

Witness Statement Ref. No.

353/1

NAME OF CHILD: CONOR MITCHELL

Name: Irene Elizabeth Brennan (Nee Dickey)

Title: Mrs

Present position and institution:

Clinical Sister Band 6 , Medical Admissions Unit, Craigavon Area Hospital,
Southern Health & Social Care Trust

Previous position and institution:

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

Sister Grade F, Medical Admissions Unit, Craigavon Area Hospital,
Craigavon Area Hospital Group Trust

Membership of Advisory Panels and Committees:

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

None.

Previous Statements, Depositions and Reports:

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

- 25th May 2004 Initial Statement to the Coroner's Court Re: Joanne Mitchell obo Conor
CM - Coroner 087- 021- 104
- 26th May 2004 Deposition of Witness at inquest regarding the death of Conor Mitchell before
Mr JL Leckey, Coroner for the District of Greater Belfast.
CM - Coroner 087 - 021 - 101
- ? 3rd February 2010 Witness Statement of Irene Elizabeth Brennan before the Investigating Committee
of the Nursing & Midwifery Council in the matter of Nursing & Midwifery Council
and Ruth Bullas.

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. QUERIES ARISING OUT OF YOUR QUALIFICATION, TRAINING, EXPERIENCE

With reference to your deposition to the Coroner dated 26 May 2004, please provide clarification and/or further information in respect of the following:

(1) "I am an "F" Grade Sister within the Craigavon Area Hospital Group Trust." (Ref: 087-021-101)

(a) State your nursing qualifications and the date you qualified as a nurse.

State Enrolled Nurse – 23 April 1989
Registered General Nurse – 11 June 1992

(b) Provide a detailed account of your career history post qualification
Post Qualification:-

(i) **4 April 1989 to 31 August 1989**

Enrolled Nurse Grade C 2 Accident & Emergency Department

Moyle Hospital, Larne

1 September 1989 to 31 October 1989

Enrolled Nurse Grade C–
Acute Geriatric Medical Ward – Admission of the elderly with a range of medical conditions.
Nobles General Hospital, Douglas, Isle of Man.

1 November 1989 to 15 May 1991

Enrolled Nurse Grade C–
Accident & Emergency Department - Moyle Hospital, Larne.

16 May 1991 to 11 June 1992

Student Training (RGN) – conversion course to First Level Nurse

12 June 1992 to 28th February 1993

Enrolled Nurse Grade C - Accident & Emergency Department. Moyle Hospital, Larne

1 March 1993 to 13 March 1994.

Acting Staff Nurse Grade D Medical Ward - Moyle Hospital, Larne

14 March 1994 to 14 February 1999

Staff Nurse Grade D/ E. – Acute Medical Admissions Unit, Antrim Area Hospital.

15 February 1999 to 9 March 2003.

Staff Nurse Grade D / E Medical Ward /Haematology Ward, Craigavon Area Hospital.

10 March 2003 to present

Grade F/ Band 6 Clinical Sister. – Medical Admissions Unit, Craigavon Area Hospital

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

I have no qualifications or experience in the field of paediatrics.

I had a 2 week placement in the Children's Ward in the Waveney Hospital, Ballymena during my Enrolled Nurse Conversion programme.

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

15 February 1999 to 9 March 2003. Staff Nurse Grade D / E Medical Ward /Haematology Ward, Craigavon Area Hospital.

10 March 2003 to present Grade F/ Band 6 Clinical Sister. – Medical Admissions Unit, Craigavon Area Hospital

I commenced employment in Craigavon Area Hospital on 15th February 1999. I was employed as a Grade D Staff Nurse and initially for a 3 month period was appointed to a Medical Ward which was opened to deal with the increasing number of medical admissions expected over the winter period.

After this 3 month period from 26th April 1999 I was allocated to 3 South Medicine, an acute medical ward caring for a range of patients with acute and chronic medical conditions, e.g. asthma, diabetes, multiple sclerosis. These patients were relocated to Ward 2 Medical on 1st June 1999 and I took up post as an Acting E Grade Staff Nurse to cover a period of staff absence. On 13th December 1999 I was appointed to the position of Grade E Staff Nurse in 1 Medical /Haematology, this ward cared for patients with a range of medical and haematological conditions.

On 10th March 2003 I was appointed as Clinical Sister Grade F to the Medical Admissions Unit (which opened on this date) and under Agenda For Change Grading changed to Band 6 Clinical Sister

My work commitments / roles and responsibilities increased over a period of time in line with my position and experience and included the following:

- Assessment, planning, implementation and evaluation of patient care.
- Provision of care to meet individualised needs in relation to eating and drinking, hygiene , elimination and mobility
- Record keeping and Report writing
- Monitoring of vital observations
- Communication with patients, relatives, nursing staff and other members of the multi-professional team (medical staff, physiotherapists, occupational therapists, Macmillan Nurses, other Specialist Nurses, Social Workers, Pharmacy, Bed Managers)
- Teaching and Supervision of Student Nurses, Nursing Auxiliaries and Newly Qualified Nurses.
- Support the Ward Sister (Band 7) in her general management function and in the co-ordination of high quality services to patients and relatives.
- Deputise for the Ward Sister (Band 7) as required.

- (e) Describe your duties as a "F" Grade Sister in the Medical Admissions Unit as of the 8 May 2003.

As per my previous statements, I was the F Grade Clinical Sister on duty on 8th May 2003 in the Medical Admissions Unit, Craigavon Area Hospital.

