THE INQUIRY INTO HYPONATRAEMIA-RELATED DEATHS

Raychel Ferguson (Preliminary)

Consolidated Report by Advisors 15th May 2013

This report describes the main issues in the management and governance areas that have arisen as a result of the death of Lucy Crawford who died on 14 April 2000 and which the advisors believe require further examination by the Inquiry during the forthcoming Oral Hearings

In addition to all the relevant administrative records, protocols and briefs, the following statements & reports were used in the generation of this document:

- 1. Witness Statements & responses to questions; Dr T Auterson, Consultant Anaesthetist, Erne Hospital
- 2. Witness Statements & responses to questions; Dr M Curtis, Assistant State Pathologist
- 3. Witness Statements & responses to guestions; Mr J Leckey, Coroner
- 4. Witness Statements & responses to questions; Dr J O'Donohoe, Consultant Paediatrician, Sperrin Lakeland Trust
- 5. Witness Statements & responses to questions; Dr M Quinn, Consultant Paediatrician, Altnagelvin Hospitals Health & Social Services Trust
- 6. Witness Statements & responses to questions; Dr R Taylor, Royal Belfast Hospital for Sick Children
- 7. Witness Statements & responses to questions; Dr Caroline Gannon, Pathologist
- 8. Witness Statements & responses to questions; Dr C Stewart, Specialist Registrar, Royal Belfast Hospital for Sick Children
- 9. Witness Statements & responses to questions; Dr A Chisakuta
- 10. Witness Statements & responses to questions; Dr D O'Donoghue, Senior House Officer
- 11. Witness Statements & responses to questions; Dr W McConnell, Director of Public Health, Western Health and Social Services
- 12. Witness Statements & responses to questions; Mr E Fee, Clinical Director Acute Services, Sperrin Lakeland Trust
- 13. Witness Statements & responses to questions; Dr D Hanrahan, Paediatric Neurologist, Royal Belfast Hospital for Sick Children
- 14. Witness Statements & responses to questions; Dr J Kelly, Medical Director, Sperrin Lakeland Trust
- 15. Witness Statements & responses to questions; Dr T Anderson, Clinical Director Women/Children, Sperrin Lakeland Trust
- 16. Witness Statements & responses to questions; Dr P Crean, Consultant, Royal Belfast Hospital for Sick Children
- 17. Witness Statements & responses to questions; Mr H Mills, Chief Executive Officer, Sperrin Lakeland Trust
- 18. Witness Statements & responses to questions; Dr M Stewart, Consultant Paediatrician
- 19. Witness Statements & responses to questions; Dr J McKaigue, Consultant Anaesthetist, Royal Belfast Hospital for Sick Children
- 20. Witness Statement Angela Colhoun
- 21. Witness Statements & responses to questions; Dr Ian Carson, Medical Director Royal Belfast Hospital for Sick Children
- 22. Witness Statement Dr Thomas Frawley, General Manager Western Health & Social Services Board
- 23. Witness statements of Elaine Trainor, Ward Sister, Paediatric Unit, Erne Hospital
- 24. Witness statement of Bridget Swift, Staff Nurse (retired), Erne Hospital
- 25. Witness statement of Esther Millar, Clinical Services Manager, Erne Hospital
- 26. Witness statements of Bridget O'Rawe (now Rippey), Director of Corporate Affairs, Sperrin Lakeland Trust
- 27. Report by Dr Roderick MacFaul April 2013
- 28. Report by Professor Gabriel Scally April 2013
- 29. Report by Professor Lucas May 2013

1. Summary

The list below summarises the matters for further consideration which forms the bulk of this report. Those items marked *Key issue* are considered as potentially significant.

- 1.1 The decision that a Coroner's post-mortem was not required immediately following Lucy's death and the reasonableness of that decision.
- What training was given to doctors regarding the need for accuracy in completing Medical Certificates of Cause of Death, when they should be provided to next-of-kin and the need for proper communication between individuals involved, particularly when a patient has been transferred at a terminal stage in their illness?
- Which medical staff were responsible for Lucy's care following her admission and who had responsibility for pursuing any issues following her death?

Key issue

- Whether the referral of Lucy's death to the Coroner was adequate
 - from the clinicians or managers involved in, or investigating her care at either hospital
 - from the Pathologist following the hospital (consent) post-mortem or
 - following the (delayed) provision of the Certificate of cause of death.

Key issue

- Whether the clinicians failed to follow Trust procedures regarding written consent for post mortem.
- Whether the procedures for referring deaths to the Coroner and of the relationship between certification and consented post-mortems were well understood by all professionals involved in Lucy's care.

Key issue

1.2 The adequacy of investigations by the relevant NHS Trust into the circumstances of Lucy Crawford's death.

1.2.1. Royal Belfast Hospital for Sick Children - (Royal Belfast Hospital Trust)

- To establish what guidance was in existence in Northern Ireland for the conduct of clinical adverse incident reviews
- To determine whether the timeline for implementation of a single incident reporting system in March 2000 was reasonable following the publication of the Risk Management Strategy three years earlier.

- To ascertain why Lucy Crawford's death in April 2000 was not registered as
 a clinical incident and why an investigation into her death was not
 undertaken by the RBHSC.

 Key Issue
- To establish the formal accountability of the Trust Board and its Executives in respect of the quality of health care and their responsibility to investigate or receive reports relating to untoward incidents.
- To establish why the Trust did not communicate Lucy's death to their Commissioners, which appeared to be the practice within the Sperrin Lakeland Trust?
- To establish the adequacy of the mortality/audit meeting and whether this
 was conducted in line with the local policy. In particular to establish
 whether the audit/mortality meeting should have shed further light on the
 reasons for Lucy's death and made appropriate recommendations.

Key issue

1.2.2. The Erne Hospital – (The Sperrin Lakeland Health Trust)

- To establish what guidance was in existence in Northern Ireland for the conduct of clinical adverse incident reviews and whether the Review undertaken by the Sperrin Lakeland Trust was competently undertaken and within extant guidelines? In particular the following areas should be explored:
 - a. The process of collection of gathering information and statements from clinical staff involved in Lucy's care and in particular the adequacy of response from medical staff as to the reasons for her sudden deterioration. (033-102)

 Key Issue
 - b. The adequacy of the choice of and brief given to Dr Quinn, the adequacy of the documentation supplied to him and the conclusions reached by him and the acceptance of his report by the Trust. (036a-048).

Key Issue

- c. The information provided in the post-mortem report.
- d. Whether relatives had been involved in previous investigations and the consequences of the lack of involvement of Lucy's parents in the Review.

Key Issue

e. The possible benefits of a joint review with RBHSC. Key Issue

f. The adequacy of feedback and debrief given to the clinical team involved with Lucy's care, (and in particular Dr O'Donohoe), following the Review.

