Witness Statement Ref. No. 355/1

NAME OF CHILD: CONOR MITCHELL

Name: Andrew Murdock

Title: Doctor

Present position and institution:

Consultant Physician with a special interest in Gastroenterology
Craigavon Area Hospital, Southern Health & Social Services Trust

Previous position and institution:

[As at the time of the child's death]

Specialist Registrar Gastroenterology & General Internal Medicine
Craigavon Area Hospital, Southern Health & Social Services Trust

Membership of Advisory Panels and Committees:

[Identify by date and title all of those between January 1995-August 2013]

1. Clinical Lead Southern Trust Implementation of National Patient Safety Authority NPSA/2011/PSA002 & NPSA/2012/RRR001 – Reducing the harm caused by misplaced Nasogastric feeding tubes in adults, children and infants
2. Southern Trust Representative Commissioning of Biologic therapies Inflammatory bowel disease Northern Ireland 2013
3. Inflammatory Bowel Disease Quality Improvement Project member Southern Trust 2011 onwards
4. Implementation of NPSA RRR012 Western Trust 2010 -2011– Reducing Risk from Oral Bowel Cleansing Solutions (collaboration with Pharmacy, Primary Care & Radiology)

Previous Statements, Depositions and Reports:

[Identify by date and title all those made in relation to the child's death]

Statement to Coroners Inquest 09/03/04

OFFICIAL USE:

List of previous statements, depositions and reports attached:

Ref:	Date:	

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 to your statement.

I. QUALIFICATIONS, TRAINING AND EXPERIENCE

(1) Please address the following matters:-

(a) State your medical qualifications and the date you qualified as a medical doctor.

Start date of first substantive appointment in HSC as a trained doctor 6th August 1997
Full registration 1st August 1998
MRCP London 24th July 2000
GMC Specialist Register Gastroenterology & General Internal Medicine 29th November 2007
Fellow of Royal College of Physicians August 2012
GMC Medical Revalidation completed 22nd August 2013

(b) Provide a detailed account of your career history post qualification

Current post
Dates 19th September 2011 – to present
Position – Consultant Physician with a special interest in Gastroenterology
Responsibilities –

1. General Internal Medicine – On call, post take ward rounds (1:8) & continual ward management.
2. Gastroenterology - 2.5 endoscopy lists per week (OGD, Colonoscopy, ERCP & Bowel cancer screening). 1 in 3 weekly Gastroenterology referral rota. GI cancer MDM, 2 specialist GI clinics per week.
3. Training / Teaching – Endoscopy training lead, Training lists, Management of JETs system, faculty member basic and advanced skills colonoscopy courses. Scheduled 3rd Yr medical student bedside teaching. Final year clinical attachments
4. Quality & Safety – Clinical lead implementation of NPSA Nasogastric tube warnings, Southern Trust representative PN link, NIIBDIG member

Unit – Craigavon Area Hospital

Dates 1st October 2008 to 12th September 2011
Position – Consultant in Gastroenterology & General Medicine
Responsibilities – 4.5 endoscopy lists per week, 2 colonoscopy & OGD lists (1 training list), 1 ERCP list, 1 EUS training list, alternate weeks Bowel cancer screening list. All aspects of

therapeutic endoscopy provided. Training lead for Endoscopy unit. 2 Specialist clinics per week., Transition clinics with Paediatric Gastroenterologist. General medical on call and take provision. Undergraduate & Postgraduate teaching. Educational & clinical supervisor for junior staff.
Unit – Altnagelvin Area Hospital

Dates 1st November 2007 – 16th September 2008
Position – Locum Consultant Gastroenterologist with an interest in Hepatology
Responsibilities – Specialist clinics in Gastroenterology and Hepatology on 2 sites within the Belfast trust. 2 endoscopy sessions per week at the BCH site combining both upper and lower GI diagnostic and therapeutic procedures. Supervision, education and evaluation of junior medical staff.
Unit – Belfast City Hospital Gastroenterology Unit
Royal Victoria Hospital Hepatology Unit

Dates – 1st August 2007 – 31st October 2007
Position – Acting locum consultant Gastroenterology + GIM
Responsibilities - General medical on call 1 in 12 basis with subsequent ward management, supervision and education of Junior medical staff, 3 endoscopy lists per week providing the full range of diagnostic and therapeutic procedures (OGD, Colonoscopy, ERCP), 2 specialist Gastroenterology outpatient clinics per week.
Unit – Belfast City Hospital