My duties as the Clinical Sister would have been to support the Ward Sister Grade G to manage the ward and co-ordinate the care of patients as per my job description (see Appendix A)

- (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. (Pre- Registration)

I would have received basic general training as a pupil nurse/student nurse in fluid management. There was no training that focused on fluid management in children or the prevention of hyponatraemia.

- (b) Postgraduate level. (Post- Registration)

On 13th October 2009 I attended mandatory training entitled "Fluid Management in Children and Young People" provided by the Trust through the Practice Development Team. (Appendix B)

On 10th September 2012 I attended an in-house questions and answer session facilitated by one of the other Clinical Sisters in the Medical Admissions Unit. (Appendix C)

- (c) Hospital induction programmes.

I do not recall attending an induction programme when I commenced employment in Craigavon Area Hospital in 1999.

- (d) Continuous Professional Development.

As above in response to 2b and 2c

II. QUERIES ARISING OUT OF YOUR DEPOSITION TO THE CORONER

With reference to your deposition to the Coroner dated 26 May 2004, please provide clarification and/or further information in respect of the following:

- (3) "I was asked to provide a side room for Conor when he was admitted to the ward." (Ref: 087-021-101)

- (a) To the best of your knowledge who was responsible for deciding that Conor should be admitted to the Medical Admissions Unit rather than a paediatric ward?

To the best of my knowledge the decision to admit Conor to the Medical Admissions Unit would have been taken by the medical staff in the Accident & Emergency Department.

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

No

- (c) 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 my understanding that the decision to manage Conor in the Medical Admissions Unit was in line with the practice in the Trust at that time.

- (d) 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?

No

- (e) What was the hospital's 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?

It was my understanding at that time that the practice in the Trust was to admit children aged 14 years and above to the Medical Admissions Unit.

- (f) Did you discuss the fact that Conor was being admitted to an adult ward with your nursing or medical colleagues and if so with whom, and what was discussed?

No.

- (4) "I reconnected Conor's IV fluids at 4.10pm." (Ref: 087-021-101)

- (a) What fluids had Conor received in Craigavon Area Hospital by the time the fluids were disconnected?

Re: ref 087-021-101 (fluid – Balance Chart)

- 220mls Hartman's Solution
- 200mls Ciproxin (Antibiotic)

- (b) Why were Conor's fluids disconnected?

Cannula Extravasated

- (c) When were Conor's fluids disconnected?

At 2.00pm when according to the nursing notes and the fluid balance chart the cannula was extravasated.

(d) Who disconnected the fluids?

As per the nursing notes it would appear that Staff Nurse Bullas removed the venflon.

(e) Were medical staff advised that the fluids had been disconnected? If so,

As per the nursing notes, the cannula was extravasated at 2pm and Dr Totten was informed at 2pm, 2.30pm and 2.45pm.

(i) Who was advised that fluids had been disconnected?

According to the nursing notes, Dr Totten was advised that the cannula had been removed at 2pm and therefore the fluids would have been discontinued.

(ii) What were medical staff told about the reasons for disconnecting the fluids?

It is my understanding from the records that the medical staff were advised that the cannula had extravasated.

(f) What steps were taken to ensure that the fluids would be reconnected?

From the nursing records, Dr Totten was contacted on 3 occasions and advised that the cannula needed to be re-sited.

(g) Why did you not reconnect the fluids before 4.10pm?

I was unable to reconnect the fluids until the cannula was re-sited.

(5) *"I was unaware of the delay in having the drip reconnected. I should have been informed of the delay as Conor was dehydrated."* (Ref: 087-021-102)

(a) To what degree was Conor dehydrated?

As far as I can recall Conor was pale, lethargic, with a dry coated tongue.

(b) What were the clinical signs of dehydration in Conor?

Again insofar as I can recall Conor was pale, lethargic, with a dry coated tongue.

(c) Why were you unaware that there was a delay in having the drip reconnected?

Nursing staff delegated to Conor's care should have informed me if there was a delay in having the drip reconnected.

(d) Who should have advised you that there was a delay in having the drip reconnected?

Staff Nurse Bullas should have informed me.

(e) Have you established why you weren't informed of the delay?

No.

(f) Who advised you that the drip had been disconnected?

I wasn't informed at the time that the drip had been disconnected.

(g) What do you now understand to have been the reason for the delay in reconnecting the drip?

It is now my understanding that the cannula was extravasated at 2 pm and Doctor Totten had according to the nursing records had been contacted on 3 occasions regarding the cannula.

(h) Did you take any steps to address the fact that there had been a delay in reconnecting the drip?

As stated previously I was not aware at the time that there had been a delay in reconnecting the drip.

(i) Did you take any steps to address the fact that you were not informed of the delay?

I have no recollection of being informed that there was a delay. According to the nursing notes I reconnected the intravenous fluids at 4.10pm.

(6) *"I was the senior nurse on the ward on the afternoon of the 8th May 2003."* (Ref: 087-021-101)

(a) What were the responsibilities of the senior nurse with regard to the fluid management aspects of a patient's treatment and care?

Sister Lorna Cullen was the most senior nurse on the Ward on 8th May 2003. I was the Clinical Sister on duty, I allocated staff to care for patients in the different areas of the ward. In respect of fluid management it is the responsibility of the nursing staff registered and un-registered caring for the patient to record accurately input and output and escalate any concerns to the Nurse in Charge of the ward.