- g. The role of the Clinical Director in incident reporting and investigation.
- The sufficiency of the findings as identified in the Review report and the acceptance of them by the Trust's Medical Director, Dr Jim Kelly (WS-290/1 pg 19)

 Key Issue
- Whether the deficiencies in documentation in Lucy's case contributed to the difficulties in determining the cause of her death. Key issue
- The adequacy of the action to implement recommendations of the Review and the consequences for lessons learned. *Key Issue*
- The presence of any audit process to monitor implementation of the review recommendations (see MacFaul 250-003-014).
- Whether the assumption by the Trust that the Coroner would be undertaking an Inquest was reasonable.
- The onus on the Sperrin Lakeland Trust to liaise with the Coroner following the Review.

 Key Issue
- Whether the Trust should have reported Lucy's death to the DHSSPS as an adverse incident
- 1.3 Communication between hospitals and professionals after Lucy Crawford's care at both the Erne Hospital and the Royal Belfast Hospital for Sick Children (RBHSC).
- What steps had been taken to implement the framework for provision of care to critically ill children in Northern Ireland and how had this impacted on communication between hospitals?
- What was the role of the 'Sick Children's Liaison Group' and did clinicians from the Erne attend this group?
- Would further discussion of Lucy's management between clinicians at the Erne and RBHSC and within PICU at RBHSC have influenced the discussion between Dr Hanrahan and the Coroner's Office or ensured that a clinician discussed the case with the Coroner?

 Key Issue
- How was lead consultant responsibility allocated in PICU in 2000? Who was
 the lead clinician in Lucy's case and what responsibilities did they have to
 ensure effective communication across all agencies following her death?

 Key issue

- Would it have been normal practice in 2000 for clinicians at RBHSC to send a discharge summary to referring hospitals? What information might this have provided to the Erne Hospital?
- Would feedback from the clinicians at RBHSC to clinicians at the Erne have contributed to learning which would have impacted on the care of other children?

 Key Issue
- Did the lead children's centre for Northern Ireland have a responsibility to contribute to the education of professionals in children's centres across NI, by providing feedback on the clinical management of children transferred to them?

 Key issue
- 1.4 Communications with Lucy Crawford's family by the relevant NHS Trust, following Lucy's death.

1.4.1. Royal Belfast Hospital for Sick Children - (Royal Belfast Hospital Trust)

- Whether the communication with the Crawfords immediately following Lucy's death was satisfactory.
- Whether the timing of the provision of a certificate, the explanation given to the Crawfords about the need for a post-mortem and the involvement of the Coroner was satisfactory.

 Key issue

1.4.2. The Erne Hospital – (The Sperrin Lakeland Health Trust)

- Whether the immediate response to Mr and Mrs Crawford by clinical staff, following Lucy's death, was timely and reasonable.
- To establish why the Trust was unable to inform the Crawfords of the Review being undertaken, why Dr Quinn was not asked to interview parents as part of preparing his report and why the Crawfords were unable to have sight of the entire Review and of Dr Quinn's report. Key issue
- Whether the Trust conformed to its Complaints Procedure generally and in particular to the response times for complaints.
- Whether the information provided to Mr and Mrs Crawford was accurate and complete as far as the Trust was aware at the time.
- Whether the recourse to legal action by the Crawfords was a consequence of the perceived poor response to their complaint. In addition whether the legal action taken then inhibited the Trust from being more communicative with the Crawfords. (See 2.5.11 for reference to the 2nd RCPCH report).

RF (LCA) - INQ

325-001-006

1.5 The adequacy of the relevant NHS Authorities' to response to investigations into Lucy Crawford's death and the dissemination of lessons learned.

1.5.1. Royal Belfast Hospital for Sick Children - (Royal Belfast Hospital Trust)

- To what extent should Lucy's death have promoted greater learning within the RBHSC and whether this learning should have been disseminated to clinicians at hospitals referring children to the RBHSC?
- As a regional children's referral hospital, to what extent should there have been communication with the Erne hospital?

 Key issue
- As a regional children's referral hospital, to what extent should RBHSC have been advising those responsible for hospital children's services in Northern Ireland?
- Should the Trust have reported Lucy's death to their commissioners and/or the DHSSPS?

1.5.2. The Erne Hospital – (The Sperrin Lakeland Health Trust)

- Whether the Trust was required to report adverse incidents to DHSSPS and whether they did so.
- The adequacy of response by the Trust to the issues arising from the Trust's Review in July 2000, and whether recommendations were implemented.
- The adequacy of the Trust's actions, once it had been recognised within the Trust that there was an issue with the use of hypotonic fluids. *Key issue*
- Adequacy of the Trust's response to WHSSB recommendation to obtain a wider review.
- The adequacy of the Trust's response to expert advice during and after the legal proceedings from March 2002. *Key issue*
- Whether the Trust implemented advice from Eugene Fee following the Inquest in February 2004.

1.5.3. The Western Health and Social Service Board (WHSSB)

• The adequacy of the response by the Western Health and Social Services Board following Lucy's death being reported to them.

- The adequacy of WHSSB's monitoring of their recommendation to Sperrin Lakeland to obtain a wider review
- Whether WHSSB should have referred Lucy's death to the Coroner's Office.

2. <u>Detailed Report</u>

- 2.1 The decision that a Coroner's post-mortem was not required immediately following Lucy's death and the reasonableness of that decision.
- 2.1.1. Dr Hanrahan states that a post mortem was desirable, as the cause of Lucy's death was unclear and Lucy had died within a short time of admission to hospital, (WS 289/1). He contacted the Coroner's Office on 14 April 2000 and, as the Coroner was not available, he was redirected for advice by Maureen Dennison to Dr Mike Curtis, the Assistant State Pathologist. Mr John Leckey, Coroner for Greater Belfast, (WS-277/1) states that this was an accepted procedure. Dr Mike Curtis accepts that he had an informal advice role (WS-275/1) but there was no formal reporting arrangement of reporting back to the Coroner.
- 2.1.2. The discussions between Dr Hanrahan and Dr Curtis are not recorded but the outcome was that a hospital (consent) post-mortem would be carried out. Dr Curtis has no recollection of the conversation but states he "would never suggest whether or not a Coroner's post-mortem was required in a case out-with the guidelines" (WS275/1(5)). In addition, he stated that he had no experience of fluid management (WS-275/1 & 2) and that there was no arrangement for him to consult on death notices (WS-275/2 p2). Dr Hanrahan acknowledges (WS 289/1) that "With hindsight, I might have considered a re-referral to the coroner".
- 2.1.3. Dr MacFaul considers that Dr Hanrahan should have referred Lucy's death to the Coroner, given the uncertainty from the preliminary autopsy report about the cause of death (250-003-017/8).
- 2.1.4. Prof. Lucas states that "proper consideration of the case" by Dr Curtis, when informed of the clinical situation, "should have dictated that further questions needed to be answered and the case should properly be taken by the Coroner for investigation." He regards Dr Curtis' advice as not reasonable (232-003-015).
- 2.1.5. At the time Dr Hanrahan's registrar, Dr Stewart, made a note that the Coroner's Office had advised a Coroner's post-mortem was not necessary and a hospital post-mortem would be useful to establish the cause of death (013-031-113). She made a note that written consent had been

obtained in Lucy's record. However, there is no signed consent form in the records, only a form relating to heart valve donation. Dr MacFaul states that RBHSC had a procedure for gaining written consent for post mortem, which had been used in the case of Claire Roberts in 1996 (250-004-061 to 062). He states that this is the standard which should have been used in this case and the reasons for this should have been explained to the parents (250-003-146).

