RAYCHEL FERGUSON

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Introduction

5.1 Raychel Ferguson was born on 4th February 1992,[1] the fourth child and only daughter of Raymond and Marie Ferguson. In June 2001 Raychel was a happy, healthy 9 year old child and in her P5 year at St Patrick's Primary School, Pennyburn, Derry.[2]

5.2 On Thursday 7th June 2001, Raychel went to school as usual. She was in good spirits and won a medal in her school sports.[3] Later, at about 16:30 she began to complain of stomach ache.[4] Nevertheless, she played in and around the family home and ate normally. However, she continued to complain and Mrs Ferguson eventually made up a bed for her on the sofa.[5] Her primary concern at that time was not that Raychel was in pain, but that she looked grey.[6]

5.3 Things did not improve and Mrs Ferguson decided to take Raychel to the Altnagelvin Area Hospital ('Altnagelvin'). She put her in the car and set off, collecting Mr Ferguson on the way. They arrived at the hospital shortly after 19:00.[7] Mr Ferguson thought Raychel looked grey and unwell.[8] He carried her into the Accident and Emergency Department ('A&E').

5.4 Within 48 hours Raychel was to suffer brain death in consequence of hyponatraemia. In this chapter of the report, I set out my findings in relation to her case.

Expert reports

5.5 The Inquiry, in examining Raychel's case and guided by its advisors, engaged the following experts to advise:

1 012-025-135
2 012-025-135
3 Mrs Ferguson T-26-03-13 p.10 line 5
4 012-025-135
5 012-025-135
6 Mrs Ferguson T-26-03-13 p.12 line 9
7 012-025-136
8 Mr Ferguson T-26-03-13 p.13 line 10

(i) Dr Robert Scott-Jupp[9] (Consultant Paediatrician, Salisbury District Hospital, England) who provided reports on paediatric and general medical issues.[10]

(ii) Mr George Foster[11] (Consultant General Surgeon, Countess of Chester Hospital, and Grosvenor Nuffield Hospital) who provided reports on the role and responsibilities of the surgical staff.[12]

(iii) Dr Simon Haynes[13] (Consultant in Paediatric Cardiothoracic Anaesthesia and Intensive Care, Freeman Hospital, Newcastle upon Tyne) who reported on anaesthetic as well as general management issues.[14]

(iv) Ms Sally Ramsay[15] (Independent Childrens' Nursing Advisor) who advised on questions of nursing.[16]

(v) Dr Wellesley St. C. Forbes[17] (retired Consultant Neuroradiologist, formerly of Salford Royal Hospitals NHS Foundation Trust and Manchester University Children's Hospitals NHS Foundation Trust) who reported on the Computerised Tomography ('CT') scans.[18]

(vi) Dr Fenella Kirkham[19] (Professor of Paediatric Neurology, Institute of Child Health, London and Consultant Paediatric Neurologist Southampton General Hospital), who provided a report on neurological issues arising.[20]

9 312-003-006
10 File 222
11 312-003-006
12 File 223
13 312-003-006
14 File 220
15 312-003-006
16 File 224
17 312-003-006
18 File 225
19 312-003-006
20 File 221

(vii) Professor Charles Swainson[21] (retired Consultant Renal Physician and Medical Director of the Lothian NHS Board, Edinburgh) who advised on governance.[22]

5.6 The Inquiry also had the benefit of expert reports commissioned by the Coroner, the Police Service of Northern Ireland ('PSNI') and Altnagelvin, from:

(i) Dr Brian Herron[23] (Consultant Neuropathologist, Royal Group of Hospitals) who provided the Autopsy Report following post-mortem on 11th June 2001.[24]

(ii) Dr Clodagh Loughrey[25] (Consultant Chemical Pathologist, Belfast City Hospital) who reported on 24th October 2001.[26]

(iii) Dr Edward Sumner[27] (Consultant Paediatric Anaesthetist at Great Ormond Street Childrens' Hospital) who provided reports to the Coroner on 1st February 2002[28] and to the PSNI in September 2005.[29]

(iv) Ms Susan Chapman[30] (Nurse Consultant for acute and high dependency care at Great Ormond Street Childrens' Hospital) who reported to the PSNI on 24th September 2005.[31]

(v) Dr John Jenkins[32] (Senior Lecturer in Child Health and Consultant Paediatrician) who provided reports dated 12th November 2002,[33] 27th January 2003[34] and 30th January 2003[35] for Altnagelvin.

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21 328-001-006
22 File 226
23 312-003-006
24 014-005-006 *et seq*
25 312-003-006
26 014-006-014 *et seq*
27 312-003-007
28 012-001-001
29 098-081-235, 098-093-341 & 098-098-373
30 312-003-007
31 098-092a-328
32 328-001-006
33 317-009-002 *et seq*
34 160-215-002
35 022-004-010

(vi) Dr Declan Warde[36] (Consultant Paediatric Anaesthetist, The Childrens' University Hospital, Dublin) who provided Altnagelvin with a report in January 2003.[37]

(vii) Mr John Orr[38] (Consultant Paediatric Surgeon, Royal Hospital for Sick Children, Edinburgh) who reported to Altnagelvin on the treatment given Raychel on 30th January 2013.[39]

Schedules compiled by the Inquiry

5.7 In an attempt to summarise the very significant quantities of information received, the following schedules and charts were compiled:

(i) Chronology of events (Clinical).[40]

(ii) Timeline of Raychel's treatment.[41]

(iii) Chronology and Clinical Timeline post-collapse 9th June 2001.[42]

(iv) Table of Clinicians duty times 7th – 9th June 2001.[43]

(v) Schedule of Observations.[44]

(vi) Schedule of Persons (Clinical).[45]

(vii) Schedule of Persons (Governance).[46]

(viii) Schedule of nomenclature and grading of doctors 1948 – 2012.[47]

(ix) Schedule of nomenclature and grading of nurses 1948 – 2012.[48]

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36 328-001-006
37 317-009-006 *et seq*
38 WS-320-1 p.3
39 WS-320-1 p.2 *et seq*
40 312-004-001
41 312-001-001
42 312-013-001
43 312-006-001
44 312-009-001
45 312-003-001
46 328-001-001
47 303-003-048
48 303-004-051

(x) Consolidated Chronology of 'Governance' and 'Lessons Learned'.[49]

(xi) Table of Nurses' training and experience.[50]

(xii) Table of Trainee Doctors' training and experience.[51]

(xiii) Glossary of Medical Terms.[52]

All of the above have been published on the Inquiry website.

Raychel in A&E

5.8 Raychel was seen in A&E at 20:05 by Senior House Officer ('SHO') Dr Barry Kelly.[53] Whilst he had limited paediatric experience,[54] his role was confined to examination and onward referral for surgical opinion. Dr Kelly has no recollection of his involvement[55] but did make a record of his examination in the medical notes.[56]

5.9 He noted a history of sudden onset abdominal pain from about 16:30 and increasing thereafter. Nausea was noted with "*pain on urination.*"[57] Pain was found to be maximal over 'McBurney's Point' with clinical signs of tenderness in the right iliac fossa. On the basis of these findings, Dr Kelly noted his suspicion as "*Appendicitis? Surgeons.*"[58] He arranged for blood and urine tests, referred Raychel for surgical assessment, and gave her cyclimorph to ease pain.[59] This appears to have been effective as Mrs Ferguson thought her "*back to normal after the injection.*"[60]

5.10 The only potential criticism of Dr Kelly relates to the painkiller. Cyclimorph is so powerful a morphine based drug that it risks compromising

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49 325-004-001
50 312-007-001
51 312-008-001
52 312-005-001
53 312-003-002
54 Dr Kelly T-05-02-13 p.7 line 17
55 Dr Kelly T-05-02-13 p.11 line 19
56 026-006-010
57 020-006-010
58 020-006-010
59 020-006-010
60 WS-020-1 p.2

subsequent medical assessment by masking clinical signs.[61] This can be relevant in the diagnosis of appendicitis because clinical findings are important.[62]

5.11 Any criticism of Dr Kelly must be extremely limited. It is not suggested that Raychel should not have been given a painkiller. It would have been inhumane not to attempt pain relief. Rather he should have opted for milder analgesia.[63] Whilst it would have been better if Dr Kelly had not prescribed as he did, it would be unfair, given the extent of his experience and the available textbook guidance[64] to criticise him. In any event, he referred Raychel to another SHO who specialised in surgery and one who could, if necessary, contact a registrar or consultant.[65]

Diagnosis and admission for appendectomy

5.12 Dr Ragai Makar[66] qualified as a doctor in Egypt in 1989. During the 1990s he gained experience in general surgery and emergency medicine and practiced as a registrar. He came to the UK in 1997 and worked almost exclusively in short-term posts as an SHO before moving to Altnagelvin in August 2000 as an SHO in general surgery. He was therefore more experienced than most SHOs, but his experience with children was limited.[67]

5.13 Upon request, Dr Makar saw Raychel and examined her on Thursday evening. He noted, but did not time, his examination in the record.[68] He found tenderness at the right iliac fossa with guarding and mild rebound. He did not believe that the painkiller hindered his diagnosis.[69] He noted normal blood test results[70] and ordered a repeat urine test.[71]

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61 223-002-006
62 Dr Scott-Jupp T-20-03-13 p.6 line 9
63 223-003-004
64 WS-254-1 p.4 & p.11
65 WS-254-1 p.4
66 312-003-002
67 WS-022-2 p.2
68 020-007-011 & 020-007-012
69 Dr Makar T-06-02-13 p.167 line 13
70 020-022-045 (including sodium at 137mmol/L. Normal sodium range 135-145mmol/L)
71 020-007-012

5.14 Dr Makar concluded that Raychel had "*acute appendicitis/obstructed appendix*"[72] and obtained Mrs Ferguson's written consent to surgery.[73] Raychel was admitted to Ward 6 at 21:41 to fast and receive fluids in preparation for an appendectomy.[74] Dr Makar was to perform the operation himself.

5.15 Altnagelvin had only one childrens' ward, Ward 6. It served both surgical and medical patients. Surgical patients were children admitted in relation to surgery and medical patients were those otherwise admitted for paediatric treatment. The ward could accommodate 43 children[75] but on 8th June 2001, there were only 23.[76] The majority of patients would normally have been medical cases.[77] Paediatricians were employed on Ward 6 to care for the medical patients. However, because there were no paediatric surgeons at Altnagelvin, children were operated on by general hospital surgeons and cared for on Ward 6 by the general surgical staff. The nurses, some of whom were trained childrens' nurses, cared for both the medical and the surgical patients.

5.16 The on-call surgical consultant for the night of 7th June was Mr Robert Gilliland.[78] He was not consulted about the decision to operate and, in all probability, remained unaware of Raychel's admission until Sunday 10th June.[79] The fact that he was Raychel's named consultant did not necessarily mean that he would see her.[80] Dr Scott-Jupp considered that his non-attendance "*by the standards of the time, was acceptable practice.*"[81] He should, however, have been informed of her case because his responsibility was, as he accepted, to "*oversee the totality of the patient's care.*"[82]

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72 020-007-012
73 020-008-015
74 020-001-001
75 Sister Millar T-28-08-13 p.111 line 8
76 316-011-001
77 Staff Nurse Noble T-26-02-13 p.103 line 8
78 312-003-002
79 WS-044-1 p.4
80 Staff Nurse Noble T-27-02-13 p.27 line 9 & Mr Gilliland T-14-03-13 p.136 line 21
81 222-005-005
82 WS-044-2 p.13

5.17 The Ferguson family "*believe to this day that Raychel's operation should never have taken place.*"[83]

5.18 There are significant issues about the decision to proceed to surgery including:

(i) Whether Dr Makar's examination of Raychel could have been affected by the cyclimorph.

(ii) Whether Dr Makar should have requested an urgent urinalysis in light of Dr Kelly's note of "*pain on urination*" and a finding of "*+1*" protein because these might have been suggestive of urinary tract infection.[84]

(iii) Whether, because the Fergusons insist that Raychel was not in obvious pain at that time (and it is noted that Dr Makar did not record complaint), the decision to operate was premature.

(iv) Whether Raychel could have been observed overnight pending re-assessment in the morning.

(v) Whether, given a disagreement between the Fergusons and Dr Makar as to the basis upon which Mrs Ferguson gave her consent to surgery, a valid consent was given.

5.19 Dr Makar did not consider that the pain relief given Raychel interfered with his diagnosis. His belief is supported by subsequent medical literature which suggests that "*morphine effectively reduces the intensity of pain among children with acute abdominal pain and morphine does not seem to impede the diagnosis of appendicitis.*"[85]

5.20 Dr Scott-Jupp discounted the likelihood of a urinary tract infection on the basis of negative leukocyte and nitrate counts[86] and in any event, Mr Orr said that if "*the urine was sent off to the lab for microscopy and thereafter*

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83 Mrs Ferguson T-26-03-13 p.175 line 20
84 223-002-005 & WS-320-1 p.4
85 WS-044-3 p.10
86 Dr Scott-Jupp T-20-03-13 p.11 line 4 & 020-016-031-2

culture... that culture will take two or three days."[87] It is hard, therefore, to criticise failure to pursue the possibility of urinary tract infection.

5.21 I heard conflicting expert opinion about the decision to operate. Dr Scott-Jupp said that "*by today's standards, a child such as Raychel presenting with those sorts of symptoms would be more likely to have been left overnight and reassessed in the morning... However, when that happens... they're taking a risk and the risk is that the condition can develop very rapidly, the appendix can burst.*"[88]

5.22 The surgeons, Mr Foster[89] and Mr Orr,[90] were of the view that it was premature to operate on the Thursday night given the available evidence[91] and Mr Orr's opinion is noteworthy because it was commissioned by the Western Health and Social Care Trust ('WHSCT').[92] However, both Mr Gilliland and Dr Scott-Jupp challenged this view[93] and in terms, described an appendectomy in such circumstances as routine practice. Dr Haynes, while questioning the wisdom of proceeding so quickly to surgery[94] did point out that "*it was not an unusual scenario.*"[95]

5.23 I have reservations about the decision to operate. However, given the conflicting expert evidence I do not formally criticise the decision. I am influenced in this regard by the generally accepted opinion that "*the conduct of the anaesthetic for Raychel's appendicectomy appears to have been completely satisfactory and the appendicectomy operation carried out with due care and attention.*"[96] What went so catastrophically wrong in Raychel's case was not the surgery but the way she was cared for afterwards.

87 Mr Orr T-21-03-13 p.40 line 19
88 Dr Scott-Jupp T-20-03-13 p.18 line 11
89 317-007-001
90 WS-320-1 p.18
91 Mr Foster and Mr Orr T-21-03-13 p.45 line 15
92 As successor to the Trust responsible for Altnagelvin in 2001
93 222-004-002 & Dr Scott-Jupp T-20-03-13 p.15 line 16
94 220-002-008 & Dr Haynes T-22-03-13 p.7 line 24
95 220-002-008
96 220-002-005: the view of Dr Haynes

5.24 While I understand why the Fergusons and some experts believe that Raychel should not have undergone surgery, my focus in this report is on hyponatraemia-related deaths and accordingly I will concentrate on the management of Raychel's fluids after the surgery and what led to the development of hyponatraemia.

5.25 There are however, two related issues about which I am critical. The first was a failure within Altnagelvin to follow relevant clinical recommendations and the second was Dr Makar's failure to make it clear to Mr and Mrs Ferguson that it was his intention to operate on Raychel that night.

NCEPOD Recommendations

5.26 In 1989 the Royal College of Surgeons published a 'Report of the National Confidential Enquiry into Perioperative Deaths' ('NCEPOD').[97] It specifically recommended that "*no trainee should undertake any anaesthetic or surgical operation on a child of any age without consultation with their consultant.*"[98] This was to ensure that senior clinicians became involved with the care of children in surgery.

5.27 The data upon which NCEPOD made its recommendations derived from hospitals throughout the UK including Altnagelvin.[99] NCEPOD was in part funded by the Department in Northern Ireland.[100] Mr Orr described its report as a widely circulated "*wake-up call*" to surgeons and anaesthetists managing children.[101] He said that he would be both surprised and worried if the 1989 Recommendations had not been adopted in Altnagelvin by 2001.[102] Mr Foster agreed.[103] However, Mr Gilliland explained that "*they were not standard practice in Altnagelvin in 2001 and* [suspected] *that they had not been implemented elsewhere within N. Ireland at that time.*"[104] I found this strange, indeed given that the 1999 Report on Paediatric Surgical

97 210-003-156
98 223-002-052
99 210-003-346
100 Dr Carson T-30-08-13 p.28 line 5
101 Mr Orr T-21-03-13 p.46 line 23 & p.47 line 9
102 Mr Orr T-21-03-13 p.53 lines 14-18
103 Mr Foster T-21-03-13 p.54 line 21
104 WS-044-3 p.3

Services in Northern Ireland recommended adherence to this particular NCEPOD guideline[105] and Mr Panesar FRCS of Altnagelvin served on the working group responsible for that Report.[106]

5.28 However, some support was offered Mr Gilliland by Dr Scott-Jupp who observed that NCEPOD reports carry more weight now than they did in 2001.[107] While I am pleased that is so, the suggestion that they did not carry significant weight in 2001 is alarming given that Altnagelvin was a teaching hospital and their purpose was to improve the quality of care.

5.29 As a direct result of Altnagelvin's failure to adopt the 1989 NCEPOD recommendations less than best practice was tolerated. Whilst Dr Makar should have known about the report and its recommendations, it appears that none of his employers in Northern Ireland from 1997 to 2001 brought it to his attention. This was a major failing in health service governance in Northern Ireland and not just Altnagelvin.

5.30 I cannot conceive of any reason for not adopting the NCEPOD guidance. Even were there compelling reason not to adopt an individual recommendation, such could not justify a rejection of the whole. Consultants and healthcare managers must ensure adherence to as many of such recommendations as possible because they are best practice standards. This was particularly important at Altnagelvin because, being so far from the specialist Children's Hospital in Belfast, it had to ensure that appropriate practices were in place to manage paediatric emergencies.

5.31 Had the NCEPOD recommendations been implemented, Mr Gilliland would have been consulted about the plan to operate. He had the right to know. His view was however, that in any event and even with hindsight, it was appropriate for the operation to proceed.[108] Notwithstanding, he should have been contacted at the time. The Chief Executive, Mrs Stella

105 224-004-100 & 121
106 306-079-037
107 Dr Scott-Jupp T-20-03-13 p.17 line 3
108 WS-044-2 p.8

Burnside,[109] acknowledged this shortcoming and said how "*sincerely sorry*" she was that the recommendations had not been followed.[110]

Consent

5.32 My second criticism relates to Dr Makar. The clear evidence of Mr and Mrs Ferguson is that they signed the consent form[111] on the understanding that Raychel would only go to surgery if her condition deteriorated. They did not therefore believe that there had been a decision to operate[112] and accordingly did not stay long with Raychel before going home.

5.33 Dr Makar's evidence is that their understanding was mistaken because he had already decided to operate and that this should have been clear to them. He suggested that their only uncertainty might have been as to whether the operation would start that night.[113]

5.34 I am entirely satisfied from the evidence of Mr and Mrs Ferguson and more particularly from their behaviour that they did not believe that Raychel was going straight to theatre otherwise they would have stayed with her. I also think that it quite likely that Dr Makar did decide to operate from the outset, as he said he did. He gave the anaesthetist the impression that it was an urgent case[114] and suggested that surgery should commence at the earliest opportunity after appropriate fasting.[115] He communicated as much to the theatre nurse.[116] I therefore conclude that when Dr Makar obtained the written consent he had not expressed himself as clearly as he should nor had he confirmed with the Fergusons their understanding.

5.35 It is accepted by the Fergusons that Dr Makar did discuss risk, both in relation to general anaesthesia and the removal of the appendix.[117] However, there is contention about how those risks were explained.

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109 328-001-002
110 Mrs Burnside T-17-09-13 p.58 line 22
111 020-008-015 & Mr and Mrs Ferguson T-26-03-13 p.17 line 15
112 Mr Ferguson T-26-03-13 p.17 line 15
113 Dr Makar T-06-02-13 p.142 line 21 & 022-084-215
114 Dr Makar T-06-02-13 p.137 line 1
115 020-009-017
116 Staff Nurse McGrath T-26-02-13 p.25 line 20
117 Mr Ferguson T-26-03-13 p.19 line 20

Difference of understanding and recollection is not unusual, which is why Dr Makar should have ensured:

(i) that Mr and Mrs Ferguson had an absolutely clear understanding of what was to happen to Raychel before consenting, and

(ii) that he documented their discussion about consent in the medical record.[118]

5.36 It is not at all clear however, that Mr and Mrs Ferguson would have actually withheld their consent had they understood Raychel was to undergo immediate surgery. They might, however, have refused consent had they understood the alternative of overnight observation but given that Dr Makar had already made the decision to operate that was not an option.

5.37 The consequence of this criticism is limited because what was to go wrong on Friday 8th June and Saturday 9th June did not follow from Dr Makar's inadequate communication with Mr and Mrs Ferguson.

Dr Makar and Dr Zawislak

5.38 Notwithstanding that Dr Makar was unaware at the time of the NCEPOD Recommendations, he subsequently claimed to have proceeded to surgery only after he had made two telephone calls to the on-call Surgical Registrar Dr Waldermar Zawislak[119] in order to obtain permission.[120]

5.39 Dr Makar said that he made this contact because "*it* [was] *the appendix and I gave him the criteria I used to diagnose appendix and I felt it needed to be done before midnight.*"[121] He said he also canvassed the alternative of delay until the morning[122] but subsequently called Dr Zawislak to advise that he was proceeding to theatre that night.[123]

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118 WS-046-2 p.115 – In compliance with the Altnagelvin 'Policy on Consent to Examination or Treatment' (1996)
119 312-003-002
120 WS-022-2 p.19 & Dr Makar T-06-02-13 p.125 line 5
121 Dr Makar T-06-02-13 p.133 line 16
122 Dr Makar T-06-02-13 p.125 line 12
123 Dr Makar T-06-02-13 p.125 line 23

5.40 However, Dr Zawislak disputed Dr Makar's evidence, maintaining:

(i) He has no recollection whatever of being contacted by Dr Makar.[124]

(ii) He was entirely unaware of Dr Makar's suggestion until 2013.[125]

(iii) That had permission been given in the manner described it would have been recorded in the notes and it is not.[126]

(iv) His role as registrar did not involve granting permission to operate in uncomplicated cases[127] and especially not to a surgeon as experienced as Dr Makar.

(v) Had Dr Makar sought his views, he would have examined Raychel himself and contacted the on-call consultant Mr Gilliland, which he did not.[128]

(vi) Otherwise the only reason he could suggest why Dr Makar might have telephoned him, was to let him know he would be in theatre and accordingly otherwise unavailable.[129]

5.41 Dr Zawislak accepted that he may have received a telephone call from Dr Makar.[130] I believe that this could have happened, but even if it did, I prefer Dr Zawislak's explanation that any such call would have been to alert him to what Dr Makar intended to do rather than seek his permission. It could not therefore satisy the NCEPOD recommendation for pre-surgery consultation.

Pre-operative fluids

5.42 Having decided to operate, Dr Makar prescribed intravenous fluids to be administered pre-operatively. His initial prescription[131] was for the isotonic

124 Dr Zawislak T-05-02-13 p.24 line 25
125 Dr Zawislak T-05-02-13 p.80 line 20
126 Dr Zawislak T-05-02-13 p.78 line 25
127 Dr Zawislak T-05-02-13 p.65 line 9
128 Dr Zawislak T-05-02-13 p.73 line 12
129 Dr Zawislak T-05-02-13 p.65 line 24
130 Dr Zawislak T-05-02-13 p.24 line 25
131 WS-022-2, p.5

solution known as Hartmann's.[132] However, he changed this prescription to Solution No.18 after a discussion with Staff Nurse Ann Noble[133] because she assured him that Solution No.18 was the accepted IV fluid for use on Ward 6.[134] The evidence confirmed that Solution No.18 was the IV fluid of choice on Ward 6 and had been for at least 25 years.[135]

5.43 He amended his prescription, not only because of ward practice,[136] but also because he knew that the anaesthetic team would, in any event, make separate prescription for fluids intra-operatively and direct Raychel's fluids thereafter.

5.44 I do not criticise either Dr Makar or Staff Nurse Noble in this regard. His prescription for Solution No.18 was only to assume significance much later and after surgery, when not only the choice of fluid but also the rate as prescribed was to prove important.

5.45 Rates were calculated with reference to patient weight using a set formula.[137] Dr Makar prescribed 80mls per hour[138] which was more than the 65mls indicated by formula[139] and more than was necessary even allowing for a possible deficit.[140] The excess was, however, of little consequence at that time because Raychel was to receive only 60mls before the anaesthetic team assumed responsibility for her fluids and changed the prescription.[141]

Nursing care plan

5.46 Upon Raychel's admission onto Ward 6 Staff Nurse Daphne Patterson[142] downloaded a computerised pro-forma episodic care plan ('ECP') for Raychel's abdominal pain.[143] By so doing Staff Nurse Patterson

132 312-005-020
133 312-003-004
134 WS-049-2 p.5 & Nurse Noble T-26-02-13 p.167 line 24
135 WS-056-3 p.21
136 Dr Makar T-06-02-13 p.183 line 18
137 Dr Makar T-06-02-13 p.176 line 10
138 020-019-038
139 220-002-004, 223-002-013 & 224-004-017
140 WS-035-4 p.2
141 021-061-146
142 312-003-004
143 020-027-056

automatically became Raychel's nominal 'named nurse.'[144] The ECP was designed to be regularly updated and adjusted to a patient's ongoing needs in order to guide nursing care. It was used to communicate accumulated patient information in print-out form at handover.[145] In connection with Raychel's IV fluid therapy, the plan directed that nurses should:

(i) "*Observe/record urinary output*"[146]

(ii) "*Check the prescribed fluids, set rate & flow as prescribed, inspect infusion rate hourly, encourage oral fluids [and] record.*"[147]

(iii) "*Encourage parental participation in care.*"[148]

The operation

5.47 Mr and Mrs Ferguson, having left the hospital believing that Raychel would not have surgery unless her condition deteriorated, then received a call that the operation was to proceed.[149] They managed to return before Raychel was taken to theatre. They did not enquire further because "*it was a hospital, we thought they know best, so we just went with it.*"[150] Mrs Ferguson accompanied Raychel to the operating theatre with Staff Nurse Fiona Bryce.[151] Raychel seemed "*a bit nervous.*"[152] She was anaesthetised by Dr Vijay Gund[153] who was assisted in part by Dr Claire Jamison.[154] Dr Makar performed the operation.