As a Clinical Sister I do have a role to supervise clinical practice. On a day to day basis it would be anticipated that staff working within the area to which patients they are allocated to care for, would record intake and output. I did not observe that Conor's intake and output had not been recorded.

(b) As senior nurse on the ward what responsibilities did you have for overseeing Conor's fluid management?

As stated above I do have a role to supervise practice. I did not observe that Conor's intake and output had not been recorded.

- (c) As senior nurse on the ward what steps did you take to ensure that Conor's fluids were being appropriately managed?

I was not made aware that there were any issues with Conor's fluid management or the delay in re-siting a cannula to facilitate administration of the intravenous fluids.

However the nurses on the ward had taken appropriate action to have the cannula reinserted on at least 3 occasions they had spoken to medical staff.

When Conor's cannula was reinserted according to the nursing notes I checked and reconnected the intravenous fluids with Staff Nurse Wilkinson.

- (d) What steps were taken to assess Conor's fluid needs when he was admitted to the Medical Admissions Unit?

Before admission to the Medical Admission Unit, Conor's fluid needs were assessed in the Accident & Emergency Department. His weight had been checked and recorded on the top of the fluid balance sheet, (088-004-064) his bloods had been taken and intravenous fluids had been prescribed and administered in the Accident & Emergency Department. As per the fluid balance chart (088-004-063) 200mls of Ciproxin (an intravenous antibiotic) was erected at 1.00pm this would normally run over a period of 1 hour. The cannula was removed at 2.00pm and further fluids could not be erected whilst the antibiotic was being administered and then until the cannula was re-sited.

- (e) Who was responsible for carrying out that assessment?

Medical staff would have been responsible for assessing Conor's fluid needs.

- (f) Who was responsible for prescribing IV fluids for Conor?

Medical staff were responsible for prescribing intravenous fluids.

- (g) Did you discuss Conor's fluid needs and fluid management with any doctor or nurse? If so, what was discussed?

I have no recollection of discussing Conor's fluid management with any doctor or nurse.

- (h) What were you told about Conor's fluid needs?

I have no recollection of being told anything about Conor's fluid needs. I was aware he was dehydrated and had been treated at home for a urinary tract infection for approximately 10 days.

- (i) What were you told about how Conor's fluids were to be managed?

As per response to (h).

- (j) What provision was made for the monitoring of Conor's fluid balance or how did you anticipate this would be done?

A fluid balance chart was in place and had details of the intravenous fluids that been prescribed/administered and details of further fluids which were to be administered. I would have anticipated that the fluid balance chart would have been utilized to monitor Conor's intake and output.

- (k) During the 8 May 2003, if you obtained any information relevant to Conor's fluid needs and fluid management from a document, please refer to the document, and explain how you interpreted the document.

The document, 088-004-063 tells me that Conor received 220mls Hartman's Solution in Accident & Emergency and no oral intake or output has been recorded.

It also illustrates that Conor received 200mls of intravenous Ciproxin, then his cannula was extravasated. No further intravenous fluids were able to be administered until his cannula was re-sited at 4.00pm. Staff Nurse Wilkinson and I re-connected 250mls Normal Saline, prescribed to run over 4 hours at 4.10pm

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:

- (7) Were you responsible for making any of the entries contained at Ref: 088-004-063 - *Intake/Output Chart*? If so, refer to each of the entries that you were responsible for making and explain what each such entry means.

Ref 088-004-063 at 4.10 hours I recorded FLUIDS RECONNECTED this means the intravenous fluids were recommenced at this time.

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

Ref 088-004-064 I have countersigned that I checked and erected the intravenous fluids with Staff Nurse Wilkinson.

- (9) What do the documents at Ref: 088-004-063 and Ref: 088-004-064 tell us about Conor's fluid management during any period on the 8 May 2003 when you were senior nurse responsible for the Medical Admissions Unit?

The Senior Nurse with overall responsibility for the Medical Admissions Unit on 8th May 2003 was Sister Lorna Cullen Band 7. I was the Clinical Sister Band 6 on duty 8th May 2003. The documents as referenced above shows clearly that no oral input or output was recorded by nursing staff in either the Accident & Emergency Department or the Medical Admissions Unit.

- (10) Who was responsible for managing Conor's fluid needs in the Medical Admissions Unit during any period when he was a patient there?

Medical staff were responsible for checking Conor's blood results and prescribing intravenous fluids in accordance, they also had responsibility to ensure patent access for intravenous fluid management to be maintained. If Conor was able to tolerate oral fluids nursing staff should have encouraged and recorded same.

- (11) Why was no record made of fluid output in the Intake/Output Chart (Ref: 088-004-063)?

I am unable to advise why there was no record made of Conor's fluid output on the chart that was available. It is evident from the nursing notes that urine samples were obtained for analysis in both the Accident & Emergency Department and the Medical Admission Unit.

- (12) Who was responsible for making a record of Conor's fluid output?

Any member of nursing staff who was present when Conor passed urine or faeces or vomited should have recorded same.

- (13) Who was responsible for supervising the person(s) responsible for ensuring that a record was made of Conor's fluid output?

Each Registered Nurse is accountable for the care she/he delivers and for maintaining records of same as per NMC Code of Conduct and NMC guidance on Record Keeping. As Clinical Sister I would have expected the intake and output chart to have been maintained accurately.

- (14) How was Conor's fluid balanced monitored.

A fluid balance chart was in place and should have been used to record intake and output as a means of monitoring fluid balance.

- (15) What steps did you take to provide a handover with regard to Conor's fluid management when you went off duty on the 8 May 2003?