- 2.1.6. Mr Leckey subsequently took the view that Lucy's death should have been referred to the Coroner (for a Coroner's post-mortem) following the conclusions of the hospital (consent) post-mortem. This could have been referred to the Coroner by the late Dr Dennis O'Hara and/or the doctors at the Erne Hospital who had been aware that when Lucy left the Erne hospital for transfer to the RBHCH she was in a moribund state. (WS-277/1)
- 2.1.7. Dr Jarlath O'Donohoe, Consultant Paediatrician at the Erne Hospital, when asked if he had considered reporting Lucy's death to the Coroner, states that Dr Hanrahan had informed him that he had notified the Coroner and that a Coroner's inquest was not being considered. (WS-278/1). On the same day that Dr Hanrahan contacted the Coroner's office, Dr O'Donohoe phoned Dr James Kelly (Medical Director at Erne Hospital), asking for Lucy's death to be examined 'under the heading of a Critical Incident' (WS-278/1(8f)). Dr Donohoe cannot recall details of the conversation except that he was concerned that she had deteriorated and died unexpectedly and that after discussion with Dr Crean he was concerned she had been given a larger quantity of IV fluids than intended. (ibid(9d iv)).
- 2.1.8. Dr Kelly, in his interview with PSNI on 6th April 2000, stated that Dr O'Donohoe told him "there might have been a misdiagnosis, the wrong drug had been prescribed or the child had an adverse drug reaction." (WS 290/1(7)) At the time of Lucy's death, he understood the convention was that clinicians at a hospital where a death occurred would refer the case to the Coroner's office and he assumed the post-mortem was at the request of the Coroner and stated 'I expected a Coroner's Inquest would take place.' (WS290/1(8))
- 2.1.9. Dr Dara O'Donoghue, then registrar in PICU at RBHSC, completed a Medical Certificate of the Cause of Death (MCCD) on 4th May 2000, as "1 Cerebral Oedema; 2 Dehydration; 3 Gastroenteritis". He states he asked for advice from his consultant, Dr Hanrahan, before doing so. (WS284/1(10). Dr Hanrahan cannot recall this conversation but "it is possible that I suggested following the post-mortem report in filling out the death certificate." (WS 289/1(19f i)).

- 2.1.10. Lucy Crawford's case notes identify Dr Crean as the consultant responsible for Lucy's care. However in his statement WS-292/2, Dr Crean states that Lucy was admitted under the care of Dr Seamus McKaigue, and was "jointly managed by the consultant anaesthetists and Dr Hanrahan, consultant paediatric neurologist". Dr MacFaul considers that Dr Hanrahan was "responsible for diagnostic care in life and after death was responsible for the processes". He considers that the intensive care consultants Dr Crean and Dr Chisakuta were responsible with Dr Hanrahan during Lucy's life (250-003-019).
- 2.1.11. Prof Lucas notes the conversation between Mr Stanley Millar and Dr O'Hara on 16th June 2000 as implying that the latter had 'identified a circumstance [delay in rehydration] that certainly should have prompted consideration of inappropriate medical treatment and perhaps referral to the Coroner in retrospect.'
- 2.1.12. Hugh Mills (Chief Executive-Sperrin Lakeland NHS Trust) states that he wasn't aware that there was not to be a Coroner's Inquest until 12 October 2001. (WS-293/1) At the time the Erne were undertaking a review of the circumstances relating to Lucy's collapse and death, Hugh Mills understood the case had been reported to the Coroner and would be the subject of an inquest (WS-293/1 p16). However, when he became aware that there was no planned inquest, there is no indication that he personally informed the Coroner or directed colleagues to do so, despite knowing there was no adequate explanation for Lucy's death.
- 2.1.13. Prof. Lucas states that a consented post-mortem should only take place where 'the cause of death is natural and satisfactory for registration.' He adds that "to apparently wait for the autopsy (+/- the report) before writing the death certificate is (at least) inappropriate and possibly an infringement of the law" In this respect, he notes the comments from Drs Stewart, Hanrahan and O'Donoghue, indicating that it was the practice at RBHSC to await the preliminary autopsy report before issuing a death certificate as 'bizarre.' (252-003-016)

Matters for further consideration:

- What training was given to doctors regarding the need for accuracy in completing MCCDs and on the need for proper communication between individuals involved, particularly when a patient has been transferred at a terminal stage in their illness?
- Which member of the consultant medical staff had overall responsible for Lucy's care following her admission and who had responsibility for pursuing any issues following her death?

 Key issue

- Whether the referral of Lucy's death to the Coroner was adequate
 - from the clinicians or managers involved in, or investigating her care at either hospital
 - from the Pathologist following the hospital (consent) post-mortem or
 - following the (delayed) provision of the Certificate of cause of death.

Key issue

- Whether the clinicians failed to follow Trust procedures regarding written consent for post mortem.
- Whether the procedures for referring deaths to the Coroner and of the relationship between certification and consented post-mortems were well understood by all professionals involved in Lucy's care.

 Key issue
- 2.2. The adequacy of investigations by the relevant NHS Trust into the circumstances of Lucy Crawford's death.

Royal Belfast Hospital for Sick Children - (Royal Belfast Hospital Trust)

- 2.2.1. The Trust Health and Safety Policy (WS-061-2 from page 232) of November 1993, concentrated mainly on the health and safety of staff and compliance with health and safety regulation in respect of non-clinical events. The later revision in October 1998, added in a Clinical Risk Management Group, which identified key areas of clinical audit, research register, untoward incident reporting (clinical), medical negligence and complaints.
- 2.2.2. The 'Risk Management Strategy' (WS-061-2 from page 222) of February 1997, referred to incident reporting and investigation, as an element of risk management.
- 2.2.3. The Trust's Clinical Governance Framework (April 1999) identified the need to develop quality systems to maintain the quality of clinical services. The Trust developed a single incident reporting system dated March 2000 (WS-061-2 from page 207). A Critical Incident Review Group was set up about March 2000, but according to Dr Anthony Chisakuta, a consultant in Paediatric Anaesthesia who attended weekly meetings, it appears that Lucy's death was not reported to it. (WS283/2)
- 2.2.4. There is no evidence that Lucy's death was registered as an untoward clinical incident, or that an internal review had been undertaken. There is evidence that Lucy's death was discussed at the mortality section of the RBHSC Audit meeting on 10 August 2000 (061-038-123). According to Dr Robert Taylor, who chaired the mortality section of such audit meetings, the purpose of the meeting was "to discuss every"

child's death for learning purposes among the clinicians present" (WS-280/1). There do not appear to be any written conclusions reached concerning Lucy's treatment. Nor is it clear that Lucy's death was accurately recorded on the Paediatric Intensive Care computer database.