5.48 Dr Vijay Gund was an SHO in anaesthesia and had started at Altnagelvin just four weeks before.[155] Dr Jamison was his senior[156] and about to

144 Staff Nurse Patterson T-04-03-13 p.30 line 25 & Mrs Margaret Doherty T-09-09-13 p.119 line 17
145 Staff Nurse Bryce T-04-03-13 p.171 line 5
146 020-027-063
147 020-027-059
148 020-027-056
149 Staff Nurse Patterson T-04-03-13 p.40 line 9
150 Mrs Ferguson T-26-03-13 p.26 line 16
151 312-003-004 & WS-054-1 p.3
152 Staff Nurse Bryce T-04-03-13 p.152 line 19
153 312-003-002
154 312-003-002 & Dr Jamison T-07-02-13 p.79 line 17
155 WS-023-2 p.2-3
156 Dr Gund T-05-02-13 p.144 line 15

become a registrar. She attended because she was free to assist and not because her presence was necessary.[157]

5.49 The 1989 NCEPOD Recommendations applied to anaesthetists as well as surgeons. However, neither Dr Gund nor Dr Jamison was aware of the recommendations[158] but neither thought the case so complex as to warrant discussion with a consultant before proceeding to surgery.[159] As with Dr Makar, my criticism relates not to the actions of these two trainee doctors but rather the failure within Altnagelvin to implement the 1989 recommendations.[160]

5.50 The operation went smoothly, starting at 23:40 and finishing about 00:20. It was unusual but not improper for paediatric surgery to start so late.[161]

5.51 Raychel received IV Hartmann's solution intra-operatively. There is no record of precisely how much she received which is an obvious failing in the anaesthetic documentation but one not seemingly that unusual for the time.[162] In addition, Dr Gund noted "*Hartmanns 1 L*"[163] which was a potentially misleading entry because it is most improbable that Raychel received a full litre of Hartmann's during surgery. It was thus that after Raychel's death, Dr Jamison was asked to and did make "*Retrospective note dated 13/6/01. Patient only received 200mls of noted fluids below when in theatre. Litre bag removed prior to leaving theatre.*"[164] This was signed by her and countersigned by Dr Geoff Nesbitt,[165] Consultant Anaesthetist and Clinical Director in Anaesthesia and Critical Care. Whilst this unusual entry aroused considerable suspicion, it must be recognised that it very obviously identifies itself as a retrospective note and is clearly

157 WS-024-2 p.5
158 Dr Gund T-05-02-13 p.147 line 11 & Dr Jamison T-07-02-13 p.61 line 5
159 Dr Gund T-05-02-13 p.145 line 8 & p.146 line 7 & Dr Jamison T-07-02-13 p.60 line 2 & p.65 line 24
160 Dr Jamison T-07-02-13 p.64 line 8
161 Staff Nurse McGrath T-26-02-13 p.29 line 16
162 Staff Nurse McGrath T-26-02-13 p.41 line 9
163 020-009-016
164 020-009-016
165 312-003-003

dated. It is also now accepted as being most probably correct by Dr Gund.[166]

5.52 Even though Dr Gund should have kept a better record of the fluids infused, it was the view of Dr Haynes that "*the anaesthetic administered by Dr Gund (including the fluid administered during the operation) was entirely appropriate and cannot be faulted.*"[167]

5.53 Raychel took a little longer than expected to regain consciousness after surgery[168] but was ready to be returned to the ward by about 01:30. Whilst not particularly unusual[169] this caused her parents concern because they had understood from Staff Nurse Bryce that the surgery would take about an hour.[170] Staff Nurse Bryce thought it most unlikely that she would have given any such indication.[171] I do not believe it necessary to examine this misunderstanding. I accept that Staff Nurse Bryce was trying to be helpful to Mr and Mrs Ferguson.

5.54 Post-operatively Dr Makar recorded that the appendix was "*mildly congested*" with an "*intraluminal faecolith.*" Accordingly, whilst the appendix was not inflamed, it was not normal.

5.55 Dr Makar did not speak to the Fergusons after the operation. He conceded that, had circumstances permitted, it would have been good practice but because he was the sole SHO in a busy hospital, he may not have been able to manage it.[172]

Post-operative fluids

5.56 After the operation and while Raychel was still in the recovery room Dr Gund gave his prescription for Raychel's initial post-operative fluids.[173] He prescribed Hartmann's Solution to continue at the same rate as pre-

166 Dr Gund T-05-02-13 p.188 line 18
167 220-002-014
168 020-009-017
169 Staff Nurse McGrath T-26-02-13 p.50 line 2 & Dr Haynes T-22-03-13 p.65 line 17
170 095-001-002 & Mrs Ferguson T-26-03-13 p.29 line 12
171 Staff Nurse Bryce T-04-03-13 p.155 line 1
172 Dr Makar 06-02-13 p.212 line 11
173 020-021-040

operatively, namely the over-prescribed 80mls per hour. He was then told by Dr Jamison and Staff Nurse Marian McGrath,[174] that post-operative fluids were not prescribed by the anaesthetist but were managed by the doctors on the ward.[175] Dr Gund, being new to the hospital, acquiesced and deleted his prescription for Hartmann's. I am certain that he did so because he was new and assumed such a practice could only be at the direction of a consultant and that a ward doctor would take active responsibility for the post-operative fluids. He now accepts that he ought to have made his views about post-operative fluids better known,[176] not least because he could not have known how long it would be before a ward doctor would see Raychel nor in any event how any such doctor could have appreciated her individual fluid requirements.[177]

5.57 Staff Nurse McGrath remembered the discussion with Drs Gund and Jamison.[178] She recalled pointing out that normally the pre-operative fluid regime was resumed after surgery, and that while Dr Gund indicated that he preferred Hartmann's, Dr Jamison told him that Hartmann's was not used on Ward 6. Staff Nurse McGrath had no doubt that Raychel would receive Solution No. 18 on the ward[179] and that is what happened.

5.58 Dr Jamison does not recall exactly what she said to Dr Gund but accepted that she might have told him that prescriptions for Hartmann's were regularly cancelled on Ward 6 and the fluids thereafter managed by the doctors on the ward.[180] It is not therefore surprising that Dr Gund should have felt there was little point in prescribing and left the fluids for ward management.

5.59 Staff Nurse McGrath said that anaesthetists who were new to the hospital were often surprised by this convention but nothing was done.[181] Dr Jamison, herself, had no concerns "*because No.18 was commonly used at*

174 312-003-004
175 WS-023-1 p.2 & WS-023-2 p.5
176 Dr Gund T-05-02-13 p.211 line 6
177 Dr Gund T-05-02-13 p.209 line 23
178 Staff Nurse McGrath T-26-02-13 p.52 line 15
179 Staff Nurse McGrath T-26-02-13 p.54 line 21
180 Dr Jamison T-07-02-13 p.115 line 4
181 Staff Nurse McGrath T-26-02-13 p.66 line 18 *et seq*

that time in the ward which was a paediatric ward with experience in giving fluids to children."[182] However, she would not have prescribed it herself[183] and nor does it seem would any other anaesthetist.[184]

5.60 When asked why nurses challenged doctor's decisions on fluids, Staff Nurse Noble explained that "*previous to that if a child had been on other fluids, we would have been asked by our nursing seniors why that particular fluid had been used and why we hadn't highlighted it to the doctors that Solution No.18 was always used on the paediatric ward.*"[185]

5.61 Whilst it was not inappropriate for nurses to advise doctors about ward practice,[186] the choice of fluids remained the responsibility of the doctor. It was disturbingly clear from the evidence that Ward 6 nurses had very little understanding of the importance of the type and rate of post-operative IV fluids[187] let alone the Syndrome of Inappropriate Antidiuretic Hormone secretion ('SIADH'). They were ignorant as to the effect of administering Solution No.18 intravenously.[188] Such lack of understanding should have been obvious. The anaesthetists should never have relinquished responsibility for directing the immediate post-operative fluids for their patients.

5.62 Of equal concern is that not only was the fluid as prescribed pre-operatively followed post-operatively, but so too was the rate.[189] That created a problem for two reasons. First because Raychel's pre-operative hourly rate was already excessive at 80mls and secondly, because it was generally held to be good practice to reduce fluids post-operatively by 20% to 30% to avoid the risks of SIADH.[190]

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182 Dr Jamison T-07-02-13 p.133 line 13
183 Dr Jamison T-07-02-13 p.117 line 17
184 Staff Nurse McGrath T-26-02-13 p.10 line 23
185 Staff Nurse Noble T-26-02-13 p.168 line 17
186 Miss Ramsay T-19-03-13 p.70 line 14
187 Staff Nurse Noble T-26-02-13 p.204 line 2 & Sister Millar T-28-02-13 p.51 line 11
188 Staff Nurse Noble T-26-02-13 p.135 line 9 & Sister Millar T-28-02-13 p.21 line 15 Staff Nurse Bryce T-04-03-13 p.128 line 23 & Staff Nurse McAuley T-05-03-13 p.50 line 24 & Staff Nurse Gilchrist T-11-03-13 p.47 line 9
189 Staff Nurse Noble T-26-02-13 p.198 line 15 & p.174 line 15
190 223-002-013 & WS-320-1 p.7 & 220-002-196 & Dr Haynes T-22-03-13 p.47 line 2 & p.51 line 13

5.63 Upon Raychel's return to Ward 6 the anaesthetic team ceded control of Raychel's fluids.[191] There was then no prescription or clinical protocol to guide the post-operative management of Raychel's fluid therapy.[192] Without any reference to her post-operative needs, she was re-subjected to her pre-operative fluids.

5.64 Dr Haynes considered this "*completely unsatisfactory*"[193] and Mr Foster described it "*a rather bizarre protocol... it doesn't make anaesthetic or surgical sense.*"[194] Mr Gilliland said that he was "*not aware of* [this practice] *and it would appear none of my surgical colleagues were aware of it, nor indeed Dr Nesbitt,*"[195] Dr Raymond Fulton[196] was "*surprised*"[197] and Miss Irene Duddy,[198] Director of Nursing[199] said that "*unless someone had brought that to my attention I would not have been aware of it.*"[200]

5.65 The evidence revealed that there was no clear delegation of the responsibilities for administering IV fluids. Fluid therapy was undertaken by the surgical, paediatric and anaesthetic specialties in conjunction with the nursing staff without agreed responsibilities or appropriate supervision.[201] Dr McCord was left to describe his "*perception... that one specialty was doing one thing, another specialty was doing another, and likewise they thought that we were doing one thing*"[202] – "*the fact is that we thought it worked, but it evidently didn't.*"[203]

5.66 I am critical of these Altnagelvin practices. The expert evidence was that the universal practice elsewhere at that time was for the anaesthetist to prescribe the initial post-operative fluids, which would continue until review, most probably at ward round. That was because it was only the

191 Staff Nurse McGrath T-26-02-13 p.13 line 1
192 Dr Jamison T-07-02-13 p.108 line 9 & Staff Nurse Noble T-26-02-13 p.177 line 11
193 Dr Haynes T-22-03-13 p.33 line 24
194 Mr Foster T-21-03-13 p.80 line 15
195 Mr Gilliland T-28-08-13 p.32 line 2
196 328-001-001
197 Dr Fulton T-04-09-13 p.63 line 3
198 328-001-003
199 WS-323-1 p.30
200 Miss Duddy T-29-08-13 p.78 line 9
201 220-002-015
202 Dr McCord T-13-03-13 p.21 line 1
203 Dr McCord T-13-03-13 p.21 line 11

anaesthetist who could know what the fluid requirements were. That that was not the practice in Altnagelvin was wholly unacceptable. Nobody was able to explain the origin of this practice,[204] although it is clear that it had been followed for many years.[205] I suspect that it had no reasoned basis because it makes no sense. The fact that this practice continued unquestioned and for so long reveals an absence of system and control and raises the fundamental question as to whether any consultant - surgeon, anaesthetist or paediatrician – actually understood what was going on. It would indeed have been a miracle if Raychel had been the only child placed at risk.

5.67 However, neither the type nor the rate of fluid given at that time would have mattered very much had it not been for a catalogue of further failure on the Friday.

Raychel's return to Ward 6 and the ward round

5.68 Raychel was sleepy when returned to the ward, opening her eyes only briefly for her parents.[206] They stayed with her until about 06:00 when Mrs Ferguson left.[207]

5.69 Mr Ferguson recalled Raychel waking at about 08:00 in relatively good form. Staff Nurse Patterson "*helped Raychel sit up in bed and... told Raychel and her dad,* [that] *she was doing very well.*"[208] Mr Ferguson went to buy her a colouring book. Thereafter, and presumably while he was away, Raychel vomited shortly after 08:00.[209]

5.70 After that she was well enough to get out of bed and sit colouring. The intravenous drip attached to her arm was infusing Solution No.18 at 80ml/h.

5.71 The evidence indicates:

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204 Mr Gilliland T-14-03-13 p.178 line 17
205 Staff Nurse McGrath T-26-02-13 p.65 line 19 & Sister Millar T-28-02-13 p.53 line 3
206 Mr and Mrs Ferguson T-26-03-13 p.31 line 7
207 Mrs Ferguson T-26-03-13 p.32 line 6
208 Staff Nurse Patterson T-04-03-13 p.76 line 15
209 Staff Nurse McAuley T-05-03-13 p.81 line 10

(i) Raychel was the only child on the ward to have undergone surgery overnight.

(ii) At approximately 08:00 – 08:30 Staff Nurse Noble made a hand-over of Ward 6 to Sister Elizabeth Millar.[210]

(iii) Sister Millar deployed Staff Nurse Michaela McAuley[211] as Raychel's principal carer.

(iv) Between 08:30 and 10:00 a surgical SHO Dr M H Zafar,[212] conducted the morning ward round with Sister Millar. Usually the ward round would have been taken by a registrar[213] but on this occasion, because Raychel was the only surgical patient on Ward 6[214] Dr Zafar was assigned by the registrar to conduct the round.[215] Dr Zafar was on a 6 month placement at Altnagelvin and was dealing with paediatric patients for the first time.[216]

(v) There is uncertainty as to whether Dr Zafar was aware of the 08:00 vomit[217] but in any event and given Raychel's clear signs of recovery, Dr Zafar directed a routine and gradual reduction of intravenous fluids with staged encouragement to take fluids orally. Normally after an uncomplicated appendectomy, the reduction of IV fluids would start in the morning and continue into late afternoon or early evening with the expectation that a patient such as Raychel would "*increase her drinking during the day; walk a short distance, and possibly eat something light later in the day.*"[218] In the usual way, Raychel might then have been ready to go home on the Saturday or at the latest on Sunday. Indeed 80% of such children might have expected to be discharged within 48 hours.[219]

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210 312-003-004 & Sister Millar T-28-02-13 p.62 line 24
211 312-003-005
212 312-003-002
213 Sister Millar T-28-02-13 p.109 line 7
214 Dr Zafar T-01-03-13 p.184 line 24
215 Dr Zafar T-01-03-13 p.183 line 2
216 Dr Zafar T-01-03-13 p.108 line 15
217 WS-025-1 p.3 & Sister Millar T-28-02-13 p.92 line 11
218 224-004-011
219 Miss Ramsay T-19-03-13 p.19 line 14

(vi) Sister Millar and her nurses were very familiar with such a plan for recovery.[220]

(vii) Dr Zafar saw Raychel for no more than 5-10 minutes.[221] He did not concern himself with the rate or type of her IV fluids because she seemed well[222] and in any event he proposed to reduce her fluids and end her therapy.[223] Accordingly, he made no new prescription for her fluids and they continued as before.

(viii) Whilst it was comparatively unusual for Raychel to have been seen on a morning ward round by a SHO rather than a registrar,[224] it did not then seem of particular significance given that there was no cause for concern on Friday morning and complications in such circumstances were rare.

(ix) When Dr Zafar and Sister Millar were taking their leave of Raychel, Dr Makar arrived to enquire after her.[225] This was both routine, lest there be complication and a courtesy. He spoke briefly to Mr Ferguson.

(x) Dr Makar confirmed that "*Raychel was sitting up... she was pain free at that time.*"[226]

(xi) Neither Sister Millar nor the doctors had any concerns at that time. In fact, Mr Ferguson telephoned his wife at about 09:30 and told her not to hurry to the hospital because Raychel was up and about.[227]

Underlying concerns

5.72 Underlying these apparently un-troubling circumstances were matters of real concern.

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220 Sister Millar T-28-02-13 p.64 line 2
221 Dr Zafar T-01-03-13 p.185 line 11
222 Dr Zafar T-01-03-13 p.209 line 3
223 Dr Zafar T-12-03-13 p.206 line 14
224 Staff Nurse Noble T-26-02-13 p.189 line 2
225 Sister Millar T-28-02-13 p.106 line 21
226 Dr Makar T-13-03-13 p.174 line 20
227 Mr Ferguson T-26-03-13 p.35 line 12

5.73 The ward round was not taken by a consultant or a registrar but by a junior doctor with limited experience of children. Mr Foster found this concerning and "*entirely unsatisfactory and unsafe and evidence of disorganisation of the surgical services...*"[228] Dr Haynes was of the view that the formal ward round should "*ideally* [be] *supervised directly by the responsible consultant.*"[229]

5.74 In addition, there was no formalised handover between the surgeon who performed the surgery and the surgeon who conducted the ward round. There was no continuity. They appear to have passed each other without conferring as to Raychel's fluid management. Had they done so, Dr Makar might have reconsidered the fluid therapy and the catastrophic outcome which was to ensue might have been avoided. Whilst neither Dr Makar nor Dr Zafar was aware of her fluid regime on the Friday morning, they each could have discovered it. That neither did was unacceptable.

5.75 This is to be understood in a context where the surgical patients on Ward 6 were cared for by the surgical team and not the paediatricians who were actually based on Ward 6.[230] In practice, this meant that the surgical doctors might not always be available to their patients because they were elsewhere in the hospital.[231] Whilst such an arrangement was not unusual in district general hospitals it did pose risk and had given rise to nursing complaint.[232] This was an organisational shortcoming, which could keep surgical doctors from their patients and inhibit nurses from calling upon the medical doctors available on Ward 6.

5.76 Moreover, it was the most junior hospital surgical doctors who were relied upon for initial response to any summons in respect of the surgical patients on Ward 6. Mr Foster believed that "*junior house officers who had no experience of paediatrics should not have been first on call for surgical children.*"[233] This was a further potential risk factor, not least because it was

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228 223-003-011
229 220-002-008
230 Dr Johnston T-07-03-13 p.172 line 7
231 Dr Zafar T-01-03-13 p.160 line 23 & Dr Scott-Jupp T-20-03-13 p.45 line 9
232 Sister Millar T-01-03-13 p.60 line 19 & Dr McCord T-13-03-13 p.22 line 17
233 223-003-013

these inexperienced doctors who had first oversight of the childrens' post-surgical fluid management.

5.77 Furthermore, significant differences had developed in the care given to the paediatric and surgical patients on Ward 6. Medical patients receiving IV infusion under the care of paediatricians were subject to routine blood tests every 24 hours.[234] However, surgical patients were not. Accordingly, a child vomiting with gastroenteritis would have daily blood tests as a matter of course whereas a child who vomited after surgery would not. This was an alarming anomaly and it is not at all clear how or why this had arisen. Dr Haynes suggested that it "*occurred because of a lack of consultant ownership of the issue.*"[235] Such a lack of organisational control of Ward 6 would have consequences for Raychel.

5.78 These were important matters of concern and each reveals not only underlying systemic weakness but also the lack of consultant leadership in the management of surgical patients on Ward 6.

Friday 8th June: nursing issues

Fluid balance chart

5.79 The importance of fluid balance should have been known to all nurses in 2001 having been taught for many years.[236] It was the clear responsibility of nursing staff to enter relevant fluid information into the fluid balance chart. In 2001, this permitted the following to be recorded:

(i) Type of fluid intake.

(ii) Amount of hourly fluid intake.

(iii) Type of output (i.e. vomit, urine etc.)

(iv) Amount of hourly fluid output.

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234 Staff Nurse Noble T-27-02-13 p.129 line 4
235 220-002-006
236 Professor Hanratty T-20-03-13 p.197 line 2

5.80 Fluid balance charts record information to guide fluid management. Accordingly and as Professor Hanratty observed "*measuring and recording intake and output* [is] *a very significant part of the continuing care of the patient.*"[237] Had Raychel's fluid balance chart been accurately compiled, it should have guided the nurses and doctors to an appreciation of what was happening to Raychel's fluid balance in real time.

Recording fluid output

5.81 Some fluid information will always be imprecise. Unless the quantity of urine passed is actually measured, the entry can only really be "*PU*" (passed urine). The fluid output of a 9-year old girl toileted by her mother will go unrecorded unless the parent is advised to provide particulars. Mr and Mrs Ferguson were not so advised[238] and, regrettably, even when such matters were brought to Sister Millar's attention she neither noted nor investigated.[239] Disturbingly she conceded that it was not always the practice on Ward 6 to record such an event.[240] This was despite the requirement of the fluid balance chart and the specific direction of the ECP to "*observe/record urinary output.*"[241]

5.82 Accordingly, neither the frequency nor quantity of urinary output was properly recorded. There is a single entry of "*PU*" timed at 10.00[242] but the Fergusons are sure that she also passed urine around noon and perhaps again in the early afternoon.[243]

5.83 Similarly, the quantification of vomit in the record is uncertain.[244] A shorthand was devised on Ward 6 to record vomit quantity using the '+' sign. Unfortunately this had not always been explained[245] allowing nurses to interpret "*vomit* ++" as indicating anything from small to large.[246]

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237 Professor Hanratty T-20-03-13 p.163 line 3
238 Staff Nurse Bryce T-05-03-13 p.39 line 12 & Mrs Ferguson T-26-03-13 p.78 line 23 & p.46 line 25
239 Sister Millar T-28-02-13 p.18 line 7 & p.115 line 3
240 Sister Millar T-28-02-13 p.80 line 4
241 020-027-063
242 020-018-037
243 Mrs Ferguson T-26-03-13 p.78 line 19
244 Staff Nurse Bryce T-04-03-13 p.169 line 24
245 Staff Nurse Patterson T-04-03-13 p.78 line 14
246 Sister Millar T-28-02-13 p.124 line 10 & Staff Nurse Bryce T-04-03-13 p.169 line 10

5.84 Imprecision as to quantity of output was not the only problem. Additionally and critically individual incidents of vomiting were not accurately recorded.

5.85 The fluid balance chart shows[247]:

(i) "*Vomit*" around 08:00

(ii) "*Large vomit*" around 10:00

(iii) "*Vomited ++*" around 13:00

(iv) "*Vomited ++*" around 15:00

(v) "*Vomiting coffee grounds ++*" around 21:00

(vi) "*Vomited small amount x 3*" around 22:00

(vii) "*Small coffee ground vomit*" around 23:00.

5.86 I have no doubt that this record is incomplete. Evidence was given that Raychel vomited at about 18:00 but this was not recorded. Staff Nurse Sandra Gilchrist[248] failed to note a vomit at about 20:30[249] and additional vomit seen on pyjama top and pillowcase at 00:35 also went unrecorded.[250] In addition, there were occasions when Raychel vomited into kidney dishes which were disposed of undocumented by the nursing staff.[251] Even allowing for some confusion as to timings, I am certain that the incidence of Raychel's vomiting significantly exceeded that recorded in the fluid balance chart. Whilst I acknowledge the practical difficulties in accurately monitoring fluid balance, I can only agree with Staff Nurse McAuley that her "*documentation was poor.*"[252]

247 020-018-037
248 312-003-005
249 Staff Nurse Gilchrist T-11-03-13 p.66 line 22
250 Staff Nurse Gilchrist T-11-03-13 p.112 line 17
251 WS-021-1 p.6-7 & Mrs Ferguson T-26-03-13 p.54 line 20
252 Staff Nurse McAuley T-05-03-13 p.173 line 7

Recording fluid intake

5.87 The nursing staff did not seemingly attach particular importance to the fluid intake record either. Staff Nurse McAuley acknowledged that she had been aware that Raychel was "*taking sips*" and yet did not record them.[253] Mr Ferguson recalled allowing Raychel some soft drink[254] but this was not noted because he had not been told to tell the nurses.[255] These particular omissions from the fluid chart are of little consequence given the minimal amounts involved but do highlight a nursing failure to advise the Fergusons as to the importance of fluid information.

5.88 Overall, there was a lack of due attention to fluid documentation. In consequence, the fluid balance chart could not have been relied upon to indicate Raychel's fluid balance. This was a major deficiency in record-keeping and a significant failing in nursing for which Sister Millar was primarily responsible.

Repeated vomiting

5.89 Raychel's fluid balance chart for 9th June records nine vomits in the 15 hours between 08:00 and 23:00. In addition there were, at the very least, three additional vomits. Whilst it was probably reasonable for the nurses to consider Raychel's initial vomiting a normal post-operative response,[256] this became an increasingly unlikely explanation as the day progressed. However, the nurses did not reconsider their initial perception and in the view of Mr Foster became "*locked into a mindset of what they expect to happen.*"[257]

5.90 As Mr Ferguson recalled "*every time Raychel vomited in the bowl, I would actually take it out and show it to them. And as far as I can remember... the only words... back, 'its only natural. After an operation, she will be sick.'*"[258]

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253 Staff Nurse McAuley T-05-03-13 p.60 line 7
254 Mr Ferguson T-26-03-13 p.34 line 18
255 Mrs Ferguson T-26-03-13 p.53 line 4
256 Dr Scott-Jupp T-20-03-13 p.66 line 7
257 223-002-017
258 Mr Ferguson T-26-03-13 p.54 line 3

5.91 Mr Orr said that "*alarm bells should have been ringing by lunchtime, if not after lunch, when there was the third vomit.*"[259] Medical staff should then have been contacted. A doctor would then, according to Mr Orr, have taken "*blood for urea and electrolytes and... actively considered replacing the vomitus... with a solution such as normal saline and then altering the maintenance fluids as well.*"[260] That would have saved Raychel.[261]

5.92 The vomiting continued all day and the coffee ground vomiting which started at about 21:00[262] (or even earlier if Mr Ferguson is correct[263]) is a particularly disturbing feature. Mr Foster believed it an "*indication of significant or severe and prolonged vomiting and retching... it should have attracted serious attention as it is due to trauma to the gastric mucosa causing bleeding.*"[264] Mr Orr considered it an alert "*to the fact that something unusual and abnormal is happening.*"[265] Professor Mary Hanratty said that any coffee ground vomiting in a child should immediately prompt a nurse to contact an SHO.[266]

5.93 It did not however alarm the nurses on Ward 6. Staff Nurse Gilchrist, who noted this development "*thought maybe she had a wee tear when she was vomiting. That's why it was all blood in it...*"[267] She waited for another hour before she contacted a doctor. She simply did not think.

