it is a difference nonetheless. I do not take anything from the fact that the phrase "I did not know what to do" was as, it appears (and I have not seen it), not in Dr Gan's statement to the SCIR nor that it did not appear in his affidavit before the inquiry. I was certainly not left with the impression that Dr Gan was in some way trying to mislead the inquiry by not having that phrase in

his affidavit. A more likely explanation in my view is that perhaps on reflection this is now what he has come to realise. If he wished to conceal the fact that he did not know what to do, why then volunteer that fact on three occasions in his evidence?

[377] In any event the admission that he did not know what to do was made in the context of him seeking advice from Dr Stirling. Before using that phrase his evidence was that "I was not experienced enough and spoke to Dr Stirling". He was clear in his evidence that his uncertainty about what to do arose because he did not know the significance of the green vomit and that this was Cailyn's third attendance at the Emergency Department. As he put it "I did not know what to do next", which is entirely consistent with what he says at paragraph 22 of his affidavit.

[378] In short I had no concerns about Dr Gan's evidence before this inquiry. That is not surprising given the frankness and candour of his oral evidence.

Jaundice, blanching spots and "Acopia"

[379] For completeness I did not find it necessary for the purpose of this inquiry to make any findings or comments regarding these matters.

Martha's Rule

[380] Ms Guinnane referred in her submissions to what I understand (although I have no direct knowledge of it) to be a rule introduced in England that allows families of children who are ill in hospital to have access to an opinion of a senior doctor. I heard no evidence as to the detail of how this rule works in practice and in what

circumstances. I heard no evidence as to whether it could work in Scotland and if so in what way. For those reasons I cannot and have not made any findings in that regard.

Condolences

[381] Finally I would once again wish to extend the court's (and my own personal) condolences to Sonny's family and Cailyn's family.

APPENDIX ONE

GLOSSARY OF MEDICAL TERMS

FATAL ACCIDENT INQUIRY

INTO THE DEATH OF SONNY CAMPBELL AND CAILYN NEWLANDS

GLOSSARY OF MEDICAL TERMS

MEDICAL TERM	MEANING
Acidosis (acidotic)	*n.* a condition in which the acidity of body fluids and tissues is abnormally high
Afebrile	*Adj.* without, or not showing any signs of a fever.
Asystole (asystolic)	*n.* a condition in which the heart no longer beats, accompanied by the absence of complexes in the electrocardiogram. The clinical features, causes and treatment are those of cardiac arrest
Bair Hugger	*Adj* Convective temperature management system used in a hospital or surgery to maintain a patient's core body temperature[1]

Bolus	*n.* a large dose of a drug or fluid administered by rapid injection, as opposed by infusion.
Bronchopneumonia	**Branch- (broncho-)** *combining form denoting* the bronchial tree of the lung **Pneumonia-** *n.* inflammation of the lung caused by pathogens such as bacteria or viruses, in which the air sacs of the lung (alveoli) become filled with inflammatory cells and the lung becomes solid. The symptoms may include those of any infection (fever malaise, headaches etc.) together with cough and chest pain. Pneumonias may be classified in different ways, such as according to the X-ray

[1] The technology | Bair Hugger for measuring core temperature during perioperative care | Advice | NICE

	appearance. Lobar pneumonia affects the lobes of the lung and is usually caused by the bacterium, *Streptococcus pneumoniae.* When these multiple shadows are widespread across the lung fields, the term bronchopneumonia is used. In bronchopneumonia, the infection starts in a number of small bronchi and spreads in a patchy manner into the alveoli.
Cardiopulmonary Resuscitation	An emergency procedure for life support, consisting of artificial respiration and manual external cardiac massage. It is used in cases of cardiac arrest or apparent sudden death resulting from electric shock, drowning, respiratory arrest, or other causes, to establish effective circulation and ventilation in order to prevent irreversible brain damage. External cardiac massage compresses the heart, forcing blood into the systemic and pulmonary circulation; venous blood refills the hear when the compression is release. Mouth-to-mouth resuscitation or mechanical ventilation(using a bag and mask, for example) oxygenates the blood being pumped through the circulatory system.

Capillary Refill Time	A quickly performed test to assess the adequacy of circulation in an individual with poor cardiac output. An area of skin is pressed firmly by (say) a fingertip until it loses its colour; the number of seconds for the area to return to its original colour indicates capillary refill time. Normal capillary refill takes around 2 seconds. Slow capillary refill may occur centrally (for example, on the chest or abdominal wall) in an individual with poor circulation or in a small area (e.g. a toe) in which local circulation is compromised (due, for example, to peripheral vascular disease).