- 2.2.5. Dr MacFaul gives as his opinion that the RBHSC audit meeting had offered an opportunity to integrate the in-house and the Erne case notes, to challenge the death certificate, to provide such information to the Coroner and to start a process of reviewing fluid management at Erne Hospital. (250-003-019)
- 2.2.6. The Trust's Medical Director, Dr Ian Carson cannot recall being notified of Lucy Crawford's death at the time. (WS 077/1)
- 2.2.7. There is no evidence that there was communication with the Erne Hospital in respect of an investigation into Lucy's treatment.
- 2.2.8. In his evidence to the Inquiry on 17th January 2013, Mr William McKee, Chief Executive believed that formally, neither the Trust Board nor he had responsibility for the healthcare and the quality of healthcare given to patients in the hospital until 2003.

Matters for further consideration

- To establish what guidance was in existence in Northern Ireland for the conduct of clinical adverse incident reviews.
- To determine whether the timeline for implementation of a single incident reporting system in March 2000 was reasonable following the publication of the Risk Management Strategy three years earlier.
- To ascertain why Lucy Crawford's death in April 2000 was not registered as
 a clinical incident and why an investigation into her death was not
 undertaken by the RBHSC.

 Key issue
- To establish the formal accountability of the Trust Board and its Executives in respect of the quality of health care and their responsibility to investigate or receive reports relating to untoward incidents.
- To establish the adequacy of the mortality/audit meeting and whether this
 was conducted in line with the local policy. In particular to establish
 whether the audit/mortality meeting should have shed further light on the
 reasons for Lucy's death and made appropriate recommendations.

Key issue

The Erne Hospital – (The Sperrin Lakeland Health Trust)

2.2.9. According to Hugh Mills, Chief Executive of the Sperrin Lakeland Trust, there were two procedures which were relevant in respect of reporting untoward events internally and to the Western Health and Social Services Board.

Circular P.1/86 WHSSB — Notification of untoward events/unusual occurrences to Board Headquarters 3rd February 1986 Circular ADM1 9/96 Sperrin Lakeland HSC Trust Procedures for recording and notifying accidents, untoward events and unusual occurrences on trust premises February 1997.

He further states that the Trust was preparing for the introduction of clinical and social care governance during late 1999 and 2000. The Women's and Child Health Directorate were piloting a critical incident reporting form at the time of Lucy's admission in April 2000.

- 2.2.10. The clinical staff at the Erne Hospital quickly recognised that Lucy's death was a serious and untoward incident.
- 2.2.11. A clinical incident form, (036a-045-096), was completed by Mrs Esther Millar (Clinical Services Manager) on 14th April.
- 2.2.12. Dr O'Donohoe (consultant paediatrician) informed Dr Kelly (Medical Director) of the death of Lucy, probably on 14th April, who then informed Hugh Mills.
- 2.2.13. Hugh Mills recognised the serious nature of the incident (PSNI Statement Interview 1 page 4), and agreed to inform Dr McConnell, the Director of Public Health in the Western Health and Social Services Board (WHSSB). It was agreed by Hugh Mills that there should be a case review (the Review) of the care which Lucy had received at the Erne Hospital. This was coordinated by Mr Eugene Fee (Director of Acute Hospital Services), and Dr Trevor Anderson (Clinical Director of Women & Children's Services).
- 2.2.14. Nurses and doctors from the ward were interviewed and written statements taken from the nurses. However, no statement was requested from the Night Sister involved in Lucy's care prior to transfer to RBHSC.
- 2.2.15. Mr Eugene Fee notified Dr Hamilton, part of the Commissioning Team at WHSSB (WS-287/1).
- 2.2.16. The Trust engaged Dr Murray Quinn, Consultant Paediatrician at the neighbouring Altnagelvin Hospital, to provide an independent review.

- 2.2.17. The Trust did not inform the DHSSPS, to whom they were accountable, of Lucy's untoward death. (WS 293/3)
- 2.2.18. A framework for conducting case reviews (036a-039-83) is in evidence but it is undated and Mr Fee in his PSNI statement –interview 1 (Page 6), states that there was not a standard process in Northern Ireland at that time. There is evidence that the Trust was implementing clinical governance prior to Lucy's treatment. McFaul cites evidence from a risk review report of the Sperrin Lakeland Trust from Mr Frawley (250-003-086).
- 2.2.19. Bridget O'Rawe, (Director of Corporate Affairs) states in her letter to Mr Crawford on 22 November 2000, (033-026-054), "This process is one which has been introduced by the Sperrin Lakeland Health Trust in the last 2 years or so and is in the main undertaken where there has been a sudden unexpected death or where clinicians and professionals involved identified unusual complications or difficulties arising during the management of a patient's care. This process is undertaken as an internal review by the Sperrin Lakeland Health Trust and in this instance does not tend to involve members of the patient's family"
- 2.2.20. Following an initial telephone contact, Mr Fee wrote to Dr Quinn on 21st April 2000 asking for his opinion on the significance of type and volume of fluid administered, likely cause of cerebral oedema and likely cause in 'the change of electrolyte balance' [i.e. hyponatraemia] and any other relevant observation. Lucy's casenotes were supplied to Dr Quinn (but it is probable he did not receive RBHSC notes, given that he states in his report 'At 0630 hours she was transferred to [RBHSC] and I understand that she subsequently died.') He added that he had subsequently been made aware of the pathologist's report, but not that he had seen it. (026-002-005)
- 2.2.21. Dr Quinn's report failed to determine a cause for cerebral oedema and stated he 'would be surprised' if the volume of fluid infused 'could have caused gross cerebral oedema.' (025-002a-008). Amongst the issues identified by Quinn in his report were the inadequacies in fluid prescription and recording of fluid given (025-002b-013 to 014). This was supported by the Review report (036a-049) and Dr Stewart's Royal College of Paediatrics and Child Health review of the case (032-025), dated 26 April 2001.
- 2.2.22. The report of the review (034-004) dated 5 July 2000 failed to identify why Lucy had died. "Neither the post-mortem result or the independent medical report on Lucy Crawford, provided by Dr Quinn, can give an absolute explanation as to why Lucy's condition deteriorated rapidly, why she had an event described as a seizure at around 2.55am on 13 April