5.94 I must record that I reject emphatically the evidence given by Sister Millar[268] and Staff Nurses Gilchrist,[269] Noble[270] and Roulston[271] that they considered that Raychel was suffering from conventional post-operative vomiting. I do not believe that they actually thought about it and that was the problem. Post-operative nausea and vomiting ('PONV') could not have explained

259 Mr Orr T-21-03-13 p.147 line 13
260 Mr Orr T-21-03-13 p.149 line 6
261 Dr Scott-Jupp T-20-03-13 p.116 line 7
262 020-018-037
263 095-005-018
264 223-002-016
265 Mr Orr T-21-03-13 p.193 line 6
266 Professor Hanratty T-20-03-13 p.202 line 1
267 Staff Nurse Gilchrist T-11-03-13 p.75 line 1
268 WS-056-1 p.3
269 WS-053-2 p.6 & 098-293-771
270 WS-049-1 p.5
271 312-003-005 & WS-52-1 p.3

what was happening. Even if Raychel had suffered some post-operative vomiting, the overall frequency, duration and type of vomiting was of a very different order.

Failure to appreciate deterioration

5.95 It is a fundamental nursing task to monitor progress, identify deterioration and where necessary contact the doctor.[272] That requires 'active' observation.

5.96 Over the course of Friday, Raychel who had started her day contentedly colouring-in, became very ill. She stopped passing urine, became increasingly lethargic, vomited repeatedly, failed to respond to anti-emetics and vomited coffee grounds. She was very obviously not recovering as expected from her uncomplicated routine surgery.

5.97 Sister Millar has since acknowledged "*Raychel was... deteriorating earlier than we as nurses recognised.*"[273] However, I heard evidence that Raychel's condition was recognised, not just by family[274] and friends,[275] but also by strangers.[276] I am struck by the contrast between the descriptions given by these witnesses and those proffered by the nurses.

5.98 I do not accept the nursing evidence that Raychel was well and presenting no real cause for concern[277] and in this regard, I note the evidence of those nurses who sought retrospectively to diminish the importance of the vomiting.[278] I believe that Staff Nurse McAuley must be wrong when she said that shortly before 20:00 she saw Raychel "*up and about, walking in the corridor*" and pointing things out to her brothers.[279] On the balance of the evidence, I do not believe her to be correct.

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272 224-002-021
273 Sister Millar T-01-03-13 p.83 line 5
274 095-005-017 & 095-006-020 - Mrs Harrison
275 Mrs McCullagh (095-009-029)
276 095-008-025 - Mr Stephen Duffy & 095-007-022 - Mrs Elaine Duffy
277 Staff Nurse McAuley T-05-03-13 p.189 line 14 & WS-056-1 p.4
278 Staff Nurse McAuley T-05-03-13 p.96 line 14 & Staff Nurse Gilchrist T-11-03-13 p.112 line 12 & p.87 line 23
279 WS-051-1 p.3 & Staff Nurse McAuley T-05-03-13 p.188 line 10

5.99 I also found disquieting the nurses' unquestioning belief that Raychel could come to no harm while on Solution No.18.[280] That induced complacency.[281] I accept that because Solution No.18 was widely used, it was generally safe. I do not criticise the nurses for failing to appreciate that hyponatraemia was developing or even that her fluids were not replacing the sodium lost through vomiting. However, the nurses were obligated to monitor and respond. I find serious failure in each and every nurse caring for Raychel to:

(i) Consider whether the care given was having the desired effect.

(ii) Appreciate that her condition was deteriorating.

(iii) Recognise that she was very ill.

(iv) Understand that she needed the urgent attention of a capable doctor properly informed by nursing observation.

Accordingly, I criticise the nursing staff for failing to recognise and react to Raychel's illness.

Medical care: 8th June, post-ward round

5.100 In addition and over the course of Friday 8th June three junior doctors were involved in Raychel's care.

Dr Mary Butler

5.101 Dr Mary Butler[282] was a second year SHO with 4 months experience in paediatrics.[283] She attended the daily ward round and covered the neo-natal, special baby and day care units. She understood the management of fluids and electrolytes in children.[284]

280 Staff Nurse Roulston T-06-03-13 p.139 line 14 & Staff Nurse Noble T-26-02-13 p.205 line 10
281 Staff Nurse Noble T-27-02-13 p.92 line 2 & p.133 line 9
282 312-003-002
283 Dr Butler T-11-03-13 p.3 line 5
284 Dr Butler T-11-03-13 p.9 line 21

5.102 Dr Butler's involvement with Raychel was brief. At around noon, she was on Ward 6 when Raychel's litre bag of Solution No.18 had almost emptied.[285] She was asked by Staff Nurse McAuley to prescribe a replacement. She did so without investigating and probably without even seeing Raychel.[286] She believes that she would have made some basic enquiries[287] and if so, would probably have been told that according to the chart, Raychel had vomited twice.[288] Such, she said, would not have caused her concern at that time.[289] Had she been concerned, she would have contacted a surgical SHO or spoken to her paediatric registrar, which she did not.[290]

5.103 In the event Dr Butler assumed that the rate prescribed for the fluids had been properly calculated and accordingly issued a repeat prescription for Solution No.18.[291] She now recognises that she did so at a rate which was excessive and regrets that she did not double-check.[292] While Dr Butler could have been more pro-active, I believe it would be unduly severe to criticise her in the context of her response to a limited request on behalf of a patient who was not her own.

Dr Joseph Devlin

5.104 Dr Joseph Devlin[293] was a Pre-Registration House Officer. He was in the first year of his first post-graduate post. In his first six months, he had undertaken very little paediatric work and in his second six months he could not remember any. He could hardly have had less paediatric experience.[294] Mr Orr was of the firm opinion that such doctors required close supervision and support.[295]

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285 Staff Nurse McAuley T-05-03-13 p.117 line 1
286 Staff Nurse McAuley T-05-03-13 p.120 line 6 & Dr Butler T-11-03-13 p.24 line 25
287 Dr Butler T-11-03-13 p.17 line 23
288 Sister Millar T-28-02-13 p.132 line 4
289 Dr Butler T-11-03-13 p.22 line 3
290 Dr Butler T-11-03-13 p.26 line 21
291 020-019-038 & Dr Butler T-11-03-13 p.30 line 4
292 Dr Butler T-11-03-13 p.23 line 20
293 312-003-002
294 Dr Devlin T-06-03-13 p.17 line 5
295 Mr Orr T-21-03-13 p.160 line 15

5.105 His involvement with Raychel appears to have been entirely unintended. Staff Nurse McAuley recalls that at about 15:00 she was alerted to Raychel's vomiting and, although not unduly concerned, thought it necessary to inform Sister Millar and contact a surgical JHO for an anti-emetic. Her evidence was that she tried repeatedly over the next 2-2½ hours to get a junior surgical doctor to come to Ward 6 but without success. Eventually Sister Millar saw Dr Devlin and directed that he be asked to "*give Raychel an anti-emetic.*"[296]

5.106 The Fergusons are sceptical that Staff Nurse McAuley made the efforts she described. They suspect that a doctor was only called after the vomit recorded at 17:00.[297] I understand their scepticism; indeed how could a childrens' ward function, if a concerned and experienced nurse could not get hold of a junior doctor in over 2 hours?[298] However extraordinary, and even in the absence of corroborative documentation[299] I am inclined to believe Staff Nurse McAuley's evidence, which of itself must raise concerns about the provision of care to surgical patients on Ward 6. That was not the fault of Staff Nurse McAuley.

5.107 When Dr Devlin attended Raychel at 18:00, he was alone.[300] That may have been unavoidable but it carried risk. A nurse should have attended with him because Raychel was not recovering as had been expected and he should have been told.[301] However, he was not and this very inexperienced doctor was left without any suggestion that there was much to worry about, apart from some vomiting[302] and on that basis, he gave the anti-emetic as indicated.[303]

5.108 As Dr Devlin explained "*I had absolute confidence...* [in] *my nursing colleagues ability to relay on any concerns to the oncoming doctor and I suppose at that time in my career I felt that the safety net would lie with the*

296 Sister Millar T-28-02-13 p.140 line 10 & Staff Nurse McAuley T-05-03-13 p.186 line 5
297 Mrs Ferguson T-26-03-13 p.71 line 7
298 Staff Nurse Noble T-27-02-13 p.64 line 14
299 Sister Millar T-28-02-13 p.145 line 5
300 Staff Nurse McAuley T-05-03-13 p.149 line 2
301 Staff Nurse Roulston T-06-03-13 p.146 line 17 & Mr Foster T-21-03-13 p.164 line 5
302 Dr Devlin T-06-03-13 p.64 line 5
303 020-017-034

senior staff... that systems... would be in place to prevent the tragic outcome..."[304]

5.109 Dr Devlin was the first doctor to see Raychel in almost 9 hours. He was inexperienced and had neither clinical guidelines, attendant nurses or the supervision of more senior clinicians to help him. That was unsafe. Dr Devlin recalled that Raychel vomited when he was with her[305] but he did not understand what this might mean. He accepts that this should have been recorded but he thought this would be done by a nurse. It was not. With experience and hindsight, Dr Devlin accepts that he should have directed electrolyte tests. He also accepts that he should have recorded his intervention.

5.110 I have considered whether Dr Devlin should be criticised for his relative inaction. The expert evidence and his own evidence taken with that of other witnesses, including the nurses, persuades me that this would be unfair. Whilst he had an opportunity to help Raychel and did not, fault does not attach to the inexperienced Dr Devlin. He did what he was asked to do and moved on.

5.111 Dr Devlin believes that had he been called back to see Raychel four hours later, he might then have been more alert to her condition[306] and would have been able to reassess. In terms, he was suggesting that the inexperienced doctor who is called to see a child once is at a major disadvantage. I think he is correct.

5.112 It is disturbing to record that after Dr Makar saw Raychel briefly on Friday morning, the only doctors to see her were JHOs and none of them saw her more than once. Raychel's deterioration was not observed over time by any one doctor.

5.113 It is the role of the nurse to monitor patient progress and communicate relevant observation to the junior doctor. Responsibility for management

304 Dr Devlin T-06-03-13 p.75 line 21
305 Dr Devlin T-06-03-13 p.61 line 4
306 Dr Devlin T-06-03-13 p.73 line 21

remains with the doctor who acts under the direction and supervision of more senior colleagues and the consultant. Unfortunately, Ward 6 was over reliant upon the services of very junior and inexperienced doctors and in Raychel's case, neither the nurses nor the senior surgical staff were supporting them. This was a deficiency in communication and system[307] and carried risk.

Dr Michael Curran

5.114 Dr Michael Curran[308] was a medical JHO[309] with just 10 months experience and very little exposure to paediatric work.[310] Due to staff pressure, he was unexpectedly doing a locum in surgery on the Friday evening of 8th June and in contact with children for the first time in months.

5.115 Like Dr Devlin, he considered that his role as a JHO was task orientated. He performed specific duties delegated at ward round, such as carrying out blood tests, organising x-rays and preparing discharge letters.[311] These tasks were performed at the behest of senior colleagues and the more experienced nurses.

5.116 Dr Curran had limited understanding of the risks posed by prolonged vomiting. He believed that the risk posed by vomiting and/or diarrhoea was dehydration and that the appropriate response was fluid replacement.[312] He did not understand that prolonged vomiting depleted sodium levels[313] and was unsure of the causes of hyponatraemia.[314]

5.117 Staff Nurse Gilchrist 'bleeped' Dr Curran at about 22:00[315] because of Raychel's continued vomiting and he attended. He could not recall any

307 Mr Orr T-21-03-13 p.135 line 15 & WS-320-1 p.15
308 312-003-002
309 Mr Gilliland T-14-03-13 p.124 line 18
310 Dr Curran T-07-03-13 p.5 line 20
311 Dr Curran T-07-03-13 p.36 line 15
312 Dr Curran T-07-03-13 p.33 line 24. n.b. The Ward 6 copy of Forfar & Arneil 'Textbook of Paediatrics' 1992 (321-004g-004) advised that in response to vomiting *"Electrolyte losses should be corrected."*
313 Dr Curran T-07-03-13 p.33 line 11
314 Dr Curran T-07-03-13 p.29 line 10
315 WS-053-1 p.3

particular conversation but believes he must have been told where to find Raychel and the medication he was to prescribe and administer.[316]

5.118 Staff Nurse Gilchrist assumed that Dr Curran would assess Raychel.[317] However, she made no particular effort to speak to him[318] assuming "*he would have spoken to somebody.*"[319] In the circumstances, she should have prompted Dr Curran to assess Raychel, or at the very least shown him the fluid balance chart and informed him that the vomiting had not been controlled by the earlier anti-emetic. Staff Nurse Noble also had the opportunity to speak to Dr Curran.[320]

5.119 Mr Foster considered that "*Dr Curran and the nursing staff should have really been alarmed at this point.*"[321] Tragically they were not. Dr Curran's attendance was to be the last opportunity for a doctor to respond to Raychel's continuing deterioration. At that stage electrolyte testing would almost certainly have identified abnormally low sodium levels[322] and at 22:00 it may still have been possible to save her.[323]

5.120 Dr Curran is clear that he was not asked to assess Raychel's condition and that no concern was expressed to him about coffee ground vomiting[324] or deterioration.[325] He said that had he been told of the coffee ground vomit or had he seen it recorded, he would have contacted an SHO immediately.[326] He maintained that he was only asked to administer an anti-emetic which was a routine request.[327] In that context, he believes that he would have performed only a very limited assessment. He would not have checked the fluid balance chart[328] because he already knew she was vomiting. Accordingly, he prescribed and gave the anti-emetic, made an

316 Staff Nurse Noble T-27-02-13 p.96 line 4 & Dr Curran T-07-03-13 p.55 line 6
317 Staff Nurse Gilchrist T-11-03-13 p.93 line 1
318 Staff Nurse Gilchrist T-11-03-13 p.95 line 15
319 Staff Nurse Gilchrist T-11-03-13 p.110 line 23
320 Staff Nurse Noble T-27-02-13 p.132 line 14
321 Mr Foster T-21-03-13 p.189 line 2
322 Dr Scott-Jupp T-20-03-13 p.92 line 2 & Dr Haynes T-22-03-13 p.112 line 15
323 Dr Scott-Jupp T-20-03-13 p.116 line 7
324 Dr Curran T-07-03-13 p.76 line 22
325 Dr Curran T-07-03-13 p.63 line 3
326 Dr Curran T-07-03-13 p.76 line 13
327 Dr Curran T-07-03-13 p.56 line 20
328 Dr Curran T-07-03-13 p.75 line 11

entry in Raychel's drug record and left. He suggested that had the nurses been genuinely worried about Raychel, they would most certainly have informed him of their concerns and not just left out the anti-emetic for him, and in any event in such a situation he believed that they would have called someone rather more senior and experienced than he.[329]

5.121 Dr Curran is open to the criticism that, when asked to give an anti-emetic he neither read the notes in respect of the vomiting nor asked any questions. That was inadequate because the longer she vomited the more urgent did the need become to check her electrolytes. He did not know how long she had been vomiting[330] or what had already been done about it.[331] The coffee ground vomit, which he accepts would have caused him concern, was recorded at 21:00 but he did not read the record. He did not know that her vomit was "++"[332] or that she had headaches. He conceded that would have been relevant.[333] His obligation at 22:00 was greater than that imposed on Dr Devlin at 18:00 because Raychel's vomiting had continued and her failure to recover should have been even more obvious. Notwithstanding mitigating factors, including his own inexperience and the lack of nursing support, I criticise Dr Curran for not taking the care to recognise that the circumstances demanded more than just an anti-emetic. At the very least, the situation demanded the attendance of a more senior doctor.

Nursing communication

5.122 In considering how and why nursing staff failed to appreciate what was happening to Raychel, I consider the following deficiencies in communication to be relevant:

(i) There was a failure to liaise properly with Mr and Mrs Ferguson whether to involve them in fluid management or to take advantage

329 Dr Curran T-07-03-13 p.92 line 3
330 Dr Curran T-07-03-13 p.65 line 5
331 Dr Curran T-07-03-13 p.71 line 14
332 020-018-037
333 Dr Curran T-07-03-13 p.149 line 14

of their observations and opinions. Their input was not recorded, nor does it seem to have been taken seriously.

(ii) Raychel's 'named nurse' was such a nurse "*in name only*"[334] and did not communicate with the family. Whilst I can understand that the provision at all times of an informed named nurse[335] is almost impossible, no real attempt was made to provide the channel of communication intended and Raychel was, in terms, denied her right to a named nurse under the Patient's Charter.[336]

(iii) There was nursing failure to speak to Drs Devlin and Curran to provide or discuss appropriate information.

(iv) Nurses failed to communicate adequately with each other especially at handover. When Staff Nurse Bryce came on duty at 19:45, she was not informed that Raychel was still vomiting.[337] Such a failure to communicate verbally was important because nurses did not conventionally consult patient records at handover.[338] It should be noted that in November 2000 an assessment of the quality of nursing on Ward 6 specifically identified as a "*negative*" the fact that "*the retiring and oncoming nurses in charge do not make walking rounds of the patients together.*"[339] This was not seemingly addressed.

(v) Even had nurses sought to rely upon the fluid balance chart, it would have been found wanting. Regrettably, inaccuracy in this important regard was an established feature on Ward 6. An audit in November 2000[340] identified patients on Ward 6 with "*intake/output charts* [which] *had information missing (7 were incomplete out of 14).*"[341] This deficiency should have been attended to and before Raychel's

334 Mrs Margaret Doherty T-09-09-13 p.119 line 17
335 Mrs Margaret Doherty T-09-09-13 p.114 line 10
336 306-085-010 & 317-042-001 & 321-068-005
337 WS-054-2 p.6
338 Staff Nurse McAuley T-05-03-13 p.68 line 6
339 WS-323-1 p.39
340 WS-323-1 p.42
341 WS-323-1 p.45

admission.[342] It was not.[343] Mrs Margaret Doherty,[344] the Clinical Services Manager ('CSM') has since acknowledged that in this regard "*not sufficient was done and I should have stepped in.*"[345]

(vi) Furthermore, the nursing notes could not have been relied upon. They failed to record the attendance of the three junior doctors on 8th June. Mr Foster concluded that "*more detailed records throughout the 8th would have assisted the nursing staff to detect an ongoing deterioration throughout the afternoon and evening of the 8th.*"[346]

(vii) The ECP which was intended to communicate current care requirements was not updated. It neither referred to the continued vomiting[347] nor indicated any need to monitor the effectiveness of anti-emetics. It did not therefore communicate the evolving situation as it was meant to. Staff Nurse Noble conceded that Raychel's care plan should have been individualised.[348]

(viii) In addition, entries in the care plan were inaccurate. The ECP, when updated at about 17:00 by Staff Nurse McAuley for her 20:00 handover[349] recorded "*observations appear satisfactory. Continues on PR flagyl. Vomit x 3 this am, but tolerating small amounts of water this evening.*"[350] She later conceded that this was "*not right*"[351] because it ignored Raychel's afternoon vomiting and hinted at recovery on the basis of a largely non-existent fluid intake. On the basis of this information, Staff Nurse Gilchrist said she "*would have believed*" that Raychel's vomiting had been brought back under control.[352] It did not even suggest, let alone inform, the incoming night staff as to the problems that were developing.

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342 WS-323-1 p.42
343 Sister Millar T-28-08-13 p.120 line 14
344 328-001-002
345 Mrs Margaret Doherty T-09-09-13 p.103 line 11
346 223-003-002
347 224-002-019
348 Staff Nurse Noble T-26-02-13 p.155 line 18
349 Staff Nurse Noble T-27-02-13 p.35 line 4
350 020-027-064
351 Staff Nurse McAuley T-05-03-13 p.172 line 21
352 Staff Nurse Gilchrist T-11-03-13 p.63 line 8

(ix) Nursing care plans had previously been the subject of a benchmarking exercise against other hospitals in 2000 which had identified "*problems... as a result of not individualising care plans*"[353] and recommended that nurses be made "*aware of the need to update and change care plans when there is a change in treatment.*"[354] Regrettably, this was not heeded any more than the internal 1999/2000 Nursing Record Audit which found a mere 44% compliance with individualisation of care plans.[355]

5.123 That no effective steps were taken to rectify such known deficiencies was a further and significant failing for which the Director of Nursing, Miss Duddy, must bear ultimate responsibility.

Events after 21:00 on 8th June

5.124 The development of coffee ground vomiting, which was noted in the fluid balance chart from 21:00, did not prompt consideration of the possible implications.

5.125 Raychel's vomiting intensified between 21:00 and 23:00 hours. Mr Ferguson was by then increasingly alarmed by Raychel's condition and "*told nurse Noble that Raychel was complaining of a sore head and was bright red in the face. Nurse Noble said she would come and give Raychel a paracetomol and did so a short time later...*"[356] – "*She appeared to me to be laid back and not concerned at all about my daughter.*"[357] Nurse Noble accepted that "*he told me the facts, yes... I just felt Raychel had had a particularly poor post-operative first day and that I would try and relieve the symptoms...*"[358]

5.126 At 21:15 Staff Nurse Gilchrist recorded of Raychel "*colour flushed → pale, vomiting ++ c/o headache*"[359] and at about 21:30 hours, Mr Ferguson

353 WS-323-1 p.49
354 WS-323-1 p.50
355 321-068-006
356 095-005-019
357 WS-021-1 p.9
358 Staff Nurse Noble T-27-02-13 p.74 line 17
359 020-015-029

telephoned his wife to voice his frustration and concern – "*she's starting to throw up blood on the bed and they're not listening to me at all.*"[360] Nurse Noble recalled that "*Mr Ferguson did not express to me at that time how much he was concerned.*"[361] Staff Nurse Gilchrist could not "*agree that we weren't taking her condition seriously... After her periods of vomiting I told him... that I was going to contact the surgical doctor to come and assess her. So, I was taking his concerns on board.*"[362] It was Dr Curran who attended but Mr Ferguson's concerns were not communicated to him.

5.127 Mrs Ferguson returned at 22:00 to find Raychel very restless and with something trickling from the side of her mouth. The Fergusons now believe that she was beyond saving at that stage. In fact, they think she may have been beyond saving from about 17:00. It is not clear to me that their belief is medically correct[363] but the experts agree that Raychel was, by that stage, increasingly threatened by an excessive infusion of hypotonic fluid in the context of SIADH and prolonged vomiting.

5.128 By that stage of the evening Raychel's vomiting was clearly both severe and prolonged[364] and yet, despite further vomiting at 23:00, and 00:35 on Saturday morning, the nurses still did not call a doctor. Dr Scott-Jupp was of the view that they should have.[365] Staff Nurse Noble has accepted that with "*hindsight... yes, we probably should have called a doctor back to re-evaluate the effectiveness of the anti-emetic, but because the amounts were less... we thought things were settling down.*"[366]

5.129 Mr and Mrs Ferguson, who had spent all Friday at Raychel's side, whether in turns or together, recall that they eventually left the hospital at about 00:40.[367] They did so because they had been reassured by nursing staff that Raychel had settled and would sleep for the night.[368] I am certain that

360 095-002-007 & Mr Ferguson T-26-03-13 p.103 line 18
361 Staff Nurse Noble T-27-02-13 p.74 line 14
362 Staff Nurse Gilchrist T-11-03-13 p.82 line 2
363 Dr Haynes T-22-03-13 p.139 line 20
364 Mr Foster and Mr Orr T-21-03-13 p.197 line 21
365 Dr Scott-Jupp T-20-03-13 p.107 line 5
366 Staff Nurse Noble T-27-02-13 p.104 line 7 & Staff Nurse Gilchrist T-11-03-13 p.114 line 22
367 Mrs Ferguson T-26-03-13 p.116 line 2
368 Mr Ferguson T-26-03-13 p.115 line 3

the Fergusons would have stayed had they had even the slightest suspicion that Raychel was in danger. That they were allowed to leave was another failing in nursing.

5.130 Soon thereafter, Raychel became "*restless again*" and was possibly "*behaving funny, ? confused.*"[369] This was reported to Staff Nurse Noble[370] by Staff Nurse Bryce and although there is disagreement about the detail of this development, it nonetheless should have been taken seriously. In the circumstances, it should have prompted an immediate call for medical assistance. Instead, Staff Nurses Gilchrist and Bryce were asked to look after Raychel while Staff Nurse Noble took an extended tea break.[371] Raychel then vomited again. Staff Nurse Bryce described her as being "*a little unsettled*"[372] and took no action.

5.131 By then, over 24 hours had passed since surgery and Raychel was still vomiting. She had headaches, was flushed and unsettled. She had probably not passed urine for 12 hours and was still receiving Solution No.18 at 80mls per hour. As time progressed and as Raychel's condition deteriorated, the deficiencies in nursing become ever more obvious and serious. Mrs Ferguson felt "*Raychel was dying slowly in front of us and not one person... was even concerned.*"[373]

Final collapse: 03:00 9th June

5.132 Professor Arieff had observed in 1992, that "*headache, nausea, emesis, weakness and lethargy are consistent symptoms of hyponatraemia in children. If the condition is allowed to go untreated there can follow an explosive onset of respiratory arrest, coma and transtentorial cerebral herniation.*"[374]

369 316-085-013
370 316-085-013
371 Staff Nurse Noble T-27-08-13 p.169 line 3
372 WS-054-1 p.3
373 Mrs Ferguson T-26-03-13 p.185 line 10
374 220-002-204

5.133 At 03:00, Auxiliary Nurse Elizabeth Lynch[375] alerted Staff Nurse Noble to the fact that Raychel was fitting.[376] She was found in a tonic state lying in a left lateral position with her hands and feet tightly clenched. She had been incontinent of urine. Staff Nurse Noble immediately sought the help of the nearest doctor[377] who was Dr Jeremy Johnston,[378] a paediatric SHO on Ward 6.[379] It was the first time he had been called upon to care for a paediatric surgical patient.[380]

5.134 Dr Johnston's intervention has been praised.[381] At that time, he had almost completed his three-year training as an SHO. Notwithstanding that he had only specialised in paediatrics since February 2001, he was very much more experienced than Drs Devlin or Curran.