	This test may not be very useful in people with dark skin.

Cardiac Arrest	The cessation of effective pumping of the heart. This may be asystole, because there is no normal electrical activity without mechanical pumping activity (pulseless electrical activity), or because there is rapid, chaotic, ineffective electrical and mechanical activity of the heart (ventricular fibrillation or ventricular tachycardia). There is abrupt loss of consciousness, absence of the pulse and breathing stops. Unless treated promptly, irreversible brain damage and death follow within minutes. Some patients may be resuscitated by airway clearance and support, artificial ventilation, massage of the heart and (if ventricular fibrillation or tachycardia is present) defibrillation.
Cervical lymphadenopathy	**Cervical** *adj.* of or relating to the neck **Lymphadenopathy** *n.* enlargement of the lymph nodes. This is usually due to infection (e.g. viral or bacterial), when the nodes are painful and tender but may alternatively be caused by malignancy (e.g. leukaemias, lymphomas), autoimmune disease (e.g. systemic lupus erythematosus) or adverse drug reactions.
Coryza(l)	A catarrhal inflammation of the mucous membrane in the nose due to either a cold or hay fever. Usually manifests as a runny nose.
Creps (Crepitation)	*n.* a soft fine crackling sound heard in the lungs through the stethoscope. Crepitations are made either by air passages and the alveoli (air sacs) opening up during inspiration or by air bubbling through fluid. They are not normally heard in healthy lungs.

Cyanosis (cyanosed)	*n.* bluish discolouration of the skin and mucous membranes resulting from an inadequate amount of oxygen to in the blood. Cyanosis is associated with heart failure, lung diseases (including infection), the breathing of oxygen deficient atmospheres, and asphyxia. Cyanosis is also seen in blue babies because of congenital heart defects.
Diarrhoea	*n.* frequent bowel movement evacuation or the passage of abnormally soft or liquid faeces. It may be caused by intestinal infections, inflammation (such as ulcerative colitis or Crohn's disease), malabsorption, anxiety, drugs and irritable bowel syndrome. Severe or prolonged diarrhoea may lead to excessive loss of water, salts and nutrients.
Dextrose (Glucose)	*n.* a simple sugar containing six carbon atoms (hexose). Glucose is an important source of energy in the body and the sole source of energy for the brain. Free glucose is not found in many foods (grapes are an exception); however, glucose is one of the constituents of both sucrose and starch, both of which yield glucose after digestion. Glucose is stored in the body in the form of glycogen.
Echocardiogram (Echocardiography)	*n.* the use of ultrasounds waves to investigate and display the action of the heart as it beats. Used in the diagnosis and assessment of congenital and acquired heart diseases, it is safe, painless and reliable and reduces the need for cardiac catheterization.

Encephalitis	*n.* inflammation of the brain. It may be caused by a viral or bacterial infection, or it may be due to an abnormal autoimmune process, such as an allergic response to a systemic illness or vaccination.
Exudate (Exudation)	*n.* the slow escape of liquid (called the **exudate)** that is rich in proteins and contains white cells through the walls of intact blood vessels, usually as a result of inflammation. Exudation is a normal part of the body's defence mechanisms.
Effusion (pericardia!)	*n.* 1. the escape of pus, serum, blood, lymph or other fluid into a body cavity as a result of inflammation or the presence of excess blood or tissue fluid in an organ or tissue. 2. Fluid that has escaped into a body cavity. Such effusions may be exudate (rich in protein) or transudates (low in protein)
Febrile	*Adj.* relating to or affected with fever

Gastroenteritis	*n.* inflammation of the stomach and intestine. It is usually due to acute viral or bacterial infection or due to the ingestion of toxins in contaminated food. Clinical symptoms are vomiting, diarrhoea, and fever. The illness usually lasts 3-5 days. Fluid loss is sometimes severe, especially at the extremes of age, and intravenous fluid replacement may be necessary. Viral or viral-type organisms (e.g. the norovirus) are common causes of highly infectious gastroenteritis and unlike bacterial pathogens, can be spread by aerosol or minimal contact and not necessarily by the faeco-oral route.
Hypoglycaemic (Hypoglycaemia)	*n.* a deficiency of glucose in the bloodstream, causing muscular weakness and incoordination, mental confusion, and sweating. If severe, it may lead to hypoglycaemic coma. Hypoglycaemia most commonly occurs in diabetes mellitus, as a result of insulin overdosage and insufficient intake of carbohydrates. It is treated by administration of glucose: by injection if the patient is in a coma, by mouth otherwise.
Hyperkalaemia	*n.* the presence in the blood of an abnormally high concentration of potassium, usually due to failure of the kidneys to excrete it.