Dates – 7th February – 31st July 2007
Position – SpR Hepatology / General Internal Medicine
Responsibilities – Responsible for inpatient and outpatient care of patients with both general medical and hepatological disorders. The unit works closely with Kings College Hospital London in the care of liver patients pre and post transplant. Advising on hepatology referrals from other specialist teams. General medical procedures and more specialised GI procedures such as liver biopsy and endoscopy. Participant in general medical on call rota. Responsible for the weekly ward rota. Undergraduate teaching sessions.
Unit - Royal Victoria Hospital

Dates – 30th January 2006 to 14th January 2007
Position – Endoscopy Fellow
Responsibilities – One year Fellowship in a 727 bed tertiary referral unit Queensland Australia. Training in a wide range of interventional endoscopic techniques e.g. ERCP, EMR, Stent placement. Gastroenterology on call one in three. Gastroenterology outpatient clinics - general GI complaints, urgent referrals and requests for specialist endoscopic procedures. Exposure to Capsule endoscopy and EUS. Organisation of endoscopy lists and triage of referrals. The hospital has a large HPB surgical unit including a liver transplant program. Part of the ward TPN team. Undergraduate teaching sessions.
Unit – Princess Alexandria Hospital
Brisbane, Queensland, Australia

Dates – 3rd August 2005 to 23th January 2006
Position –SPR Gastroenterology and General Internal Medicine
Responsibilities – Management of inpatients and outpatients with both general medical, cardiac and gastroenterological conditions. Upper and lower GI endoscopy, ERCP. Participation in general medical on call rota. Undergraduate and Postgraduate teaching

sessions. Regular shared care of patients with ICU staff. NIV provision. Management of coronary care patients.
Unit - Mater Hospital Trust

Dates – 4th August 2004 – 2nd August 2005
Position - SPR Gastroenterology and General Internal Medicine
Responsibilities – Management of inpatients and outpatients with both general medical and gastroenterological conditions. Upper and lower GI Endoscopy, ERCP. General medical on call. Postgraduate teaching sessions. Regular shared care of patients with ICU staff.
Unit - Ulster Hospital Dundonald

Dates – 6th August 2003 – 3rd August 2004
Position - SPR Gastroenterology and General Internal Medicine
Responsibilities - Management of inpatients and outpatients with both general medical and gastroenterological conditions. Endoscopic diagnosis and treatment of both upper and lower GI disease. Participation in general medical on call rota. Organisation of postgraduate teaching programme.
Unit - Belfast City Hospital

Dates – 7th August 2002 – 5th August 2003
Position - SPR Gastroenterology and General Internal Medicine
Responsibilities - Management of inpatients and outpatients with both general medical, cardiac and gastroenterological conditions. Endoscopy training. General medical on call rota. Associate Royal College tutor.
Unit –Craigavon Area Hospital

LAT General Internal Medicine:
8th August 2001 – 6th August 2002 Downe Hospital, Downpatrick
7th February 2001 – 7th August 2001 Mid- Ulster Hospital, Magherafelt

Senior House Officer Posts
Ulster Hospital Dundonald
9th August 2000 – 6th February 2001 General medicine & Gastroenterology

Antrim Area Hospital
May '00 – 8th Aug '00: General medicine & Respiratory medicine
Feb '00 – April '00: Cardiology
Nov '99 – Jan '00 : Gastroenterology
4th Aug '99 – Oct '99 : Care Of The Elderly

May '99 - 3rd Aug '99 : General Medicine, specialty in Diabetes
Feb '99 - April '99: Rheumatology
Nov '98 - Jan '99 : Cardiology
5th Aug '98 - Oct '98 : Care of the Elderly

Pre-Registration House Officer Post: Belfast City Hospital
April '98 – 4th Aug '98 : General Surgery
Jan '98 - April'98: Nephrology / Haematology
6th Aug '97 - Dec '97 : General Medicine

(c) State whether you have any qualifications or experience in the field of paediatrics.