5.135 Dr Johnston administered diazepam rectally and then intravenously.[382] This quieted the seizure but Raychel was unresponsive and oxygen was given. Her vital signs were assessed and in the absence of raised temperature, Dr Johnston became concerned that there might be a critical underlying cause.[383] He astutely identified electrolyte abnormality as the principal differential diagnosis[384] and directed a Urea & Electrolyte ('U&E') test. Approximately 30 hours had passed since Raychel's blood had last been tested.

5.136 Dr Johnston needed senior surgical assistance as a matter of urgency and asked Dr Curran to get it.[385] Dr Curran contacted Dr Zafar,[386] who said he would "*come as soon as possible.*"[387] Dr Johnston then awaited the senior surgical support, but it did not materialise. Dr Curran did not go beyond Dr Zafar to contact a registrar or consultant and just hoped that Dr Zafar would

375 312-003-005
376 Staff Nurse Noble T-27-02-13 p.144 line 12
377 Staff Nurse Noble T-27-02-13 p.146 line 1 & WS-029-1 p.2
378 312-003-003
379 312-003-003
380 Dr Johnston T-07-03-13 p.177 line 4
381 223-002-022
382 012-013-014
383 Dr Johnston T-07-03-13 p.183 line 2
384 020-007-013
385 WS-029-2 p.9
386 Dr Curran T-07-03-13 p.111 line 5
387 Dr Zafar T-12-03-13 p.166 line 12 & Dr Curran T-07-03-13 p.112 line 2

arrive.[388] Dr Zafar contacted nobody and Dr Johnston was left to cope with this major clinical event by himself. In the meantime he concentrated on "*getting the ECG, chasing up blood results*"[389] and maintaining her airway.

5.137 Staff Nurse Noble telephoned Mr and Mrs Ferguson at about 03:45.[390] There is disagreement as to whether Staff Nurse Noble attempted contact earlier.[391] I am inclined to the Fergusons' account and it is very clear that Mr Ferguson got to the hospital as soon as he could.

5.138 At about 04:00 hours, Dr Johnston was obliged to go and get a senior doctor himself. He found Dr Bernie Trainor,[392] the SHO in paediatrics, in the neo-natal unit.[393] Dr Johnston explained the situation and they swapped roles so that Dr Trainor could go to Raychel. It was then that the results of the blood test came back recording a sodium level of 119mmol/L.[394] This was lower than Dr Trainor had ever seen.[395] She asked for a repeat test because the result was so abnormal she felt it could be wrong.[396] It only confirmed Raychel's acute hyponatraemia.[397]

5.139 Raychel's oxygen saturation levels were dipping. She was transferred to the treatment room. Dr Trainor telephoned the on-call consultant paediatrician, Dr Brian McCord[398] who came as quickly as he could.[399] Raychel suffered a respiratory arrest and Dr Aparna Date,[400] anaesthetist, attended.[401] Raychel was intubated[402] and her fluids adjusted to restrict the rate and increase the sodium.[403] Mr and Mrs Ferguson were with her.[404]

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388 Dr Curran T-07-03-13 p.123 line 16
389 Dr Johnston T-07-03-13 p.209 line 24
390 095-005-019
391 Staff Nurse Noble T-27-02-13 p.152 line 11 & Mr Ferguson T-26-03-13 p.122 line 9
392 312-003-003
393 Dr Trainor T-12-03-13 p.41 line 2
394 020-022-042
395 Dr Trainor T-12-03-13 p.56 line 10
396 Dr Trainor T-12-03-13 p.48 line 3
397 020-015-024
398 312-003-003 & 012-036-170
399 Dr McCord T-13-03-13 p.48 line 7
400 312-003-003
401 WS-031-1 p.2
402 020-023-048
403 020-015-025
404 Dr Johnston T-07-03-13 p.220 line 15

CT scans

5.140 When Dr McCord examined Raychel at 05:00 on 9th June, her pupils were fixed and dilated.[405] Her condition was almost certainly irretrievable.[406] He noted "*marked electrolyte disturbance with profound hyponatraemia*"[407] and arranged a CT scan.

5.141 Despite the extreme seriousness of the event, the on-call surgical consultant did not attend. Mr Foster was in no doubt that he should have[408] and in no doubt that he should have been summonsed. Mr Orr agreed.[409] However, Dr Naresh Kumar Bhalla,[410] the Surgical Registrar who was there, explained that he did not call his consultant surgeon because he thought it a metabolic or septic issue and not a surgical one.[411] Notwithstanding that there was no specific call for surgical expertise at that time, I find the absence of the on-call surgical consultant very surprising. It was not only a remarkable detachment by the surgical team from their patient, but also from Mr and Mrs Ferguson who were seemingly ignored by them.

5.142 Indeed, Mr Foster thought "*the absence of a senior member of the surgical team must have been noticed by everybody*"[412] and believed that a senior surgical doctor "*should have spoken to the family and appraised them of the fears and anxieties of the whole of the team.*"[413] However, it was left to Staff Nurse Noble and Dr Trainor to speak to Mr and Mrs Ferguson and advise them that Raychel was being stabilised, that further tests were being undertaken and that it was the anaesthetic team that was looking after her.[414]

405 012-036-171
406 220-003-018 & Dr Trainor T-12-03-13 p.85 line 18 & Mr Foster T-21-03-13 p.229 line 7
407 012-036-171
408 223-002-026
409 WS-320-1 p.15
410 312-003-003
411 WS-034-2 p.5
412 Mr Foster T-21-03-13 p.215 line 3
413 Mr Foster T-21-03-13 p.214 line 15
414 Dr Trainor T-12-03-13 p.91 line 18

5.143 The CT scan was thought to suggest sub-arachnoid haemorrhage[415] with evidence of cerebral oedema. Dr Nesbitt, Consultant Anaesthetist arrived and discussed the scan via image linking with neurosurgeons at the Royal Victoria Hospital ('RVH'). They suggested that there was "*possibly a subdural empyema (an area of infection)*"[416] for which surgical intervention might have been possible.

5.144 Mrs Ferguson recalled Dr McCord telling them that Raychel's brain was clear and that if Raychel's sodium could be controlled "*that would be better.*"[417] It is not at all clear that Mrs Ferguson knew what sodium was[418] but nonetheless she drew reassurance from this and reacted to "*thank God, Raychel's brain is clear – she will be alright.*"[419] She now considers that it was wrong of Dr McCord to give her hope at that time. Dr McCord said he would not have intended to deliberately mislead[420] but nor would he have wished to "*remove all hope.*"[421] He accepted that he might have allowed an undue expectation[422] for which he offered his apology.[423]

5.145 Mrs Ferguson remembered "*a doctor in ICU with a beard said that she was very seriously ill and that there was a lot of pressure inside her head and that they would operate to reduce the pressure.*"[424] Raychel's aunt, Ms Kay Doherty[425] "*felt this was the first bit of information that we were given as to Raychel's condition and as to what was going to happen to her...*"[426] However, Mrs Ferguson also recalled "*a wee nurse coming up. When she put her hand on my knee and she said that she was so sorry and I remember saying to my sister, 'she's going on as if Raychel's dead.*"[427] No

415 020-015-026 & 021-065-155
416 WS-035-1 p.2
417 012-028-146
418 Ms Kay Doherty T-18-09-13 p.155 line 2
419 WS-020-1 p.19
420 Dr McCord T-13-03-13 p.109 line 1
421 Dr McCord T-13-03-13 p.121 line 15
422 Dr McCord T-13-03-13 p.109 line 16
423 Dr McCord T-13-03-13 p.147 line 15
424 012-028-146
425 328-001-001
426 WS-326-1p.7
427 Mrs Ferguson T-26-03-13 p.136 line 5

one took responsibility for communication with the family at that dreadful time and Mrs Ferguson could only sense mixed messages.[428]

5.146 A second and enhanced CT scan was sought to exclude the possibility of sub-dural empyema and haemorrhage. It was performed at 08:51[429] by Dr Cyril Morrison,[430] Consultant Radiologist, who reported that "*a sub-dural empyema* [is] *excluded.*"[431] He discussed it with Dr Stephen McKinstry[432] of the RVH who considered that "*the changes were in keeping with generalised brain oedema (swelling due to increased fluid content) and that there was no evidence of haemorrhage.*"[433]

5.147 Mr Bhalla remembered "*I was there... we got the report that the second CT scan confirmed that it was cerebral oedema and there was no haematoma there*"[434] - "*it was quite clear that she had got a very bad prognosis.*" It was understood that she would not survive.[435]

5.148 Dr Nesbitt did not, however, have quite the same understanding. Whilst he knew that empyema was excluded, he remained under the impression that a diagnosis of subarachnoid haemorrhage was possible[436] and surgical intervention, an option.

Transfer to the RBHSC

5.149 The decision was taken at 09:10 to remove Raychel to Paediatric Intensive Care Unit ('PICU') in Belfast.[437] Such a transfer was indicated whether subarachnoid haemorrhage was excluded or not because as Dr Bhalla recalled "*all of them said she needs intensive care, conservative management*"[438] and the only ICU for children was in Belfast.[439]

428 Mrs Ferguson T-26-03-13 p.136 line 11
429 020-026-055
430 312-003-004
431 020-026-055
432 312-003-005
433 WS-037-1 p.2
434 Mr Bhalla T-14-03-13 p.45 line 20
435 Mr Bhalla T-14-03-13 p.46 line 19
436 Dr Nesbitt T-03-09-13 p.20 line 9 & p.25 line 20
437 020-024-052
438 Mr Bhalla T-14-03-13 p.48 line 13
439 WS-035-2 p.21 & Dr Trainor T-12-03-13 p.94 line 11

5.150 However, Mrs Ferguson believed that a "*cover-up began on the morning Raychel was being transferred to the Royal. We now know the situation was hopeless... Altnagelvin just sent her to Belfast so that it could be recorded that Raychel died there; there was no hope for her.*"[440]

5.151 However, Mr Orr doubted that the consultants at Altnagelvin "*could be absolute in their opinion until they knew what the assessment was of Raychel in the Childrens' Hospital*"[441] and as Dr Nesbitt recalled, she was sent to Belfast because "*neurosurgeons had asked that we transfer her to their care.*"[442] In such a situation, I can understand that no one would want to abandon hope.

5.152 Transfer documentation was initially prepared on behalf of Dr Nesbitt citing "*? Meningitis ? Encephalitis*" as the suggested diagnoses, and "*? sub-achnoid hae*"[443] as the finding on investigation. Dr Trainor then drafted the referral letter for the Royal Belfast Hospital for Sick Children ('RBHSC') summarising known and relevant information. She detailed the treatment with Solution No.18, the IV infusion rate, Raychel's repeated vomiting and the sudden drop in her sodium levels to 118mmol/L.

5.153 Raychel arrived at the RBHSC at 12:30. She was formally admitted under the care of Dr Peter Crean,[444] Consultant in Paediatric Anaesthesia and Intensive Care. She had no purposeful movement.[445] Her serum sodium level was then 130mmol/L[446] and her diagnosis "*? Hyponatraemia.*" Dr Dara O'Donoghue[447] assessed her as having "*coned with probably irreversible brain stem compromise.*"[448] She was admitted for "*neurological assessment and further care.*"[449]

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440 Mrs Ferguson T- 26-03-13 p.176-7
441 Mr Orr T-21-03-13 p.228 line 23
442 WS-035-2 p.21. See also Dr Crean T-11-09-13 p.32 line 11
443 012-002-073
444 312-003-005
445 012-032-159
446 012-032-159
447 312-003-005
448 063-009-023
449 063-015-035

5.154 Distressingly, Mr and Mrs Ferguson travelled to Belfast believing that Raychel was to have surgery. They recall that when they arrived at the RBHSC Dr Nesbitt told them that Raychel had "*a good journey up and that there was plenty of movement, that's a good sign.*"[450] Kay Doherty also remembered him saying "*she's in the best place.*"[451]

5.155 The Ferguson family feel that they were misled and given further false hope by the transfer to Belfast and the encouraging reference to movement. Dr Nesbitt maintained however that "*the movements, which were evident prior to transfer, remained. I do not believe that I placed undue emphasis on these movements and there was no inference that there had been any recovery. It is very much regretted that Mr and Mrs Ferguson took this meaning.*"[452] At that stage, Raychel was still capable of reflex movement.[453] I think it most unlikely that Dr Nesbitt could or would have misinterpreted this.[454]

5.156 I do not believe that there was any deliberate attempt to give the Ferguson family false hope. The transfer to Belfast alone may have done that. It is however clear that communication should have been better and more considered. Dr Nesbitt acknowledged this when he observed how the circumstances of that day emphasised for him "*the importance of effective communication with distraught family members.*"[455] The question of who should have spoken to the Fergusons, when and in what terms, was not considered at that time. One consequence of this was that the relationship of trust between the Altnagelvin doctors and the Ferguson family was critically undermined.

5.157 By way of contrast, when Mr and Mrs Ferguson met with Drs Crean and Hanrahan[456] at PICU they were told in clear terms that "*Raychel is critically ill and the outlook is very poor.*"[457] This was recorded in the medical chart

450 Mr Ferguson T-26-03-13 p.148 line 13
451 Ms Kay Doherty T-18-09-13 p.157 line 3
452 WS-035-3 p.2
453 Dr Haynes T-22-03-13 p.152 line 6
454 Dr Haynes T-22-03-13 p.153 line 3
455 WS-035-3 p.3
456 312-003-005
457 063-009-021

and is confirmed by the counselling record.[458] Dr O'Donoghue also met with the family. The Fergusons appreciated this straightforwardness and make no criticism of the way they were treated by the clinicians at the RBHSC.[459] Mr Foster agrees and noted that Mr and Mrs Ferguson were treated with "*all possible care and sensitivity at the RBHSC.*"[460]

5.158 Mrs Ferguson gave evidence that "*I don't remember whether it was Dr. Crean or Mr. Hanrahan, they kept going over about the vomiting, what kind of vomiting, how many vomits, what time was there blood in the vomit, they just kept repeating these questions... and... 'What's Altnagelvin trying to do here, pass the buck?'*"[461] and "*this should never have happened.*"[462] Dr Hanrahan, however had no recollection of this and Dr Crean thought it most unlikely. He said "*the main thrust of what we were doing at that time was to take the family through a terrible journey.*"[463]

5.159 Drs Crean and Hanrahan performed the first brain stem death test at 17:30 9th June and noted brain death.[464] Their second test of 09:45 the following morning confirmed "*no evidence of brain function... she is brain dead.*"[465]

5.160 Mr and Mrs Ferguson were advised that nothing could be done. With their consent and Raychel on her mother's knee[466] and with her family beside her, ventilation support was discontinued at 11:35.[467] Raychel was pronounced dead at 12:09, 10th June 2001.[468]

5.161 The Coroner's office was notified.[469]

458 063-009-021 & 063-022-049
459 Mr and Mrs Ferguson T-26-03-13 p.160 *et seq*
460 223-002-027
461 Mrs Ferguson T-26-03-13 p.161 line 19 & p.162 line 11
462 Mrs Ferguson T-26-03-13 p.164 line 10
463 Dr Crean T-11-09-13 p.24 line 20
464 063-010-024 & 012-032-160
465 063-012-024
466 Mrs Ferguson T-26-03-13 p.184 line 21
467 063-016-040 & 063-017-042
468 063-017-041
469 063-012-026

Discharge advices

5.162 Altnagelvin was obliged to issue a formal hospital discharge letter and summary to Raychel's GP but this was not done. As before, this was a particular failing in documentary compliance which had been previously identified by audit[470] but not addressed.

5.163 Nor did Mr Gilliland contact Raychel's GP,[471] despite the fact that he had previously "*telephoned quite a number of general practitioners about deaths of their patients.*"[472] He did not call her because "*Raychel had died elsewhere and I simply didn't think to do so.*"[473] He did however tell her "*in casual conversation*" when they met at the supermarket.[474]

5.164 Further, and notwithstanding that Mr Gilliland recognised his responsibility for Raychel's care[475] and his duty under the General Medical Council ('GMC') 'Good Medical Practice' code to "*explain, to the best of* [his] *knowledge, the reason for and the circumstances of the death to those with parental responsibility*"[476] he made no contact with the Ferguson family because again he did not think to do so.[477] He made no expression of condolence. Professor Swainson believed that Mr Gilliland should have met the family and within days.[478] Such would have been proper and if properly done could have been helpful.

5.165 Irrespective of whether the RBHSC might also have been expected to give full discharge details to the family GP, it was most important in the circumstances that Altnagelvin itself advise the family doctor because the Fergusons might have needed support in their bereavement and the GP was likely to be involved.[479]

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470 321-068-004
471 Mr Gilliland T-28-08-13 p.64 line 3 & p.64 line 3 & p.68 line 15
472 Mr Gilliland T-28-08-13 p.97 line 13
473 Mr Gilliland T-28-08-13 p.97 line 17
474 Mr Gilliland T-28-08-13 p.64 line 9
475 Mr Gilliland T-14-03-13 p.217 line 25
476 Mr Gilliland T-28-08-13 p.81 line 1
477 Mr Gilliland T-14-03-13 p.83 line 4
478 Professor Swainson T-19-09-13 p.98 line 2
479 Professor Swainson T-19-09-13 p.45 line 3

Altnagelvin governance framework

5.166 The Altnagelvin Hospitals Health & Social Services Trust (the 'Trust') was created on 1st April 1996[480] and made accountable to the Department of Health and Personal Social Services & Personal Safety, Northern Ireland ('DHSSPSNI' otherwise 'the Department').[481]

5.167 The Trust's main commissioner of services was the Western Health & Social Services Board ('WHSSB')[482] under a 'purchaser-provider' Service Agreement[483] which required of it a commitment to a "*clinical governance programme* [which] *must include key elements such as processes for recording and deriving lessons from untoward incidents, complaints and claims; a risk management programme; effective clinical audit arrangements; evidence based medical practice and a supportive culture committed to the concept of life-long learning.*"[484]

5.168 Whilst the Trust operated independently of the WHSSB and without managerial accountability, it was nonetheless required to "*share details of its quality framework*" with the WHSSB[485] and maintain liaison "*to ensure that the services it provides meet the needs of the resident population.*"[486]

5.169 Oversight was also given the Western Health & Social Services Council ('WHSSC') established to "*keep under review the operation of the health and personal services in its area and to make recommendations for the improvement of these services.*"[487]

5.170 The Trust was led by a Board of Executive and Non-Executive Directors. Mrs Burnside as Chief Executive was the "*accountable officer*"[488] "*responsible for the management and leadership of the services provided*" and "*bore ultimate responsibility for the overall quality and quantity of the*

480 321-004gj-008
481 321-004fa-001
482 321-004fa-001
483 321-028-002 *et seq*
484 321-028-004
485 321-028-009
486 321-004fa-002
487 WS-093-1 p.2
488 WS-046-1 p.3 & 321-050-002

services..."[489] She was herself accountable to the Chairman of the Trust Board and to the WHSSB.[490]

5.171 There were two Executive Directors bearing particular responsibility for clinical matters, namely the Medical Director, Dr Fulton and Miss Duddy, Director of Nursing.

5.172 Dr Fulton was responsible for the efficiency of clinical services, audit and professional standards. His task was to facilitate communication between clinicians and management.[491] He monitored "*the quality of medical care*",[492] investigated serious clinical incidents[493] and advised the Trust Board on medical issues, complaints, appraisal of medical performance and medical issues arising from litigation.

5.173 Miss Duddy provided professional leadership for nursing and advised the Board on nursing matters. She and Dr Fulton were jointly accountable to the Board for the quality of care and overall risk management.[494] Mrs Therese Brown,[495] the Risk Management Co-ordinator ('RMCO') had responsibility for "*establishing systems for assessing, preventing and responding to* [clinical] *risk.*"[496] The task of managing standards and guidelines and administering the audit team fell to the Clinical Effectiveness Co-ordinator, Mrs Anne Witherow.[497]

5.174 Responsibility for overseeing operational management lay with the Hospital Management Team[498] comprising the Clinical Directors and Clinical Service Managers of the individual clinical directorates.[499] The role of the Clinical Director was one of leadership within a directorate and included those "*issues relating to standards of care or poor performance.*"[500] The CSM was

489 WS-046-2 p.8
490 WS-046-2 p.5
491 321-004gh-005-007
492 WS-043-1 p.3
493 WS-043-1 p.3
494 WS-323-1 p.3
495 328-001-002
496 WS-322-1 p.31
497 328-001-003 & WS-322-1 p.5
498 321-004gj-011
499 321-004gj-011
500 WS-035-2 p.4

"*the practitioner responsible for day-to-day management of the directorate.*"[501]

5.175 The Surgery and Critical Care Directorate was responsible for the provision of Raychel's surgical care and was under the clinical directorship of the late Mr Paul Bateson. Care for paediatric patients on Ward 6 was provided within the Women & Children's Care Directorate under the directorship of Dr Denis Martin[502] but was in reality directed by the CSM Mrs Margaret Doherty.[503] Whilst she reported to Dr Martin she was accountable to the Director of Nursing. This was in contrast to the Clinical Directors who were both "*responsible and accountable to the lead Clinical Director.*"[504]

Altnagelvin clinical governance - June 2001

5.176 In April 2001 the Department, recognising that "*governance arrangements are already in place to ensure overall probity, transparency and adherence to public service values*", published for consultation 'Best Practice Best Care' proposing a more formalised "*system of clinical and social care governance backed by a statutory duty of quality.*"[505]

5.177 In preparing to comply with this new statutory accountability for patient care,[506] the Trust recorded in its Annual Report 1998-99 that "*a clinical governance strategy has been developed... which details the structures and processes required to ensure that patients will receive the highest quality of care with the best clinical outcomes.*"[507]

5.178 The Trust made a commitment to the success of clinical governance[508] and by June 2001 claimed to have introduced a range of policy initiatives, including amongst others:

501 321-004-009
502 328-001-003
503 WS-336-1 p.26 & Sister Millar T-28-08-13 p.125 line 1 & 321-022-001
504 321-004gd-001
505 WS-068-1 p.14: 'A Framework for Setting Standards, Delivering Services and Improving Monitoring and Regulation in the HPSS'
506 'Clinical and Social Care Governance Circular' HSS (PPM) 10/2002
507 321-004gi-044
508 321-004fg-001

(i) Proposed Strategy for Implementing Clinical Governance, September 1998.[509]

(ii) Clinical Governance Committee, 1998-99.[510]

(iii) Clinical Governance 'Steering Group'.[511]

(iv) Policy for Reporting of Clinical Incidents and Critical Incident Protocol, February 2000.[512]

(v) Procedure for appraisal of staff pursuant to DHSSPSNI consultation document[513] by 2000.[514]

(vi) Policy for the Management of Clinical Risk, including arrangements for the management of legal claims, October 1997.[515]

(vii) Clinical Negligence Scrutiny Committee.[516]

(viii) Clinical Incident Review Committee.[517]

(ix) Procedure for Handling Complaints, Enquiries and Commendations, May 1996.[518]

(x) Patients' Forum.[519]

(xi) Multi-disciplinary Clinical Audit Committee with Clinical Audit Co-ordinator and Clinical Effectiveness Co-ordinator, 1998-99.[520]

(xii) Patient Case Note Standards, May 1996.[521]

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509 321-004fg-001
510 321-004gj-042
511 321-004gr-008
512 321-004ff-001 & 022-109-338
513 321-004fi-001 - 'Confidence in the Future...On the Prevention, Recognition and Management of Poor Performance of doctors in Northern Ireland' 2000. Chief Executive Mrs Burnside served on the Working Group responsible for this development of these proposals.
514 321-004gj-044
515 321-004fd-001
516 WS-323-1 p.14
517 WS-323-1 p.14
518 321-004fb-001
519 WS-323-1 p.14
520 321-004gi-044
521 321-014c-001

(xiii) Regular appraisal for trainee doctors, 1997.[522]

(xiv) Junior Doctors' Handbook and a staff 'Hotline' to assist communication, 1998.[523]

(xv) Trust Scrutiny Committee.[524]

5.179 In addition, doctors were individually subject to wide ranging and long established codes of professional self-regulation, not least from the GMC, Royal Colleges and published guidance. Nurses were subject to the United Kingdom Central Council for Nursing, Midwifery and Health Visiting ('UKCC') 'Code of Professional Conduct'[525] and standing guidelines for professional practice.[526] Additionally within Altnagelvin, nurses were said to be subject to annual performance and training requirement appraisals,[527] benchmarking exercises against best practice guidance,[528] a "*cascade system of dissemination*" for external guidance,[529] and auditing "*of nursing and medical records.*"[530]

5.180 Notwithstanding that the Trust made application for the King's Fund Organisational Audit ('KFOA') accreditation in 1998,[531] achieved a number of charter standards and "*full CPA accreditation of all departments*" in 2001-02,[532] the extent to which policy and strategy was actually put into practice is uncertain.

5.181 It took time and money to integrate clinical governance into the hospital system and money was not always available.[533] For Sister Millar in Ward 6, clinical governance in 2001 was "*very much in its infancy but we were striving to get our heads round it.*"[534] Altnagelvin did not publish a clinical

522 WS-328-1 p.12
523 321-004fk-001
524 321-004fd-005
525 202-002-058
526 314-003-001
527 WS-323-1 p.8
528 WS-046-2 p.18 & WS-329-1 p.5
529 WS-323-1 p.19
530 WS-329-1 p.12
531 321-004fg-003
532 321-004gt-001
533 317-006-004 & 316-006g-003
534 Sister Millar T-28-08-13 p.102 line 3

and social governance report until 2003 some 5 years after making public its strategy for implementing clinical governance.

5.182 Even though the evidence confirmed that the implementation of clinical governance was not so complete as was claimed, it is however clear, that at the time of Raychel's death, those within Altnagelvin who were charged with the governance response to her death, knew or ought to have known what constituted good practice.

Initial RBHSC response

5.183 On the day of Raychel's death, 'rumour' spread from the RBHSC that her fluids had been mismanaged.[535] Sister Millar recalled "*a nurse in the intensive care in the Children's* [Hospital] *in Belfast said when Raychel arrived and there was handover, that she was on the wrong fluid.*"[536] Mr Gilliland recalled "*discussion between our own medical staff and the doctors in the RBHSC about the probable cause of Raychel's death. I believe I was made aware of the discussions sometime on 11 June...*"[537] and "*some of that discussion had been critical.*"[538]

5.184 By the Monday morning Mrs Burnside was also aware of Raychel's death. She recalled the "*'rumour' from PICU that the 'wrong fluids' had been used. This 'rumour' emerged from a nurse in PICU responding to an inquiry from Altnagelvin Ward Nurse on the child's state, on the Sunday.*"[539]

5.185 Inconsistency about the origin of the rumour is not surprising but does draw attention to the more important fact that the RBHSC did not inform Altnagelvin in writing that the "*wrong*" fluids had been used.

