MEETING OF

MEDICAL DIRECTORS OF TRUSTS / DIRECTORS OF PUBLIC HEALTH / CHIEF MEDICAL OFFICER

31 MARCH 2008 (MONDAY)
13.00 – 16.00
C3.18, CASTLE BUILDINGS

SECRETARIAT AGENDA

		Papers
1	Apologies	

PART 1 - STRATEGIC ISSUE (1.00pm – 2.15pm)

2 Serious Adverse Incidents (Dr Briscoe)
- Input from members to review of SAI systems

PART 2 - REACTIVE ISSUES (for Medical Directors and Directors of Public Health)

3 Minutes of previous meeting – 4 February 2008 (CMO) — 16/08

4 Matters Arising

4.1 – Hyperkalaemia Kit Pilot Exercise (Dr Briscoe) — 17/08
- Update and agreement on roll out

4.2 – Screening (Dr Boyle)
- Identification of Trust Leads — 18/08

4.3 – Governance Issues on Regional Contracts (Medical Directors)
- MDs were to notify Peter McLaughlin of interested clinicians

CMO - no comments received from members in respect of Review of Medical Advisory Structures or Tooke Report

5 Acute Medical Task Force Report (CMO) — 19/08
- Implications for providers and commissioners

6 Out of Hours Endoscopy (Medical Directors)
- Medical Directors to present summary of Trust arrangements

7 Appraisal for Doctors in Training (Dr Flanagan) — 20/08
- Identification of breadth of issues to be addressed
- Agree process to take forward

CMO to ask one of the MDs to lead on behalf of colleagues

8 Implications of NPSA Alert re Blood Transfusion (Dr Flanagan) — 21/08

CMO – 1 **need to guard against Trusts backing away from implementing safe practice guidance**

CMO – 2 **draw out commissioners perspective**

9 Implementation of NPSA Hyponatraemia Guidance (Dr Briscoe) 22/08

10 Healthcare Acquired Infections (Dr Doherty)
- Staff training and uptakes

11 National Confidential Inquiry into Patient Outcomes and Death (Dr Briscoe) 23/08
- Direct communication with service by NCEPOD

12 Safety and Quality Targets – PfA (Dr Stevens) 24/08
[Paper – extract from PfA document which is subject to Ministerial consideration and approval]

SECRETARIAT PAPERS ONLY - PAPER 24/08(A)

13 AOB

NEXT MEETING 19 MAY 2008

PAPER 22/08

Safety, Quality and Standards Directorate
Office of the Chief Medical Officer

Department of
Health, Social Services and Public Safety

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Circular HSC (SQS) 20/2007

27 April 2007

For action:

Chief Executives of HSC Trusts
Chair -Regional Paediatric Fluid Therapy Working Group
NI Medicines Governance Team
Regulation and Quality Improvement Authority (for cascade to independent hospitals, hospices and relevant regulated establishments)

For information:

David Sissling, Chief Executive Designate, HSCA
Chief Executives HSS Boards
Medical Directors HSC Trusts
Medical Director NIAS
Directors of Public Health
Directors of Nursing HSC Boards/ HSC Trusts
Directors of Pharmacy HSC Boards/ HSC Trusts
Chair – CREST
Northern Ireland Clinical & Social Care Governance Support Team
Professor R Hay, Head of School of Medicine and Denistry, QUB
Professor James McElnay, Dean of Life and Health Science, UU
Professor Jean Orr CBE, Head of School of Nursing and Midwifery, QUB
Dr Carol Curran, Head of School of Nursing, UU
Ms Donna Gallagher, Staff Tutor of Nursing, Open Nursing

Dear Colleague

NPSA PATIENT SAFETY ALERT 22: REDUCING THE RISK OF HYPONATRAEMIA WHEN ADMINISTERING INTRAVENOUS INFUSIONS TO CHILDREN

Introduction

1. The National Patient Safety Agency (NPSA) has issued advice to the NHS on how to reduce the risks associated with administering infusions to children (see below). The recommendations made in the NPSA Patient Safety Alert relate to paediatric patients from one month to 16 years old. They are not intended for paediatric or neonatal intensive care units or specialist areas such as renal, liver, and cardiac units where hypotonic solutions have specialist indications.

2. HSC organisations are required to implement the actions identified in the Alert by **30 September 2007**. Independent sector providers which administer intravenous fluids to children will also wish to ensure that the actions specified in the alert are implemented in their organisations within the same time scale.