Undergraduate - clinical attachment 4th year of medical school training Queens University Belfast
Postgraduate - Participated in Paediatric Inflammatory bowel disease transition clinics 2008-2011 with Dr C Imrie Consultant Paediatric Gastroenterologist Altnagelvin Area Hospital.
The Health Service in Northern Ireland defines a Paediatric patient as 14 or under. I have throughout my consultant career managed patients aged between 14 and 18 admitted via the General Medical take or referral to outpatient clinic.

(d) Describe your work commitments to the Craigavon Area Hospital from the date of your appointment, stating the locations in which you worked and the periods of time in each department/location.

As it has been over 10 years since my initial employment in Craigavon Area Hospital and having had 8 further training / substantive posts during this period the accuracy of my answer maybe affected.
As a training post in Gastroenterology & General medicine I would have been involved in 3 main areas

1. Outpatients – Attending clinics with a consultant seeing patients with both Gastroenterology and General medical problems.
2. Endoscopy training – attending supervised endoscopy lists training in both upper and lower GI endoscopy.
3. Inpatient work – On call commitment for both General medicine and Cardiology. On going management of inpatients. Advising on general medical and Gastroenterological referrals from other teams.

(e) Describe your duties as a Medical SHO in Craigavon Area Hospital as of the 8 May 2003.

I was the Medical Registrar on call that day.
It has been over 10 years since my initial employment in Craigavon Area Hospital. I have had 8 further training / substantive posts during this period therefore the answers that I provide to the questions that follow are to the best of my recollection and based on my contemporaneous notes.
As the medical registrar on call in 2003 I would have been on a full 24 hour on call shift (9am to 9am). I would have been responsible for assessment and management of both new admissions and current inpatients on all medical wards (1S, 1N, 2S, 2N) plus available to all surgical wards for medical issues (4N, 4S, 3S), to A&E for 'standby one' calls and supervising all on call junior medical staff. I would have been also responsible for admissions to the Cardiac ward and part of the Cardiac arrest team.

(2) Describe in detail the education and training you have received in fluid management, the prevention of hyponatraemia and record keeping in relation to fluid balance, to include any particular training relating to fluid management in children, and provide dates and names of the relevant institutions/bodies, by reference to the following:

(a) Undergraduate level.

As I left medical school (Queens University Belfast) 16 years ago my recollection of the exact curriculum covered is limited. I do not recall any specific sessions in fluid management, hyponatraemia prevention and record keeping. I attended a 3 month paediatric clinical attachment in 1996.

(b) Postgraduate level.

From 2008 I have kept an electronic CPD diary. This gives details of the event and reflection on learning.
Prior to this my CPD was simply listed as the Event title and date.
I have therefore reviewed previous CVs as to my attendance at education events. I have selected events which were aimed at General Medical issues. I do not have records of their content to confirm fluid management was discussed.

a. Acute Medicine – Manchester Conference centre 23-24 April 07
b. Advanced life support renewal – Dec 2005
c. Leeds Course in Clinical Nutrition - September 2004
d. Royal College of Physicians regional updates – Yearly basis
e. General Internal Medicine training day – Bimonthly basis throughout registrar training
f. Gastroenterology Training sessions – Monthly basis throughout registrar training.
g. Ulster Society of Gastroenterology meeting, Ramada Hotel 18th October 2001
h. Ulster Society of Internal Medicine, RVH, 19th October 2001
i. Ulster Society of Internal Medicine, Spring Meeting18 May 2001
j. European Federation of Internal Medicine, 3rd Annual Congress, 9–12 May 2001
k. Hospital induction programs

(c) Hospital induction programmes.

The last induction program I attended was over 6 years ago therefore I have no clear recollection as to their content.

(d) Continuous professional development.

I attended a presentation by Dr C Clarke Consultant Anesthetist on the introduction of new regional fluid balance charts August 2013 at CAH. I also reviewed the SharePoint presentation of the charts for both adults and paediatric groups.
Previous to that upon appointment to Trust I reviewed all key guidelines including hyponatraemia
I keep up to date with National Patient Safety Agency alerts
Advanced life support renewal 1st & 2nd June 2011

II. QUERIES ARISING OUT OF YOUR DEPOSITION TO THE CORONER

With reference to your deposition to the Coroner dated 27 May 2004, please provide clarification and/or further information in respect of the following:

(3) *"I was contacted by Dr. Cathy Quinn, Medical SHO and asked to see Conor Mitchell. I first saw Conor at 1pm, this was in a side room located in the Medical Admission Unit of Craigavon Area Hospital."* (Ref: 087-025-116)

(a) Why were you asked to see Conor?