5.186 Professor Swainson, noting the absence of a formal RBHSC discharge summary for Altnagelvin, said he would have expected "*a full analysis of the cause(s) of the cerebral oedema and the role of acute hyponatraemia*

535 021-020-041
536 Sister Millar T-01-03-13 p.64 line 23 & cf WS-344-1 p.3
537 WS-044-4 p.11
538 WS-044-4 p.11
539 021-020-041

in that. The evidence that Altnagelvin Trust heard only through an informal conversation between nurses is surprising and disturbing."[540]

5.187 Professor Scally also considered that there should have been formal communication because a professional obligation to do so arose when a death may have been caused by mismanagement. He believed this obligation was "*reinforced by the RBHSC role as a regional centre of excellence.*"[541] Dr Ian Carson,[542] then Medical Director of the Royal Group of Hospitals Trust ('RGHT'), agreed that concerns should have been communicated.[543] Professor Swainson believed it would have been proper for the complications of care to be communicated "*so that the doctors who referred* [her could] *understand what exactly has happened or at least... the Royal Belfast Hospital's interpretation of that.*"[544] However, Dr Crean said it was not the "*culture at the time. That's not the way we did our business...*"[545]

5.188 The sole RBHSC communication was to Raychel's GP and indicated only that Raychel had been "*transferred from Altnagelvin hospital with seizures/ hyponatraemia/cerebral oedema/fixed dilated pupils. Certified as dead on 10/6/01 @ 12:09 hours. For Coroner's P.M.*"[546] No reference was made to mismanagement.

5.189 Notwithstanding that the death was the subject of discussion within the RBHSC,[547] Raychel's death was not made the subject of a Critical Incident Report or Review, because as Dr Crean explained "*if an adverse event occurred in RBHSC and it was considered to have led to an unexpected death, then it would have been reported. However, I do not believe an event occurring in another hospital would have been reported.*"[548] This was the same unacceptable explanation as was offered in respect of Lucy's death

540 226-002-010
541 251-002-017
542 328-001-004
543 Dr Carson T-30-08-13 p.19 line 25
544 Professor Swainson T-19-09-13 p.44 line 18
545 Dr Crean T-11-09-13 p.128 line 23
546 317-041-001
547 Dr Taylor T-18-09-13 p.62 line 2
548 WS-038-3 p.6

occurring the previous year.[549] Furthermore, it contravened RGHT's own Adverse Incident Reporting policy.[550]

5.190 Whilst there was a clear lack of full and formal communication and that is to be criticised, it must nonetheless be emphasised that the RBHSC immediately notified the Coroner of Raychel's death, informally communicated suspicion of mismanagement to both Altnagelvin and the Coroner[551] and subsequently discussed Raychel's case at an Audit Meeting on 10th April 2003.[552]

Altnagelvin's Critical Incident Review

5.191 Likewise, within Altnagelvin, there was no formal adverse incident report of Raychel's death. This was in contravention of the internal reporting policy "*that any clinical incident should be reported on the appropriate documentation.*"[553]

5.192 However, Mrs Burnside immediately and very properly asked Dr Fulton "*to investigate this very serious event in* [his] *role as Medical Director.*"[554] To that end he, and Mrs Therese Brown the RMCO, decided to formally review Raychel's case in accordance with the Altnagelvin Critical Incident Protocol.[555] This procedure was broadly based on recommendations extracted from a 'Clinical Governance' textbook by Myriam Lugon[556] and developed by Dr Fulton,[557] Mrs Brown[558] and Miss Duddy.

5.193 Professor Swainson thought that it was "*in general a good protocol.*"[559] However, it has proved difficult to determine the extent to which it was actually followed because there is so little documentation. It might be thought that such a serious case involving numerous clinical witnesses and

549 Dr Crean T-04-06-13 p.147 line 24
550 WS-292-2 p.45 & 321-074-001
551 012-052c-275
552 063-037-095
553 321-004ff-002
554 WS-043-1 p.3
555 026-012-016
556 WS-043-1 p.2 1999 p.94-96 & Mrs Brown T-02-09-13 p.39 line 7
557 Dr Fulton T-04-09-13 p.22 line 18
558 Mrs Brown T-02-09-13 p.38 line 25
559 Professor Swainson T-19-09-13 p.73 line 14

multiple issues of fact would have generated copious documentation and opinion. However, that was not the case. Dr Fulton did not take notes[560] and there is no written report of the review.

5.194 Notwithstanding, Dr Fulton immediately sought "*to form an accurate account of the events leading to Raychel's death while it was clear in everyone's memory. I was also keen to ascertain whether lessons could be learned so that a recurrence of this tragic event could be avoided.*"[561] He convened a critical incident review meeting for 12th June. Speed was important and Dr Fulton achieved it.

5.195 Dr Fulton initially assured this Inquiry that Mrs Brown contacted the relevant staff, who all agreed to attend[562] and that he noted those who attended and what they said.[563] However, he has since recognised that not all relevant witnesses were contacted, that he made no record of those who did attend, that he did not note what was said and that, in terms, he has no reliable recollection of his review.[564] It is however clear that "*only the staff present at the Critical Incident Meeting were interviewed...*"[565] and absent from the Review were the surgeons Bhalla, Zafar and Zawislak,[566] Drs Curran, Devlin,[567] Gund,[568] Jamison,[569] Johnston,[570] Trainor,[571] Butler,[572] Kelly,[573] and Date,[574] and Staff Nurses Patterson,[575] McGrath,[576] McAuley and Roulston.[577]

560 Dr Fulton T-04-09-13 p.49 line 2
561 WS-043-1 p.4
562 WS-043-1 p.4
563 WS-043-1 p.4
564 WS-043-2 p.1-3 & Staff Nurse Noble T-27-02-13 p.185 line 9
565 WS-043-3 p.11
566 Dr Zawislak T-05-02-13 p.85 line 17
567 Dr Devlin T-06-03-13 p.3 line 18
568 Dr Gund T-05-02-13 p.184 line 1
569 Dr Jamison T-07-02-13 p.95 line 17
570 Dr Johnston T-07-03-13 p.224 line 24
571 Dr Trainor T-12-03-13 p.101 line 24
572 Dr Butler T-11-03-13 p.35 line 14
573 WS-254-1 p.6
574 WS-031-2 p.6
575 Ms Patterson T-04-03-13 p.112 *et seq*
576 Staff Nurse McGrath T-26-02-13 p.94 line 13
577 Staff Nurse McAuley T-05-03-13 p.202 line 3 & Staff Nurse Roulston T-06-03-13 p.151 line 24

5.196 Further and notwithstanding the suggestion of criticism from the RBHSC,[578] Mr Bateson, the Clinical Director of Surgery, did not attend the Critical Incident Review despite his responsibility for the surgical team treating Raychel. Nor was there any involvement from Dr Martin, the Clinical Director charged with leadership of the paediatric department.[579] Miss Duddy, the Director of Nursing, did not attend the meeting or learn of Raychel's death until "*sometime after the critical incident meeting.*"[580]

5.197 Mr Gilliland did attend but did not contribute. He did not speak to his doctors,[581] review their performance,[582] or ensure their attendance at the Critical Incident Review. He said that he "*didn't think about doing that at the time, nor did* [he] *necessarily feel that it was* [his] *role to call the people to that meeting.*"[583] However, Mrs Doherty, Mrs Witherow, and Staff Nurses Noble, Gilchrist and Bryce were present together with Sister Millar and Auxiliary Nurse Lynch.

5.198 Given the rumour that Raychel had been given the "*wrong*" fluid it is surprising that no input was sought or received from the RBHSC. There was no request for RBHSC notes and the Trust's solicitor was not invited to attend.[584] This was however the first time a formal Critical Incident Review had been convened at Altnagelvin[585] and as Professor Swainson observed "*to be fair to the people concerned, and to do that well, you do need a bit of experience.*"[586]

Critical Incident Review meeting

5.199 Dr Fulton said that "*from the start we knew why Raychel had died, we knew about the low sodium and the cerebral oedema. So to some extent we were working backwards.*"[587] He recalled how "*subdued and shocked all the*

578 WS-044-4 p.11
579 Dr Fulton T-04-09-13 p.18 line 19 & WS-335-1 p.7
580 WS-323-1 p.23
581 Mr Gilliland T-28-08-13 p.72 line 1 & p.69 line 2
582 Mr Gilliland T-28-08-13 p.72 line 6
583 Mr Gilliland T-28-08-13 p.75 line 17
584 Mrs Brown T-02-09-13 p.49 line 7
585 Dr Fulton T-09-04-13 p.27 line 1
586 Professor Swainson T-19-09-13 p.83 line 14
587 Dr Fulton T-04-09-13 p.51 line 13

nurses and doctors appeared at the start of the meeting. It was clear... that they regarded this as a very serious and highly unusual event."[588] He stressed "*that the purpose of the meeting was to establish facts and not to blame individual staff members. This was the approach recommended for Critical Incident investigations to allow staff to give essential information in a non-judgmental atmosphere.*"[589]

5.200 The meeting was not minuted. Dr Fulton "*explained at the start of the meeting that Mrs Brown would take minutes. This caused anxiety and started a discussion about the need for legal advice before proceeding. I was concerned that this would delay the investigation.*"[590] Accordingly, he chose to continue which was proper but I consider that the reluctance of those present to allow any record of the proceedings is indicative of defensiveness from the outset.

Fluids

5.201 In preparation for the review meeting Dr Nesbitt conducted some preliminary research and noted "*evidence relating to problems with low sodium containing solutions in children.*"[591] Some of the relevant medical literature was available at the meeting.[592]

5.202 Mr Makar recalled that "*most of the discussion was about the type of fluid*"[593] and Dr Fulton recalled how "*Dr Nesbitt also felt a low sodium solution such as Solution 18 could be unsuitable for post-operative children as they were predisposed to hyponatraemia. However, he was aware that the use of Solution 18 was common practice in such situations in other hospitals in Northern Ireland. Dr Nesbitt offered to ring other hospitals in Northern Ireland to establish the current use of Solution 18.*"[594]

588 095-011-049
589 WS-043-1 p.5
590 WS-043-3 p.11
591 WS-035-2 p.13
592 Dr Fulton T-04-09-13 p.72 line 7
593 Mr Makar T-13-03-13 p.190 line 1
594 WS-043-1 p.7

5.203 The review considered Raychel's notes and scrutinised the volume of IV fluids administered. There appears to have been consensus that mistakes had been made.[595] Dr Fulton remembered that "*Dr Nesbitt reviewed the infusion rate of Solution 18 and felt it was too high for Raychel's weight.*"[596] The retrospective and clarifying annotation of the record was made at this time by Drs Nesbitt and Jamison.

Electrolytes

5.204 Dr Fulton remembered that "*Sister Millar clearly stated that the blood electrolytes should have been checked in the afternoon because of the continued vomiting*"[597] and that "*medical help should have been called earlier.*"[598]

Documentation

5.205 Sister Millar's "*main concern at that meeting was our failure in the documentation.*"[599] *S*he felt that the urinary output and the vomiting "*could have been better documented.*"[600] Staff Nurse Noble recalled agreement in relation to this.[601]

Vomiting

5.206 Dr Fulton stated that the nurses at the Review "*agreed that the vomiting was prolonged but not unusual after this type of surgery. They did not believe that the vomiting was excessive though they may not have witnessed all the vomit*"[602] Sister Millar recalled differences of opinion between the nurses as to how much Raychel had vomited, and "*there may have been a problem with the documentation of the vomit.*"[603]

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595 Staff Nurse Noble T-27-02-13 p.168 line 8
596 WS-043-1 p.7
597 WS-043-3 p.15
598 Dr Fulton T-04-09-13 p.56 line 18
599 Sister Millar T-01-03-13 p.63 line 24
600 Sister Millar T-28-08-13 p.130 line 10
601 Staff Nurse Noble T-27-02-13 p.191 line 18 & Staff Nurse Noble T-27-02-13 p.179 line 19
602 WS-043-3 p.14
603 Sister Millar T-28-08-13 p.131 line 6

5.207 Dr Fulton found it "*hard to form a clear opinion of the volume of vomit... and the frequency*"[604] not least because the nurses also indicated that "*the Ferguson family told them during 8 June that they... believed that Raychel's vomiting was repeated and severe.*"[605] Dr Fulton was therefore "*unable to reconcile the different views of the nurses and the family over the severity of the vomiting*"[606] and could not "*appreciate which side was right.*"[607]

5.208 The review took no further steps to investigate the severity of the vomiting. It did not seek to interview the Ferguson family or the junior doctors and gave no consideration to the engagement of external experts.

Care of surgical patients on Ward 6

5.209 Sister Millar took the opportunity to emphasise that she "*had for some time been unhappy with... the system within the hospital for caring for surgical children.*"[608] "*There was always a difficulty in getting doctors.*"[609] It "*was my impression that there just weren't enough.*"[610] "*I had spoken about this before.*"[611]

5.210 In addition, staff Nurse Noble suggested that the responsibility for overseeing fluid management should not rest with inexperienced JHOs[612] because assisting such junior doctors placed additional burden on the nursing staff. Sister Millar expressed her view that it "*was totally unfair that the nurses had such responsibility for the surgical children. I felt it was unfair. I felt that we had to be the lead all the time in looking after the surgical children. We are nurses, we are not doctors. And whilst we do our very best, I don't think we should be prompting doctors.*"[613] Dr Fulton could not

604 Dr Fulton T-04-09-13 p.53 line 14
605 WS-043-3 p.15
606 WS-043-3 p.15
607 Dr Fulton T-04-09-13 p.54 line 11
608 Sister Millar T-01-03-13 p.57 line 6
609 Sister Millar T-01-03-13 p.57 line 11
610 Sister Millar T-01-03-13 p.59 line 24
611 Sister Millar T-01-03-13 p.60 line 19
612 Staff Nurse Noble T-27-02-13 p.175 line 20
613 Sister Millar T-01-03-13 p.58 line 7

however recall this matter being raised with quite the force described by the nurses.[614]

Informal review

5.211 At or about the same time and in an unrelated initiative, Mrs Margaret Doherty, the CSM, asked Sister Kathryn Little[615] to interview Staff Nurse Noble, review the patient notes and prepare a preliminary report.[616] Regrettably, this did not come to the attention of either Mrs Brown[617] or Dr Fulton[618] in time to be incorporated into the work of the formal review.[619] The CSM did not share it with Miss Duddy or pass on the information in her possession.[620] Her investigation ended when she "*was told it was the Risk Management that were taking it over.*"[621]

5.212 Professor Swainson considered that, at the same time and in the same way, the surgeons should have been internally reviewing the case for their own benefit and assisting Dr Fulton in his review.[622] It was, he said, a "*huge opportunity for learning.*"[623] Neither Mr Bateson nor Mr Gilliland availed of the opportunity.

Action plan

5.213 In consequence of the review, Dr Fulton prepared and agreed a plan of action.[624] He instituted a number of rapid and appropriate responses to address shortcomings recognised at review. It was decided:

(i) To review the evidence about the use of Solution No.18 and to suggest change if indicated.[625]

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614 Dr Fulton T-04-09-13 p.64 line 6
615 328-001-003
616 316-085-009 & 316-085-011
617 Mrs Brown T-02-09-13 p.74 line 13
618 Dr Fulton T-04-09-13 p.40 line 6
619 Mrs Brown T-02-09-13 p.74 line 14
620 Mrs Margaret Doherty T-09-09-13 p.77 line 16
621 Mrs Margaret Doherty T-09-09-13 p.82 line 13
622 Professor Swainson T-19-09-13 p.81 line 8
623 Professor Swainson T-19-09-13 p.76 line 18
624 026-011-014
625 022-108-336 & WS-035-2 p.33

(ii) To display a wall chart detailing correct rates for IV infusion.

(iii) To institute daily U&E assessments.

(iv) To monitor and record all urinary and vomit output.[626]

(v) To review the fluid balance documentation.

(vi) To remove JHOs from the care of paediatric surgical patients.[627]

(vii) To actively consider whether the anaesthetic team should assume responsibility for initial post-operative fluids.[628]

5.214 Despite the non-involvement of key personnel and the failure to make a record or produce a report, it should be recognised, as Dr Haynes did, that "*the Critical Incident Inquiry at Altnagelvin was convened at the first possible opportunity and... it is clear from the agreed action points... that the incident was treated with the utmost gravity...*"[629] Mr Foster thought "*it was excellent that instant action was taken*" especially to remove JHOs from the care of paediatric surgical patients.[630] The review was a timely response and did valuable work. It genuinely strove to prevent recurrence.

Systemic analysis

5.215 It has been noted that matters were not analysed in line with the then emerging methods of root-cause analysis. Professor Swainson advised that "*root cause analysis was a common methodology in Trusts in 2001 and does not appear to have been carried out.*"[631] It was not however common in Northern Ireland.

5.216 Dr McCord observed that Raychel's death was caused by "*all the factors coming together.*"[632] This should have been apparent at the outset. In such circumstances and notwithstanding a lack of the precise skills necessary to

626 WS-043-3 p.15
627 Staff Nurse Noble T-27-02-13 p.125 line 5
628 WS-043-3 p.14 & Dr Makar T-13-03-13 p.192 line 1 & 026-005-006
629 220-002-006
630 Mr Foster T-21-03-13 p.143 line 11
631 226-002-024
632 Dr McCord T-13-03-13 p.143 line 22

perform root-cause analysis[633] there could and should have been a broader consideration of the factors combining to permit the catastrophic outcome. Such might have included:

(i) Communication between consultant and trainee at time of emergency admission and proposed operation.

(ii) Supervision of junior doctors.

(iii) Consultant responsibilities in respect of fluids.

(iv) Communication between clinicians and parents.

(v) Post-take ward round and consultant review.

(vi) Appreciation of deterioration.

(vii) Lines of communication when recovery plans do not go as expected.

(viii) Implementation of external practice recommendations.

(ix) Failure to address deficiencies identified by practice audit.

(x) Concerns arising from aspects of nursing practice as outlined above at paragraph 5.122.

(xi) Questions of overarching responsibility for paediatric surgical patients, their IV fluid therapy and the potential problems associated with adult surgeons providing part-time surgery for children.

5.217 I do not believe it would have been unreasonable for the Chief Executive, Mrs Stella Burnside, to expect some consideration of these matters given that she had herself contributed in May 2000 to the consultation document 'Confidence in the Future'[634] which recommended that[635]:

633 Mrs Brown T-02-09-13 p.84 line 5
634 321-004fi-001
635 321-004fi-029

(i) Senior doctors give clear guidance and supervision to junior doctors in training when tasks are delegated.

(ii) Clear leadership roles and responsibilities be identified and established in clinical teams.

(iii) Participation in clinical audit be made compulsory for all doctors.

With hindsight, Mrs Burnside regretted that she had not asked an external expert to join the review.[636]

Report of discontinuance of Solution No.18 at RBHSC

5.218 Dr Nesbitt having researched the medical literature, made enquiries about post-operative fluid management practice in other Northern Ireland hospitals. He reported to Dr Fulton and Mrs Brown on 14th June 2001 that at "*the Children's Hospital anaesthetists have recently changed their practice and have moved away from No.18 Solution... to Hartmann's Solution. This change occurred six months ago and followed several deaths involving No.18 Solution.*"[637]

5.219 The RVH records seemingly confirm a decline in the use of Solution No. 18 in the months prior to Raychel's death.[638] Dr Carson gave it as his understanding "*that a decision was taken by anaesthetists in the RBHSC to change their use of No.18 solution. This decision was taken at a local level within the RBHSC.*"[639] He felt that in those circumstances "*there would be justification*" for informing other hospitals of this change.[640]

5.220 Dr Fulton was disappointed that the RBHSC had not informed Altnagelvin at the time about such an important matter of patient safety[641] and Dr Nesbitt believed that had Altnagelvin known of the RBHSC move towards

636 Mrs Burnside T-17-09-13 p.81 line 9
637 022-102-317
638 319-087a-001 & 319-087c-003 & 321-073-001
639 326-003a-001
640 Dr Carson T-30-08-13 p.40 line 6
641 Dr Fulton T-04-09-13 p.77 line 6 et seq

discontinuance of Solution No.18 at the time, they would have considered it "*a strong message and one we would have acted on*"[642]

5.221 Dr Elaine Hicks,[643] Clinical Director of Paediatrics at RBHSC, whilst herself unable to recall any change in the use of Solution No.18[644] did agree that it would be reasonable to criticise the RBHSC if, as the Regional Paediatric Centre, it had made a significant change in its practice and failed to advise other hospitals.[645] However, it is to be recognised that there were no systems in place at that time to formally disseminate such information and the responsibility may not have been fully understood within the RBHSC. The matter might most appropriately have been made the subject of a report to the Department but no guidance was available and as Dr Crean said there was no "*culture at the time to do things like that.*"[646]

5.222 Although no explanation for this change was forthcoming from any source within the RBHSC, I am satisfied from the evidence that there was a move away from the use of Solution No.18 and for clinical reasons. Exactly what those reasons were is a matter of speculation.[647] The catalyst may have been the publication in the British Medical Journal ('BMJ') of Halberthal's article on the use of hypotonic solutions and hyponatraemia in March 2001.[648] It was therefore a learning issue which should have been shared with other hospitals. That was in part the role of the RBHSC as the regional centre and a role which was subsequently acknowledged by the Department when it published its own guidelines on hyponatraemia.[649]

Written report

5.223 Altnagelvin's critical incident protocol specified that "*the Chief Executive will be kept informed by the RMCO throughout the investigation.*"[650] Dr Fulton and Mrs Brown gave the Chief Executive an oral briefing on the evening of

642 WS-035-2 p.34
643 328-001-004
644 WS-340-1 p.2
645 Dr Hicks T-07-06-13 p.43 line 12
646 Dr Crean T-11-09-13 p.68 line 14
647 321-073-001 & WS-360-1 p.2 & Dr Taylor T-18-09-13 p.8 line 7
648 036a-056-142 & Dr Taylor T-18-09-13 p.16 line 12
649 077-005-008
650 022-109-338

the Critical Incident Review.[651] There was no written summary of the case, or of the review or action plan, nor any briefing paper for the Chief Executive in preparation for her next Board meeting.[652] Whilst Mrs Brown did provide a written update for the Chief Executive on 9th July,[653] I am struck by the general lack of documentation.

5.224 Having initiated the Critical Incident Review in the context of suspected clinical mismanagement, Mrs Burnside should have expected and required a critical incident report. She did not[654] and despite the Critical Incident Protocol requirement,[655] to "*provide the Chief Executive with a written report with conclusions and recommendations within an agreed timescale*",[656] none was offered her. Mrs Brown accepted that this "*should have been done*"[657] and that it was her responsibility.[658] Dr Fulton felt that in the circumstances he probably should have done it himself[659] and accepted that this failure was a "*deficit.*"[660] Remarkably, Mrs Burnside did not herself consult the protocol for guidance.[661] She fully acknowledged her failing in this regard.[662] I consider that this confirms a lack of commitment to the processes of clinical governance at that time. Nonetheless, Mrs Burnside said she "*felt fully informed...*"[663]

5.225 Subsequently however, she was to erroneously recount her "*clear understanding that the Critical Incident Review established that Raychel's care and treatment were consistent with custom and practice,*"[664] that "*an unusual or idiosyncratic response had precipitated the leading to the tragic death*"[665] and that "*there were no indicators of persistent patterns of poor care to cause the alarm bells or to trigger an external review.*"[666] I believe

651 Dr Fulton T-04-09-13 p.70 line 5
652 Mrs Brown T-02-09-13 p.106 line 17
653 022-097-307
654 Mrs Burnside T-17-09-13 p.68 line 21
655 022-109-338
656 022-109-338
657 Mrs Brown T-02-09-13 p.83 line 14
658 Mrs Brown T-02-09-13 p.82 line 4
659 Dr Fulton T-04-09-13 p.10 line 3
660 Dr Fulton T-04-09-13 p.11 line 6
661 Mrs Burnside T-17-09-13 p.84 line 10
662 Mrs Burnside T-17-09-13 p.70 line 8
663 Mrs Burnside T-17-09-13 p.93 line 13
664 WS-046-2 p.14
665 WS-046-2 p.26
666 WS-046-2 p.25

that had an appropriate written report been submitted to the Chief Executive she could not have made such ill-informed statements.

5.226 The Director of Nursing was responsible for the implementation of the Critical Incident Protocol. However, she made no attempt to find out what had been learned at the Review,[667] did not ask to see the statements of her nurses[668] and took no steps to request a written report.[669] Whilst she accepted criticism in this regard,[670] she was unable to explain herself. Accordingly, Miss Duddy made no report on the nursing issues to the Chief Executive or the Board and was not in a position to reassure as to the nursing on Ward 6.[671] The Board meeting minutes for July 2001, which would have confirmed what was disclosed about Raychel's death are missing. Miss Duddy said she could "*only assume that someone got access to them and didn't replace them.*"[672] In such circumstances, I consider it unlikely that the Board could have been sufficiently informed to know whether the clinical services for children were safe or not.

5.227 Additionally, it is much to be regretted that at that time, no one thought to advise Mr and Mrs Ferguson as to the causes of their daughter's death or the findings at review. The clinical shortcomings and the agreed action plan were not explained. They should have been and such silence could not easily have been maintained had a written report been available. It is easy to understand how, in such circumstances, the failure to report in writing might be interpreted as defensive.

5.228 A written report would have been an effective channel of communication with the Ferguson family. Professor Swainson observed that "*in my experience over many, many years* [families] *have always said that what they are interested in is... what is being done to stop that happening again to anybody else... communicating with them broadly the lessons learned*

667 Miss Duddy T-29-08-13 p.49 line 9 & Mrs Margaret Doherty T-09-09-13 p.85 line 14
668 Miss Duddy T-29-08-13 p.47 line 25
669 Miss Duddy T-29-08-13 p.47 line 5
670 Miss Duddy T-29-08-13 p.56 line 21
671 Miss Duddy T-29-08-13 p.76 line 16
672 Miss Duddy T-29-08-13 p.62 line 5

and what has been put in place... is a key piece of the interaction with the family."[673]

Actions: post-review

5.229 Professor Swainson also advised that "*a Critical Review would typically meet again after a few weeks to check that the agreed actions had been completed and begin the task in determining what went wrong.*"[674] Dr Fulton agreed that this "*would have been a very good idea.*"[675] However no such meeting took place nor indeed was there any surgical consideration of the issues whether at morbidity/mortality meetings or audit.[676]

5.230 Dr Fulton's action plan was not however forgotten and work started on its implementation. Mrs Brown was able to give an 'update report' to Mrs Burnside on 9th July 2001 confirming daily U&E checks for post-operative children receiving IV fluids[677] and display of a chart detailing IV infusion rates,[678] confirmation was given that these matters had been brought to the attention of junior surgical doctors.

