#### BRIEF FOR EXPERT ON RADIOLOGY

#### **RE: CLAIRE ROBERTS**

### Introduction

- (1) Claire Roberts is one of four children who are the subject of a public inquiry being conducted by John O'Hara QC.
- (2) Claire was born on 10<sup>th</sup> January 1987. She was admitted to the Royal Belfast Hospital for Sick Children ("RBHSC") on 21<sup>st</sup> October 1996 with a history of malaise, vomiting and drowsiness and she died on 23<sup>rd</sup> October 1996. Her medical certificate recorded the cause of her death as Cerebral Oedema and Status Epilepticus. That certification was subsequently challenged after a television documentary into the deaths of Adam Strain and two other children (Lucy Crawford and Raychel Ferguson) [see Terms of Reference below].
- (3) The Inquest into Claire's death was carried out nearly 10 years after her death by John Leckey on 4<sup>th</sup> May 2006. The Inquest Verdict found the cause of Claire's death to be: (a) Cerebral Oedema due to (b) meningoencephalitis, hyponatraemia due to excess ADH production and status epilepticus.

### **Terms of Reference**

- (4) The Inquiry was established under the <u>Health and Personal Social Services</u> (Northern Ireland) Order 1972, by virtue of the powers conferred on the Department by Article 54 and Schedule 8 and it continues pursuant to the <u>Inquiries Act 2005</u>.
- (5) The original Terms of Reference for the Inquiry as published on 1<sup>st</sup> November 2004 by Angela Smith (then Minister with responsibility for the Department of Health, Social Services and Public Safety) were revised in 2008 in response to the Crawford family's wish to have Lucy excluded from the Inquiry's work. The Revised Terms of Reference under which the Inquiry is operating are:

To hold an Inquiry into the events surrounding and following the deaths of Adam Strain and Raychel Ferguson, with particular reference to:

The Inquiry into Hyponatraemia-related Deaths

CR - EXPERT 230-001-001

1

- The care and treatment of Adam Strain and Raychel Ferguson, especially in relation to the management of fluid balance and the choice and administration of intravenous fluids in each case.
- The actions of the statutory authorities, other organisations and responsible individuals concerned in the procedures, investigations and events which followed the deaths of Adam Strain and Raychel Ferguson.
- 3. The communications with and explanations given to the respective families and others by the relevant authorities.

In addition, Mr O'Hara will:

- (a) Report by 1 June 2005 or such date as may be agreed with the Department, on the areas specifically identified above and, at his discretion, examine and report on any other matters which arise in connection with the Inquiry.
- (b) Make such recommendations to the Department of Health, Social services and Public Safety as he considers necessary and appropriate.
- (6) The case of Claire Roberts (and to a more limited extent that of Conor Mitchell) was included into the Inquiry's work by the Chairman under his discretionary powers. That decision arose out of the belated recognition by the RBHSC that hyponatraemia had played a part in Claire's death notwithstanding that only a few months earlier the Inquest into Adam's death had established hyponatraemia as a contributory factor and drawn attention to the dangers of the condition.

# **Requirements**

- (7) The Inquiry team requires your assistance with the following matters:
  - (a) Please report on:
    - (i) the chest x-ray (attached) taken at 3.50am on 23<sup>rd</sup> October 1996 (just over 1 ¼ hours after her respiratory arrest). The hospital informs us that there is not an x-ray report available for this x-ray.
    - (ii) the chest x-ray (attached) taken at 7.15am on 23<sup>rd</sup> October 1996 (approximately 4 <sup>3</sup>/<sub>4</sub> hours after her respiratory arrest) and the X-ray report (Ref: 090-033-115).
  - (b) For each chest x-ray:

CR - EXPERT 230-001-002

2

- (i) Report on the state of the lungs. In particular, please state whether the X-ray shows primary lung infection or infection secondary to inhalation.
- (ii) Identify any abnormalities, explaining the likely cause and significance thereof. Please also state, in so far as it is possible, the time when these abnormalities arose, and in particular whether the abnormalities likely occurred before or after CR's respiratory arrest at approximately 02.30 on 23rd October 1996. Explain the reasons for your view and their significance.
- (iii) Whether there is any evidence of subcutaneous oedema.
- (c) Please describe any differences between the first and second x-rays, and explain the significance of any such differences.
- (d) Please identify and describe anything else of note from your examination of the x-rays

## Conclusion

- (8) It is of fundamental importance that the Inquiry receives a clear and reasoned opinion on these issues.
- (9) Your assistance on the Inquiry's requirements should be provided in the form of an Expert's Report (please reference if necessary).

CR - EXPERT 230-001-003

3