Prior to going off duty Staff Nurse Wilkinson and I re-erected Conor's intravenous fluids. There was no formal handover. However, Staff Nurse Bullas and Staff Nurse Wilkinson remained on duty until 9pm and were aware that Conor had intravenous fluids in place.

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

With reference to the *Guidance on the Prevention of Hyponatraemia* (Ref: 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:

- (16) Was the Guidance brought to your attention? If so, state:

No

(a) Who brought the Guidance to your attention?

As above the guidance was not brought to my attention.

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

The 2002 guidance was never brought to my attention.

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

As above the 2002 Guidance was never brought to my attention.

(17) Insofar as you are aware, was the Guidance brought to the attention of the other nurses working in the Medical Admissions Unit, whether before or after Conor was treated there?

No

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

(a) Who provided you with training?

The first training I received in relation to fluid management in children and young people was training provided by the Trust in 2009 through the Practice Development Team.

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

On 13th October 2009 I attended mandatory training entitled "Fluid Management in Children and Young People" provided by the Trust through the Practice Development Team. (Appendix B)

On 10th September 2012 I attended an in-house questions and answer session facilitated by one of the other Clinical Sisters in the Medical Admissions Unit. (Appendix C)

(c) What form did the training take?

The training on 13th October 2009 comprised of a 2 hour lecture, handouts and a quiz session.

As above the session on 10th September 2012 was a Question and Answer session.

(d) What did you learn from the training?

I learned about the importance of baseline assessment, fluid requirement, choice of fluid, monitoring of intake and output and when to seek advice.

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

Yes

(19) 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?

I have received written information on Fluid Management in Children and Young People as part of the training in 2009. (Appendix)

(b) When did you receive it?

13th October 2009

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

I learned about the importance of baseline assessment, fluid requirements, choice of fluid monitoring and when to seek advice.

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

Yes

(20) 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?

No

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

No I was unaware of any other location within the hospital where this poster was displayed.

(21) Was the Guidance applicable to fluid management in the circumstances of Conor's case?

Yes

(22) If the Guidance was applicable to fluid management in the circumstances of Conor's case, did you or the other nurses in the Medical Admissions Unit, apply the Guidance during the period of time when Conor was a patient in that Unit? If so, and where applicable,

As the nursing staff in Medical Admissions Unit were unaware of the 2002 guidance we did not apply same.

Describe the steps you took under 'Baseline Assessment'.

- (a) Describe the steps that you took under 'Fluid Requirements'.
- (b) Describe the steps that you took under 'Choice of Fluid'.
- (c) Describe the steps that you took under 'Monitor'.
- (d) State whether you applied the Guidance in all respects that were relevant to your duties and responsibilities?
- (e) If you did not apply the Guidance in all relevant respects, identify the respects in which the Guidance wasn't applied?
- (f) In respect of any part of the Guidance that you did not apply, explain why you did not apply it?

IV. GENERAL

Please address the following:

- (23) 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.

On 8 May 2003 Sister Lorna Cullen Band 7 was the most senior nurse on duty in the Medical Admissions Unit. I was the Clinical Sister Band 6 on duty.
 - (b) The Guidance on the Prevention of Hyponatraemia Fluid management.

If this guidance had been available to medical and nursing staff it would have been applied in the care and treatment of Conor Mitchell.
 - (c) Fluid Management
 - (d) Record keeping in association with fluid management.

(24) 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?

No.

If so,

- (a) Who conducted it?
- (b) When was it conducted?
- (c) What contribution did you make to it?
- (d) Were you advised of the conclusions that were reached, and if so, what were they?

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

Signed: *Gene E. Brennan*

Dated: *24/9/13*

H502/55

CRAIGAVON AREA HOSPITAL GROUP TRUST**JOB DESCRIPTION**

JOB TITLE: Sister/Charge Nurse Grade 'F'
LOCATION: Medical Directorate, Craigavon Area Hospital
REPORTS TO: Ward Manager - Sister/Charge Nurse Grade 'G'
RESPONSIBLE TO: Clinical Services Manager
JOB SUMMARY: The postholder will:

- Support the Ward Manager in his/her general management function and in the co-ordination of high quality services to patients and relatives.
- Under the direction of the Ward Manager, lead in the development of all aspects of nursing within the ward, through the professional development of nursing staff, the implementation of evidence based practice and clinical audit.
- Function as the principal support to the Ward Manager, who has continuing responsibility deputising when required.

In particular, the postholder will have delegated responsibility for –

- the development and supervision of clinical practice;
- the assessment, development, implementation and evaluation of programmes and standards of care;
- teaching and supervision of nursing staff and health care support workers;
- the co-ordination of high quality patient focused care;
- ensuring that staff comply with professional and clinical policies, guidelines and protocols.

1.0 Professional Role

- 1.1 Promote a patient centred approach to care within the ward.
- 1.2 Ensure practice reflects the standards set in the NMC Code of Professional Conduct.
- 1.3 Participate and facilitate in the training of student nurses, post basic students and auxiliary staff to facilitate the delivery of optimum patient care.
- 1.4 Lead and enable nursing staff to implement proven research/evidence-based practice for the enhancement of patient care.