NPSA Alert 22

3. The NPSA Alert 22 is available on http://www.npsa.nhs.uk/site/media/documents/2449_PaediatricInfusonsPSAFINAL.pdf

A number of resources have been developed by NPSA to support implementation of the Alert. All materials are available on www.npsa.nhs.uk/health/alerts. These include:

- A **guideline template** to assist with the production of local clinical guidelines;
- A **prescription template** providing ideas on how local prescriptions for intravenous fluids can be improved;
- An **e-learning module** for clinical staff prescribing paediatric infusion therapy;
- A **practice competence statement** for the prescribing and monitoring of intravenous infusions;
- An **audit checklist** to assist organisations with an annual audit process to ensure that the recommendations are embedded and maintained within practice; and
- A **patient briefing.**

Local Development of Clinical Guidelines

4. It should be noted that one of the actions in the NPSA Alert is for each NHS organisation to produce and disseminate local clinical guidelines for the fluid management of paediatric patients based on the suggested NPSA guidelines template. As The Northern Ireland Regional Paediatric Fluid Therapy Working Group and the NI Medicines Governance Team were part of the NPSA external reference group, the Department has asked both of these groups to work collaboratively to produce an intravenous fluid clinical guideline in accordance with NPSA guidance, by **31 July 2007**. This will then be disseminated to each HSC Trust for local implementation and monitoring.

ACTION

5. HSC Trust Chief Executives are responsible for implementation of NPSA Alert 22. All Trusts should:

   a. Develop an action plan and ensure that action is underway by **2 July** 2007;
   b. Complete actions by **30 September 2007;** and
   c. Return the audit template, by **31 October 2007:** www.npsa.nhs.uk/site/media/documents/2452_Paediatric_audit_checklist.doc to the Safety, Quality and Standards Directorate in DHSSPS at qualityandsafety[redacted] The purpose of this return is to ensure full implementation of the actions as set out in the Alert.

6. The return of the audit proforma should be accompanied by an endorsement by the Chief Executive to confirm that the named HSC Trust has undertaken an internal audit in line with the audit tool, and that the recommended actions have been fully implemented.

7. The audit proforma should also be copied to the Regulation and Quality Improvement Authority who may wish to incorporate the Trust's evidence as part of their clinical and social care governance reviews in 2007/08. RQIA will also wish to ensure that relevant independent establishments are compliant with this Alert.

Conclusion

8. Much work has already been done in HSC organisations to promote the safe and effective care of children receiving intravenous fluid. The NPSA Alert 22 builds on the experience gained locally and seeks to promote a consistent approach across provider organisations. You are asked to ensure that this circular is widely communicated to staff.

Yours sincerely

DR MICHAEL McBRIDE
Chief Medical Officer

DR NORMAN MORROW
Chief Pharmaceutical Officer

MR MARTIN BRADLEY
Chief Nursing Officer

PAEDIATRIC PARENTERAL FLUID THERAPY (1 month – 16 yrs)

Initial management guideline

Sept 2007

Is shock present? YES →

ADMINISTER RAPID FLUID BOLUS
Give 20 ml/kg sodium chloride 0.9% IV or Intraosseous
[10 ml/kg if history of haemorrhage or in diabetic ketoacidosis]
Reassess. Repeat bolus if needed. Call for senior help.
(Up to 60 ml/kg may be needed. Use blood after 40 ml/kg if patient has haemorrhaged)

NO ↓

Can child be managed with oral fluids? YES →

PRESCRIBE ORAL REHYDRATION SOLUTION

NO ↓

DKA / burns: initiate departmental protocol. Renal / cardiac / hepatic - get senior advice.

Is there a fluid deficit? YES →

ESTIMATE DEFICIT
FLUID DEFICIT = (% dehydration x kg x 10) as mls of:
sodium chloride 0.9%
The volume of fluid to be prescribed is: fluid deficit MINUS volume of any fluid bolus received
Prescribe this residual volume of deficit separately from the maintenance prescription.
Give over 24 hours (but over 48 hours if Na^+ < 135 or > 145 mmol/L)
ONGOING LOSSES: calculate at least 4 hourly. Replace with an equal volume of:
sodium chloride 0.9% (with or without pre-added potassium)
Be prepared to change fluid type and volume according to clinical reassessment, electrolyte losses and test results

NO ↓

Prescribe Maintenance fluids →

PRESCRIBE INITIAL IV MAINTENANCE FLUID AND TIME FOR REASSESSMENT

Patients particularly at risk of hyponatraemic complications:
peri-operative patients; patients with head injuries; gastric losses; CNS infection; severe sepsis; hypotension; intravascular volume depletion; bronchiolitis; gastroenteritis with dehydration; abnormal plasma sodium, particularly if less than 138 mmol/L but also when greater than 160 mmol/L; salt wasting syndromes.