I have no clear recollection as to why I was asked to see Conor initially. As has always been my practice when a junior colleague asks me to see a patient for whatever reason I attend as soon as possible.

(b) Identify who was responsible for deciding that Conor should be admitted to the Medical Admissions Unit rather than a paediatric ward.

I was in clinic in a separate hospital during the morning. The patient had already been accepted to Medical Assessment Unit by the time I had arrived at Craigavon Hospital. I am not aware who would have been responsible for arranging Conor's destination.

(c) Were you advised that Conor was not suitable for admission to the paediatric ward?

Conor had already been accepted for medical admission and admitted before I was involved in his care. The admission was not discussed with me prior this. The A&E notes would have accompanied Conor to MAU. They show an attempt to admit to the Paediatric service.

(d) What was your understanding of the reasons behind the decision to manage Conor in the Medical Admissions Unit rather than under the supervision of a paediatric team?

It was and still is the policy of the Trust that the Paediatric department will accept patients only if under the age of 14. I understand this is a regional policy amongst all Trusts.

(e) Did you give any consideration to the appropriateness of the decision to manage Conor in the Medical Admissions Unit rather than under the supervision of a paediatric team?

It was and still is the policy of the Trust that the Paediatric department will accept patients only if under the age of 14. I understand this is a regional policy amongst all Trusts. I would have been aware that Paediatrics had refused admission but I asked Dr Quinn to contact them for their guidance on the fluid prescription.

(f) What was the hospitals admissions policy at that time and how should it have applied to a 15-year-old boy with the body *habitus* of an 8 year old?

As detailed above the policy was a pure age related limit. I played no part in the discussion regarding admission or accepting admission of Conor. I note Dr Budd attempted to seek admission to Paediatrics but this was refused.

(g) Did you discuss this issue with any of your colleagues and if so with whom, and what was discussed?

I cannot recollect any discussion but I note that following my first meeting with Conor I asked Dr Quinn to contact the paediatric team regarding the suitably of our fluid prescription.

(4) *"He had received intravenous fluids in A&E and I asked Dr. Quinn to decrease the rate of the fluids that were being administered in view of patient's apparent low weight and size for his age. The fluid balance chart shows that this was carried out. The first bag of fluids initially prescribed was changed from 1 litre of Normal Saline over 8 hours to 250 mls of Normal Saline over 4 hours. The second and third bags were also changed from 1 litre 5% dextrose and 1 litre Normal Saline both over 8 hours to 250 mls Normal Saline over 6 hours and another bag of 250 mls Normal Saline over 8 hours."* (Ref: 087-025-117)

(a) Fully describe the discussion that you had with Dr. Quinn with regard to Conor's fluid management, and state the conclusions which you reached following that discussion.

Due to the time interval I cannot recollect in detail the discussion.

(b) Did you or Dr. Quinn make a record setting out the conclusions of your discussion, or the action to be taken with regard to Conor's fluid management? If so, please refer to the relevant record.

I have not recorded 'reduce fluid rate and volume' in the chart. It is however evident from the fluid balance chart that the previously prescribed fluids were struck off and a new regime prescribed. My entry 08/05/03 1pm concludes with the request to discuss the new prescription with the paediatrics team.

(c) Did Dr. Quinn accurately calculate the volume and rate of infusion of fluid in her initial prescription of fluids for Conor? If not, state the respects in which there was any inaccuracy.

Conor's maintenance fluid volume would have been approximately 1500mls. The fluid deficit would have been approximately 600mls. Conor had already received approximately 400mls bolus and 200mls antibiotic fluid totalling approximately 600mls. Hence I felt a total volume of 3000mls prescribed over 24 hours was too great. Conor would have also received another 200mls of fluid later from his antibiotic therapy.

(d) State precisely why you asked Dr. Quinn to make changes to the fluid management plan that she had originally prescribed for Conor? In this regard,

(i) Explain the relevance of Conor's *"apparent low weight and size for his age."*

Paediatric prescription of fluids is weight based therefore this had to taken into account. As detailed above I felt a smaller volume was more appropriate.

(ii) Explain the requirement to decrease the rate of fluids that were being administered.

To minimize the risk of fluid overload.

(e) Why did you decide IV fluids should be included as part of the treatment plan for Conor?