- 2000, or why cerebral oedema was present on examination at postmortem"
- 2.2.23. There was no follow up to the lack of understanding of why Lucy died (Dr Trevor Anderson WS 291/2, Dr Jim Kelly WS-290/1 and Hugh Mills 293/1). However, Dr MacFaul's opinion is that Dr Stewart's report of April 2001 provided the Trust with sufficient information to identify that Lucy's fluid management 'could have contributed to her death' (250-003-074).
- 2.2.24. Dr MacFaul states that Dr Anderson's role in the review seemed to be 'limited to writing his recommendations' (250-003-060 to 061). He also identifies that Dr Anderson seemed to be unaware of the structures and processes in place for investigating adverse events. In Dr MacFaul's view, Dr Anderson held the responsibility to ensure the review recommendations were carried out, including setting up and attending a meeting with parents.
- 2.2.25. Dr MacFaul regards the review process as "flawed and incomplete" in not obtaining evidence and opinion from involved Trust clinicians, not informing parents, not communicating with RBHSC treating clinicians and not informing the Coroner of its findings. (250-003-005). He expresses concern that Dr Auterson's opinion was not sought (nor offered) nor was he shown the report.
- 2.2.26. In his statement (WS-287/1), Mr Eugene Fee acknowledges that Lucy's family should have been involved in the Review; that the composition of the Review team could have been broader; that a joint review with RBHSC could have been beneficial and that there may have been overreliance on the external opinion. Dr Kelly adds that with the benefit of hindsight, the Review could have included a "Rigorous Root Cause Analysis approach" and "a formal opinion of a lead paediatrician..." (WS-290/1)
- 2.2.27. There is evidence that the Trust was concerned with the standard of care provided by Dr O'Donohoe, and evidence that action was being taken at the time to review this using the advice of the Royal College of Paediatrics and Child Health (30-012-022).
- 2.2.28. Hugh Mills believes that the Review report was shared and discussed with the Trust chairman (WS293/1).
- 2.2.29. A comprehensive note 'Issues for consideration' was produced by Mr Fee following Lucy's Inquest on 19 February 2004, (WS 287/2), although there is no evidence available on whether these matters were actioned.

Matters for further consideration

- To establish what guidance was in existence in Northern Ireland for the conduct of clinical adverse incident reviews and whether the Review undertaken by the Sperrin Lakeland Trust was competently undertaken and within extant guidelines? In particular the following areas should be explored:
 - a. The process of collection of gathering information and statements from clinical staff involved in Lucy's care and in particular the adequacy of response from medical staff as to the reasons for her sudden deterioration. (033-102)

 Key Issue
 - b. The adequacy of the choice of and brief given to Dr Quinn, the adequacy of the documentation supplied to him and the conclusions reached by him and the acceptance of his report by the Trust. (036a-048).

Key Issue

- c. The information provided in the post-mortem report.
- d. Whether relatives had been involved in previous investigations and the consequences of the lack of involvement of Lucy's parents in the Review.

 Key Issue
- e. The possible benefits of a joint review with RBHSC. Key Issue
- f. The adequacy of feedback and debrief given to the clinical team involved with Lucy's care, (and in particular Dr O'Donohoe), following the Review.
- g. The role of the Clinical Director in incident reporting and investigation.
- The sufficiency of the findings as identified in the Review report and the acceptance of them by the Trust's Medical Director. (Dr Jim Kelly (WS-290/1 pg 19)

 Key issue
- Whether the deficiencies in documentation in Lucy's case contributed to the difficulties in determining the cause of her death.

 Key issue
- The adequacy of the action to implement recommendations of the Review and the consequences for lessons learned.

 Key issue
- Whether the assumption by the Trust that the Coroner would be undertaking an Inquest was reasonable.
- The onus on the Sperrin Lakeland Trust to liaise with the Coroner following the Review. *Key issue*

15

- Whether the Trust should have reported Lucy's death to the DHSSPS as an adverse incident.
- The presence of any audit process to monitor implementation of the review recommendations (see MacFaul 250-003-014).
- 2.3. Communication between hospitals and professionals after Lucy Crawford's care at the both the Erne Hospital and the Royal Belfast Hospital for Sick Children
- 2.3.1. There appears to have been little communication between hospitals and professionals following Lucy's death.
- 2.3.2. The Erne Hospital established a review of Lucy's care following her collapse and transfer to the RBHSC. The review report identified a number of issues in relation to links with the regional centre including communication (036a-049-111).
- 2.3.3. Hugh Mills stated that communicating the fact of the review or the concerns about the fluid management to other professionals, including clinicians at the RBHSC, 'was not suggested by others or considered by myself', despite the fact that RBHSC were responsible for Lucy's ongoing care (WS-293/1 p6).
- 2.3.4. Dr Auterson stated that he did not discuss Lucy's death with the doctors at RBHSC, despite the fact that he believed that too much of the wrong fluid being administered was an "obvious conclusion" (WS-274/1 p7). He reported that the quality of care was less than satisfactory in relation to intravenous fluid prescribing and recording (WS-274/1 p7) but did not report these concerns to the physicians who had taken over Lucy's care. Similarly Dr O'Donohoe reported his concerns about fluid management to Dr Kelly the morning after Lucy's transfer, requesting investigation as a critical incident (WS-278/1 p5), but did not discuss these concerns with the PICU team at RBHSC. However, he did speak to Dr Crean at the RBHSC when Dr Crean rang to clarify the fluids given. At this time, it appears that Dr O'Donohoe reported what he thought he had prescribed and made a note of this discussion in Lucy's Erne records (WS-292/1 p5).
- 2.3.5. MacFaul states that by 2000 a regional retrieval team for paediatric intensive care should have been in place and the lack of 'such an arrangement' 'should have been identified as a shortcoming' during the review (250-003-064). The framework for the development of paediatric intensive care services, published in 1997, outlined a tiered structure for the provision of care to critically ill children across a geographical area. To work effectively, the framework required professionals to communicate across hospitals with the PICU taking the

lead on training, protocol development and audit across the area. Dr Taylor refers to the use of telemedicine, the establishment of the 'Sick Children Liaison Group' and his involvement with the UK Paediatric Intensive Care Society (093-035-110i & o). However, it is not clear whether these initiatives are linked to the implementation of the framework in Northern Ireland and the establishment of agreed communication networks.

- 2.3.6. At RBHSC, despite concerns relating to hypotonic fluid administration, Dr Crean did not feedback these concerns to Dr O'Donohoe after Lucy's death (WS-292/1 p7). At some point following Lucy's death, Dr Crean discussed his concerns with Dr McKaigue, who had admitted Lucy to PICU (WS-302/2). MacFaul states that a discharge summary was not sent to the Erne by the RBHSC and not requested by the Erne as part of the review (250-003-098).
- 2.3.7. Dr Hanrahan had concerns regarding the IV fluid administered to Lucy at the Erne, but apparently did not speak to Dr O'Donohoe at the Erne to raise these concerns following Lucy's death (WS-289/2 p4).
- 2.3.8. MacFaul raised concern regarding the "apparent deficit of communication" between Dr Hanrahan and the PICU clinicians (250-003-148), which might have assisted Dr Hanrahan identify concern about the rapid fall in serum sodium and the relationship with cerebral oedema.
- 2.3.9. Despite the number of consultants involved in Lucy's care at RBHSC, there appears to be a lack of clarity regarding who the lead consultant was. MacFaul believed this was Dr Hanrahan (003-112), the patient records identify Dr Crean but Dr McKaigue was the consultant on call when Lucy was admitted. The established systems for communicating information regarding patient investigations and management between these professionals are unclear.

Matters for further consideration

- What steps had been taken to implement the framework for provision of care to critically ill children in Northern Ireland and how had this impacted on communication between hospitals?
- What was the role of the 'Sick Children's Liaison Group' and did clinicians from the Erne attend this group?
- Would further discussion of Lucy's management between clinicians at the Erne and RBHSC and within PICU at RBHSC have influenced the discussion between Dr Hanrahan and the Coroner's Office or ensured that a clinician discussed the case with the Coroner?