Fluid choices: glucose containing fluid normally required if under 1 year old and may also be required by older children

sodium chloride 0.9% (with/ without pre-added glucose 5%)
or
Hartmann's Solution
or
Solution Corporately Approved at Trust Level

Other Patients:
sodium chloride 0.45% with pre-added glucose 2.5% or 5%

All Patients:
Alter fluid rate according to clinical assessment. Change electrolyte and glucose content of infusion fluid according to test results.
COMMENCE ORAL FLUIDS & DISCONTINUE IV FLUIDS AS SOON AS POSSIBLE

Monitoring & observations essential

ALL CHILDREN

Admission Weight. U&E *(unless child is well & for elective surgery)*

12 Hourly –
Assess In / Output, plasma glucose

Daily – Clinical reassessment. U&E (more often if abnormal; 4-6 hourly if Na^+ < 130 mmol/L).

ILL CHILDREN
May need:
Hourly - HR, RR, BP, GCS. Fluid In/ Output (urine osmolarity if volume cannot be assessed)
2-4 hourly – glucose, U&E, +/- blood gas.

Daily – weight if possible

Each shift
Handover and review of fluid management plan.

If plasma Na^+ < 130 mmol/L or > 160 mmol/L or plasma Na^+ changes > 5 mmol/L in 24 hours ask for senior advice

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CALCULATION OF 100% MAINTENANCE RATE

(a) for first 10 kg:	100 ml/kg/ day	≡	4ml/kg/hr
(b) for second 10 kg:	50 ml/kg/ day	≡	2ml/kg/hr
(c) for each kg over 20 kg:	20 ml/kg/ day	≡	1ml/kg/hr

[for 100% daily maintenance add together (a) + (b) + (c)]
MAXIMUM: **in females 80 mls per hour; in males 100 mls per hour**
If risk of hyponatraemia is high consider initially reducing maintenance volume to two thirds of maintenance

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Hypokalaemia (< 3.5 mmol/L): Check for initial deficit. Maintenance up to 40 mmol/L IV potassium usually needed after 24 hrs using pre-prepared potassium infusions as far as possible. Consult Trust Policy on IV strong potassium.
Oral intake and Medications: volumes of intake, medications & drug infusions must be considered in the fluid prescription.
Hypoglycaemia (< 3 mmol/L). Medical Emergency: give 5 ml/kg bolus of glucose 10%. Review maintenance fluid, consult with senior and recheck level after 15-30 mins. **INTRA-OPERATIVE PATIENTS:** consider monitoring plasma glucose.
Symptomatic Hyponatraemia: check U&E if patient develops nausea, vomiting, headache, irritability, altered level of consciousness, seizures or apnoea. This is a Medical Emergency and must be corrected.
Commence infusion of sodium chloride 2.7% at 2 ml/kg/hour initially and get senior advice immediately.

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Directors of Nursing HSC Boards/ HSC Trusts
Chair – GAIN
Northern Ireland Clinical & Social Care Governance Support Team
Head of School of Medicine and Dentistry, QUB
Professor Hugh McKenna, Dean of Life and Health Science, UU
Professor Jean Orr CBE, Head of School of Nursing and Midwifery, QUB
Dr Carol Curran, Head of School of Nursing, UU
Ms Donna Gallagher, Staff Tutor of Nursing, Open Nursing
Professor David Cousins NPSA
Chief Executive NIMDTA, NICPPET, NIPEC

Circular HSC (SQS) 20/2007 - Addendum

16 October 2007

Dear Colleague

NPSA PATIENT SAFETY ALERT 22: REDUCING THE RISK OF HYPONATRAEMIA WHEN ADMINISTERING INTRAVENOUS INFUSIONS TO CHILDREN – REGIONAL CLINICAL GUIDELINES

Introduction

Circular HSC(SQS) 20/2007 informed you about the National Patient Safety Agency alert on administering infusions to children aged from 1 month to 16 years.

The NPSA alert is to be implemented by 30 September 2007, and an audit template completed and returned to **DHSSPS by 31 October 2007.**

The Northern Ireland Regional Paediatric Fluid Therapy Working Group and the Northern Ireland Medicines Governance Team were asked to develop a clinical fluid guideline in accordance with NPSA guidance, to be disseminated to HSC Trusts for local implementation and monitoring. A regional paediatric fluid guideline, which has been endorsed by the Department, is attached.