Icteric (Icterus) Sciera	**Icterus** *n.* a yellow discolouration of the skin or whites of the eyes, indicating excess bilirubin (a bile pigment) in the blood. **Sciera** *n.* the white fibrous outer layer of the eyeball. At the front of the eye, it becomes the cornea.
Immunisation	*n.* the production of immunity by artificial means. Passive immunity may be temporary conferred by the injection of an anti-serum, while the production of active immunity calls for the use of treated antigens, to stimulate the body to produce its own antibodies: this is the procedure of vaccination (also known as inoculation). The material used for immunisation (the vaccine) may consist of live bacteria or viruses which have been modified so that they are harmless while remaining antigenic or completely dead organisms or their products (e.g. toxins) chemically or physically altered to produce the same effect.
Intraosseous needle	A wide-bore needle for insertion directly into the bone marrow of (usually) the tibia (shin bone) in children, used only in emergencies when no other means of intra- venous access can be gained. Intraosseous needles enable fluids and drugs to be given rapidly
Intubation (Intubate)	*n.* the introduction of a tube into part of the body for the purpose of diagnosis or treatment (usually the lungs, to provide effective ventilation).
Intravenous	*Adj.* into or within a vein
Lethargy (Lethargic)	*n.* mental and physical sluggishness: a degree of inactivity and unresponsiveness approaching or verging on the unconscious.

	The condition results from disease (including serious infections) or hypnosis.
Meningitis	*n.* inflammation of the meninges (lining of the brain) due to infection by viruses or bacteria or fungi. Meningitis causes an intense headache, fever, loss of appetite, intolerance to light (photophobia) and sound (phonophobia), rigidity of muscles, especially those in the neck and in severe cases convulsions, vomiting and delirium leading to death.
Meningism	Set of symptoms associated with meningitis, such as photophobia and neck stiffness
(Metabolic) Acidosis	*n.* a condition in which the acidity of body fluids and tissues is abnormally high. This arises because of a failure of the mechanisms responsible for maintaining a balance between acids and alkalis in the blood.
Otitis Media (Otitis)	*n.* otitis refers to inflammation of the ear. Acute Otitis Media is the inflammation, usually due to viral or bacterial infection, of the middle ear (the chamber lying beyond the eardrum and containing the three bony ossicles that conduct sound to the inner ear). Symptoms include pain and a high fever. Treatment is with antibiotics and sometimes also by surgical drainage.

PERLA	Pupils equal, react to light and accommodation: acronym used in hospital notes.
Pericardia! Effusion	**Pericardia!** *adj.* the membrane surrounding the heart, consisting of two sections. The outer fibrous pericardium completely encloses the heart and is attached to the large blood vessels emerging from the heart. The internal serous pericardium is closed sac of serous membrane: the inner visceral portion (epicardium) is closely attached to the muscular heart wall and the outer

	parietal portion lines the fibrous pericardium. Within the sac is a very small amount of fluid, which prevents friction as the two surfaces slide over one another as the heart beats. **Effusion** *n.* 1. The escape of pus, serum, blood, lymph or other fluid into a body cavity as a result of inflammation or the presence of excess blood or tissue fluid in an organ or tissue. 2. Fluid that has escaped into a body cavity. Such effusions may be exudates (rich in protein) or transudates (low in protein).

Pulmonary oedema	**Pulmonary** *adj.* relating to or associated with or affecting the lungs. **Oedema** *n.* excessive accumulation of fluid in the body tissues; historically known as dropsy. The resultant swelling may be local, as with an injury or inflammation or more general, as in heart or kidney failure. In generalised oedema there may be collections of fluid within the chest cavity (pleural effusions), abdomen or within the air spaces of the lung *(pulmonary oedema).*
Pyrexia (pyrexial)	(fever) *n.* a rise in body temperature above normal i.e. above an oral temperature of 98.6°F (37°C) or a rectal temperature of 99°F (37.2°C) in adults. Fever is generally accompanied by shivering, headache, nausea, constipation or diarrhoea. A rise in temperature above 105°F (40.5°C) my cause delirium. In young children, a rapid rise in temperature resulting in fever may be associated with convulsions - such febrile convulsions are generally self-limiting and not associated with any long-term complications. Fevers are usually caused by bacterial or viral infections and can accompany any infectious illness, from the common cold to malaria.