4 factors indicated IV fluids should be used

1. The clinical history suggesting poor oral intake as he had been unwell. Vomiting had also occurred over the preceding days (possibly secondary to oral antibiotics)

2. Physical examination suggesting dehydration

3. The U&E result suggested dehydration

4. Patient would be unlikely to meet fluid requirements orally for at least 24 hours and therefore would need maintenance fluid to prevent dehydration.

(f) Did you take any steps or make any calculations before asking Dr. Quinn to change the prescription to 250 ml of Normal Saline over four hours, followed by 250 ml of Normal Saline over six hours, followed by 250 ml of Normal Saline over 8 hours? If so, set out the steps taken or calculations made, and refer to any note or document which records the steps taken or calculations made.

I have not made any entries in the medical chart regarding this. My calculations would have been mental arithmetic.

(g) Following your discussion with Dr. Quinn, state precisely why it was thought that normal saline was the appropriate type of fluid.

Normal saline would be a safe isotonic solution minimising risk of hyponatraemia developing which is in accordance with the 2002 guidelines.

(h) Following your discussion with Dr. Murdock, state precisely why the volume and rate was prescribed as it was (250mls of over 4 hours, followed by 250mls over 6 hours, followed by 250mls over 8 hours).

I presume this question is meant for Dr Quinn and its inclusion is a typographical error.

(i) State precisely why you advised the administration of a total volume of 750 ml of Normal Saline.

I have not documented my reasoning at the time. My recollection is that I wanted to be cautious with fluid volume and rate.

Reviewing the case Conor's maintenance fluid volume would have been approximately 1500mls calculated in accordance with the 2002 guidelines. Upon examination I found Conor to be dehydrated. The fluid deficit would have been approximately 600mls.

Conor had already received approximately 400mls bolus and 200mls antibiotic fluid totalling approximately 600mls. A total volume of 750mls was a reduction in the maintenance fluid to reduce the chance of fluid overload. This volume was below the 2002 guideline limits and would have allowed for further fluid as per intravenous antibiotics and for any oral intake that may have been possible as the patient improved.

(j) Explain the objective(s) of prescribing 250 mls of normal saline over 4 hours, followed by 250mls over 6 hours, followed by 250mls over 8 hours?

To rehydrate slowly and safely avoiding large fluid boluses with opportunity for reassessment / adjustment and remain within the 2002 guidelines.

(k) Having discussed with Dr. Quinn the need to make changes to Conor's fluid management plan, did you discuss the fluid management plan with any other doctor or nurse, and if so, who did you discuss this issue with and what was discussed?

My entry 08/05/03 1pm 'D/W Paeds re rate' records I asked Dr Quinn to discuss the fluid prescription with the paediatric registrar to ensure it was a reasonable prescription. My recollection is that when I asked Dr Quinn later that afternoon (from recollection while standing at the nurses station in MAU) regarding this she stated they were happy with this prescription. Unfortunately this has not been recorded in the medical notes. I also discussed the case with my consultant on call Dr McEneaney at 6.30pm 08/05/03.

(l) Please set out in detail your understanding of how Conor's fluid management needs (including his fluid balance) would be monitored after you left him?

My understanding would have been an input output chart would be kept by nursing staff. The plan would have been for a review in the evening by medical staff including myself to determine if satisfactory progress was being made.

(5) *"As per normal practice this fluid prescription would be reviewed according to the patient's clinical progress."* (Ref: 087-025-117)

(a) Was Conor's fluid prescription reviewed? If so, state,

(i) When was it reviewed?

Patient reviewed 6.30pm 08/05/03

(ii) Who reviewed it?

I performed a full clinical assessment

(iii) In response to what event or development was it reviewed?

I record 'concern re rash on abdomen'

(iv) What was the outcome of the review?

I record 'dry' indicating an assessment of clinical fluid status had been made

(v) Was the review and any outcome recorded?

Following my review of Conor (which would have included his fluid management) I chose to discuss the case with my consultant on call Dr McEneaney as documented in the chart.

(6) Before you asked Dr. Quinn to make the changes described, had Conor's fluid administration commenced under the original fluid plan prescribed by Dr. Quinn and if so, state,

(a) How much volume of Normal Saline had Conor received before the change was made?

(b) Was any administration of fluid given under Dr. Quinn's original fluid plan recorded in any document, and if so, please refer to that document?