 Key issue

- How was lead consultant responsibility allocated in PICU in 2000? Who was
 the lead clinician in Lucy's case and what responsibilities did they have to
 ensure effective communication across all agencies following her death?

 Key issue
- Would it have been normal practice in 2000 for clinicians at RBHSC to send a discharge summary to referring hospitals? What information might this have provided the Erne?
- Would feedback from the clinicians at RBHSC to clinicians at the Erne have contributed to learning which would have impacted on the care of other children?

 Key issue
- Did the lead children's centre for Northern Ireland have a responsibility to contribute to the education of professionals in children's centres across NI, by providing feedback on the clinical management of children transferred to them?

 Key issue
- 2.4. Communications with Lucy Crawford's family by the relevant NHS Trust, following Lucy's death.

Royal Belfast Hospital for Sick Children - (Royal Belfast Hospital Trust)

- 2.4.1. On 14th April, immediately following Lucy's death, Dr Hanrahan at RBHSC told the Crawfords that they "should seek answers from the Erne as to what happened to Lucy" (013-022-079). Dr Hanrahan then wrote to the Crawfords on 16th May 2000, advising them that he would be happy to meet with them (PSNI Dr Hanrahan). This meeting took place on 9th June 2000 following their meeting with Dr O'Donohoe from the Erne Hospital in May (WS 278/1). Dr Hanrahan explained the events that had occurred at the Erne hospital from his point of view and encouraged them to speak to Dr O'Donohoe again. Dr Hanrahan then spoke to Dr O'Donohoe to "make sure that he would see them again".
- 2.4.2. On 16th June 2000, Mr & Mrs Crawford, together with Mr Stanley Millar (WHSSC), met Dr Dennis O'Hara (Consultant Paediatric Pathologist-Belfast) to discuss the outcome of the post mortem examination (015-006).

Matters for further consideration:

- Whether the communication with the Crawfords immediately following Lucy's death was satisfactory.
- Whether the timing of the provision of a certificate, the explanation given to
 the Crawfords about the need for a post-mortem and the involvement of the
 Coroner was satisfactory.

 Key issue

The Erne Hospital – (The Sperrin Lakeland Health Trust)

- 2.4.3. Although there is no record of the meeting, the Crawfords met Dr O'Donohoe, at their request (PSNI statement N Crawford), in May 2000. This took place about one month after Lucy's death (030-010-018). In her statement to the Coroner (013-022-079), Mrs Crawford said "We asked him various questions surrounding Lucy's death. He said 'he did not know' or 'did not understand it'. Dr O'Donohoe did not have Lucy's notes with him. He said he had given them to Dr Kelly to check. We were left feeling totally deflated and in the dark surrounding the circumstances in which Lucy died".
- 2.4.4. Dr O'Donohoe said that he did not have a clear understanding of what had happened to Lucy (WS-278/1).
- 2.4.5. In his letter to Mr McConnell, Director of Public Health at WHSSB on 15th May 2000, (036a-046), Dr Kelly, (Medical Director) stated that an "Initial interview has taken place with the family. Dr O'Donohoe outlining the planned review of the case in line with Hospital Policy is underway and that results of such a review will be shared with them". There does not appear to be any record of this.
- 2.4.6. The Crawfords approached Mr Millar at the Western Health and Social Services Council (WHSSC) and they met on 5th May 2000 to highlight their questions and concerns, (015-001). He described them as being "grieving, distraught with legitimate questions" (015-059-232).
- 2.4.7. Marion Doherty, a health visitor called in on the Crawford family on two or three occasions, during this period, but was unable to tell them why Lucy had died. (PSNI 115-005)
- 2.4.8. The Crawford family were not involved in the Review which was undertaken by the Trust and which commenced on 14th April 2000 and finished on 5th July 2000.
- 2.4.9. On 16th June 2000, Mr & Mrs Crawford, together with Mr Stanley Millar (WHSSC), met Dr Dennis O'Hara (Consultant Paediatric Pathologist, Belfast) to discuss the outcome of the post mortem examination (015-006).
- 2.4.10. Mr Millar continued with his communication with the Sperrin Lakeland Health Trust on behalf of the Crawfords and Lucy's case notes were obtained. On 22nd September 2000, the Crawfords invoked the Trust's complaints procedure (033-041-139). An offer to meet with staff was made by the Trust in a letter dated 11 October 2000 (033-039-135).

- 2.4.11. There was a delay in sending a copy of the Review report to the Crawford family and Dr Quinn's report was not included (WS-293/1). This was sent on 10 January 2001 (030-056-076) without the recommendations included in the 31 July 2000 version (250-003-084). A further offer by the Trust to meet the Crawford's was made on 30th March 2001 (033-018-034)
- 2.4.12. The Crawfords expected a response to their complaint within 20 days, giving a written explanation of what happened. In his Coroner's statement (013-022-079), Mr Crawford stated that he received a letter dated 30 March 2001, (almost one year after Lucy's death), from the Trust Chief Executive stating "the outcome of our review has not suggested that the care provided to Lucy was inadequate or of poor quality". MacFaul states that the "review had identified concerns about the quality of care" (250-003-085). This suggests that the information provided to Lucy's family may have been inaccurate and/or incomplete.
- 2.4.13. Between the Crawfords' commencement of the complaint and the Chief Executive's formal response in March 2001, the Trust had corresponded with the Crawfords (or through Mr Millar) on about eight occasions (072-004). The matter was predominantly dealt with by the Trust through Bridget O'Rawe (Director of Corporate Affairs), Hugh Mills (CEO) and on one occasion through Michael MacCrossan.
- 2.4.14. Key points from these letters may be summarised:
 - Bridget O'Rawe's response to the official complaint (2nd October 2000, 033a-004) stated that "...and a full investigation will take place." (The Review of Lucy by the Trust had been completed in July 2000)
 - Hugh Mills to S Millar (11th October 2000, 033a-003) proposed a meeting with the Crawford's "...to share with Lucy's parents our findings of the review we have carried out." The Crawfords stated that they had no knowledge that a review had taken place (072-004-186).
 - Further attempts were made by the Trust to meet the Crawfords but without forwarding the written review (072-004). A key issue was the decision by the Crawford family not to meet the Trust until they had seen the review (067K-010-013).
 - Michael MacCrossan (for Mills) forwarded a slightly amended review as an "initial step" in the formal complaints process. (10th January 2001, 033-054)
- 2.4.15. Legal action was commenced by the Crawfords on 27th April 2001 (072-002-047) and the Trust accepted liability on 10 December 2003. During the period of litigation the Crawfords made an attempt to find out what had happened with Lucy's care. Mrs Crawford contacted Dr Holmes

(consultant anaesthetist). His report of this conversation to Dr Kelly (Medical Director) contains the statement "Mrs Crawford states firmly that taking recourse to legal help, they are not seeking ...compensation. They just want 'an explanation and an apology" (033-056-169).