Rash	*n.* a temporary eruption on the skin, usually typified by discrete red spots or generalised reddening, that may be accompanied by itching. A rash may be a local skin reaction or the outward sign of a disorder affecting the bod. Rashes commonly occur with infectious diseases, such as chicken pox and measles.
Respiratory Rate	*n.* (RR) breathing rate: the number of breaths per minute. Normally between 6 and 12 in adults, it increases after exercise and in cases of respiratory distress and decreases after head injury and opioid overdose.
Resuscitation	*n.* the restoration of a person who appears to be dead by the revival of cardiac and respiratory function.
Sciera	*n.* the white fibrous outer layer of the eyeball. At the front of the eye, it becomes the cornea.
Sepsis	*n.* the putrefactive destruction of tissues by disease-causing bacteria or their toxins.

Sinus Bradycardia	*n.* slowing of the heart rate to less than 50 beats per minute. Sinus bradycardia is often found in health individuals, especially athletes, but it is also seen in some patients with reduced thyroid activity, jaundice, hypothermia, or vasovagal attacks. Bradycardia may also result from arrythmias, especially complete heart block, when the slowing is often extreme and often causes loss of consciousness.
Streptococcus	*n.* a genus of Gram-positive nonmotile spherical bacteria occurring in chains. Most species are saprophytes; some are pathogenic. Many pathogenic species are haemolytic, i.e. they have the ability to destroy red blood cells in blood agar. This provides a useful basis for classifying the many different strains. Strains of *5. pyogenes* (the haemolytic streptococci) are associated with any infections, including scarlet fever, and produce many exotoxins. Strains of the a-haemolytic streptococci are associated with bacterial endocarditis. The species 5. *pneumoniae* (formerly *diplococcus pneumoniae)* - the pneumococcus - is associated with serious diseases including pneumonia, pneumococcal meningitis and septicaemia. It is also a common bacterial cause of ear infections. It occurs in pairs, surrounded by a capsule. 5. *mutans* has also been shown to cause dental caries.
Tachycardic (tachycardia)	*n.* an increase in the heart rate above normal

Tachypnoea (tachypnoeic)	*n.* rapid breathing rate above normal
Triage	*n.* a system whereby patients are evaluated and categorized according to the seriousness of their injuries or illnesses with a view to prioritising treatment and other resources. In emergency situations it is designed to maximise the number of survivors.
Tympanic Membrane(s)	(Eardrum) the membrane at the inner ear of the external auditory meatus, separating the outer and middle ears. It is formed from the outer wall of the lining of the tympanic cavity and the skin that lines the external auditory meatus. When sound waves reach the ear tympanum vibrates, transmitting these vibrations to the malleus - one of the auditory ossicles in the middle ear-to which it is attached.
Urinalysis	*n.* the analysis of urine, using physical, chemical and microscopical tests, to determine the proportions of its normal constituents and to detect alcohol, drugs, sugar, blood, protein or other abnormal constituents.
Urinary Tract (Infection)	The entire systems of ducts and channels that conduct urine from the kidneys to the

	exterior. It includes ureters, the bladder and the urethra.
Ventricular Tachycardia (VT)	A dangerously fast beating of the heart stemming from an abnormal focus of electrical activity in the ventricles. The electricity does not pass through the heart along the usual channels and as a result the contraction of the heart muscle is often not as efficient as normal, which can result in a sudden drop in blood pressure or even cardiac arrest. Left untreated it will prove ultimately fatal.

Reference: Concise Medical Dictionary (Oxford University Press, 10th Edition, 2020)
ISBN: 978-0-19-883661-2

ABBREVIATIONS

ABX - Antibiotics

BIBA- Brought in by ambulance.

BPM - Breaths per minute

CPR - Cardiopulmonary

resuscitation CRT- Capillary refill

time

CXR - Chest **X-ray**

ECHO - Echocardiogram

ED - Emergency

department ETT -

Endotracheal tube GCS -

Glasgow Coma Scale GP -

General practitioner HR -

heart rate

HX- History

PICU - Paediatric intensive care

unit IV - intravenous

10 - intraosseous

MMR- measles, mumps, rubella (vaccine)

