



Western Health  
and Social Care Trust

**Chairman**  
Gerard Guckian

**Chief Executive**  
Elaine Way

Our ref: TB/Jan08/lq

8 January 2008

Dr Maura Briscoe  
Quality and Standards Directorate  
Department of Health, Social Services and Public Safety  
Castle Buildings  
Stormont  
Belfast  
BT4 3SQ

Dear Dr Briscoe

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

I refer to Circular letter HSC (SQS) 20/2007.

I wish to confirm that an Audit has been undertaken in line with the recommendations contained within the Alert and all the recommended actions have been undertaken. The Trust's Clinical and Social Care Governance Committee has approved the Policy; and the associated guidelines for Prescribing Intravenous Fluids to Children and this will now be disseminated to all areas treating children.

I enclose a copy of the audit checklist for your information.

Yours sincerely

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**Elaine Way**  
**Chief Executive**

Enc.

# **Patient safety alert 22**

*Reducing the risk of hyponatraemia when administering intravenous infusions to children*



National Patient Safety Agency

## **Audit checklist**

Name of organisation:

Western Health and Social Care Trust

Date: 14-12-2007

Audit checklist prepared by:

- Therese Brown Head of Clinical Quality and Safety
- Daryl Connolly, Medicines Governance Pharmacist

### **1. Review of NPSA recommended action**

| Recommended action                                                                                                                                                                                                                                                                                                                                               | Suggested evidence                                                                                                                                                                                                                      | Assessment | Comment/further action required                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Remove sodium chloride 0.18% with glucose 4% intravenous infusions from stock and general use in areas that treat children. Suitable alternatives must be available. Restrict availability of these intravenous infusions to critical care and specialist wards such as renal, liver and cardiac units. Ensure that suitable alternatives are available for use. | Copy of: <ul style="list-style-type: none"> <li>• purchase records illustrating reduction in use of sodium chloride 0.18% with glucose 4% infusion;</li> <li>• list of areas stocking sodium chloride 0.18% with glucose 4%.</li> </ul> | Compliance | <ul style="list-style-type: none"> <li>• Altnagelvin removed from Paediatrics in 2001 and all areas in 2005.</li> <li>• Tyrone County and Erne Hospitals are currently compliant</li> </ul> |

|                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                          |            |                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Produce and disseminate clinical guidelines for the fluid management of paediatric patients. These should give clear recommendations for fluid selection, and clinical and laboratory monitoring. Ensure that these are accessible to all healthcare staff involved in the delivery of care to children. | <p>Copy of:</p> <ul style="list-style-type: none"> <li>clinical guidelines;</li> <li>date of Drugs and Therapeutics Committee review and approval;</li> <li>distribution list for clinical guidelines;</li> <li>audit of compliance with clinical guidelines.</li> </ul> | Compliance | Clinical and Social Care Governance Committee approved CMT decision on 11-10-2007 (see attached minutes). Policy to C&SC Governance Committee December 2007. Policy approved with minor amendments.                                                                                                      |
| Provide training and supervision for all staff involved in the prescribing, administering and monitoring of intravenous infusions for children.                                                                                                                                                          | <p>Copy of:</p> <ul style="list-style-type: none"> <li>training curriculum;</li> <li>dates of training sessions;</li> <li>record of staff attending training and level of competency attained;</li> <li>dates of training updates.</li> </ul>                            | Compliance | Guidelines attached.<br><br>Distribution list attached. ( <i>Dr Stewart to advise on distribution list when agreed</i> ).<br><br>Training already undertaken by Dr Stewart for Altnagelvin and Dr O'Donaghue for Southern Sector. (See notes of fluid management meeting 24-9-2007). Training is ongoing |
| Reinforce safer practice by reviewing and improving the design of existing intravenous fluid prescriptions and fluid balance charts for children.                                                                                                                                                        | <p>Copy of:</p> <ul style="list-style-type: none"> <li>prescription and fluid balance charts;</li> <li>date of Drugs and Therapeutics Committee review and approval.</li> </ul>                                                                                          | Compliance | See attached charts used in both sites.<br>Group established to review and amalgamate chart, (see note 5 of meeting 24-9-2007). See draft chart to C&SC Governance Committee and notes of meeting 14-12-2007.                                                                                            |
| Promote the reporting of hospital-acquired hyponatraemia via local risk management systems and implement an audit programme to ensure NPSA recommendations and local                                                                                                                                     | <p>Copy of:</p> <ul style="list-style-type: none"> <li>regular hospital incident reports featuring episodes of hospital-acquired hyponatraemia and degree of harm;</li> <li>minutes of meetings to</li> </ul>                                                            | Compliance | <ul style="list-style-type: none"> <li>See note 6 of meeting 24-9-2007 See attached examples of incidents</li> <li>See sample Clinical Incident Agenda</li> <li>See Dr Nesbitt Correspondence</li> <li>See Dr Stewart's Audit</li> </ul>                                                                 |

procedures are being adhered to.

- review reports and consider action;
- documented action taken;
- results of audit of the above parameters

## 2. Review of patient safety incident data involving paediatric infusions for preceding 12 months

| Clinical area reporting incident                                               | Number of reports |
|--------------------------------------------------------------------------------|-------------------|
| Accident and emergency                                                         | 1                 |
| Critical care (PICU)                                                           |                   |
| General paediatrics                                                            | 7                 |
| Specialist ward areas (e.g. liver/renal/cardiac units)                         |                   |
| Surgery                                                                        | 1                 |
| Trauma and orthopaedics                                                        |                   |
| Other                                                                          | 1                 |
| <b>Total</b>                                                                   | <b>10</b>         |
| Clinical outcome                                                               | Number of reports |
| Death                                                                          |                   |
| Severe (permanent harm)                                                        |                   |
| Moderate (significant, but not permanent, harm requiring additional treatment) | 1                 |
| Low (temporary harm requiring extra observation or minor treatment)            | 9                 |
| No harm                                                                        |                   |
| Near miss                                                                      |                   |
| <b>Total</b>                                                                   | <b>10</b>         |

### 3. Overall comments and actions recommended by Drugs and Therapeutics Committee

Comments: Concerns identified by Head of Pharmacy i.e. regarding the corporate solution have been considered.

Action: A reference to the solution being unlicensed has been added to the approved Trust Guidance.

Signature of Drugs and Therapeutics Committee Chair:



Name of Drugs and Therapeutics Committee Chair:

Dr Geoff Nesbitt, Associate Medical Director Quality and Safety

Date:

8-1-2008

Date of next annual audit review:

1-9-2008

NPSA audit checklist for paediatric infusions  
March 2007

Record file available at [www.npsa.nhs.uk/health/alerts](http://www.npsa.nhs.uk/health/alerts)