- 2.4.16. In a draft letter to the Crawfords from Mr Mills, the Trust made a final apology to the Crawfords on 2nd March 2004 (067k-002-003). The Trust states that it was a "matter of regret to the Trust that the opportunity to discuss these matters more openly with you was complicated by legal processes".
- 2.4.17. Prior to the Coroner's inquest in February 2004, the Crawfords believed that they had not received an explanation from the Sperrin Lakeland Health Trust or any of its employees as to what did happen to Lucy or what caused her death.

Matters for further consideration:

- Whether the immediate response to Mr and Mrs Crawford by clinical staff, following Lucy's death, was timely and reasonable.
- To establish why the Trust did not inform the Crawfords of the review being undertaken; why Dr Quinn was not asked to interview parents as part of preparing his report; and why the Crawfords were not given sight of the entire review and of Dr Quinn's report.

 Key issue
- Whether the Trust conformed to its Complaints Procedure generally and in particular to the response times for complaints.
- Whether the information provided to Mr and Mrs Crawford was accurate and complete as far as the Trust was aware at the time.
- Whether the recourse to litigation by the Crawfords was a consequence of the perceived poor response to their complaint. In addition whether it then inhibited the Trust from being more communicative with the Crawfords. (See also 2.5.11 with reference to the 2nd RCPCH report).
- 2.5. The adequacy of the relevant NHS Authorities' response to investigations into Lucy Crawford's death and the dissemination of lessons learned.

Royal Belfast Hospital for Sick Children - (Royal Belfast Hospital Trust)

2.5.1. RBHSC did not investigate the death of Lucy Crawford. The only reference to reviewing Lucy's care within the Trust was at the mortality section of a clinical Audit meeting held on 10 August 2000 (061-038-123). No notes were taken and there is no evidence from witness statements that there was learning from Lucy's death.

- 2.5.2. Dr James McKaigue (consultant anaesthetist WS 302/1) suggests that Lucy's case may have been referred to in a meeting of the Paediatric Anaesthetic group in Northern Ireland held on 26th November 2001. There is no evidence of further learning from this.
- 2.5.3. There is no evidence of communication with the Erne hospital to establish the reasons for Lucy's death.
- 2.5.4. There is no evidence that Lucy's death was reported to the Trust Board, any Health Board who commissioned services or to the DHSSPS, (to whom they were accountable).

Matters for further consideration:

- To what extent should Lucy's death have promoted greater learning within the RBHSC and whether this learning should have been disseminated to clinicians at hospitals referring children to the RBHSC?
- As a regional children's referral hospital, to what extent should there have been communication with the Erne hospital?

 Key issue
- As a regional children's referral hospital, to what extent should RBHSC have been advising hospital children's services in Northern Ireland?
- Should the Trust have reported Lucy's death to their commissioners or to the DHSSPS?

<u>The Erne Hospital – (The Sperrin Lakeland Health Trust)</u>

- 2.5.5. The investigation into Lucy's death is covered in Section 2.2 (above). The Trust accepted the review into Lucy's death (Dr Kelly WS-290/1 Pg 19) and a response by Hugh Mills (CEO) was given to the Crawford family on 30 March 2001.
- 2.5.6. The review (31st July 2000) identified eight 'Issues Arising' from Lucy's care (036a-053-125), from which there were four recommendations:-
 - improved documentation around prescribed orders
 - the availability of standard protocols on the ward
 - holding a joint meeting of those involved in Lucy's care, to discuss the report's findings

• a further meeting with the Crawford family.

- 2.5.7. Hugh Mills stated that he believed that Mr Fee had met with the medical and clinical staff to share the review's outcomes (WS 293-2), but Mr Fee does not recall such action (WS-287-1). Dr Kelly stated that he expected Mr Fee, Mr Anderson (Clinical Director) and Mrs Miller (Clinical Services Manager) to "ensure that the issue of fluid prescription was addressed". However, Mr Anderson was not aware of any action taken by the Trust on the findings of the review, and he gave it no further consideration (WS -291-1 and 2). The review was not considered at Trust Board level, although it was discussed with the Trust Chairman (WS 293-2).
- 2.5.8. At a Medical Directors Network meeting in June 2001, Raychel Ferguson's case was raised by Dr Fulton, Medical Director of Altnagelvin Trust (WS 290/1). He also raised that the RBHSC, the regional paediatric centre, had changed its fluid guidelines. It was agreed that this would be brought to the attention of the Chief Medical Officer's office. On 21st June 2001, Dr Kelly issued an alert letter to the Trust's paediatric staff asking them to consider reviewing the practice of using hypotonic fluids for rehydration (036a-055-141).
- 2.5.9. On 14thSeptember 2000, Dr Kelly requested the Royal College of Paediatrics & Child Health(RCPCH) to provide a review of Dr O'Donohoe's practice. This was not related specifically to Lucy but her case was one of four that were included in matters to be investigated by the College. Dr Moira Stewart, RCPCH Regional Adviser for NI, reported in April 2001 that the fluid regime used in Lucy was inappropriate (032-021-034 and 032-025-060). Dr Kelly states the first time he became aware of the possibility of hypotonic fluids being an issue in paediatric practice was following a meeting with Dr Stewart on 31st May 2001, (WS 290/2). Dr MacFaul suggests that consideration should be given to the time it took to receive the report from Dr Stewart and considers that the receipt of her opinion should have prompted the Trust to inform the Coroner (given that its senior officers believed an Inquest was in hand). (250-003-073/4)
- 2.5.10. Legal action against the Sperrin Lakeland Trust was commenced by the Crawfords on 27 April 2001 (072-002-047). The Trust's legal advisors received expert medical advice in March 2002 from Dr John Jenkins (072-002-140), and approximately five days before the case was listed to be heard, the Trust declared (on 10 December 2003) that it 'would not be contesting the issue of liability' (072-002-109). Whilst Dr Jenkins' advice states that "no definite conclusions can be drawn regarding the cause of this child's deterioration and subsequent death, there is certainly a suggestion that this was associated with a rapid fall in sodium associated with intravenous fluid administration and causing hyponatraemia and cerebral oedema".

- 2.5.11. In August 2002, a draft of the second RCPCH review into Dr O'Donohoe's practice, carried out by Dr Stewart and a paediatrician from England, Dr Boon, referred within its text to Lucy's fluid prescription. However, because of the ongoing litigation, the authors restricted their conclusions to dealing with the professional issues within the terms of reference of the report, (WS-321/1).
- 2.5.12. Following the inquest on Lucy in February 2004, Mr Eugene Fee forwarded to Hugh Mills a document entitled 'Issues for consideration' (WS 287/2) which highlighted the clinical, organisational and regional issues which he felt should be actioned.

Matters for further consideration:

- Whether the Trust was required to report adverse incidents to DHSSPS and whether they did so.
- The adequacy of response by the Trust to the issues arising from the Trust's Review in July 2000, and whether recommendations were implemented.
- The adequacy of the Trust's actions, once it had been recognised within the Trust that there was an issue with the use of hypotonic fluids. *Key issue*
- Adequacy of the Trust's response to WHSSB recommendation to obtain a wider review.
- The adequacy of the Trust's response to expert advice during and after the legal proceedings from March 2002. *Key issue*
- Whether the Trust implemented advice from Eugene Fee following the Inquest in February 2004.