PEA - Pulseless electrical activity

PEEP - Positive end-expiratory

pressure PICU - Paediatric intensive

care unit PT-patient

PVT - Pulseless ventricular tachycardia

RR - Respiratory rate

RAH - Royal Alexandra Hospital

RESUS - Resuscitation

RHC - Royal Hospital for Children

RX - Therapy or treatment

SCIR - Significant Clinical Incident Review

SP02 - Oxygen saturation

T - Temperature

URTI - Upper respiratory tract infection

APPENDIX TWO

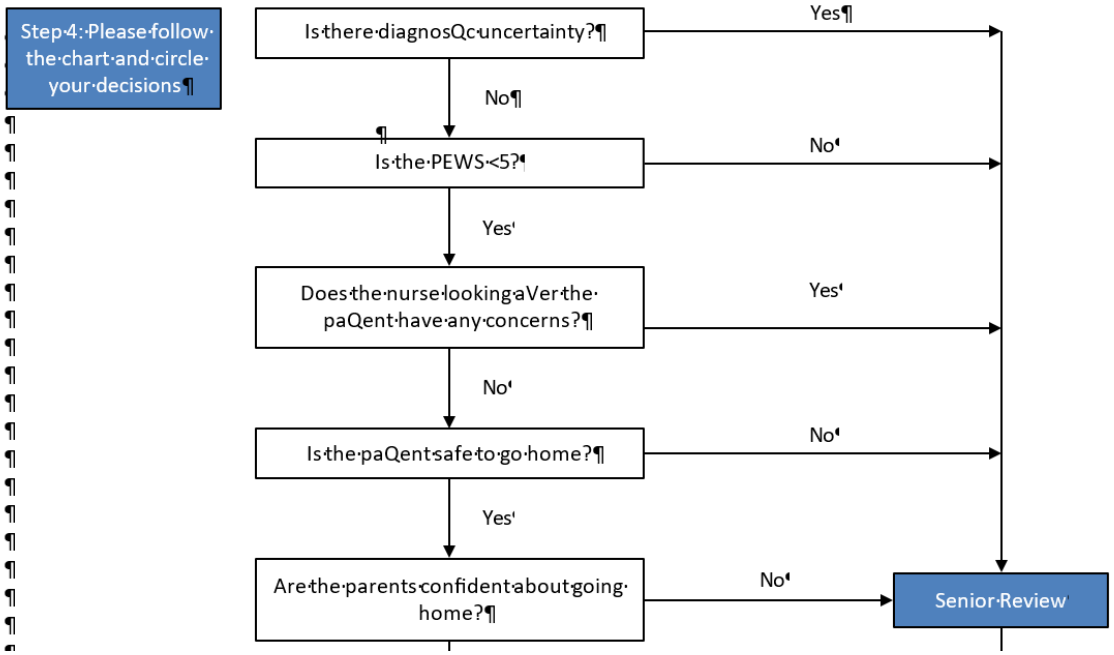
THE ROYAL HOSPITAL FOR CHILDREN EMERGENCY UNPLANNED RETURN PATIENT CHECKLIST

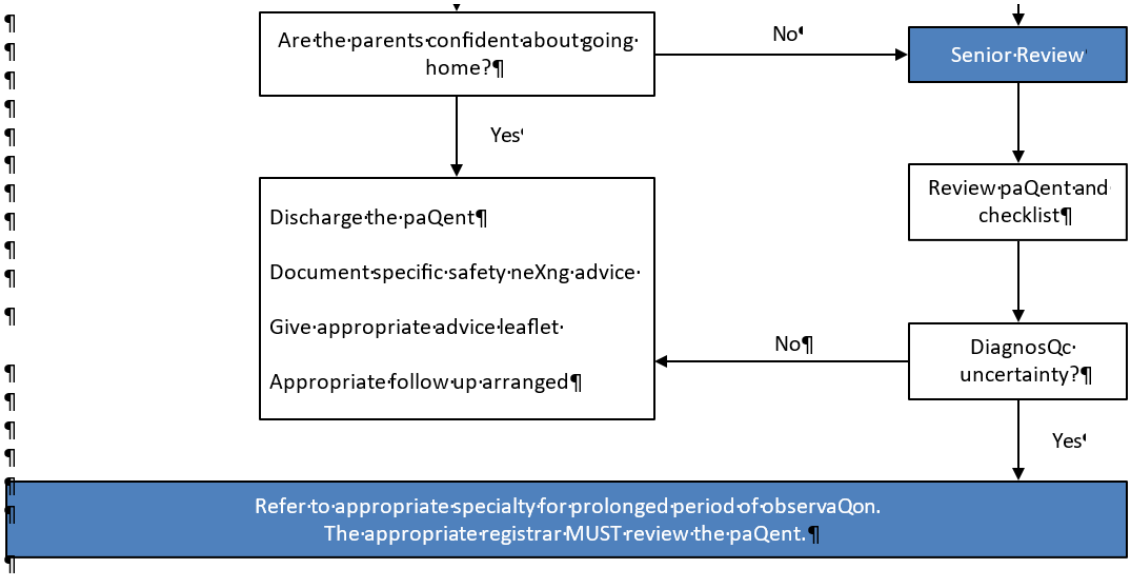
GLW-B59-24 → GGHB → PROD·10¶

UNPLANNED·RETURN·PATIENT·CHECKLIST·
EMERGENCY·DEPARTMENT,·RHC¶
Use·for·all·patients·re-attending·ED·with·same·complaint·within·**72·hours¶**

¶
NAME:(affix·label)¶
CHI:¶

Step·1:·Review·previous·ED·attendance·on·TrakCare/Portal			
Blood·tests		Reviewed	Documented
X-Rays/Reports		Reviewed	Documented
Microbiology		Reviewed	Documented
Step·2:·Review·previous·record·on·Portal			
Blood·tests			
X-Rays/Reports			
Step·3:·Assessment·of·patient·for·this·attendance			
NEW·full·HISTORY·documented		NEW·full·EXAMINATION·documented	





Doctor's signature → Print name → Time & Date

APPENDIX THREE – ROYAL HOSPITAL FOR CHILDREN DISCHARGE ADVICE LEAFLET FOR CARERS OF CHILDREN YOUNGER THAN 5 YEARS WHO HAVE FEVER OF AN UNKNOWN CAUSE

GLW-B59-24 → GGHB¶ PROD12¶

Column Break

This leaflet is based on the National Institute for Health and Care Excellence (NICE) guideline: "Fever in under 5s: assessment and initial management". (CG160)¶

NHS ¶
Greater Glasgow and Clyde¶

Discharge advice for carers of children younger than 5 years who have a fever of an unknown cause¶

We think that your child is well enough to go home now, but if you become more worried than when you previously sought advice, or you are concerned that you are unable to look after your child at home, for example because:¶

- your child's health gets worse¶
- your child has a fit¶
- your child develops a rash that does not disappear with pressure (see the 'tumbler test' section)¶