I do not believe Dr Quinn's regime was commenced. In her statement to the Coroner Dr Quinn states she paged me after seeing Conor (and presumably prescribing the fluids) and I arrived 10 minutes later. I doubt this would have allowed time for the fluids to be erected and commenced.

(7) *"I am satisfied with the fluid management of Conor."* (Ref: 087-025-120)

(a) Explain why you were satisfied with the fluid management of Conor?

I was satisfied that my prescription regarding choice of fluid and its rate of infusion had not caused harm to the patient. The fluid prescription was checked with the Paediatric team. The fluid volume I prescribed was within the 2002 guidelines. I do not believe Hyponatraemia occurred.

(b) Do you remain satisfied with how Conor's fluids were managed?

Yes, Conor's fluids did not exceed safe volume limits as per 2002 guidelines. Mr Lecky in his verdict from Conor's inquest 9th June 2004 states 'The fluid management in Craigavon Area Hospital was acceptable'.

III. QUERIES ARISING OUT OF CONOR'S CAGHT HOSPITAL CASENOTES: FILE 88

With reference to the content of Conor's CAGHT Hospital Casenotes, please provide clarification and/or further information in respect of the following:

(8) You are referred to the note at Ref: 088-004-045. Clarify whether you made that note.

I made the entry in the medical chart.

(9) The note at Ref: 088-004-045 includes the following entry in the context of the fluids which were to be given to Conor: *"D/W paeds re rate."* Did you or any of your colleagues discuss with any member of the paediatric team, the rate at which fluids were to be infused to Conor? If so, provide a full description of that discussion.

As I stated in an earlier question my entry 08/05/03 1pm 'D/W Paeds re rate' records I asked Dr Quinn to discuss the fluid prescription with the paediatric registrar to ensure it was a reasonable prescription. My recollection is that when I asked Dr Quinn soon afterwards regarding this she stated they were happy with this prescription. Unfortunately this has not been recorded in the medical notes.

(10) Were you responsible for making any of the entries contained at Ref: 088-004-064 – *Particulars of Intravenous Fluids to be Taken?* If so, please identify each of the entries that you were responsible for making and explain what each such entry means.

None of entries were written by myself. The entries 250ml Normal Saline over 4 hours, 250ml Normal Saline over 6 hours and 250mls Normal Saline over 8 hours were prescribed as per my instructions.

(11) There is an entry at Ref: 088-004-063 indicating that 200ml of Ciproxin had been erected? State, as precisely as you can, how this entry is to be interpreted? In particular, clarify how or whether this note indicates that 200mls of Ciproxin was administered.

I did not make the note. My interpretation now would be a dose of intravenous Ciproxin had been given in a fluid volume of 200mls.

(12) In her deposition to the Coroner, Ms. Joanna Mitchell gave the following evidence (Ref: 087-002-018) in relation to the fluid management of Conor when he was being cared for in the Accident and Emergency unit of Craigavon Hospital:

"I asked the nurse how much fluid Conor was receiving and was told that Conor was receiving 110ml of fluids from the IV drip every 15 minutes. I remember looking at the syringe drip and thinking how fast it seemed to be emptying compared to other drips that I had seen. Conor's grandmother stated that the IV drip emptied very quickly and was replaced by another. She said to me that she thought that Conor's face looked swollen and puffy. Conor received approximately 440ml of IV rehydration fluids in one hour."

Please address the following matters arising out of the evidence of Ms. Mitchell:

(a) What was your understanding of the volume of fluids which had been given to Conor in Accident and Emergency?

As it has been over 10 years since the event I cannot recollect my exact understanding of the volume given to Conor in A&E

(b) What was your understanding of the rate at which fluids had been administered to Conor in Accident and Emergency?

As it has been over 10 years since the event I cannot recollect my exact understanding of the rate given to Conor in A&E

(c) Did you observe Conor's face looking swollen and puffy at any of the times when you attended Conor?

I do not recall observing this and did not document this. I documented he appeared dry.

(13) *"Discussed management to date [with] Dr. Smith. Happy that appropriate fluids had been given. Feels appropriate fluid management has been given to date."* (Ref: 088-004-049)

(a) Confirm that you made this entry in the notes, and that that you held a discussion with Dr. Smith about the management of Conor's intravenous fluids?