5.231 She also reported the decision to discontinue the use of Solution No.18 for paediatric surgical patients. This had not proved straightforward because "*one of the surgeons [was] not supporting this change*"[679] on the basis that "*he saw no reason to change and was happy to use No.18 Solution.*"[680] Further review of the medical literature ensued and then, with some reservation, Hartmann's rather than Solution No.18 eventually became the post-operative fluid for paediatric surgical patients in Altnagelvin. This was the determined achievement of Dr Nesbitt and was to eventually result in the complete removal of Solution No.18 from Ward 6.[681] In this he was

673 Professor Swainson T-19-09-13 p.97 line 2
674 226-002-023
675 Dr Fulton T-04-09-13 p.69 line 24
676 Miss Duddy T-29-08-13 p.109 line 23
677 022-097-307
678 026-009-010
679 022-097-307
680 WS-035-2 p.30
681 Dr Nesbitt T-03-09-13 p.228 line 19

ahead of his time. It was to take until December 2012 for the British National Formulary for Children[682] to follow suit.

5.232 The update report also recorded the work of the CSM, the Clinical Effectiveness Co-ordinator and some of the nursing staff in relation to fluid balance issues.[683] They had agreed detailed matters relating to the management of fluids,[684] fluid balance sheets, quantification of vomit volume and the necessity to encourage doctors to record and document.[685]

5.233 Additionally, they considered important organisational matters including the concern of "*nursing staff that surgeons are unable to give a commitment to children on Ward 6*" and made a request that "*paediatricians maintain overall responsibility for surgical children on Ward 6?*"[686] The Director of Nursing took no part in these discussions.[687] Dr Fulton "*didn't call a meeting but in retrospect, I should have because that seemed to be raising an increasing concern.*"[688] This confirms that the Critical Incident Review should indeed have reconvened to finish its work.

Arranging to meet Mr and Mrs Ferguson

5.234 Immediately after the Critical Incident Review, Mrs Burnside, having received her oral briefing and reviewed "*the issues and actions identified from the analysis*"[689] and "*knowing the child should not have died*"[690] and being conscious of a "*duty of care to the parents and family*"[691] wrote on 15th June 2001 to Mr and Mrs Ferguson to "*express to you my sincere sympathy following the death of your daughter Rachel* [sic]. *We are all deeply saddened and appreciate the loss you must be feeling. The medical and nursing staff who cared for Rachel would like to offer you both their sincere condolences and they would also like to offer you the opportunity*

682 311-048-001
683 022-097-307
684 Mrs Margaret Doherty T-09-09-13 p.86 line 10
685 Sister Millar T-28-08-13 p.146 line 15
686 022-097-307
687 Sister Millar T-28-08-13 p.160 line 12
688 Dr Fulton T-04-09-13 p.86 line 23 & Dr McCord T-13-03-13 p.22 line 17
689 098-267-722
690 Mrs Burnside T-17-09-13 p.114 line 1
691 098-267-722

to meet with them if you feel this would be of any help. If you wish me to arrange this for you please contact my department..."[692]

5.235 Mrs Burnside acknowledged that "*at the time I wrote the letter I really had very limited knowledge*"[693] – "*but I did know that I would have to meet with the family because this family would want explanations.*"[694] Professor Swainson considered it "*very good of the Chief Executive to take that lead in this particular circumstance.*"[695]

5.236 Mrs Ferguson remembers that "*as time went on, I was getting more annoyed because at this stage Raychel had died and was buried and we still did not know what had happened... We got the letter on the 15th, I remember phoning Altnagelvin, it was a while after that, and I wanted to have a meeting.*"[696] The family quite simply "*wanted to know why Raychel had died.*"[697]

5.237 Contact was made and a meeting arranged for Monday 3rd September 2001 at the hospital. Mrs Burnside explained that "*it was our practice to be open with patients and their families if and when there was an untoward event.*"[698] This was therefore the opportunity for Altnagelvin to openly and honestly explain the circumstances of Raychel's death to her family.

Monday 3rd September meeting

5.238 The meeting took place and was minuted[699] by Altnagelvin's 'Patient Advocate' Mrs Anne Doherty.[700] Her note has been accepted as reliable.[701] In attendance were Mrs Ferguson, her brother,[702] her sister Kay Doherty, Dr Ashenhurst, the family GP, a family friend and Ms Helen Quigley of the WHSSC. Mrs Burnside attended with Drs Nesbitt and McCord, Sister Millar

692 022-085-225
693 Mrs Burnside T-17-09-13 p.137 line 21
694 Mrs Burnside T-17-09-13 p.137 line 7
695 Professor Swainson T-19-09-13 p.103 line 11
696 Mrs Ferguson T-26-03-13 p.167 line 17
697 Ms Kay Doherty T-18-09-13 p.169 line 15
698 098-267-724
699 022-084-215
700 328-001-002/ No relation to Kay Doherty
701 Staff Nurse Bryce T-04-03-13 p.179 line 12
702 Ms Kay Doherty T-18-09-13 p.167 line 14

and Staff Nurse Noble. Mrs Burnside explained it was the "*staff who had been involved in Raychel's care and who wished to meet the family* [who] *attended the meeting.*"[703]

5.239 On this occasion the Patient Advocate was not representing the interests of the Ferguson family, nor was she present as an independent advocate but attended at the request of the Chief Executive "*to take minutes.*"[704] Notwithstanding that Mrs Burnside intended her "*to make whatever notes* [she] *needed for her to be able to work with the family and support them in whatever way*"[705] she gave her no instructions to that effect. Accordingly, Mrs Anne Doherty did not introduce herself then or at any time to the Ferguson family[706] and made no contribution to the meeting.[707] Subsequently she did not share her minutes with Mrs Ferguson[708] but sent them directly to Drs Nesbitt and McCord and Sister Millar[709] and showed them to the Chief Executive.[710] She did not support the family.

5.240 That was a mistake because as Professor Swainson observed "*given the importance, given the sensitivity, given the high emotional state of some of the people participating in that meeting particularly from the family's perspective, the Patient Advocate had a very important role, particularly if she'd had a pre-meeting with the family because that would have enabled her in advance to understand what the family's complaints, concerns and enquiries were. It would have enabled her to help them frame them in a way that the senior people at the meeting would understand.*"[711]

5.241 Notably absent from the meeting were Mr Gilliland and his surgical team. He had been invited to attend but declined on the basis that he had not treated Raychel and thought there was little he could do to ease Mrs Ferguson's grief.[712] In so doing he acted against the express advice of his

703 WS-046-1 p.6
704 WS-325-1 p.4 & 321-076-006
705 Mrs Burnside T-17-09-13 p.139 line 13
706 WS-326-1 p.5
707 Mrs Anne Doherty T-09-09-13 p.22 line 16
708 Mrs Anne Doherty T-09-09-13 p.24 line 22
709 321-076-008
710 WS-325-1p.4 & Mrs Anne Doherty T-09-09-13 p.34 line 2
711 Professor Swainson T-19-09-13 p.108 line 4
712 Mr Gilliland T-14-03-13 p.217 line 15

Medical Director, Dr Fulton.[713] Mr Gilliland explained that he "*didn't think there was a particular surgical issue. I understand now... that there were surgical issues and that there were questions that the family wished to have answers... if they feel that I have let them down at that particular moment in time then I am very sorry.*"[714] Raychel was a surgical patient and suffered from inadequate surgical care. I consider that Mr Gilliland's failure to attend was a failure of both professional duty and hospital governance.

5.242 Neither the Medical Director nor the Director of Nursing attended the meeting. No external expert or independent figure of authority was in attendance. None of the doctors responsible for treating Raychel before her collapse was present. The meeting convened without Raychel's medical notes. Furthermore, Mrs Burnside had no record of the Critical Incident Review and claimed not to know that there was disagreement between her nurses and the family about the extent of Raychel's vomiting.[715] The Chief Executive had neither prepared for nor been briefed for the meeting.

5.243 Nor were the other Altnagelvin representatives prepared.[716] Dr McCord recalled "*there was no agenda, no plan, no prior thought as to who was going to speak. The setting wasn't good, we arranged ourselves... in a cold blue coloured room, it was an echoey Portakabin.*"[717] Sister Millar recalled she "*didn't know why* [she] *was attending or what* [she] *was supposed to do.*"[718] Professor Swainson considered a "*pre-meeting would have been essential... a central part of the preparation.*"[719]

5.244 Mrs Burnside said "*I look back now and think, why didn't I postpone the meeting, why didn't I structure it, why didn't I see what state Mrs Ferguson was in, did we have all of the information that was available? All of those*

713 Mr Gilliland T-28-08-13 p. 91 line 6
714 Mr Gilliland T-14-03-13 p. 216-217
715 Mrs Burnside T-17-09-13 p.145 line 18
716 Mrs Burnside T-17-09-13 p.154 line 11
717 Dr McCord T-10-09-13 p.183 line 1
718 Sister Millar T-28-08-13 p.156 line 7
719 Professor Swainson T-19-09-13 p.113 line 19

are lessons that sadly I have learnt and sadly Mrs Ferguson has suffered with, and I'm profoundly sorry that that is so."[720]

5.245 The meeting cannot have been easy for any of the participants and obviously required care and sensitivity on the part of Altnagelvin. It was necessary for them to effectively communicate the harsh facts of Raychel's death, meaningfully discuss failings in her care and at the same time support a deeply stressed family. Training and preparation for such a difficult meeting were essential.

5.246 A serious breakdown in communication and understanding seems to have occurred at the meeting because Mrs Ferguson recalled leaving "*the meeting totally confused, believing it to be pointless. I remember feeling a sense of Raychel being blamed for her own death or that we were in some way responsible.*"[721] She said "*I look back on this meeting now with some disgust, anger and annoyance, to me it was just a beginning of a cover-up by Altnagelvin Hospital...*"[722] "*Even to this day I really do find it very hard not to get agitated and angry looking back at the behaviour of Altnagelvin at that meeting. Their behaviour was appalling as they knew, or must have known, full well what happened to Raychel by that stage.*"[723]

5.247 This impression of the meeting was not however shared by Mrs Burnside who said that they met "*with the clear understanding that our hospital had not managed to care for that child in a way that would have prevented her dying.*"[724] She believed "*Mrs Ferguson was given our honest understanding of the issues...*"[725] and recalled having offered "*explanations around the following issues, namely the process of Critical Incident Review, the research findings on post-operative reaction leading to hyponatraemia, our subsequent actions to prevent risk of recurrence, and the measures in place to monitor improvement.*"[726]

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720 Mrs Burnside T-17-09-13 p.160 line 5
721 WS-020-1 p.20
722 WS-020-1 p.20
723 WS-020-1 p.21
724 Mrs Burnside T-17-09-13 p.114 line 8
725 WS-046-2 p.27
726 WS-046-1 p.7

5.248 Sister Millar supported this account and said that Dr Nesbitt acknowledged deficiencies, was very sympathetic and gave an apology.[727] She recalled a "*very long account... I thought it was very fair, I thought it was honest and I thought he was open.*"[728] Dr Nesbitt agreed, thinking "*we had been open and honest and helpful*"[729] and had "*a clear memory of discussing the reason why I thought Raychel had died... this was not recorded*"[730] and Staff Nurse Noble specifically recalled "*Dr Nesbitt saying that she had got a little bit too much fluid.*"[731]

5.249 However, the minute of the meeting records a very different conversation. It makes no reference to the Critical Incident Review, or of failings identified, actions taken or measures put in place. It records nothing about Altnagelvin's "*subsequent actions to prevent risk of recurrence,*"[732] noting only that "*Mrs Burnside said... the hospital would look at things and see if there were ways of improving care.*"[733]

5.250 I found it telling that Raychel's GP, Dr Ashenhurst, had "*no recollection of deficiencies in the care of Raychel being mentioned at the meeting by the representatives.*"[734]

5.251 Furthermore, I do not consider Sister Millar a reliable witness given that even after she had learned of the many failings in Raychel's care, she continued to assert to this Inquiry her confidence that Raychel had "*received the highest standard of care from nursing staff in Ward 6*"[735] and that she "*had been recovering very well on Friday the 8th.*"[736]

5.252 The minutes record some most unsatisfactory questions and answers:

727 Sister Millar T-01-03-13 p.79 line 23 *et seq*
728 Sister Millar T-01-03-13 p.82 line 19
729 Dr Nesbitt T-03-09-13 p.240 line 18
730 WS-035-2 p.24
731 WS-049-4 p.13
732 WS-046-1 p.7 & Mrs Burnside T-17-09-13 p.155 line 25
733 022-084-221
734 WS-333-1 p.3
735 WS-056-1 p.9
736 WS-056-1 p.9

(i) "*Why did the nurses not look about her when she was so sick and had a sore head? Dr Nesbitt said that on the day following surgery, the first post op. day, people can be sick and have a sore head.*"[737]

(ii) "*Raychel was bringing up blood when she vomited why was this? Dr Nesbitt said that when you are vomiting the back of your throat can become irritated and can bleed.*"[738]

(iii) "*Mrs Doherty asked what were Raychel's sodium levels the first time they were done? What is routine? What checks do you do? Dr McCord said bloods are checked routinely on admission. 36 hours prior to this Raychel's bloods were normal.*"[739]

5.253 No sincere attempt was made to answer the family's reasonable questions about the evaluation of Raychel's sodium levels or her therapy. The minutes record Dr Nesbitt's questionable explanations[740] that "*the reason why they were not done routinely is that it requires a needle into the vein to take the blood*"[741] and "*the fluids used are the standard across the country... nothing we were doing was unusual.*"[742] Such understanding Mrs Ferguson may have had as to what happened to her daughter cannot have been assisted. Indeed as her sister Kay Doherty concluded "*we had no more knowledge leaving than what we had when we went in.*"[743]

5.254 I am satisfied that the Altnagelvin representatives knew a very great deal more than they were prepared to tell the Ferguson family. Only weeks before Mrs Burnside had herself received background briefing on hyponatraemia and been informed that "*the problem today of dilutional hyponatraemia is well recognised...*"[744]

737 022-084-217
738 022-084-217
739 022-084-220
740 022-084-215
741 022-084-220
742 022-084-223
743 WS-326-1 p.6
744 021-056-135

5.255 In addition and at about the same time as the meeting[745] Dr Nesbitt was preparing a PowerPoint presentation about Raychel's case entitled "*Fatal Hyponatraemia following surgery.*"[746] In this he identified shortcomings in her treatment and in particular noted that she was a risk patient for SIADH,[747] had received excessive maintenance fluids,[748] that her fluid balance documentation was deficient[749] and that there had been a failure to test her U&Es.[750] In addition, he made reference to the British Medical Journal "*Lesson of the Week*" which had appeared only two months before Raychel's admission and specifically warned not to "*infuse a hypotonic solution if the plasma sodium concentration is less than 138mmol/L.*"[751] These were matters which were not shared with Mrs Ferguson either at the meeting or indeed at any time thereafter as they could and should have been. Even Mrs Burnside "*perceived... that the family was concerned that we weren't telling everything.*"[752]

5.256 Mrs Kay Doherty suggested to this Inquiry that "*if they had said openly, and told us... that they had a meeting and that they had discovered problems and they had found things weren't done right, that simple care was not given to Raychel... I don't think we'd all be sitting here today if they had been open and honest with us in that meeting.*"[753] Regrettably, the Altnagelvin approach demonstrated only limited understanding of what the meeting was really for and what the needs of the family were.

5.257 The meeting lasted one hour and fifteen minutes.[754] Mrs Ferguson gave evidence that "*Dr McCord has told us personally that the meeting was a disaster.*"[755] Unsurprisingly, the Ferguson family did not seek any further meeting with the Chief Executive or the doctors and nurses of Altnagelvin.

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745 Dr Nesbitt T-03-09-13 p.115 line 10
746 095-010-046ag
747 021-054-120
748 021-054-128
749 021-054-124
750 021-054-124
751 070-023b-217
752 Mrs Burnside T-17-09-13 p.163 line 11
753 Ms Kay Doherty T-18-09-13 p.184 line 11
754 022-084-224
755 Mr and Mrs Ferguson T-26-03-13 p.177 line 14

5.258 Not only did the meeting achieve little that was useful but it actually gave rise to distrust, suspicion and anger, I attribute this to lack of preparation and transparency compounded by insensitivity and poor communication skills. Further, I conclude that relevant information was withheld from the Ferguson family. Such was a serious breach of trust and professional duty and violated Mrs Ferguson's right to know. Mrs Burnside was present, in charge and responsible.

The Ferguson family contact RBHSC

5.259 The Ferguson family, having failed to obtain the answers they wanted from Altnagelvin, sought a meeting with Dr Crean of the RBHSC. This prompted him to contact the Coroner on 11th October 2001 to emphasise that "*there was mismanagement of this case in the Altnagelvin Hospital... The fluid balance was the key to why her condition deteriorated – dilutional hyponatraemia.*"[756]

5.260 It was very proper that Dr Crean should have brought this to the Coroner's attention. Nonetheless, there remains the question as to whether he should not also have brought it to the attention of Mr and Mrs Ferguson. He had been Raychel's admitting Consultant to the RBHSC, had joint care of her[757] and should have felt a general professional obligation, as well as a duty, under paragraph 23 of the GMC's 'Good Medical Practice,' to tell them.[758] However, the idea of a meeting was not pursued by the Fergusons and the opportunity was lost. It would be harsh to criticise in this regard but it is a matter which should have been considered.

Altnagelvin dissemination

5.261 By way of contrast to the way Altnagelvin communicated with the family, it made admirable, early and sustained efforts to bring her death and the risks

[756] 012-052c-275
[757] Dr Crean T-11-09-13 p.19 line 9
[758] 314-014-012 & Dr Carson T-30-08-13 p.24 line 3

connected with the use of Solution No.18 to the attention of interested parties outside Altnagelvin.

5.262 On 18th June 2001, Dr Fulton attended a meeting of hospital Medical Directors in Belfast. It was chaired by Dr Carson, Medical Director of RGHT and Medical Advisor to the Chief Medical Officer ('CMO'). Before the meeting and in conversation with Dr Jim Kelly, Medical Director of the Erne Hospital[759] Dr Fulton discovered that they had each in their respective hospitals experienced fluid balance problems associated with the use of Solution No.18 and that each had learnt from separate sources that Solution No.18 had been discontinued at the RBHSC.[760]

5.263 Dr Kelly believes, in this context, that he told Dr Fulton about the death of a child patient (Lucy Crawford). Dr Fulton is very clear that he did not.[761] The evidence does not convince that Dr Fulton knew about Lucy's case at that time and indeed none of his subsequent actions or communications suggest that he did.

5.264 Drs Fulton and Kelly decided that the matter should be raised at the meeting. Dr Fulton recalled how he then outlined the circumstances of Raychel's death and "*told the medical directors present at the meeting that in my opinion there was evidence that Solution 18 was hazardous in post-operative children*"[762] and "*that there should be regional guidelines.*"[763] He recalled other anaesthetists at the meeting acknowledging some 'near misses' in this context.

5.265 The meeting was un-minuted and whilst Dr Fulton believes that he referred to the discontinuance of Solution No.18 at the RBHSC, Dr Carson has no such recollection and could "*nearly honestly say that was not raised with me.*"[764] In any event, Dr Carson acted promptly upon the matter and almost

759 Dr Kelly T-13-06-13 p.23 et seq
760 Dr Fulton T-04-09-13 p.88 line 18
761 Dr Fulton T-04-09-13 p.90 line 14
762 095-011-054
763 012-039-179
764 Dr Carson T-30-08-13 p.81 line 10

immediately brought the issue of hyponatraemia and low saline solutions to the attention of Dr Henrietta Campbell, the CMO.

5.266 On 22nd June 2001 Dr Fulton telephoned Dr Campbell personally to inform "*her of circumstances of the death* [and] *suggested she should publicise the dangers of Hyponatraemia when using low saline solutions in surgical children. I said there was a need for regional guidelines. Dr Campbell suggested that CREST (Regional Guidelines Group) might do this.*"[765]

5.267 Dr Fulton also telephoned Mr Martin Bradley,[766] Chief Nursing Officer of the Western Area Health Board and notified him of Raychel's death.[767]

5.268 Additionally he made contact with Dr William McConnell,[768] Director of Public Health WHSSB, about the case and forwarded the BMJ extracts about hyponatraemia. Dr McConnell in turn raised the matter at the next meeting of Northern Ireland's Directors of Public Health on 2nd July 2001 in the presence of both the Chief and Deputy Chief Medical Officers. He described the "*recent death in Altnagelvin Hospital of a child due to Hyponatraemia caused by fluid imbalance. Current evidence shows that certain fluids are used incorrectly post operatively. It was agreed that guidelines should be issued to all units.*"[769] Dr McConnell described this as "*the usual method at that time of raising professional or clinical concerns which had arisen at any one Board, but which potentially, had wider relevance.*"[770]

5.269 On 5th July 2001, Dr McConnell also wrote to his fellow Directors of Public Health enclosing Dr Fulton's extracts from the BMJ and recommending that the matter be brought to the attention of paediatricians generally. Dr McConnell suggested that for "*more specific information... Dr Fulton would*

765 012-039-180
766 325-002-010
767 095-011-055
768 328-001-005
769 320-080-005
770 WS-047-1 p.3

be happy to discuss this with anyone."[771] The issue was thus quickly and efficiently disseminated.

5.270 Dr Fulton kept his Chief Executive informed of these developments and she in turn reinforced his approach by writing to the CMO to emphasise her concern "*to ensure that an overview of the research evidence is being undertaken. I believe that this is a regional, as opposed to a local hospital issue, and would emphasise the need for a critical review of evidence. I would be extremely grateful if you would ensure that the whole of the medical fraternity learned of the shared lesson.*"[772] The CMO responded by setting up a working group to draft guidelines and indicated that Dr Nesbitt would be involved.

5.271 Taking the issue directly to the CMO was a central part of Altnagelvin's alert to the medical profession about the risks of hyponatraemia and Solution No.18. They are to be praised particularly, because as Professor Swainson pointed out, "*there was no explicit duty on the Trust to communicate a rare fatal event to the Board or to the Department or more generally.*"[773]

5.272 These very public responses to Raychel's death stand in disquieting contrast to the failure of the RGHT to share the information about dilutional hyponatraemia and Solution No.18 which had emerged from Adam's inquest. It provides illustration of how rapid and widespread reporting of a clinical danger can stimulate rapid and meaningful response.

Chief Medical Officer's Working Group on Hyponatraemia

5.273 Preparation of clinical guidelines did not normally come within the CMO's remit[774] but she made an exception for hyponatraemia and personally oversaw the process "*because of the level of concern expressed by people at Altnagelvin.*"[775]

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771 022-094-303
772 022-093-301
773 226-002-025
774 WS-075-2 p.5
775 WS-075-2 p.6

5.274 Her Working Group first met on 26th September 2001[776] and drew on the specialism of Drs Taylor, Nesbitt, Loughrey, Crean and Jenkins, amongst others. These doctors had knowledge not only of hyponatraemia and of Raychel's case but also individually of at least some of the other cases being scrutinised by this Inquiry.[777] Dr Nesbitt confirmed that "*Raychel was mentioned at the meeting because I kept on and on about it.*"[778]

5.275 The Working Group produced draft guidelines for the prevention of hyponatraemia in November 2001. However, the draft failed to address Dr Nesbitt's concern that Solution No.18 was of itself a major factor in children's post-operative hyponatraemia. Dr Nesbitt wrote again to the Chair of the Working Group to express disappointment that the guidance made no reference to Solution No.18 and asked "*what evidence do you need exactly. We had a child who died and for that reason I feel strongly that No.18 Solution is an inappropriate fluid to use...You can be sure that it will remain highlighted as a risk in any protocol produced by Altnagelvin Hospital.*"[779] He was determined that "*Solution No.18 should be named and shamed.*"[780]

5.276 However, when the Department published its guidance on the 'Prevention of Hyponatraemia in Children' in March 2002[781] it provided general advices only and did not warn specifically against the use of Solution No.18. The guidelines acknowledged the regional role of the RBHSC by indicating that "*in the event of problems that cannot be resolved locally, help should be sought from Consultant Paediatricians/Anaesthetists at the PICU, RBHSC.*"[782]

776 007-048-094
777 328-003-001
778 Dr Nesbitt T-03-09-13 p.161 line 8
779 007-003-005
780 Dr Nesbitt T-03-09-13 p.175 line 18
781 077-005-008
782 006-054-438

Post-mortem

5.277 Dr Brian Herron,[783] Consultant Neuropathologist[784] and Dr Al Husaini,[785] Pathologist, conducted the post-mortem examination of Raychel at the request of the Coroner.[786] They found diffuse cerebral oedema but no evidence of subarachnoid haemorrhage. They sought the additional opinion[787] of Dr Clodagh Loughrey,[788] Consultant Chemical Pathologist, as to the cause of Raychel's hyponatraemia.[789]

5.278 Incorporating her advices, Dr Herron then formally reported his opinion that the cause of death was cerebral oedema secondary to acute hyponatraemia.[790] He attributed her "*low sodium*" to three factors as identified by Dr Loughrey,[791] namely:

(i) Infusion of low sodium fluids post-operatively

(ii) Profuse vomiting in post-operative period

(iii) Secretion of anti-diuretic hormone.

Preparation for inquest

5.279 In the immediate aftermath of Raychel's death, it had been clearly understood within Altnagelvin that the Coroner had been notified and there were questions of mismanagement. It must have seemed probable that an inquest would be held. Notwithstanding the necessity to gather statements for Critical Incident Review, there was then an even more onerous obligation to obtain statements for inquest.