- the fever lasts longer than 5 days¶
- you are concerned your child is dehydrated (see section below)

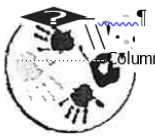
Then phone NHS 24 on this number for further **advice: ...111 ...**¶

or take them to **... Your GP ... as** soon as possible,¶

or in an emergency dial for an ambulance **... 999 ...**¶

What·to·do·when·your·child·has·a·fever¶

- → offer·your·child·regular·drinks·(if·you·are·breastfeeding·then·breast·milk·is·best)¶
- → check·for·signs·that·your·child·may·be·dehydrated·(dry·mouth,·no·tears,·sunken·eyes,·sunken·fontanelle·-·t he·soft·spot·on·a·baby's·head).·If·you·notice·any·of·these·signs·seek·further·advice·(see·section·above).¶
- → check·your·child·for·rashes·and·know·how·to·look·for·and·identify·a·non-blanching·rash·(a·rash·that·does·not·disappear·with·pressure)·as·that·could·be·a·sign·of·serious·illness·(see·'tumbler·test'·section)¶
- → check·on·your·child·during·the·night¶
- → do·not·try·to·reduce·your·child's·fever·with·medicine,·but·do·use·medicines·(see·medicines·section)·if·your·child·is·distressed·or·uncomfortable¶
- → keep·your·child·away·from·school·or·nursery·while·they·have·a·fever·and·notify·them·of·your·child's·absence¶
- → return·a·urine·sample·if·one·has·been·requested,·ideally·within·24·hours¶



Column Break

This·leaflet·is·based·on·the·National·Institute·for·Health·and·Care·Excellence·(NICE)·guideline:·"Fever·in.·under·5s:·assessment·and·initial·management".·(CG·160)¶

,NHS¶

Greater·Glasgow·and·Clyde¶

Fever·and·Medicines¶

Fever·is·a·natural·and·healthy·response·to·infection,·so·do·not·try·to·reduce·your·child's·fever·by·over·or·under·dressing·them,·or·by·sponging·them·with·water.¶

Although·it·is·not·necessary·to·treat·fever,·there·are·two·medicines·that·can·be·used·to·treat·distress·caused·by·fever·and·being·unwell.·These·are·ibuprofen·and·paracetamol·and·they·may·make·your·child·feel·better.·They·are·equally·effective,·so·you·should·start·with·one·and·only·use·the·other·if·the·first·has·not·worked,·but·you·should·not·give·both·at·the·same·time.¶