The Regional Paediatric Fluid Guideline

The fundamental layout selected for this guideline complements a structured approach to patient clinical assessment. A sequence of questions is offered that prompts the clinician to assess for the presence of shock and guides treatment, if required; further assessment of whether there is also a deficit to be considered and then the calculation and prescribing for maintenance requirements, is also included.

The guideline emphasises that assessment of each patient should include a decision on whether oral fluid therapy could be appropriately initiated instead of intravenous therapy and further prompts reconsideration of this question when IV therapy is reviewed. ***The guidance is not a replacement for individual patient assessment, treatment and reassessment or for consultation with a senior clinician.***

Promoting Safe Use of Injectable Medicines

Organisations should also note that the NPSA Patient Safety Alert 20 on Promoting Safe Use of Injectable Medicines was issued on 4 June 2007 for local implementation. Circular HSC(SQSD)28/2007 refers. Action included a risk assessment of injectable medicine procedures and products and the development of an action plan to minimise risk. As indicated in this circular, Chief Executives should have nominated Chief Pharmacists, Pharmaceutical Directors/Advisers and Heads of Pharmacy and Medicines Management in HSC organisations to lead the action required.

Organisations should use ready to administer preparations and, if possible, avoid the need for potassium chloride to be added in clinical settings. Staff should consult the local Trust policy on IV strong potassium. Information about the availability of infusion fluids in individual hospitals should be attached to the Regional Paediatric Fluid Guideline wall chart so that all prescribers are made aware of the infusion fluids available for use in the local hospital.

ACTION

1. ***HSC Trusts (and other establishments) should ensure that the guideline is available and followed for fluid prescribing for children aged 1 month to 16 years. Children may be treated in adult wards and Accident and Emergency units, therefore, the guideline should be implemented in all settings where children aged 1 month to 16 years are treated.***

   Certain groups of children such as those with renal, cardiac or hepatic conditions, or suffering from burns or diabetic keto-acidosis (DKA) or those treated in intensive care will require management under special protocols; however, this guideline will be helpful in their initial assessment and management.

2. ***Where a senior clinician(s) considers that a "special" maintenance infusion fluid is required, then this alternative choice for fluid maintenance must be endorsed by the Chief Executive of the Trust with clear documentation of the reasons for that endorsement.***

3. ***Information about the availability of infusion fluids in individual Trusts should be developed by Trust Directors of Pharmacy and attached to the regional paediatric fluid guideline wall chart locally.***

4. ***Medical directors, in collaboration with other Directors and educational providers, should ensure that all prescribers are made aware of this circular and wall chart, and that the contents are brought to the attention of new junior prescribers on an ongoing basis.*** Educational material to support this guideline is available on http://www.bmjlearning.com/planrecord/servlet/ResourceSearchServlet?keyWord=All&resourceId=5003358&viewResource .

   In order to ensure the effective implementation of this guidance and to promote a user friendly version for the use by individual clinicians, the Department has asked the NI Medical and Dental Training Agency to work with Regional Paediatric Fluid therapy Group to produce wall and pocket charts appropriate to the needs of individuals and teams. These will be circulated in the near future. In addition, the NIMDTA should work with Trusts and other training agencies to ensure that the principles of paediatric fluid therapy and its potential risks, as highlighted in the National Patient Safety Agency Alert, are highlighted in postgraduate training programmes.

5. ***Trust Directors of Pharmacy should develop a progress report on important supply issues in respect of all infusion fluids relevant to this regional paediatric fluid guideline and submit a report to the Pharmacy Contracting Evaluation Group and copied to the Regional Paediatric Fluid Therapy Working Group.***

Conclusion

This circular is an addendum to Circular HSC(SQS)20/2007 which informed you about implementation of the NPSA alert on reducing the risk of hyponatraemia when administering intravenous infusions to children. This Alert is applicable to HSC Trusts and other independent hospitals, hospices and regulated establishments.

A regional clinical guideline is attached to assist in implementation of Circular HSC(SQS)20/2007.

A commercially produced version of the wallchart and pocket version will be circulated by NIMDTA to HSC organisations when it becomes available. This should be complemented by information about the availability of infusion fluids in individual Trusts.

The Department expects HSC organisations to complete the NPSA audit template and return it to the Department by 31 October 2007, as outlined in Circular HSC(SQS)20/2007.

Yours sincerely

DR MICHAEL McBRIDE
Chief Medical Officer

DR NORMAN MORROW
Chief Pharmaceutical Officer

MR MARTIN BRADLEY
Chief Nursing Officer