5.280 Doctors were bound by section 7 of the Coroner's Act (Northern Ireland) 1959 to notify the Coroner of the "*facts and circumstances*" of a death where the doctor had "*reason to believe that the person died, either directly or*

783 312-003-006
784 312-003-006
785 328-001-004
786 014-005-006
787 014-005-009
788 312-003-005
789 012-063g-322
790 014-005-013
791 022-070-179

indirectly as a result of...negligence... or in such circumstances as may require investigation." Doctors were furthermore obligated by paragraph 32 of the GMC's 'Good Medical Practice' code to "*assist the Coroner... by offering all relevant information to an inquest.*"[792]

5.281 Mrs Brown[793] collected statements for inquest and, although untrained,[794] guided Altnagelvin and its personnel through the coronial process. She assisted the Coroner in gathering evidence for inquest.[795] She played a central role liaising with clinicians, solicitors, the Coroner and the Trust Board.[796]

5.282 Although Mrs Brown characterised herself as merely "*a post-box in getting statements*"[797] she did in fact volunteer to the Coroner those she thought should provide statements and accordingly, had an input into who might give evidence. Additionally she checked the witness statements[798] and suggested amendments[799] allowing her an input into the evidence itself. She also forwarded statements to the Trust's solicitors for approval.[800]

5.283 In the week following the Critical Incident Review Staff Nurse Noble and Sister Millar[801] submitted their written statements to Mrs Brown.[802] Remarkably neither nurse made any reference to the consensus reached at the Critical Incident Review that Raychel had been given too much fluid or that her electrolytes had gone unmeasured in the context of prolonged vomiting.[803] Such omission is troubling but that it should pass unquestioned by Mrs Brown is a matter of real concern because she too had been involved with the review. It hints at an understanding that substandard

792 314-014-014 – Issued May 2001
793 WS-322-1 p.24
794 WS-322-1 p.23
795 WS-322-1 p.24
796 WS-322-1 p.24
797 Mrs Brown T-02-09-13 p.118 line 4
798 WS-322-1 p.24
799 Mrs Brown T-02-09-13 p.130 line 25
800 WS-322-1 p.24
801 022-100a-313
802 021-069-160
803 Sister Millar T-28-08-13 p.137 line 7

treatment might be discussed within the hospital but not volunteered in writing to outsiders.

5.284 Scrutiny of Staff Nurse Noble's statement bearing the date 14th June 2001 and intended for the Coroner[804] reveals that small but significant changes have been made to her original statement also dated 14th June 2001.[805] Whilst she offered no explanation for these amendments beyond the suggestion that they may have been made to improve readability, it is clear that her revisions serve to distance her nurses from the warning signals of Raychel's deterioration. This was consistent with a general reluctance within Altnagelvin to concede any shortcomings in writing. Mrs Brown did nothing to discourage this approach.

5.285 Indeed, it appears to have been a part of Mrs Brown's role to ensure that clinicians did not easily make personal admissions of error. The Altnagelvin 'Junior Doctors' Handbook' specifically directed that doctors should "*not release any report to the police or coroner without showing it first to the Trust RMCO. This is particularly important when the family of the deceased have employed a barrister to represent them in court, or if you feel that an allegation of medical negligence will be made in court.*"[806]

5.286 Dr McCord and Nurse Michaela Rice[807] also provided statements in June 2001.[808] Remarkably, no further statements were taken by Mrs Brown at that time, whether from the consultant responsible for Raychel's care or the doctors who had treated her before collapse.

5.287 The Coroner wrote to Mrs Brown on 17th October 2001 advising "*that questions must be asked regarding the management of this child whilst a patient at Altnagelvin Hospital... It would greatly assist me if you would arrange to let me have as soon as possible statements from all those concerned with the case...*"[809] Three weeks passed before Mrs Brown

804 012-008-100
805 Staff Nurse Noble T-27-08-13 p.151-56
806 316-004a-026
807 312-003-005
808 022-104-319 & 022-099-311
809 022-081-212

wrote to a small group of clinicians requesting statements with the reassurance that "*your report will be forwarded to our solicitor prior to release to the Coroner.*"[810] She chose not to ask those doctors who had attended upon Raychel on 8th June.[811] The Coroner was thereafter obliged to repeatedly remind Mrs Brown on 29th November,[812] on 5th December,[813] and 11th December 2001[814] to forward the statements. When Mrs Brown received a statement from Dr Johnston, on 21st December 2001,[815] she noted his reference to Drs Curran and Zafar and wrote "*I have not requested reports from these doctors, as they have not written in the notes.*"[816] I find it extraordinary that six months after Raychel's death and the Critical Incident Review and even when confronted with a potentially controversial inquest that Mrs Brown should not have identified the clinicians involved. Dr Zafar was the most senior member of the surgical team to have seen Raychel on 8th June[817] and he saw her again after her collapse on 9th June. Had a documented review been undertaken or had Mrs Brown been genuinely motivated she would have known who the relevant clinicians were and would have already held statements from them.

5.288 On 25th January 2002, Mrs Brown purported to send nine witness statements to the Coroner[818] but her letter enclosing the nine statements went "*astray.*"[819] She did, however, forward her draft list of witnesses for the Coroner from which she omitted all the surgical doctors.

5.289 On 25th March 2002, Mrs Brown finally received Dr Zafar's statement.[820] It was not her fault that all he could contribute was that "*I saw Rachael* [sic] *Ferguson on 8th June 2001, who had appendectomy operation on 7th June*

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810 022-079-207
811 Dr Devlin T-06-03-13 p.3 line 4 & Dr Curran T-07-03-13 p.1 line 18
812 022-072-187
813 022-070-170
814 022-068-167
815 012-013-114
816 160-207-001
817 020-007-013
818 022-054-151
819 012-050g-246
820 160-239-001

2001. On my ward round she was free of pain and apyrexial, plane [sic] *was to* [sic] *continuous observation.*"[821]

5.290 The inquest was listed for 10th April 2002. It was not, however, until 6th March 2002 that a 'complete' set of Altnagelvin statements was forwarded the Coroner.[822] The inquest hearing was adjourned.[823] Mrs Brown wrote to Dr Zafar returning his "*draft statement. Please amend. I enclose a statement from Dr Johnston.*"[824] DrZafar duly obliged adding a paragraph[825] derived from Dr Johnston's statement[826] which was then sent unsigned to the Coroner.[827]

5.291 The gathering of written statements for the Coroner lacked rigour and mirrored the collection of written evidence for Critical Incident Review. What was required was clear. That which was gathered in writing was not. I do not believe that was entirely accidental.

Altnagelvin writes to the Coroner

5.292 On 11th December 2001, the Coroner engaged Dr Edward Sumner to investigate Raychel's death on his behalf.[828] Dr Sumner reported in February 2002 that Raychel had died from coning in consequence of cerebral oedema caused by hyponatraemia[829] and that the "*hyponatraemia was caused by a combination of inadequate electrolyte replacement in the face of severe post-operative vomiting and the water retention always seen post-operatively from inappropriate secretion of ADH*"[830] The Coroner forwarded this to Mrs Brown on 18 February 2002.[831]

5.293 On 12th March 2002, Mrs Brown advised the Chief Executive that "*some of the clinical staff have come back and advised me that there are factual*

821 160-239-001
822 022-038-099
823 021-001a-002
824 021-001a-002
825 021-059-143
826 021-058-141
827 022-023-064
828 012-067u-365
829 012-001-001
830 012-001-005
831 160-197-001

inaccuracies in [Dr Sumner's] *Report.*"[832] It is remarkable that not even in these circumstances did Mrs Burnside insist on a written report of her own Critical Incident Review.

5.294 Mrs Brown drew those claimed inaccuracies to the attention of the Trust solicitor,[833] who then wrote to the Coroner on 29th March stating that "*the Trust has taken this tragic incident very seriously and has fully and promptly investigated this matter*"[834] and "*fully accepts that the cause of death in this case was cerebral oedema due to hyponatraemia... It is also accepted that the vomiting experienced by the Deceased was a contributory factor in that it would have contributed to some extent to the net sodium loss from the extracellular fluid. Further, it is accepted that the use of Solution 18...in order to provide post-operative maintenance and replacement fluids was a contributory factor in bringing about a reduction in the concentration of sodium in the extracellular fluid.*"[835]

5.295 However, the solicitor then proceeded to very pointedly question Dr Sumner's opinion that Raychel had suffered very severe and prolonged vomiting. This had not been amongst those inaccuracies drawn to her attention by Mrs Brown. She wrote "*this conclusion is strongly disputed by the Trust. The nurses who were caring for the Deceased during the relevant period have been interviewed in detail about this matter and they are all of the opinion that the vomiting suffered by the Deceased was neither severe nor prolonged.*"[836] She concluded her letter by claiming that "*the Trust wished me to bring these matters to your attention well in advance of the hearing of the inquest.*"[837]

5.296 Notwithstanding these assertions, Mrs Brown was very clear in her evidence that the nurses "*were never interviewed in detail.*"[838] Furthermore, Sister Millar had "*no recollection of being separately interviewed*"[839] and in

832 022-036-097
833 160-183-001
834 160-163-002
835 160-163-001
836 160-163-003
837 160-163-004
838 Mrs Brown T-02-09-13 p.144 line 5
839 Sister Millar T-28-08-13 p.161 line 25

any event, Staff Nurse Noble considered Raychel's vomiting to have been both severe and prolonged.[840] I conclude that in respect of this claim alone the letter was factually incorrect and had therefore, as Mrs Brown put it "*a potential to mislead.*"[841]

5.297 The Chief Executive maintained that she had not seen the letter[842] and did not "*believe the Trust would have sanctioned the letter. I think the Trust would have briefed the legal advisor about their concerns and the legal advisor would have, within their expertise, laid out those concerns as they interpreted them.*"[843] She said she took the "*dimmest view*" of any intention to mislead.[844] So do I, not least because the Ferguson family had received Mrs Burnside's personal assurances that they "*could have confidence that their concerns would be addressed thoroughly through the Coroner's court.*"[845]

5.298 The Coroner's response to Altnagelvin's solicitor's letter was terse: "*So far as the point you made regarding vomiting I have no objection to receiving evidence from any nurses who are in a position to give relevant evidence.*"[846] The Coroner met with the Ferguson family on 3rd April 2002 and adjourned the inquest to allow them legal representation.[847]

5.299 Efforts were then made to gather evidence to corroborate the solicitor's assertions. Mrs Brown sought a statement from Staff Nurse Gilchrist in the following terms: "*Dr. Nesbitt and I met with the barrister yesterday. The barrister feels it is important that we counteract the comments made by Dr. Sumner, the independent expert in relation to the allegation of excess vomiting. To do this he feels it is important that we bring along the nursing staff. If nursing staff do not attend then it would be difficult for anyone to explain what is meant by the ++ in the notes. The Barrister is endeavouring to get permission from the Coroner for the nurses to attend. I require a*

840 Staff Nurse Noble T-27-02-13 p.172 line 6 & Staff Nurse Noble T-27-08-13 p.202 line 2
841 Mrs Brown T-02-09-13 p.152 line 16
842 Mrs Burnside T-17-09-13 p.192 line 5
843 Mrs Burnside T-17-09-13 p.240 line 22
844 Mrs Burnside T-17-09-13 p.192 line 8
845 WS-046-1 p.7
846 022-026-069
847 098-137-425

statement from you on your involvement as soon as possible."[848] Staff Nurse Gilchrist duly supplied a statement,[849] purporting to have been "*written on 10th June 2001*" [850] confirming that she had not been concerned by Raychel's vomiting because it was not unusual in post-operative children. However, when she came to give evidence to this Inquiry she accepted that "*Raychel's vomiting was severe and prolonged.*"[851]

Altnagelvin reviews progress and prepares for inquest

5.300 Dr Fulton having retired from his post as medical director, nonetheless arranged a pre-inquest meeting on 9th April 2002 with the Altnagelvin witnesses, namely Mr Gilliland and Drs Nesbitt, McCord and Makar.[852] On the same day he reviewed the implementation of his action plan.[853] This was an important review and examined the plan in light of the Department's Guidelines on Hyponatraemia[854] and considered the availability of surgeons for paediatric patients and their responsibilities in respect of fluid therapy. It laid the basis for a new clinical protocol to be agreed in May 2002 between surgeons, anaesthetists and paediatricians in respect of paediatric IV fluid therapy.[855] This was a local protocol of real value[856] and provides demonstrable evidence of the sincerity of professional intent at Altnagelvin in almost everything except the open acceptance of error and the transparent provision of information and respect to the Ferguson family.

5.301 Meanwhile, Mrs Brown co-ordinated the Altnagelvin preparation for inquest.[857] In addition to challenging any suggestion of a failure to respond to Raychel's vomiting she started to bring together evidence to mitigate Altnagelvin's position. To that end, Dr Fulton, having failed to prepare a written report of his Critical Incident Review for his Chief Executive, now provided a statement for the Coroner detailing his work investigating "*the*

848 022-017-056
849 098-293-771
850 Mrs Brown T-02-09-13 p.75 line 9 & Dr Fulton T-04-09-13 p.50 line 11
851 Staff Nurse Gilchrist T-11-03-13 p.134 line 6
852 022-029-073
853 026-002-002 & 022-092-299
854 022-025a-068 & WS-046-2 p.132
855 160-143-003
856 021-052-113 & 021-050a-108 & 077-004-005
857 Dr Fulton T-04-09-13 p.108 line 7 & p.109 line 1

circumstances of her death within the hospital and... recommendations for any action to prevent recurrence."[858] Although Dr Fulton was not on the list of witnesses, his statement was forwarded to the Coroner who was asked to confirm that he would be called to give evidence.[859] The Coroner replied that "*so far as Dr. Fulton is concerned whilst it is not strictly necessary for him to give evidence, I can understand why the Trust might wish to put in evidence the response to the death of Rachel* [sic]."[860] The Coroner thus allowed him to be called as a witness.

5.302 In addition, on 1st May 2002, Dr Nesbitt wrote to the CMO "*to know if any... guidance was issued by the Department of Health following the death of a child in the RBHSC which occurred some five years ago and whose death the Belfast Coroner investigated. I was unaware of the case and am somewhat at a loss to explain why. I would be grateful if you could furnish me with any details of that particular case for I believe that questions will be asked as to why we did not learn from what appears to have been a similar event.*"[861] The CMO responded by reassuring Dr Nesbitt that "*This Department was not made aware of the case at the time either by the Royal Victoria Hospital or the Coroner. We only became aware of that particular case when we began the work of developing guidelines following the death at Altnagelvin.*"[862]

5.303 Mrs Brown was then able to advise the Chief Executive that "*the positive aspects of the case are... the action taken following the death and again it is hoped that Dr. Fulton will be able to give evidence in relation to his actions following the tragic incident. The other positive note is the letter dated May of this year from Dr. Campbell to Dr. Nesbitt and the barrister is keen to*

858 022-089-295
859 012-070k-397
860 160-106-001
861 022-091-298
862 022-090-297

exploit this issue."[863] To that end Dr Nesbitt's letter to the CMO[864] and her reply[865] were sent directly to the Coroner himself.[866]

Altnagelvin commissions independent expert opinion

5.304 The inquest was re-listed for 26th November 2002.[867] Counsel retained to act on behalf of the Trust directed that the Trust's solicitor obtain a report "*from an independent Consultant Paediatric Anaesthetist who should comment* [on] *management of this case, the contents of Dr. Sumner's report and the steps taken by the Trust following this incident to ensure that such an incident could not occur again...*"[868]

5.305 On 1st November 2002[869] the Trust's solicitor sought the independent expert opinion, not of a consultant paediatric anaesthetist, but of Dr John G. Jenkins,[870] who was a consultant paediatrician. He was nonetheless well qualified, being a member of the CMO's Working Group on Hyponatraemia[871] and the same expert who had some months before provided the same solicitors with a report on the care, treatment and death of Lucy Crawford.[872]

5.306 He was briefed with a full Schedule of Documents[873] excepting only that Dr Fulton's Critical Incident Review plan was omitted[874] and disturbingly a copy of Altnagelvin's 'draft press statement'[875] for release after inquest, included. This statement asserted that "*it is important to be aware that the procedures and practices put into effect in the care of Raychel following her operation were the same as those used in all other area hospitals in Northern Ireland.*" This inclusion was inexcusable in that not only was it known to be untrue but it blatantly suggested Altnagelvin's preferred opinion to the independent

863 022-017-052
864 022-091-298
865 022-090-297
866 012-070k-396
867 012-056-286
868 022-019-060
869 172-002-001
870 312-003-007
871 WS-059-1 p.1
872 013-011-037
873 172-002-002
874 Dr Jenkins T-10-09-13 p.131 line 13
875 172-002-043

witness. Although this was Dr Jenkins' first experience of drafting a report for an inquest,[876] he wisely "*didn't really take notice of it.*"[877]

5.307 Dr Jenkins' initial view was that Raychel's vomiting "*needed to be looked at in more detail as a particularly important aspect*"[878] and "*an area which required clarification. Dr Sumner had reached a view which differed from that of the staff who'd been providing care, so... it was important that this was something which needed to be elucidated.*"[879] Accordingly, he concluded his opinion dated 12th November 2002 by observing that "*while it was possible in retrospect to form the opinion reached by Dr. Sumner that Raychel must have suffered severe and prolonged vomiting, this does not seem to have been the assessment of her condition made by experienced staff at the relevant time*" and it was thus "*important that further details are obtained of relevant nursing and medical procedures and management in relation to fluid administration and post-operative monitoring of fluid intake, urine output and other losses such as vomiting. In particular information needs to be obtained regarding the local policy for post-operative fluid administration in children. Was the prescribed regime in this case in keeping with this guidance?*"[880] However, no further information on these important matters was to be forthcoming to Dr Jenkins.[881]

5.308 His opinion may not have been thought sufficient for Altnagelvin's purposes because on 3rd December 2002 another report was commissioned, this time from Dr Declan Warde,[882] of the Children's University Hospital Dublin who was a Consultant Paediatric Anaesthetist.[883] Dr Warde, having agreed to "*attend the inquest hearing on behalf of the Trust*" was specifically asked to "*comment on the treatment provided and the issues raised by Dr. Sumner.*"[884] The inquest was further adjourned to 5th February 2003.[885]

876 Dr Jenkins T-10-09-13 p.92 line 11
877 Dr Jenkins T-10-09-13 p.82 line 2
878 Dr Jenkins T-10-09-13 p.84 line 20
879 Dr Jenkins T-10-09-13 p.90 line 22
880 022-010a-041
881 Dr Jenkins T-10-09-13 p.91 line 12
882 312-003-007
883 160-083-001
884 160-083-001
885 012-059-292

5.309 Dr Warde's report was received by the Trust solicitor on 19th January 2003.[886] He gave it as his opinion that Raychel had "*died as a result of developing cerebral oedema secondary to acute hyponatraemia, which was itself caused by a combination of severe and protracted post-operative vomiting, SIADH and the administration of intravenous fluid with a low sodium content.*"[887] This was even less supportive of Altnagelvin's position than Dr Jenkins' opinion and flatly contradicted the contention that the vomiting was neither severe nor prolonged. The Report was sent to Dr Jenkins who was asked for "*any further comments which you have which might assist the Trust.*"[888] The wording of this request is regrettable because it was open to misinterpretation and in any event, Dr Jenkins' paramount responsibility was always to assist the Coroner.

5.310 Dr Jenkins commented on 27th January 2003 that "*Dr. Warde again makes reference to the significance of the vomiting. I pointed out in my report of 12th November 2002 the importance of seeking further information regarding the frequency and severity of Raychel's vomiting in the opinion of senior staff... I have also not been provided with any further details of relevant nursing and medical procedures and management in relation to fluid administration and post-operative monitoring of fluid intake, urine output and other losses such as vomiting.*"[889]

5.311 On 28th January 2003, the Trust's solicitors informed Dr Warde that his services were not required at the inquest[890] and Dr Jenkins' attendance for 5th February was confirmed.[891]

5.312 Dr Jenkins then produced his third and final report dated 30th January 2003[892] from which he omitted much that he had been included in his earlier reports. All reference to Raychel's vomiting, the amount of fluid administered and his requests for further information was excised. He

886 160-046-001
887 022-006-023
888 160-045-001
889 022-004-013
890 160-044-001
891 012-070b-386
892 022-004-010

made no mention of Dr Warde's report and concluded that "*having carefully studied the statements provided by the doctors and nurses involved in Raychel's care my opinion is that they acted in accordance with the established custom and practice in the Unit at that time.*"[893]

5.313 Dr Jenkins' "*best guess*" as to how this came about was "*that I was asked to re-format my report and to concentrate on the aspects of the development of guidance*"[894] and accordingly, "*my third report, the report for the Coroner, was specifically addressing the broader issues.*"[895] This was regrettable because an independent expert can never be truly independent if placed under direction. Dr Jenkins having been asked for "*an independent view re treatment for inquest hearing*"[896] and having agreed to prepare a report on the matter[897] was perhaps naive in the circumstances to consider that the Trust "*was within their rights to advise me as to what aspects of the matter I should provide a report on for the Coroner.*"[898] It appears likely that 'editorial' control was exerted by lawyers representing Altnagelvin.[899] Entitlement to legal privilege was asserted by Altnagelvin which frustratingly precluded any further investigation of this important matter.

5.314 It was Dr Jenkins' third report alone which was sent to the Coroner[900] and subsequently incorporated into his deposition at inquest.[901] The Coroner was thus led to believe that the sole expert opinion held by Altnagelvin was Dr Jenkins' third report[902] and that represented the totality of his relevant opinion.

5.315 Dr Jenkins was able "*in retrospect*" to appreciate that it would have been "*very sensible*"[903] to include his own observations where relevant for the

893 022-004-011
894 Dr Jenkins T-10-09-13 p.106 line 11
895 Dr Jenkins T-10-09-13 p.108 line 11
896 160-113-002
897 172-002-001
898 Dr Jenkins T-10-09-13 p.104 line 2
899 Dr Jenkins T-10-09-13 p.114 line 22
900 012-070b-386
901 012-030-153
902 012-070b-386
903 Dr Jenkins T-10-09-13 p.106 line 24

Coroner and recognised "*in retrospect that it would have been a more sensible thing*"[904] not to omit comment previously considered relevant.

5.316 Significantly, the Trust did not share Dr Warde's report with the Coroner either. Nor was it shared with the Ferguson family (or indeed later with the PSNI). The Coroner was not told that Altnagelvin was in possession of an opinion from a second consultant paediatric anaesthetist let alone one which supported Dr Sumner's views. A decision must have been taken to withhold the report. Dr Nesbitt believes "*that this would have been a decision made by the Chief Executive*"[905] but Mrs Burnside claimed "*no knowledge of why and how it did not go to the Coroner.*"[906] Others said that this non-disclosure was upon the advice of the Altnagelvin's legal advisors[907] acting in liaison with Mrs Brown.[908] It was not at all what the Coroner expected of them.[909] Mr Leckey acknowledged that "*there may be an issue raised of privilege. What I would say is, are we not investigating in this case the death of a child and let's not dwell on legal niceties first. We want to get to the truth.*"[910]

5.317 Professor Swainson advised that "*the principle I would adhere to is that you make a full disclosure of whatever information you have because of two reasons. One is it helps the process, it can only be helpful. Secondly, if you don't, it'll come out later anyway... So my overriding principle is that in these circumstances your duty is to assist the Court, or whatever, as far as you are able. I have been advised by my solicitors previously not to either submit a report or submit it in a different form and I've been happy to discuss that, but I have never agreed to not submitting a report that was available that would have been of clear relevance to court proceedings.*"[911]

5.318 Had Altnagelvin been sincerely motivated to assist the Coroner it would undoubtedly have shared Dr Warde's publicly funded expert opinion with

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904 Dr Jenkins T-10-09-13 p.109 line 6
905 WS-035/2 p.31
906 Mrs Burnside T-17-09-13 p.164 line 5
907 Mrs Brown T-02-09-13 p.177 line 5 & Mrs Margaret Doherty T-09-09-13 p.43 *et seq*
908 Dr Fulton T-04-09-13 p.112 line10
909 Mr Leckey T-25-06-13 p.110 line 8 & p.109 line 23
910 Mr Leckey T-25-06-12 p.109 line 23
911 Professor Swainson T-19-09-13 p.134 line 17

him, just as the Coroner shares with the public those expert opinions commissioned by him.[912] It is hard to understand what public interest is served by withholding such a report. Notwithstanding that Altnagelvin was not legally obliged to submit Dr Warde's report – it is hard not to conclude that the wrong approach was taken.

5.319 The Altnagelvin preparation for inquest was calculated and defensive. I interpret the actions of those involved on behalf of Altnagelvin as having been primarily motivated by a misguided desire to avoid the risk of criticism and to portray the hospital in the best possible light. If a culture of defensiveness characterised the responses of the clinicians involved it also marked those engaged with this aspect of governance.

5.320 Additionally, I wish to record my disappointment that the Trust should have withheld documentation from this Inquiry on the basis of legal privilege. This has not assisted. It can only inflame suspicion of 'cover-up'. Whilst I fully recognise the Trust's legal right to assert privilege I do not necessarily consider it ethical. In this context, I am influenced by the contrast between Altnagelvin's promises of unqualified co-operation with the work of the Inquiry and the reality. In November 2004, the Trust issued a statement to the press assuring that "*Altnagelvin will co-operate fully and without equivocation with this Inquiry*"[913] and in addition Mrs Burnside wrote to me personally "*that Altnagelvin will give its fullest co-operation to the Inquiry team.*"[914] Lest there could have been any doubt the Trust solicitors then also wrote to the Ferguson family solicitor on 30th June 2005 to confirm "*it is our client's intention and duty to assist the Inquiry in every way possible and to participate fully in its investigations.*"[915] It is therefore a matter of regret that Altnagelvin should, for whatever reason, have failed to honour its pledges.

912 012-070p-405
913 021-010-025
914 021-009-021
915 326-002-001

Inquest

5.321 The inquest into Raychel's death opened on 5th February 2003 before H.M. Coroner, Mr John Leckey,[916] and heard evidence over the course of 4 days from 16 witnesses including Mrs Ferguson. Whilst there is no formal transcript of the proceedings, a very full note was taken by the Trust's solicitor.[917] Expert evidence was received from Drs Herron, Sumner and Jenkins.

5.322 Dr Heron's autopsy findings were unchallenged and Dr Jenkins having listened to the evidence of Dr Sumner "*suddenly realised that Dr Sumner and indeed Dr Warde had evidence* [[918]] *to support their conclusions and I was content with that evidence.*"[919] Accordingly, he "*stated that he concurred with all the views expressed by Dr. Sumner.*"[920] This was very proper, not least because the Coroner did not have the benefit of Dr Warde's evidence.