Read·the·instructions·carefully·as·these·medicines·come·in·different·strengths,·and·they·may·also·be·contained·in·other·products·that·yo_ur·pharmacist·sells.·If·you·have·any·doubt·you·should·tell·the·pharmacist·what·you·are·currently·using.·Although·both·are·very·safe·when·used·correctly,·they·may·be·harmful·if·too·large·a·dose·is·given·or·if·given·too·often.¶

Rashes·and·the·tumbler·test¶

(Photo·courtesy·of·the· Meningitis·Research·Foundation)¶

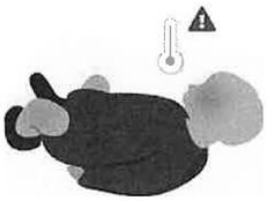
Do·the·'tumbler·test'·if·your·child·□as·a·rash.¶
Press·a·glass·tumbler·firmly·against·the·rash.·If·you·can·see·the· spots·through·the·glass·and·they·do·not· fade·this·is·called·a·'non-·blanching·rash'.·If·this·rash·is·present·seek·medical·advice·immediately.¶

If·the·spots·fade·when· the·glass· is·rolled· over·them,·the·rash· is·probably· not·serious,· but·keep·checking,· it·can·develop· into·a·rash·that¶
does·not· fade.¶
¶
Rashes·are·harder·to·see·on·dark·skin·so·look·for·rashes·on·paler·areas,·such·as·palms·of·the·hands,·soles· of·the·feet,·tummy·and·inside·the·eyelids.¶

If·you·are·worried·that·your·child's·health·is·getting·worse,·seek·further·medical·advice·-·do·not·wait·for·a·rash·to· appear.¶

APPENDIX FOUR – EXTRACT FROM ROYAL HOSPITAL FOR CHILDREN GLASGOW WEBSITE "FEVER IN CHILDREN UNDER 5 YEARS"

Fever·in·children·under·5·years¶



This·advice·is·intended·for·parents/carers·taking·their·child·home·after·consulting·a·doctor.· Your·doctor·may·recommend· different·treatments·depending·on·your·child's·condition¶

+ → **Remember·to·bookmark·this·page·so·that·you·can¶**

find·it·later.¶

Section Break (Continuous)

You·can·find·instructions·on·how·to·bookmark/favourite· content·here(/roY.al-hosRital-for-children-for-patients-carers-· visitors/about-your-childs-health-information-· resources/patient-information-leaflets/how-to-bookmark-a-¶ J:lligel)·¶

C· Share·via·SMS¶

··· Column Break····

Close·all¶

Printable·and·alternative·language·versions·of·this·infor → ation¶

Click here for printable versions of this leaflet in:

English(/media/sd4fug3e/fever-under-5-english-language-leaflet-last-updated-november-2024.Rdf)	Al:I:l11i.c.(lmfill.iafidhdtif1/2024-fever-under-5-guidelines-grouR-edit-formattPn-arabic.P-Qf)	Mandarin(/media/ofiQ.lppi/2024-fever-under-5-guidelines-gJ:QYP::filill:formatted-mangarin.P-Q...f)
(/media/c30grem5/2024-fever-under-5-guidelines-group-edit-formatted-polish.Rdf) **(Polskie)**	Romanian(/media/vqqlg5w1/2024-few:ir-ıind-Ar-5-guide11nes-Q.IQUR-edit-formatted-romanian.rul.O **(Romana)**	Urdu(lmedia/seniw..ill/202+fever-under-5-::guideliges-gm.up-edlt-formatted-urdu.RQ.f)

About fever in children

Your child has a fever if they have a temperature of 38°C or more.

Fever is common in children and suggests that your child may have an infection.

Most children with a fever do get better very quickly but some children can get worse.

You need to regularly check your child during the day and through the night and follow the advice given below.

What causes fever in children?

The most common reason for your child to have a fever is a viral infection. Viral infections usually get better on their own and do not need treatment.

Some fevers are caused by bacterial infections. Antibiotics can be needed to treat bacterial infections.

Fever can also be common up to 48 hours after some childhood immunisations.

Fever can sometimes be due to an inflammatory disorder and is not caused by infection.

How can I look after my child?

It is important to give your child plenty of fluids (drinks). If your child is still breast feeding, the best way to do this is with frequent breast feeds.