I confirm this entry is mine. I have very little recollection of the conversation but believe my note would have been accurate.

(b) When did that discussion take place?

I am unclear as to exact timing of this discussion. Upon reading the notes I presume this occurred after we had stabilized Conor and could review the situation while awaiting the CT scan of brain.

(c) Describe in detail the discussion which you held with Dr. Smith.

I can recall very little of this discussion and cannot furnish any further details beyond my recorded entry.

(d) Why was the subject of Conor's intravenous fluids discussed?

As stated I have no clear recollection of conversations held at that point. I would have reviewed all aspects of care as there had been deterioration in Conor's condition.

(e) Was there a concern that the management of Conor's intravenous fluids may have caused or contributed to the seizures which he suffered? If so,

(i) Describe those concerns.

(ii) How did they arise?

(iii) What was your view?

(iv) What was Dr. Smith's view?

I do not believe so. I do not recall any concern expressed by any member of medical staff to me that the fluid prescription had caused or contributed to the seizures.

IV. QUERIES ARISING OUT OF THE 'GUIDANCE ON THE PREVENTION OF HYPONATRAEMIA'

With reference to the *Guidance on the Prevention of Hyponatraemia* (007-003-004) which was issued by the Chief Medical Officer in March 2002, please provide clarification and/or further information in respect of the following:

(14) Was the Guidance brought to your attention and if so state,

(a) Who brought the Guidance to your attention?

(b) When was it brought to your attention? In particular, were you aware of the Guidance before you had any dealings with Conor?

(c) In what way was the Guidance brought to your attention?

Medicine is a career of life long learning. Every working day brings new facts with an ever-changing knowledge base. It is therefore very difficult to provide accurate details as to when any guideline was introduced to me. I cannot therefore answer (a) (b) or (c) with any accuracy

(15) Have you ever received training in the use or application of the Guidance and if so state,

(a) Who provided you with training?

(b) When and on how many occasions have you been provided with such training?

(c) What form did the training take?

(d) What did you learn from the training?

(e) Was the training of an adequate quality or standard for the work that you do?

Pre May 2003 I had, to my recollection, never received any formal training in the guidelines March 2002. I note an e-learning module was not available (via the National Patient Safety Agency) until March 2007.

(16) Have you ever received written information in relation to the use or application of the Guidance and if so please provide a copy and state,

(a) Who provided you with the written information?

(b) When did you receive it?

(c) What did you learn from the written information?

(d) Was the written information which was given to you of an adequate quality or standard for the work that you do?

I do not recall receiving any written information in relation to the use or application of the March 2002 guidance

(17) Please address the following matters:

(a) The Guidance was reproduced as an A5 poster. Please clarify to the best of your knowledge whether the Guidance was displayed in the Medical Admissions Unit of Craigavon Hospital on the 8 May 2003?

I do not recall seeing any such guidance displayed as a poster.

(b) If you are aware of any other location(s) within the Hospital where the poster was displayed, please indicate.

I do not recall seeing the poster on any of the locations I commonly worked in.

(18) In the context of fluid management in Conor's case, was the Guidance applicable?

Yes in that although the NI health Service states chronologically Conor was an adult (over 14) physiologically paediatric fluid management was more appropriate.

(19) If the Guidance was applicable to fluid management in the circumstances of Conor's case, did you apply the Guidance when dealing with Conor's fluids? If so, and where applicable,

(a) Describe the steps you took under 'Baseline Assessment'.

Weight was recorded 22kg. U&E checked with a normal sodium. The urea and creatinine were relatively elevated in view of Conor's body mass indicating dehydration. Physical examination records Conor was 'Dry'

(b) Describe the steps that you took under 'Fluid Requirements'.

I prescribed in total 750mls over 18 hours which is within 2002 guideline limits

(c) Describe the steps that you took under 'Choice of Fluid'.

Normal Saline was chosen as the safest option

(d) Describe the steps that you took under 'Monitor'.

The guidelines state review after 12 hours. Conor was reviewed by myself after 5.5 hours. I carried out a physical examination and discussed with family. After this review I contacted my senior colleague Dr McEneaney Medical consultant on call by telephone. I suggested to Dr McEneaney that a second opinion from the Paediatric service should be sought. He agreed and I immediately contacted the Paediatric registrar upon finishing my telephone conversation.