5.323 Furthermore, Dr Jenkins made reference in his evidence to the "*tragic death of two children in Northern Ireland*" from hyponatraemia.[921] This, which was an intended reference to Lucy Crawford's death, was misunderstood as a reference to Adam Strain, and Lucy's death remained unknown to the Coroner. This was unfortunate given that it was known to Altnagelvin's legal advisors.

5.324 No evidence was given by the doctors who had actually seen Raychel on Ward 6 on 8th June 2001. Evidence was, however, received from Drs Gund, Jamison, Johnston and Trainor who neither cared for Raychel on the ward nor attended the Critical Incident Review. Drs McCord, Nesbitt and Fulton together with Mr Gilliland did however give evidence.

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916 328-001-005
917 160-010-001 *et seq*
918 160-010-015: i.e. the evidence relating to the abnormality of the electrolyte results which was interpreted as indicative that the vomiting must have been severe (Dr Jenkins T-10-09-13 p.116 line 6)
919 Dr Jenkins T-10-09-13 p.117 line 7
920 012-064-323
921 022-004-011

5.325 Mr Foster was concerned that two key members of the surgical team failed to attend.[922] Dr Makar was on leave and Dr Zafar was sitting exams.[923] This was regrettable but consistent with the established detachment of the surgical team from the case. It did not however unduly concern the Coroner or prevent him from reaching a finding.[924]

5.326 Dr Nesbitt who was Altnagelvin's new Medical Director, was the most senior Trust representative at the inquest. He chose not to tell the Coroner about those deficiencies in treatment identified by him and described in his PowerPoint presentation. Whilst he conceded that there were no blood tests on 8th June[925] he did not indicate that he regarded this as relevant or a failing. Whilst he steadfastly maintained that he "*did not withhold anything from the Coroner*"[926] it is clear that he could have volunteered more. Whilst it may not have made any difference I am of the view that he could and should have proffered more information to the Coroner about what he knew to be relevant.

5.327 The Coroner was given the perspective of the surgical team by Mr Gilliland who gave evidence that he was "*not sure blood test should have been done as vomiting common and* [Raychel was] *being treated appropriately,*"[927] that it was "*not commonplace to measure urine output in routine appendectomy*",[928] that he "*would not expect a member of surgical team to be told child vomited*"[929] and that Dr Curran, who had prescribed the second anti-emetic did not, as a junior, need to "*pass decision to a senior.*"[930] Given what Mr Gilliland must have known about Dr Fulton's action plan to address the clinical failings identified at Critical Incident Review,[931] I consider his evidence to have been generally unhelpful and in some respects to have been misleading.

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922 223-002-029
923 223-002-029
924 160-010-032
925 160-010-038
926 Dr Nesbitt T-03-09-13 p.156 line 11
927 160-010-041
928 160-010-041
929 160-010-042
930 160-010-042
931 Mr Gilliland T-14.03.13 p.164 line 11

5.328 Both Dr Nesbitt and Mr Gilliland were subject to the GMC obligation to "*assist the Coroner by... offering all relevant information to an inquest or inquiry into a patient's death.*"[932] I do not believe that they honoured that obligation.

5.329 Sister Millar and Staff Nurses McAuley and Noble gave the nursing evidence. Sister Millar said the "*nurses* [were] *experienced, childrens' trained*",[933] that Raychel's case was not unusual,[934] that she "*was happy she would be fine*"[935] and she had "*seen many children vomit post-appendectomy... have seen patients vomit more.*"[936] They agreed that Raychel's vomiting had not been a cause for concern.

5.330 Sister Millar told the Coroner that the record of vomits was not unusual.[937] She failed to mention that the fluid balance documentation was poor[938] or that the Ferguson family had been concerned about its severity.[939] Nor was the Coroner told that an internal Critical Incident Review had agreed that the vomiting was prolonged.

5.331 The Coroner was further led to believe by Sister Millar that junior surgical doctors were readily available for their surgical patients on Ward 6,[940] notwithstanding that she had made their non-availability an issue at the Critical Incident Review.[941] Sister Millar accepted that she ought to "*have expanded*"[942] on these matters for the Coroner. I consider that her failure 'to expand' was disingenuous and a breach of her professional duty of truthfulness.[943]

5.332 Staff Nurse McAuley also gave evidence that Raychel's vomiting was not unusual and had given her no cause for concern.[944] Staff Nurse Noble told

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932 314-014-014
933 160-010-047
934 160-010-047
935 160-010-050
936 160-010-051
937 160-010-051
938 Sister Millar T-28-08-13 p.172 line 18
939 Sister Millar T-28-08-13 p.174 line 4
940 160-010-050
941 022-097-038
942 Sister Millar T-28-08-13 p.172 line 4
943 UKCC 'Guidelines for Professional Practice' (1996) 314-003-016
944 160-010-051

the Coroner that she had nursed patients who had vomited more and that it was "*not unusual to have patients who vomited post-operatively.*"[945]

5.333 It is hard to conceive that these witnesses could have agreed one thing at Critical Incident Review and then said another at inquest had the Critical Incident Review been recorded and a report prepared.

5.334 Nonetheless, and having heard this evidence the Coroner seemed to have little difficulty in reaching the verdict that Raychel's "*hyponatraemia was caused by combination of inadequate electrolyte replacement in the face of severe post-operative vomiting and water retention resulting from the inappropriate secretion of ADH (anti-diuretic hormone).*"[946] He thus firmly rejected the Altnagelvin contention that the vomiting was "*neither severe nor prolonged*"[947] and confirmed that the electrolyte replacement therapy was inadequate in the circumstances. It was a damning verdict on the care and treatment given Raychel at Altnagelvin.

RBHSC engagement with inquest

5.335 The RBHSC was also represented at the inquest and Dr Crean was its only witness. In preparation for the hearing Mr Brangam, its solicitor, wrote to Mr Walby of the RGHT Litigation Management Office that "*At first blush I cannot see how the Trust can be implicated in the tragic circumstances surrounding the treatment given to the child and the subsequent demise at RBHSC. Dr. Crean has indicated to me that the facts surrounding an earlier matter (Adam Strain deceased) were not on all fours with the present case, but, I believe, it would be prudent for you to speak directly with Dr. Ian Carson in relation to this matter, particularly, given it would appear that the Department has some knowledge of the circumstances surrounding this particular incident.*"[948] Dr Carson was by then Deputy Chief Medical Officer.[949]

945 160-010-055
946 012-026-139-140
947 160-163-003
948 064-022-063
949 306-088-002

5.336 The RGHT interest in distinguishing Raychel's case from Adam's might suggest that it considered itself vulnerable to the criticism that the cases were so similar that the lessons from Adam's case ought to have been applied to Raychel's. This mirrored Dr Nesbitt's concern that Altnagelvin should avoid criticism for having failed to learn from Adam's case.

5.337 Mr Walby advised the solicitor that he had "*spoken to Dr. Crean and he will stick to his brief at the Inquest...*"[950] Dr Crean's evidence at the inquest dealt only with the facts of Raychel's case. He did not volunteer any criticism of Raychel's care nor make any connection with Lucy's case. He said it did not occur to him.[951]

5.338 After the inquest Mr Brangam advised Mr Walby that "*I cross examined Dr. Sumner in relation to the Adam Strain case and I asked him to distinguish and differentiate between the two cases.*"[952] In the event the RBHSC was not criticised by the Coroner and Mr Walby thanked Mr Brangam "*very much for minding our back at this inquest.*"[953]

Altnagelvin's public response to inquest

5.339 Before the inquest, Altnagelvin had declined to provide any meaningful comment to the press on the basis that it was inappropriate at that time.[954] Mrs Burnside told her Board that "*the Trust's only comment to any media inquiry will be to again offer our sympathy and regret to the family.*"[955] However and inconsistently, Mrs Burnside also described how "*we did try to brief the media off the record, trying to give them information that would be helpful. None of that information was ever used in the media. And one does not want to be standing up saying 'this is our position' when what you're dealing with is a tragedy and absolute grief.*"[956] This has parallels with the quiet briefing given to Dr Jenkins of Altnagelvin's press release and gives

950 064-019-054
951 Dr Crean T-11-09-13 p.99 line 5
952 064-016-050
953 064-014-046
954 023-002-002
955 321-058-011
956 Mrs Burnside T-17-09-13 p.200 line 24

rise to the uncomfortable sense that Altnagelvin was attempting a 'damage limitation' exercise.

5.340 After the inquest, Altnagelvin nonetheless issued the press statement as previously drafted proclaiming it "*important to emphasise that the clinical practices used during Raychel's care, following her operation, were at that time accepted practice in all other Area Hospitals in Northern Ireland.*"[957] This failed to reflect the evidence. It ignored the Coroner's finding of inadequate electrolyte replacement and contradicted Altnagelvin's own review findings.

5.341 The press release was drafted by the Altnagelvin Communications Manager, Ms Marie Dunne[958] who "*worked directly to the Chief Executive*".[959] The Chief Executive herself approved the press release.[960] It is a matter of the gravest concern that a formal public communication issued in the name of a HSC Trust should mislead.

5.342 The Chief Executive had been very aware that Raychel's inquest might "*attract substantial media attention*"[961] and her Communications Department circulated advice within the hospital entitled 'Potential Media Questions (and some suggested answers) arising from the Raychel Ferguson inquest and our Statement.' It included the following:

"*How can the public be sure that there are no other 'procedures and practices' in Altnagelvin that might lead to this kind of tragedy happening again?*

Suggested answer - The public should be reassured that Altnagelvin practices in accordance with the highest professional standards as required by the various Royal Colleges in the United Kingdom. We constantly audit

957 160-016-002
958 328-001-003
959 WS-332-1 p.4
960 Mrs Burnside T-17-09-13 p.205 line 13
961 321-058-011

our work against these standards and ensure we keep up to date with the new developments and new treatment options."[962]

5.343 Fortunately, the public was not given this particular 'reassurance' because the evidence received revealed a very different reality within Altnagelvin. The relevant Royal College of Surgeons NCEPOD guidance was either unknown or ignored[963] and far from auditing compliance with NCEPOD recommendation, the evidence suggested that it was unlikely that the Clinical Audit Committee at Altnagelvin was aware of the NCEPOD report.[964] I received evidence that Altnagelvin had no "*clear systems for ensuring compliance with relevant UK professional guidance,*"[965] no central library where Royal College guidelines were stored or assessed,[966] and "*no written protocols, guidelines, guidance or practice documents in relation to clinical audit.*"[967] Like many of Altnagelvin's claims to clinical governance activity, this was unfounded.[968] This cannot have been unknown to Mrs Burnside.

5.344 Accordingly, the Communications Department, and by extension the Chief Executive,[969] is open to the criticism of encouraging Trust employees to make public statements which mislead. The Chief Executive was, at all times, bound by the code of public service values[970] requiring that "*public statements and reports issued by the Board should be clear, comprehensive and balanced, and should fully represent the facts.*"[971] Whilst public confidence in the Health Service is important, it must never be pursued without strict regard for the truth.

962 023-018-030
963 Miss Duddy T-29-08-13 p.107 line 11
964 Mrs Brown T-02-09-13 p.92 line 17
965 226-002-015
966 316-006e-002
967 321-004f-004
968 Mrs Brown T-02-09-13 p.95 line 15
969 Miss Duddy T-29-08-13 p.114 line 24
970 Mrs Burnside T-17-09-13 p.7 line 6
971 306-096-004

Meeting with WHSSC

5.345 After the inquest the WHSSC formally sought a meeting with Altnagelvin in order to "*learn of the Altnagelvin perspective of the tragedy and... to be informed of the facts and to help members to restore public confidence, which I am informed has been damaged.*"[972] On 19th February 2003 Mr Stanley Millar,[973] Chief Officer of the WHSSC and other members of the Council met with Mrs Burnside, Miss Duddy and Dr Nesbitt.[974] It was noted that "*The Trust provided a copy of a press statement*"[975] to the WHSSC. This was in fact the same misleading statement as released the previous week.[976] Mrs Burnside was unable to give any satisfactory explanation for this.[977] That it should be offered by the Chief Executive to the WHSSC gives rise to the profoundest disquiet.

5.346 Mrs Burnside maintained that the information given the WHSSC was "*full and frank*"[978] and whilst Dr Nesbitt did provide his PowerPoint presentation[979] explaining some of the shortcomings in Raychel's case, Mrs Burnside nonetheless "*explained the outcome of the Coroner's inquest which did not apportion blame to the Trust.*"[980] This was sadly yet another misrepresentation.

5.347 I find in the approach of Altnagelvin, whether it be to Mr and Mrs Ferguson, the Coroner, the WHSSC or this Inquiry, a defensiveness and willingness to mislead. It came from the top as this meeting demonstrated. Mrs Burnside, the Chief Executive, was responsible and implicated. She is to be criticised.

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972 014-012-022
973 328-001-005
974 014-016-028
975 014-016-028
976 023-003-003
977 Mrs Burnside T-17-09-13 p.217 line 21
978 Mrs Burnside T-17-09-13 p.219 line 13
979 021-054-117
980 014-016-028

Lucy Crawford

5.348 Mr Millar, having reflected upon what he had been told, wrote to the Coroner on 27th February 2003 about the death of Lucy Crawford: "*following the Raychel Ferguson Inquest I, with other members of the WHSSC, received a briefing on the events which led up to Raychel's death. I was struck by the similarities in the two tragedies... I am left with two questions which you may be able to answer. (1) Are there direct parallels in the events leading up to the death of both girls? (2) Would an Inquest... in 2000/2001 have led to... recommendations from the....*[981] *Inquest being shared at an earlier date and a consequent saving of her life?*"[982] It is troubling that it should have been a lay person rather than a doctor who brought Lucy's death to the attention of the Coroner.

5.349 The Coroner forwarded Mr Millar's letter to the CMO[983] and sought Dr Sumner's opinion about Lucy's case. The contribution made by the late Mr Millar was important and is to be praised.

Chief Medical Officer

5.350 In the aftermath of Raychel's inquest Dr Campbell, the CMO gave media interviews, including one to UTV on 25th March 2004.[984] In it she expressed regret for the tragedy of Lucy and Raychel's deaths and said that "*the rarity of these two events was the abnormal reaction which is seen in a very few children in the normal application* [of fluids]."[985] This was inconsistent with the Coroner's finding.

5.351 Mr and Mrs Ferguson, already convinced that their daughter's death would have been avoided but for a 'cover up' in Lucy's case, then lodged a formal complaint about the CMO with the GMC on 6th November 2004.[986] Amongst their grievances, they asserted[987] that the CMO knew, or ought to

981 Words omitted to convey clearly intended meaning
982 013-056-320
983 006-010-294
984 006-037-375
985 006-037-377
986 068-013-022
987 068-013-022

have known, that the deaths of Lucy and Raychel were caused by the administration of the wrong type and volume of fluid and not by an "*abnormal reaction*"[988] and that she had therefore misrepresented the facts to the media.

5.352 The CMO countered that she had been "*completely clear in both interviews that both deaths were preventable and hence clearly accepted by implication that they were caused by clinical mistakes*"[989] and "*there was no intention on her part to mislead or misrepresent the facts*."[990]

5.353 The GMC having heard the matter found that the CMO's reference to an "*abnormal reaction*" was "*misleading*"[991] in that it "*appeared to contradict*" the Coroner's finding, that the interviews were "*open to misinterpretation*" and that she had handled them "*inappropriately*".[992] However, the panel found no evidence that the CMO had engaged in 'cover-up' or that her actions warranted a formal warning. She was invited to reflect upon the finding and the concerns of Mr and Mrs Ferguson. The complaint was closed.

Litigation

5.354 Altnagelvin had a Clinical Negligence Scrutiny Committee[993] in 2001 and a policy deeming it "*extremely important that claims for negligence are managed appropriately to increase public confidence and respect.*"[994] Clear guidance on claims management was then available to it, not least from the 1996 'HPSS Complaints Procedure' which advised that "*where the Trust/Board accepts that there has been negligence a speedy settlement should be sought*"[995] and the HPSS Protocol on Claims Handling[996] which "*recommended that in each and every case where it is realised that defence*

988 006-037-377
989 104-026-519
990 104-026-522
991 104-022-446
992 104-022-447
993 WS-323-1 p.14
994 321-004fd-004
995 314-016-017
996 317-037-001

will be difficult to sustain, consideration be given to admitting liability and attempting to reach settlement."[997]

5.355 From the outset, Altnagelvin thought it likely that the Fergusons would litigate.[998] On 1st May 2003, Mr and Mrs Ferguson's solicitors asserted by letter of claim "*our client's instructions that the death of their daughter was occasioned by the negligence, breach of duty and/or breach of statutory duty... in or about the provision of medical treatment.*"[999]

5.356 Given the findings at critical incident review, the consensus of expert opinion, the Coroner's damning verdict and Mrs Burnside's view that Altnagelvin "*would be moving to settle this litigation at the soonest opportunity*",[1000] I cannot understand why liability was not then accepted and settlement pursued.

5.357 However, Altnagelvin responded with a comprehensive denial of liability. It's solicitor wrote to Mr and Mrs Ferguson's solicitor to state in the clearest terms that Altnagelvin did "*not accept that it, or its staff, were negligent or that, if there was any failure to apply appropriate standards, that the failure caused or contributed to the death of Raychel Ferguson and therefore liability is denied.*"[1001] This denial prompted the Fergusons to commence legal proceedings on 5th May 2004.[1002]

5.358 Mrs Brown, by then promoted to Risk Management Director,[1003] again liaised with the Trust's solicitor about Raychel's case but did not seek any further information or advices.[1004] Nonetheless, complete denial remained Altnagelvin's response to the Ferguson claim then and for the many years thereafter and even when confronted by the PSNI and the process of this Inquiry.

997 317-037-010
998 WS-046-2 p.28 & Mrs Burnside T-17-09-13 p.224 line 14 & WS-043-3 p.11
999 024-001-001
1000 Mrs Burnside T-17-09-13 p.224 line 16
1001 326-002-002
1002 024-019-031
1003 024-002-002
1004 Mrs Brown T-02-09-13 p.188 line 1

5.359 It is not therefore surprising that Mr and Mrs Ferguson should have become incensed by Altnagelvin's refusal to accept responsibility for their daughter's death.[1005] They thought it inexcusable[1006] and I agree. The hospital's response was unnecessary and caused additional anguish.

5.360 The Ferguson family had to listen to almost all the evidence given to this Inquiry before Altnagelvin finally conceded liability on 30th August 2013. A formal statement was then made that "*the Trust,*[1007] *having taken into account the evidence heard during this Inquiry, including independent expert evidence and the interim comments of the Chairman, formally admits liability. The Trust apologises unreservedly for Raychel's death and regrets any further hurt or distress that the delay in admitting liability has caused the family.*"[1008] Whilst very welcome, admission did not have to await this Inquiry but could have been made ten years earlier.

5.361 In my view the denial of liability was unjustified, contrary to guidance, contrary to policy and the product of engrained defensiveness. It ran expressly counter to Altnagelvin's own publically expressed desire "*to encourage a culture of honesty and openness where mistakes and untoward incidents are identified quickly and dealt with in a positive and responsive way.*"[1009] It is a good example of how failure by a Trust Board to follow the clear guidance given it can erode the confidence and respect necessary for the efficient functioning of the Health Service.

5.362 No explanation was given as to why liability was not accepted earlier. Given the widespread public interest in Raychel's case, whether at inquest, on TV, through the CMO or this Inquiry - the decision to deny liability must have been sanctioned by Mrs Burnside. As there was no basis upon which to contest the claim I can only conclude that the Trust repudiation of liability was made for tactical reasons. If so, the Trust was cynical in its disregard

1005 Mr and Mrs Ferguson T-26-03-13 p.179 line 13 *et seq*
1006 Mrs Ferguson T-26-03-13 p.179 line 16
1007 By August 2013 Altnagelvin had been included within the new Western Health & Social Care Trust
1008 Dr Carson T-30-08-13 p.1 *et seq*
1009 321-004fd-002

of Mr and Mrs Ferguson and acted in violation of the values of public service. Responsibility would lie with the Chief Executive.

Conclusion

5.363 The introduction of clinical governance was complex, time consuming and expensive.[1010] Resources were limited and the hospital was stressed. Miss Duddy had multiple roles to fulfil and Dr Fulton was a part-time Medical Director. Notwithstanding that the implementation of clinical governance was at a comparatively early stage, the Altnagelvin Annual Reports[1011] and the Director of Nursing[1012] both confidently described a developed and functioning hospital clinical governance system at the time of Raychel's admission. The evidence convinced otherwise. The lack of functioning controls and the unstructured responses to Raychel's death do not substantiate the claims.

5.364 Neither the Clinical Governance Committee[1013] nor the Risk Management and Standards Committee actually came into existence until after Raychel's death[1014] and the Clinical Incident Committee met only quarterly.[1015] It did not minute its transactions,[1016] and did not review Raychel's case because it was defined as a critical incident rather than a clinical one.[1017] Needless to say, there was no Committee for Critical Incidents.[1018] The claims for clinical governance far exceeded the reality.

5.365 In consequence, clinical governance controls were weak. This was well demonstrated by the repeated failure to remedy deficiencies identified in bench-marking exercises, to implement external guidance or even adhere to internal protocols. Quality assurance had decidedly not been achieved

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1010 Dr Carson T-30-08-13 p.5 line 18
1011 321-004gj-042
1012 Miss Duddy T-29-08-13 p.11 line 20 *et seq* & p.87 line 7 & p.88 line 7
1013 321-004gj-042
1014 Mrs Brown T-02-09-13 p.24 line 20 & p.23 line 9 & Dr Fulton T-04-09-13 p.2 line 5
1015 Mrs Brown T-02-09-13 p.14 line 3
1016 Mrs Brown T-02-09-13 p.14 line 13
1017 Mrs Brown T-02-09-13 p.17 line 20
1018 Mrs Brown T-02-09-13 p.20 line 9

at Altnagelvin. That was significant because such controls reveal frailties in a system before they can be revealed by tragedy.

5.366 At the same time, lax leadership and management problems characterised Altnagelvin's paediatric surgical service from the ward up. Miss Duddy visited Ward 6 only sporadically[1019] and although she met with her Clinical Services Manager and Clinical Effectiveness Co-ordinator[1020] and believed that nursing issues would get to her and that she could assure the Trust Board as to nursing standards,[1021] that was clearly not the case.

5.367 Nursing problems were not being addressed. Miss Duddy conceded that she was not even aware that her nurses had difficulties accessing surgical doctors "*until after the Critical Incident Review by which time the Medical Director was already dealing with the issue.*"[1022] Her nurses had no opportunity for "*formal meeting between nursing staff, paediatric medical staff and surgical consultant staff*"[1023] in order to address issues of joint concern.[1024] The established management lines led them to the Clinical Services Manager and the Director of Nursing by-passing Dr Martin,[1025] the Clinical Director, the consultant paediatricians and most particularly the Clinical Director of Surgery. A line management disconnect existed which did not facilitate escalation of such matters directly to Dr Fulton and he remained unaware of the situation.[1026] This was a genuine systemic problem because "*the medical director must be confident that effective systems and effective clinical leadership are in place for each and every clinical service within the Trust.*"[1027]

5.368 Lack of consultant engagement and control was well illustrated by the multi-disciplinary mismanagement of Raychel's fluid therapy. The obvious necessity was that all should understand their role and responsibility in each

[1019] Miss Duddy T-29-08-13 p.20 line 6 & Sister Millar T-28-08-13 p.114 line 11
[1020] Miss Duddy T-29-08-13 p.17 line 18
[1021] Miss Duddy T-29-08-13 p.17 line 23
[1022] Miss Duddy T-29-08-13 p.26line 17
[1023] Mr Gilliland T-28-08-13 p.11 line 3
[1024] Mr Gilliland T-28-08-13 p.7 line 8
[1025] Mrs Burnside T-17-09-13 p.22 line 10
[1026] Dr Fulton T-04-09-13 p.16 line 14
[1027] 317-034-014 per Lugon

aspect of such patient care. That was a matter for the leadership of the responsible consultant[1028] as well as the consultants more generally. That was not given. That medical and surgical patients on Ward 6 should be subject to different blood test regimes points to a further obvious failure by the consultants to engage and give direction.

5.369 Weak leadership of the surgical team was revealed, not least by the complete absence of consultant or registrar from Raychel's care from admission to collapse, in circumstances where Mr Gilliland was largely unaware of the competence of his junior doctors and had no means of assessing the capability of the nurses upon whom his patients and doctors were so dependent.[1029]

5.370 These and other shortcomings in clinical governance, leadership and consultant engagement permitted significant clinical vulnerabilities to develop. Cumulatively this allowed clinical error and increased the risk of catastrophic outcome. It is for these reasons that I do not believe that any single individual can be blamed for the tragedy of Raychel's death but rather that the responsibility for what happened is collective.

Concluding remarks

5.371 After Raychel's inquest the Coroner wrote to Dr Campbell on 11th February 2003[1030] to pass on Dr Sumner's praise for the Department's 'Guidance on the prevention of Hyponatraemia in Children' and his view that in this respect "*Northern Ireland was ahead of the rest of the UK.*" He expressed his hope that the guidance might be drawn to the attention of the CMOs for England and Wales, Scotland and the Republic of Ireland.

5.372 I have no doubt that the Department's guidelines may have saved lives and owe their existence, in no small measure, to the professional and responsive actions of Drs Fulton and Nesbitt.[1031] As Professor Swainson recognised, theirs "*was a significant and highly commendable set of actions*

1028 314-014-015
1029 Mr Gilliland T-28-08-13 p.20 line 14
1030 006-002-156
1031 Professor Swainson T-19-09-13 p.142 line 7

which have improved considerably the quality of care across the province and reduced the risk of hyponatraemia."[1032] The very fact that praise is so obviously due in this regard draws attention to the overall inconsistency of the governance response to Raychel's death at Altnagelvin.

5.373 The timely Critical Incident Review and action plan together with the alert given the wider medical community as to the risks arising with Solution No.18 stand as good examples of clinical governance in action. However, there persisted an obdurate reluctance amongst clinicians to openly acknowledge specific failings in Raychel's care, whether to her family, the Coroner or the public. That was wholly reprehensible. The inclination of clinicians to avoid criticism in this way conflicts with patient interest and must not be tolerated in the Health Service.

5.374 The proper approach should of course, and at all times have been, that which was suggested to Altnagelvin at the outset of its engagement with clinical governance, namely that "*the actions of the organisation must be transparent and if negligence is identified during the investigation, this should not be hidden as it will serve no purpose and undoubtedly these facts will come to light during the legal process.*"[1033]

[1032] 226-002-006
[1033] 317-034-004