		Witness Statemer	nt Ref. No.	040/2	
NAME OF CHILD: RAYCHEL FERGUSON					
Name: Dara O'	Donoghue				
Title: Dr					
	on and institutional for Sick Child	n: Consultant Paediatrician/ Clinical A	 Icademic Tea	aching Fellow	7, Royal
Previous positi	on and instituti	on:			
Clinical Fellow	in Paediatric Ir	tensive Care in the Royal Belfast Hosp	ital for Sick	Children	
[As at the time o	f the child's death]				
		Is and Committees: se since your Witness Statement of 5 th Septe	:mber 2005]		
	e and title all the	ons and Reports: ose made in relation to the child's death s	since your Wi	itness Stateme	nt of 5 th
OFFICIAL USI List of previou		positions and reports attached:		,	
Ref:	Date:				
040/1	05.09.2005	Inquiry Witness Statement			

IMPORTANT INSTRUCTIONS FOR ANSWERING:

Please attach additional sheets if more space is required. Please identify clearly any document to which you refer or rely upon for your answer. If the document has an Inquiry reference number, e.g. Ref: 049-001-001 which is 'Chart No.1 Old Notes', then please provide that number.

If the document does not have an Inquiry reference number, then please provide a copy of the document attached

- I. QUERIES IN RELATION TO YOUR MEDICAL QUALIFICATIONS, EXPERIENCE, TRAINING AND RESPONSIBILITIES
- (1) Please provide the following information:
 - (a) State your medical qualifications and the date you qualified as a doctor.

MB BCh BAO MRCP MRCPCH MMedSci MD DCH

Date of qualification - December 1994.

- (b) Describe your career history before you were appointed to the Royal Belfast Hospital for Sick Children.
 - Please find attached a list of the posts in which I was employed before working in the Royal Belfast Hospital for Sick Children (RBHSC).
- (c) State the date of your appointment to the Royal Belfast Hospital for Sick Children and the capacity in which you were employed.
 - I was appointed to the RBHSC as a 2nd term Senior House Officer in Ambulatory Paediatrics commencing 4th August 1999.
- (d) State the date of your appointment to the role of Research Fellow in Child Health.
 - I started working as a Clinical Fellow in Paediatric Intensive Care in the RBHSC on 6th September 2000.
- (e) Describe the duties that you were expected to carry out in your role as "Research Fellow in Child Health" and outline the clinical responsibilities, if any, which you held on the 9/10 June 2001.
 - As a Clinical Fellow in Paediatric Intensive Care i was a junior member of the medical staff working under the direction of the Consultant medical staff. It was my responsibility along with the Consultant, Registrar and Senior House Officer to do a ward round of the patients in Intensive Care every morning. Following the daily morning ward round, it was my responsibility, along with the other members of the junior medical staff, to order investigations and blood tests in Intensive Care. I would

also admit new patients to the Intensive Care Unit, establish intravenous access and in some patients intra-arterial access - and do appropriate blood tests at this time. I would also liaise with Paediatric physicians or surgeons who were involved with the ongoing care for patients in Intensive Care. I am unable to recall the exact clinical responsibilities I held on 9/10th June 2001 but they would have been similar to the above.

(f) Describe your work commitments to the Royal Belfast Hospital for Sick Children from the date of your appointment at that Hospital to the 9th June 2001, stating the locations in which you worked and the periods of time in each department/location.

I was appointed to the Royal Belfast Hospital for Sick Children as a Senior House Officer in Ambulatory Paediatrics from August 1999 until November 1999. I was then employed as a 2nd term Senior House Officer in Paediatric Cardiology from November 1999 until February 2000. I was employed as a Locum Registrar in the Paediatric Intensive Care Unit from February 2000 until August 2000. I was then employed as an SHO in-lieu of registrar at the Ulster Hospital, Dundonald for one month period in August 2000 until September 2000. I then commenced employment as the Clinical Fellow in Paediatric Intensive Care in the Royal Belfast Hospital for Sick Children on 6th September 2000 until 5th August 2001.

(g) Describe your duties in the Paediatric Intensive Care Unit of the Royal Belfast Hospital for Sick Children on the 9th and 10th June 2001.