The Western Health and Social Service Board (WHSSB)

- 2.5.13. Dr William McConnell, Director of Public Health WHSSB, was informed of Lucy's death on 14th April 2000, although it appears that there was no formal requirement to do so, (WS 308/1). However, as the 'main commissioner' of services from the Sperrin Lakeland Trust, Dr McConnell stated that he would have expected the Trust to have informed WHSSB. He does not recollect the detail of any advice he may have given the Trust but felt sure he would have discussed with Dr Kelly the need for a wider review involving experts from outside the area (WS 286/1 pg7).
- 2.5.14. It is not clear that the WHSSB (or its members), received any formal reports on Lucy's death. In an analysis of the accountability arrangements between the Trust, the WHSSB and the DHSSPS,

Professor Scally suggests that the response of the senior officers of the WHSSB "cannot easily be judged as less than adequate". He further suggests however that "there was certainly more that the Board could have done to press for the issues surrounding Lucy's care and treatment to be fully and properly scrutinised" (251-002-007/8).

- 2.5.15. Dr McConnell also believed that Lucy's death had been reported to DHSSPS, (286/2 pg 4).
- 2.5.16. Around 22nd/23rd June 2001, Dr McConnell was informed by Dr Fulton (Medical Director of Altnagelvin Trust) of the wider implications of events leading to the death of Raychel Ferguson. However he stated that he did not immediately draw comparisons between Raychel Ferguson's death and Lucy's death as the circumstance of their illnesses were somewhat different. On 2nd July 2001, Dr McConnell raised the issue of the use of No 18 solution in children at a regular meeting of Directors of Public Health with the Chief Medical Officer, and states that he wrote to the Sperrin Lakeland Trust about the issue.
- 2.5.17. Dr MacFaul is critical of the Board in not checking that its advice to Sperrin Lakeland was followed, namely that a wider clinical review be carried out.

Matters for further consideration:

- The adequacy of the response by WHSSB following Lucy's death being reported to them.
- Whether the Trust was required to report adverse incidents to DHSSPS and whether they did so.
- The adequacy of WHSSB's monitoring of their recommendation to Sperrin Lakeland to obtain a wider review
- Whether WHSSB should have referred Lucy's death to the Coroner's Office.

3.0. Individuals that the Inquiry may wish to question further.

The Inquiry may wish to question the following individuals

3.1. Royal Belfast Hospital for Sick Children - (Royal Belfast Hospital Trust)

Mr McKee

 For the time taken to implement the Trust Health & Safety Policy and Risk Management Strategy which included a clear framework for reporting incidents.

- For not ensuring an incident review was initiated and the death was reported to DHSSPS and/or the Commissioners of the service.
- For being unaware of or permitting a system of death certification which was inappropriate or, possibly, illegal

Dr Carson/Dr Taylor

• For the adequacy of the Trust's Clinical Audit process in determining any lessons to be learned from Lucy's death.

Dr Crean

- For not raising his concerns regarding Lucy's fluids with the Coroner following Lucy's death.
- For not acting on the information he received from O'Donohoe about possible clinical errors.
- For not communicating with the Erne regarding Lucy's management and death.

Dr Hanrahan

- As the consultant primarily responsible for Lucy's management on PICU, for not clarifying what had happened to her prior to transfer.
- For not seeking to obtain the Erne case notes so that he could properly evaluate her clinical progress.
- For giving inadequate advice to Dr O'Donoghue as to the likely causes of death for certification purposes.
- For permitting delay of certification until after the autopsy report was received
- For failing to persist in keeping the Coroner informed in order to ensure that Lucy's death was subject to a Coroner's Inquest.
- For not communicating with the Erne regarding Lucy's management and death.

Dr C Stewart

 For providing incomplete information to the pathologist charged with Lucy's PM.

Dr Dara O'Donaghue

- For not realising the inconsistency in the information he recorded on the MCCD, although he had discussed this with Dr Hanrahan.
- For not providing the certificate before or at the time of the autopsy

3.2. The Erne Hospital – (The Sperrin Lakeland Health Trust)

Mr Hugh Mills

- For not informing the DHSSPS about Lucy's death as a critical incident.
- For not informing the Crawford family about the review of Lucy's death.

- For not ensuring the Coroner was informed regarding Lucy's death once he became aware that there was to be no inquest.
- For failing to provide Mr & Mrs Crawford with complete and accurate information.

Dr Kelly

- For not establishing an external review once the internal review was found to be inconclusive regarding the cause of Lucy's death.
- For failing to ensure that the recommendations of the internal review were actioned and adherence subsequently audited.
- For failure to take action in response to the information from the RCPCH
 1st report and for failure to inform the Coroner of this further opinion.

Mr Fee

- For not undertaking the review of Lucy's death in such a way that there was an adequate analysis of what had happened.
- For not monitoring the implementation of recommendations from the review.

Dr Anderson

- For not undertaking the review of Lucy's death in such a way that there was an adequate analysis of what had happened.
- For not monitoring the implementation of recommendations from the review.
- For not ensuring a meeting was established with Lucy's family once the review was completed.

Dr O'Donohoe

- For not informing the clinicians at RBHSC PICU of his concerns regarding incorrect fluid prescription/administration
- For poor record keeping in relation to Lucy's fluid prescription and management and the follow up discussions with other professionals and Lucy's family.
- For not reporting Lucy's death to the Coroner.

Dr Malik

- For inadequate clinical examination and/or documentation of Lucy's state of hydration.
- For either not recognising or recognising but failing to inform the Inquiry that Lucy's fluid prescription was inappropriate.

Dr Auterson

For not informing any of those making enquiries of him, at the time, that he
regarded Lucy's clinical care as inadequate, in regard to fluid and
electrolyte management.

3.3. Others

Dr Curtis

 For giving unreasonable advice not to involve the Coroner in the case (see Prof. Lucas's's report)

Dr Quinn

• For the adequacy of his investigation of the clinical aspects of the case and the production of a report which may have reduced the chances of those instructing him in reaching valid conclusions about Lucy's care.

Dr McConnell

- For not following-up his advice that a 'wider review' should be undertaken into Lucy's case.
- For failing to recognise the link between the cases of RF and LC

Dr M Stewart

• For the time taken to produce her report (1st RCPCH) which may have militated against learning timely lessons from LC's case.

Dr Gannon

• For reaching an incorrect conclusion in her report to the Inquest.

Mr Leckey

• For the adequacy of the system to refer cases to the Coroner when the Coroner was unavailable.

In addition the Inquiry may wish to explore the following issues in relation to the late Dr O'Hara

Dr O'Hara

- For limiting his autopsy report to gross and microscopic anatomical matters and not integrating the clinical problems, especially dehydration/rehydration and hyponatraemia, in formulating his conclusions.
- For not reporting the case to the Coroner.
- For attaching excess significance to his finding of bronchopneumonia and failing to implicate hyponatraemia in the cause of death sequence

Gren Kershaw Harvey Marcovitch Carol Williams

15 May 2013