If your child is vomiting (being sick), give them small drinks often. This should be milk (breast or formula) in infants under 6 months of age. If your child is older but is not eating, make sure they have some sugary drinks.

Watch your child for signs of dehydration. See the amber section of the table below 'When Should I get Help' for signs of dehydration in your child.

To get medical advice call your GP or phone NHS 24

Do not under or over wrap your child with clothes or blankets, dress them as you would normally.

Your child should not go to school or nursery while they have a fever. You should also let your school or nursery know about your child's fever.

Do not try to bring your child's fever down with tepid (cool) sponging or fans.

Which medicines can I use

If your child is distressed with their fever, you can consider giving them paracetamol (Calpol) or ibuprofen. Give one medicine at a time. If your child has not improved after 2-3 hours you can consider giving the other medicine.

Some children should not have ibuprofen, for example, children with chicken pox. If you don't know whether you should give your child ibuprofen, ask your doctor.

Follow the instructions on the medicine bottle to know how much to give and how often.

If your child has had too much medicine or takes it too often it can be harmful.

Call NHS 24 (111) if you think your child has taken too much medicine.

Do not give paracetamol or ibuprofen to babies under three months of age unless your doctor or health professional has told you to. (for example – after some immunisations)

Ask your local pharmacist if you need more help and advice about medicines for your child

How long can a fever last?

Most fevers caused by a viral infection will get better after 2-3 days. Symptoms should gradually improve

However, how long a fever lasts will depend on what is causing the fever

The Glass Test

Many people are familiar with the so-called "tumbler test" or "glass test", whereby a glass or other clear surface is pressed onto the rash. If it disappears when pressed, this is known as a **blanching** rash. The meningitis "rash" can start as a blanching rash, but nearly always develops into a **non-blanching** red, purple or brownish petechial rash or purpura, meaning it will not disappear when pressed.

(Photo courtesy of the Meningitis Research Foundation 2013)

Information from Meningitis Research Foundation (https://www.meningitis.org/blogs/what-is-the-meningitis-rash)

When should I get help?

Advice for parents and carers of children younger than 5 years

If your child has any of these signs:

- Your child is pale, mottled (blotchy) skin or feels cold to touch
- Your child has blue lips
- Your child is finding it very hard to breathe – your child is grunting, or your child is too breathless to talk, eat or drink
- Your child has a fit or seizure
- Your child is not responding to you, your child is hard to wake up or your child cannot stay awake
- Your child has a weak, high-pitched or constant cry
- Your child has a rash that does not go away when you press on it (see 'The Glass Test' below)
- Your child has a severe headache that doesn't go away, your child has neck stiffness (doesn't want to move their head) and, or your child has a bulging 'soft spot'
- Your child is under 3 months of age with a fever of 38°C or above (unless they have had their immunisations in the last 48 hours and they have no other red or amber features)

You need help now.

Go to the nearest Hospital Emergency Department or phone **999(tel:999)**

If your child has any of these signs:

- Your child is finding it hard to breathe - you can see their ribs or tummy moving while they are breathing.
- Your child has signs of dehydration including: sunken eyes, dry mouth, no tears when crying or has not passed urine (had a wee) for 12 hours. In babies the 'soft spot' on their head may be sunken
- Your child has swelling of an arm or leg or joint
- Your child finds it too painful to stand up on their own
- Your child is drowsy (very sleepy), your child does not want to play or is irritable – especially if your child is still like this after their fever settles
- Your child is shivering a lot or has muscle pain.
- Your child has a fever of 38.0°C or above for more than 5 days
- Your child is 3-6 months of age with a fever of 39°C or above
- Your child was starting to improve, and the fever settled, but the fever returns within the same illness
- Your child has a fever within 2 days of stopping antibiotics
- Your child seems to be getting worse, or you are worried

You should speak to a doctor or nurse today.

Call your GP surgery or call NHS 24 - dial **111(tel:111)**

If your child has none of the above signs

Self care

You can keep looking after your child at home. If you are still concerned call NHS 24 – dial **111(tel:111)**

Content adapted with permission from the what0-18.nhs.uk(https://what0-18.nhs.uk/) *resource produced by the Healthier Together initiative*

Healthier Together

Was this information helpful?

Was this information helpful?

- ○ Yes
- ○ No
- ○ Yes, but... [ ]

Did you like having the information digitally?

- ◯ Yes
- ◯ No
- ◯ Yes, but... [ ]

Submit

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Glasgow Children's Hospital Charity

(https://www.glasgowchildrenshospitalcharity.org/)

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