I am unable to recall the specific duties I had on the 9th and 10th June 2001. However these would have been those of a member of junior medical staff in Paediatric Intensive Care as described in (e).

II. QUERIES ARISING OUT OF YOUR INITIAL STATEMENT TO THE INQUIRY (WS-040/1)

- (2) "I wrote up Raychel's admission, summarizing her clinical course and my examination, in the clinical notes at 13:50 (Ref: 063-009-018 to 021). On the basis of her history and investigation, my impression was that Raychel had raised intracranial pressure and cerebral oedema. At the time, the cause of this was unclear...." (Ref: WS-040/1 Page 2)
 - (a) What specific factors in Raychel's history and arising from investigation, led you to the conclusion that Raychel had raised intracranial pressure and cerebral oedema?

I was aware from the history from Altnagelvin Hospital that Raychel was unresponsive and had seizure activity. In addition, her pupils were dilated and unresponsive. This was consistent with having raised intracranial pressure. I understood that the C.T. scan from Altnagelvin confirmed cerebral oedema.

- (b) You have noted that the cause of Raychel's condition was "unclear". Did you reach any conclusions then or subsequently in relation to the most likely cause(s) of the raised intracranial pressure and cerebral oedema? If so,
 - (i) State the conclusions which you reached.

I subsequently reached the conclusion that the cerebral oedema and raised intracranial pressure occurred as a result of the intravenous administration of hypotonic fluids.

(ii) When did you reach those conclusions?

I am unable to recall when I reached these conclusions.

(iii) What material or information did you consider when reaching those conclusions?

I am unable to recall what specific material or information that I considered when reaching these conclusions. However i was aware of the dissemination of guidance on paediatric parenteral fluid prescribing in the RBHSC in 2002 from the Department of Health and social Services and Public Services (DHSSPS). I was also aware of the National Patient Safety Alert 'Reducing the risk of hyponatraemia when administering intravenous fluids to children (2007).' I subsequently became aware of other paediatric deaths that were attributed to the the intravenous administration of hypotonic fluids. It is likely that i considered all of the above information when reaching my conclusions.

(iv) What factors did you take into account when reaching those conclusions?

I am unable to recall what specific factors i took into account when reaching these conclusions. However it is likely that i took into account the factors described in (iii).

(c) If you have not already addressed the point in your previous answers, have you reached any conclusions in relation to the relevance of hyponatraemia to the cause of Raychel's deterioration? If so, please explain as fully as possible the conclusions which you have reached?

I reached the conclusion that hyponatraemia led to cerebral oedema which resulted in raised intracranial pressure that led to Rachel's deterioration.

(d) At the time the decision was taken, was it appropriate to transfer Raychel from the Altnagelvin Hospital to the PICU of the Royal Belfast Hospital for Sick Children? If so, please explain why it was appropriate to do so.

I believe it was appropriate to transfer Raychel from Altnagelvin Hospital to the Paediatric Intensive Care Unit of the RBHSC because she needed to be mechanically ventilated. The most appropriate clinical area to do this is the Paediatric Intensive care Unit. The Intensive Care Unit in the RBHSC is the only Paediatric Intensive Care Unit in Northern Ireland. Therefore it was appropriate that Rachel was transferred there.

(e) Insofar as you are aware, please explain the reasons behind the decision to transfer Raychel from Altnagelvin Hospital and to admit her to the PICU of the Royal Belfast Hospital for Sick Children?

Raychel had a reduced level of consciousness (she was unresponsive). She was also apnoeic and desaturating. This indicated that she needed to be mechanically ventilated.

The most appropriate clinical area for this to occur is in the Paediatric Intensive Care Unit and therefore transfer was arranged to the Paediatric Intensive care Unit in the RBHSC.

III. OTHER MATTERS

- (3) Insofar as you are aware, please explain the circumstances in which the Royal Belfast Hospital for Sick Children ceased the practice of prescribing Solution 18 to post-operative children, and state:
 - (a) On what date was the practice of prescribing Solution 18 to post-operative children ended?

I do not know the date the practice of prescribing Solution 18 to post-operative children ended.