(e) State whether you applied the Guidance in all respects that were relevant to your duties and responsibilities?

I assessed Conor, prescribed an acceptable fluid at a rate within 2002 guidelines, sought senior guidance and monitored Conor but unfortunately my documentation in the medical notes should give a fuller account of the process I followed.

(f) If you did not apply the Guidance in all relevant respects, identify the respects in which the Guidance wasn't applied?

My failing is in the documentation of the process.

(g) In respect of any part of the Guidance that you did not apply, explain why you did not apply it?

My failing is in the documentation not the process. I believe workload pressure would have contributed to this.

V. GENERAL

(20) Provide any further points and comments that you wish to make, together with any documents, in relation to:

(a) The care and treatment of Conor on 8th May 2003.

Having reflected upon my notes and submission to the Coroner's court I have a number of comments

1. In my statement to the Coroner's court I failed to express my sympathy to Conor's mother, father and grandparents for their loss. I apologise for this omission. I now wish to express my sincere sympathy to Conor's family for their loss.

2. My record keeping did not reach the high standards I set for myself. This was due to the time / work pressure. Working a 24 hour shift with responsibilities for patients throughout the hospital resulted in limited documentation. I apologise for this and have made record keeping an area to improve upon in the intervening years. My junior staff can testify I highlight this as an essential area of professional conduct regularly.

3. Communication - Communication is a skill that requires life long work. If at any point Conor's family felt their concerns were not being listened to by myself I offer a full apology. I can reassure them I was listening. On a busy medical admissions unit communication can be rushed due to the many demands on oncall staff. I offer a full apology if the Mitchell family felt this was the case. Having stayed with my own child in hospital I can now fully appreciate how frightening the hospital environment and situation can feel. Despite being in the medical profession and aware of how the system works I did feel powerless as a relative. This experience has given me greater empathy and I hope improved my communication with patients. I have endeavoured to improve my communication skills and completed a 3 day advanced communication skills course in November 2010.

(b) The Guidance on the Prevention of Hyponatraemia.

New regional daily fluid balance & prescription sheets have been introduced (August 2013). Having separate sheets for adult patients and paediatric patients will endeavour to reduce the risk of hyponatraemia as the Paediatric form includes extra boxes to be completed detailing the calculations based on weight made. Basing fluids strictly on age alone is not however risk free. Two patients I have been involved in the care of come to mind. One aged 21 years weighed 10 kgs another aged 72 years weighed 35kg. I used paediatric fluid charts for both patients in view of body mass.

The charts do highlight the dichotomy of the Health Service in Northern Ireland stating only a paediatric prescription form should be used for under 16s but patients aged 14-16 are still admitted to adult wards.

(c) Fluid management.

As clinical lead for implementation of a National Patient Safety Authority alert for Nasogastric feeding I am aware that learning essential skills should not begin post qualification but be a continuum from undergraduate to postgraduate to continuous professional development. The introduction of a 'training passport' in the Southern Trust for junior staff and the medical revalidation process for senior appointments will help this develop.

(d) Record keeping in association with fluid management

The new regional separate daily fluid balance & prescription sheets for adult patients and for paediatric patients will help to improve this The Paediatric form includes areas to record amount and type of every fluid every hour for both input and output, a general advice box and highlighting what the purpose of a particular bag is will improve record keeping. I have learnt a clear record for any clinical decision is required.

(21) After the death of Conor Mitchell in the Royal Belfast Hospital for Sick Children on the 12 May 2003 (following his treatment in the Craigavon Area Hospital) were you asked to take part in any process designed to learn lessons in relation to any issue relating to his fluid management? If so,

(a) Describe the process which you participated in.

(b) Who conducted it?

(c) When was it conducted?

(d) What contribution did you make to it?

(e) Were you advised of the conclusions that were reached, and if so, what were they?

I first learnt of Conor's death when Conor's grandfather telephoned me at home on 23rd September 2003. I am unsure how my home telephone number and address were available. I had not been contacted by CAH about Conor's death prior to moving to my next training post on 6th August 2003. I participated in the Coroners inquest in 2004. Informal feedback was given to myself by a senior Consultant Anaesthetist after the inquest had finished. His criticism of my management was on the quality of my medical chart entries. This is a valid criticism and as stated earlier I have learnt from this.

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

Signed: Andrew Murdock **Dated:** 23/9/13