- 1.5 Prepare reports for and receive reports from the day/night nursing team, ensuring effective nurse to nurse communication at each shift handover.
- 1.6 Ensure effective communication with patients/relatives to enable them to understand the nature of the care, treatment and progress.
- 1.7 Participate in the development of clinical pathways.
- 1.8 Act as an effective role model and mentor for all Registered Nurses and Nursing Auxiliaries and provide advice and support as required.
- 1.9 Assist the Ward Manager in the identification of areas of professional development within the Scope of Professional Practice and in the development of competency based practice.
- 1.10 Assist the Ward Manager in the co-ordination of the multidisciplinary team to achieve the highest possible standard of patient care.
- 1.11 Ensure health promotion and rehabilitation are an integral part of patient care.
- 1.12 Ensure adherence to Professional and Clinical Policies, Guidelines and Protocols within the Trust.
- 1.13 Assist the Ward Manager with formal appraisals and development of junior staff and nursing auxiliaries.
- 1.14 Develop, in association with the Ward Manager, the implementation and auditing of quality assurance programmes to optimise patient care within the ward.
- 1.15 Participate in the implementation of the Trust's Strategy for Nursing and Midwifery within the ward.

2.0 Managerial Role

- 2.1 Deputise for the Ward Manager as required and work shifts of duty in accordance with the Ward Managers arrangements.
- 2.2 Assist in the duty rotas/annual leave arrangements to ensure that the ward's appropriate skill mix is maintained in the absence of the Ward Manager.
- 2.3 May be required to participate in the evening or night duty rota to provide professional cover for the hospital.
- 2.4 Ensure a safe environment for patient care, identify clinical risk and in the presence of risk, inform the appropriate department to take corrective action.
- 2.5 Assist the Ward Manager with Risk Assessments.
- 2.6 Manage accidents/incidents or hazards according to the Trust's Policies and Procedures.
- 2.7 Prepare and implement orientation and induction programmes for new members of staff in association with the Ward Manager.

EMPLOYEE PROFILE

POST: Sister/Charge Nurse Grade 'F'

DEPARTMENT/SPECIALTY: Medical Directorate

| FACTORS | ESSENTIAL | DESIRABLE |
|---|---|--|
| Skills/Abilities | Effective verbal and written communication skills. Excellent interpersonal skills. Ability to work effectively in a multi-disciplinary setting. Ability to lead and motivate a team. Ability to influence and manage change effectively. Ability to introduce evidence-based practice. | |
| Experience | 3 years' experience in general medicine, within the last 4 years. Staff management experience. | |
| Qualifications/ Training, etc. | On Part 1 or 12 of the NMC "Live" Register. Diploma in Nursing or health related subject or equivalent, or currently undertaking same. | Post-basic qualifications in a relevant specialty. |
| Knowledge | Knowledge of: * Professional issues and developments in clinical practice. * Current relevant research. | |
| Other Requirements/ Work Related Circumstances | Available to work full-time and undertake internal rotation day and night duty. Flexible with regard to working arrangements to facilitate the demands of the post. | |

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- 2.8 Assist the Ward Manager to maintain systems and processes to ensure a co-ordinated service is delivered to patients and relatives.
- 2.9 Participate in the assessment of staff performance and progress.
- 2.10 Observe for any signs of ill health or stress factors in staff and report same to the Ward Manager.
- 2.11 Assist the Ward Manager to collate information in response to complaints.
- 2.12 With the Ward Manager, ensure that there is an effective communication structure between all members of the multidisciplinary team.
- 2.13 Participate in Research and Audit as required.
- 2.14 Participate in Recruitment and Selection for the appropriate grade of staff.
- 2.15 Ensure that all staff are familiar with and adhere to **all** Policies and Procedures within the Trust.
- 2.16 Assist the Ward Manager in the monitoring of ward expenditure.

3.0 Educational Role

- 3.1 Identify own educational needs through performance appraisal with the Ward Manager.
- 3.2 Assist the Ward Manager in actively encouraging professional development of staff, and facilitate staff to meet PREP requirements.
- 3.3 Assist the Ward Manager in identifying staff training needs to meet existing and developing services.


GENERAL REQUIREMENTS

The post holder must:

- Carry out his/her duties with full regard to the Trust's Equal Opportunities Policy.
- Co-operate fully with the implementation of the Trust's Health and Safety arrangements and report any accidents/incidents, defects with work equipment or inadequate safety arrangements to his/her manager.
- Comply with the Trust's policy on smoking.
- Treat those whom he/she comes into contact with in the course of work, in a courteous manner.
- Accept that this job description will be subject to review in the light of changing circumstances and should be regarded as providing guidance within which the individual works rather than something which is rigid and inflexible.

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Self-assessment




Let's get started!!

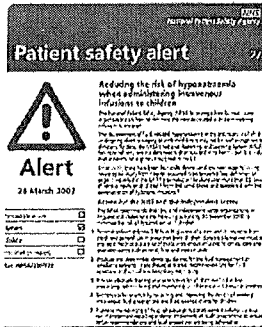
Quiz
Five minutes to complete

Background

Why do I need training on fluid management in children and young people?



- Scale of problem
 - International literature cites 50 cases of serious injury or child death
 - Since 2000, 4 child deaths (1 near miss) in the UK and more recently 2 deaths in NI, from hospital-acquired hyponatraemia
- National Patient Safety Alert (NPSA/2007/22)
- Impending RQIA Audit (12 November 2009)



Patient safety alert

Alert
28 March 2007

Reducing the risk of hyponatraemia when administering intravenous infusions to children

Alert

28 March 2007

1. This alert concerns the risk of hyponatraemia with intravenous infusions to children.

2. Hyponatraemia is a condition where the sodium level in the blood is too low. It can be caused by a number of factors, including the administration of intravenous fluids.