(b) Who took that decision?

I am unaware of who took the decision to end the practice of prescribing Solution 18 to post-operative children.

(c) What were the reasons for that decision?

There have been a number of deaths attributed to the administration of No 18 Solution resulting in hyponatraemia and cerebral oedema and I believe these were the reasons for ending the practice of prescribing solution 18 to post-operative children.

(d) Was the decision taken in response to any particular incident(s) or circumstances? If so describe the incident(s) or circumstances which brought about this decision?

I am not aware when the decision was specifically made or what specific incident or circumstance this was made in response to. However I do believe it was in response to deaths attributed to hyponatraemia as a result of the administration of hypotonic solution.

(e) Was any other person or group of persons consulted before the decision was reached to end the practice of prescribing Solution 18 to post-operative children? If so, identify all of those who were consulted in relation to the decision?

I do not know if any other person or group of persons was consulted before the decision was reached when the practice of prescribing No. 18 solution to post-operative children.

(f) If you were consulted in relation to the decision, did you contribute any view and if so what view did you express?

I was not consulted in relation to the decision to stop the prescribing of No. 18 solution to post-operative children.

- (g) Was the decision by the RBHSC to end the practice of prescribing Solution 18 to postoperative children communicated to any of the following organizations or bodies:
 - (i) Any other hospital or trust;
 - (ii) The Eastern Health and Social Services Board;
 - (iii) The office of the Chief Medical Officer;
 - (iv) DHSSPS;
 - (v) Any other organization or body.

And if the decision by the RBHSC to end the practice of prescribing Solution 18 to postoperative children was communicated to any of the above organizations or bodies, please state:

- What were they told about the reasons for discontinuing the use of Solution 18 with postoperative children?
- When were they given this information?

I am not aware if the decision by RBHSC to end the practice of prescribing Solution 18 to post-operative children was communicated to any of the above organizations or bodies.

(h) If the decision by the RBHSC to end the practice of prescribing Solution 18 to post-operative children was not communicated to any of the above organizations or bodies, please explain why the decision was not communicated.

I am not aware if the decision by the RBHSC to end the practice of prescribing Solution 18 to post-operative children was communicated to any of the above organizations or bodies.

(4) If you are unable to answer any of the questions set out at (3) above, please identify any person who may be in a position to address those questions.

I believe that the Director of Pharmaceutical services in the Royal Group of Hospitals would be in a position to answer the queries outlined in 'Other matters'.

THIS STATEMENT IS TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF

Signed: () Cura o' in o ghus

Dated: 2nd Tuy 2012

Career history for Dr Dara O'Donoghue before working in the Royal Belfast Hospital for Sick Children

Junior House Officer General Medicine / General Surgery February 1994 – February 1995 Mater Hospital Belfast

Senior House Officer General Medicine / Geriatrics Whiteabbey Hospital

February 1995 - August 1995

Senior House Officer General Medicine Mater Hospital Belfast

August 1995 - February 1996

Senior House Officer Haematology Royal Victoria Hospital

February 1996 – August 1996

Senior House Officer Paediatrics Ulster Hospital Dundonald

August 1996- February 1997

Senior House Officer Accident and Emergency Ulster Hospital Dundonald

February 1997 – August 1997

Senior House Officer Paediatrics Antrim Area Hospital

August 1997 - August 1998

2nd Term Senior House Officer General Paediatrics Daisy Hill Hospital, Newry

August 1998 - February 1999

2nd Term Senior House Officer Neonatology Royal Maternity Hospital Belfast

February 1999 - August 1999

2nd Term Senior House Officer Ambulatory Paediatrics Royal Belfast Hospital for Sick Children

August 1999 – October 1999

2nd Term Senior House Officer Paediatric Cardiology
Royal Belfast Hospital for Sick Children

Registrar: Paediatric Intensive care Unit
Royal Belfast Hospital for Sick Children

Senior House Officer in- lieu of Registrar
Ulster Hospital Dundonald

Clinical Fellow Paediatric Intensive Care Unit
Royal Belfast Hospital for Sick Children

September 2000-August 2001

September 2000-August 2001