3. The alert concerns the risk of hyponatraemia when administering intravenous infusions to children.

4. The alert concerns the risk of hyponatraemia when administering intravenous infusions to children.

5. The alert concerns the risk of hyponatraemia when administering intravenous infusions to children.



Southern Health
and Social Care Trust

Fluid Management in Children and Young People

Awareness Training
5th October – 13th November 2009

*Facilitators: Bernie McGibbon, Lead Nurse, Children & Young People
Dawn Connolly, Professional Support and Governance Lead (Nursing and Midwifery)
Dawn Ferguson, Practice Education Facilitator*

Southern HSC Trust: Fluid Management in Children and Young People, Awareness Training Oct-Nov 2009

Aims

- To provide awareness of fluid management for children and young people
- To raise awareness of the Trust's governance framework to minimise the risk associated with administering IV infusions to children and young people

Learning outcomes

- have an awareness of the National Patient Safety Agency Alert (NPSA Alert 22)
- recognise signs and symptoms of hyponatraemia in children and young people
- have an awareness of the DHSSPS Parenteral Fluid Therapy Guidance (September 2007)
- have an understanding of fluid requirements, calculation and documentation
- recognise types of IV fluids that should / should not be prescribed to children and young people
- have an awareness of the Critical Incident Trigger list and reporting responsibilities within the Southern HSC Trust
- have an awareness of ongoing ward based audits
- have an awareness of responsibilities regarding care of the child or young person receiving IV fluids

Factors contributing to hyponatraemic dehydration

- Vomiting
- Diarrhoea
- Intestinal fistula
- Sweating
- Excess diuretics
- Adrenal insufficiency
- Renal disease

INCIDENT REPORTING REQUIREMENTS FOR HOSPITAL ACQUIRED HYPONATRAEMIA
 If sodium drops below 135 after a child is admitted to hospital an incident form must be completed immediately and forwarded to the central reporting point. If it drops below 130 the relevant risk manager must be contacted immediately to notify an SAI.

Fluid Calculation Sheet
 Please print patient label

Weight: kg
 Date: / /

Calculation of amounts of fluid in 24 hours
 Fluid intake (checked alongside entry)
 Breast milk in kg () x 1000 = ml
 (Formula and infant up to 2 yrs at 100 ml per 2000 kcal)
 Maintenance fluids (max 2000 ml formula) 2000 ml (max)
 Fluid TD (ml) = 4ml/kg/hr = ml/hr
 Diuresis TD (ml) = 0 ml/kg/hr = ml/hr
 Total fluid: 1 ml/kg/hr = ml/hr

Fluid Output Calculation:
 Urine TD (ml) = 1 ml/kg/hr = ml/hr
 Stool TD (ml) = 1 ml/kg/hr = ml/hr
 Vomitus TD (ml) = 1 ml/kg/hr = ml/hr
 Total output: 3 ml/kg/hr = ml/hr

Fluid Balance:
 Fluid intake - Fluid output = ml/hr

| Assessment of Intake/Output | Fluid Intake | Fluid Output | Fluid Balance |
|-----------------------------|--------------|--------------|---------------|
| Breast milk | | | |
| Formula | | | |
| Urine | | | |
| Stool | | | |
| Vomitus | | | |
| Total | | | |

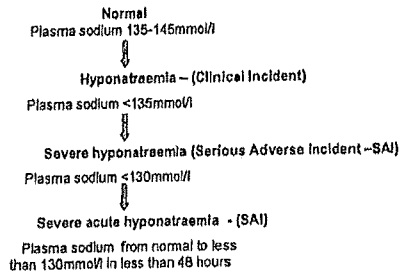
Notes:
 1. Do not record over 40 ml/hr of Na⁺ = 400 ml = 100
 2. Do not calculate at least 4 hourly
 3. Record fluid volume with unit volume i.e. ml/hr

Dr M Smith Date: 14 September 2009 To be reviewed: September 2010

What is Hyponatraemia?

- Disorder of sodium and water metabolism
- Most common electrolyte abnormality in hospitalised patients
- Usually results from water retention secondary to impairment in free water excretion
- Can cause morbidity and mortality and incorrect treatment can add to the problem
- Clinical manifestations correlate with the **serum sodium** concentration and *more importantly how rapidly the condition develops*

Hyponatraemia-what does it really mean?



Signs and symptoms of hyponatraemia

- Nausea
- Vomiting
- Headache
- Irritability
- Altered level of consciousness
- Seizures
- Apnoea

Shock - recognition

- CVS signs
 - ↑ Pulse Rate
 - ↓ CRT (Capillary Refill Time)
 - ↓ Blood Pressure
- Effects of Respiratory Insufficiency
 - ↓ Respiratory Rate
 - ↓ Skin Temperature / Colour
 - ↓ Mental Status



Resuscitation from shock

- Fluid - 0.9% Sodium Chloride
 - IV or Intraosseous
- Administer Rapid Fluid Bolus by doctor
- Assess Patient
- Repeat Bolus if needed

Fluid Deficit

- Losses occur as a result of
 - Vomiting
 - Diarrhoea / Ileostomy
 - NG losses
 - Bleeding
 - Sweating
 - GSI

Maintenance Fluid Requirements

| Body Weight Kg | Fluid Required Per Day (ml/kg) | Fluid Required Per Hour (ml/kg) |
|----------------------|--------------------------------|---------------------------------|
| 1 st 10kg | 100 | 4 |
| 2 nd 10kg | 50 | 2 |
| Subsequent kg >20kg | 20 | 1 |

Monitoring and observations

All children & young people

- Admission:
 - weight
 - U&E (unless child is well & for elective surgery)
- 12 hourly:
 - assess intake and output
 - U&E (more often if abnormal)
 - plasma glucose
- Daily
 - Clinical assessment



Monitoring and observations

ILL children & young people may need:

- Hourly:
 - HR, RR, BP, GCS, Fluid Intake / output
- 2-4 hourly
 - glucose, U&E, + / - blood gas
- Daily weight (if possible)



Clinical Signs of Dehydration (Deficit) (required to calculate fluid deficit)

| | Mild (<5%) | Moderate (5-9%) | Severe (>10%) | Shocked |
|--------------|-------------|-----------------|---------------|-----------|
| Eyes | N | N/Sunken | Sunken | Sunken |
| CRT | N | N/ ↓ | Prolonged | Prolonged |
| Skin Turgor | N | N/ ↑ | ↓ | ↓ |
| Heart Rate | N | N/ ↑ | N ↓ / ↑ | N ↑ / ↓ |
| BP | N | N | N / ↓ | ↓ |
| Urine output | N=1ml/kg/hr | N/ ↓ | ↓ | ↓ |
| GCS | N | N/ ↓ | ↓ | ↓ |

Replacement management

- Sodium Chloride 0.9%
- Accurate documentation of intake / output record chart
- Address dehydration by replacing deficit in addition to the maintenance requirements over 24 hours (managed by the doctor).
- If sodium is high the replacements MUST take place much slower i.e. over 48 or even 72 hours.
- Weigh patient daily and record.

Maintenance Fluids

Patients particularly at risk of hyponatraemic complications:

- Peri-operative patients and post-operative
- Head Injuries
- Gastric losses
- CNS Infection
- Severe sepsis
- Hypotension
- Intravascular volume depletion (shock)
- Bronchiolitis
- Gastroenteritis (with dehydration)
- Abnormal plasma sodium (particularly <138mmol / l and > 160mmol / l)
- Salt wasting syndromes



Clinical Incident Triggers

The following are clinical incidents and must be reported and documented on an IR1 form

- Failure to record the calculations for fluid requirements on the fluid balance chart
- Signs and symptoms of hypovolaemia or fluid overload while on IV fluids

This is not an exhaustive list and other incidents should be reported where staff feel this is appropriate

Serious Adverse Incident

- In **any** episode of **hospital-acquired** hyponatraemia where the sodium drops below 130mmol / l the relevant risk manager must be contacted immediately

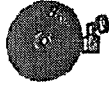


Responsibilities: doctor



- Clinical assessment and documentation
- Adhering to DHSSPS Paediatric Parenteral Fluid Therapy Guideline
- Completion of 'Fluid Calculation Sheet'
- Completion of prescription sheet
- Reassess fluid prescription 12 hourly (date, time & sign)
- Record results U&E and document action taken

Medical Emergencies



- **Hypoglycaemia** ($< 3\text{mmol / L}$)
- **Hyponatraemia** ($< 135\text{mmol / L}$)
- **Symptomatic Hyponatraemia:** patient develops nausea, vomiting, headache, irritability, altered level of consciousness, seizures or apnoea
(commence infusion of sodium chloride 2.7% at 2mls / kg / hour)

Fluid Balance Chart

- Ensure accurate recording of intake and output (Intake / output record chart)

Intake

- amount of oral and enteral feeding
- amount, type, total of intravenous fluids, IV site, Pump Pressure (PP)

Output

- PU, BO, NG, vomit, drain





Clinical Incident Triggers

The following **are** clinical incidents and must be reported and documented on an IR1 form

- The use of any IV fluid for bolus, deficit or maintenance other than outlined in the DHSSPS (September 2007) Paediatric Parenteral Fluid Therapy Guidelines.
- Any episode of hypoglycaemia ($< 3\text{mmol / l}$) while the child or young person is in receipt of IV fluids
- Any episode of **hospital-acquired** hyponatraemia in children receiving IV fluids (i.e. sodium level dropping below 135mmol / l)
- Failure to record a serum sodium less than 135mmol / l or failure to document the action taken
- Electrolytes not being checked a minimum of 24 hourly in any child or young person receiving IV fluids

Are we there yet?

Re-examine
Quiz II



Any questions?



Thank you for listening

Responsibilities: nurse



Ensure you:

- maintain a competent level of knowledge and skills on fluid management in the child or young person
- adhere to the DHSSPS Paediatric Parenteral Fluid Therapy Guidance (1 – 16 yrs) (September 2007)
- can recognise inappropriate intravenous fluid calculations and prescriptions and take appropriate action
- can complete intake and output chart accurately
- can recognise signs and symptoms of hyponatraemia
- Take action if blood results of outside of the normal reference range (contact doctor and complete IR1 form)

Responsibilities (cont'd)



• Ensure you:

- report clinical incident triggers through risk management structures (complete IR1 form)
- report **hospital-acquired hyponatraemia** as a Serious Adverse Incident (SAI)
- participate in ward-based audits when required
- apply NMC Standards to your practice:
 - Standards of Conduct, performance and ethics for nurses and midwives (April 2008)
 - Record keeping: Guidance for nurses and midwives (July 2009)
 - Standards for medicines management (August 2008)



A new chapter.....

Saturday 14 th
November 2009

*Important
DATE!*



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COMPETENCY FRAMEWORK FOR NURSES
ON THE
PRESCRIPTION, ADMINISTRATION, MONITORING
AND REVIEW OF
INTRAVENOUS FLUIDS FOR CHILDREN
AND YOUNG PEOPLE
(EXPECTED RESPONSES)

Appendix 5
Appendix X
~~II~~

COMPETENCY FRAMEWORK FOR NURSES – EXPECTED RESPONSES

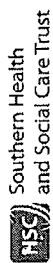
| Competency statement 1: The prescription of intravenous fluids for children and young people | | Expected responses |
|--|--|--|
| 1. Identify the signs and symptoms of Hyponatraemia | | <ul style="list-style-type: none"> • Nausea • Vomiting • Headache • Irritability • Altered level of consciousness • Seizures • Apnoea |
| 2. Name the types of IV fluids that should be prescribed for children and young people | | <ul style="list-style-type: none"> • Sodium Chloride 0.9% • Hartmann's solution |
| 3. Identify the 3 clinical indications for the prescription of IV fluids for children and young people | | <ul style="list-style-type: none"> • Shock (resuscitation) • Deficit (replacement of excess losses) • Maintenance (prevention of dehydration) |

COMPETENCY FRAMEWORK FOR NURSES – EXPECTED RESPONSES

| Competency statement 1: the prescription of intravenous fluids for children and young people. (continued) | | Expected responses |
|--|--|---|
| <p>4. What must the doctor consider and document prior to the erection of the fluids in children and young people in relation to:</p> <p>a. Fluid Calculation</p> <p>b. Prescription sheet</p> | <p>a. Fluid calculation</p> <ul style="list-style-type: none"> • Clinical assessment and documentation • Adhering to DHSSPS Paediatric Parenteral Fluid Therapy guidelines • Completion of fluid calculation sheet <p>b. Prescription sheet</p> <ul style="list-style-type: none"> • Completion of prescription sheet considering all points above • Reassess fluid prescription 12 hourly (date, time and sign) or more frequently if clinically necessary • Record results U&E and document action taken | <ul style="list-style-type: none"> • Adhere to the DHSSPS Paediatric Parenteral Fluid Therapy Guidance • Can recognise inappropriate intravenous calculations and prescriptions and take appropriate action • Complete the fluid balance chart accurately • Takes action if blood results are outside normal limits (contact doctor and complete IR1) • Adhere to standards for medicines management |
| <p>5. What the nurse must do before erecting the IV fluids on a child or young person</p> | <p>a. Fluid Calculation</p> <p>b. Prescription sheet</p> | <ul style="list-style-type: none"> • Adhere to the DHSSPS Paediatric Parenteral Fluid Therapy Guidance • Can recognise inappropriate intravenous calculations and prescriptions and take appropriate action • Complete the fluid balance chart accurately • Takes action if blood results are outside normal limits (contact doctor and complete IR1) • Adhere to standards for medicines management |

COMPETENCY FRAMEWORK FOR NURSES – EXPECTED RESPONSES

| Competency statement 2: Administration of fluids | Expected responses |
|---|---|
| 1. Correctly identify the essential equipment for the administration of IV fluids to children and young people. | <ul style="list-style-type: none">• Infusion pump |



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COMPETENCY FRAMEWORK FOR NURSES – EXPECTED RESPONSES

| Competency statement 3: The monitoring and review of IV fluids in children and young people. | | Expected responses |
|---|--|---|
| 1. The responsibilities of the doctor in relation to the monitoring of IV fluids in children and young people in relation to the FLUID BALANCE CHART. | | <ul style="list-style-type: none"> Reassess fluid prescription 12 hourly (date, time and sign) or more frequently if clinically indicated Record results U&E and document action taken Discontinue fluids as soon as child/young person stable |
| 2. The responsibilities of the nurse in relation to the monitoring of IV fluids in children and young people in relation to the FLUID BALANCE CHART. | | <ul style="list-style-type: none"> Can recognise inappropriate intravenous calculations and prescriptions and take appropriate action Complete the fluid balance chart accurately |
| 3. The normal plasma sodium level | | <ul style="list-style-type: none"> Normal range between 135mmols/l and 145mmols/l |
| 4. Nurse responsibilities if the plasma sodium is abnormal i.e. too high/too low | | <ul style="list-style-type: none"> Takes action if blood results are outside normal limits(contact doctor and complete IR1) Report hospital acquired hyponatraemia as a serious adverse incident if plasma sodium is below 130mmol/L |
| 5. The sodium level that triggers a serious adverse incident | | <ul style="list-style-type: none"> Plasma sodium level < 130mmols/l |

COMPETENCY FRAMEWORK FOR NURSES – EXPECTED RESPONSES

| Competency statement 3: The monitoring and review of IV fluids in children and young people (Continued) | Expected responses |
|--|---|
| 6. What other two conditions are classified as medical emergencies when dealing with children and young people who are in receipt of IV fluids | <ul style="list-style-type: none"> • Hypoglycaemia • Symptomatic Hyponatraemia |
| 7. What must the nurse do prior to erecting IV fluids on a child or young persons? | <ul style="list-style-type: none"> • On admission: (a) Weight (b) U&E (unless the child is well for elective surgery) |
| 8. What specific monitoring and observations should be carried out on all children and young people when receiving intravenous fluids? | <ul style="list-style-type: none"> • 12 hourly (a) Assess input and output (b) U&E (more often if abnormal) (c) plasma glucose • Daily (a) Clinical re-assessment |