

***Document 1***

***Audit of Documentation  
of  
Fluid Requirements & Fluid Balance  
on  
Children following Surgery  
July 2003***

***The Clinical Audit Department  
Altnagelvin Area Hospital***

# ***Audit of Documentation of Fluid Requirements & Fluid Balance on Children following Surgery***

## **Standards used:**

*‘Any child receiving Prescribed Fluids is at risk of Hyponatraemia’*  
Department of Health Guidelines (2002)  
*‘Guidelines for Record and Record Keeping’* Nursing & Midwifery  
Council (April 2002)

## **Sample size**

*33 surgical admissions were admitted to CHW from 01/01/03 to  
31/05/03, of these, 14 went to theatre and received IV fluids.  
The fluid balance charts of these 14 patients were used in this audit.*

### *1. Age of patient*

**7yrs – 15%**  
**8yrs – 7%**  
**9yrs – 7%**  
**10yrs – 50%**  
**12yrs – 7%**  
**13yrs – 7%**  
**15yrs – 7%**

*2. Male – **64%**          Female – **36%***

### *3. Type of surgery*

**Appendicectomy – 86%**  
**Removal of cyst – 7%**  
**Torsion of testes – 7%**

### *4. Is the patient’s name on the chart?*

**Yes 93%          No 7%**

5. *Is the patient's ward on the chart?*

**Yes 50%      No 50%**

6. *Is the date on the chart?*

**Yes 86%      No 14%**

7. *Is the Hospital No. on the chart?*

**Yes 29%      No 71%**

8. *Was it totalled at the end of the day?*

**Yes 0%      No 100%**

9. *Is the patient on IV fluids?*

**Yes 100%      No 0%**

10. *Type of IV infusion*

**0.45% NACL + 2.5% Dextrose      93%**  
**3(23%) of these also had 0.9% NACL**

**Hartman's Solution      7%**

11. *How many Mls/kg fluids was the patient commenced?*

**Maintenance Fluids (DoH guidelines)      93%**

**100mls/hr x 6 hrs on return from theatre      7%**

12. *Are they prescribed?*

**Yes 100%      No 0%**

13. *If yes, are they legible?*

**Yes 100%      No 0%**

14. *Are they signed?*

**Yes 86%                      No 14%**

15. *Were they commenced as ordered on prescription*

**Yes 100%                      No 0%**

16. *Was the patient weighed on admission/prior to IV fluids?*

**Yes 93%                      No 7%**

17. *Has the patient had a U&E checked prior to IV Fluids?*

**Yes 86%                      No 14%**

18. *Has the patient had a U&E checked daily while on fluids?*

**Yes 86%                      No 0%    N/A 14%**  
(1 day only)

19. *Any changes noted on chart e.g. tissues etc*

- 500mls NACL infused over 1 hr. as not passed urine
- Fluids discontinued x 2 hrs. – Reason not documented
- 200mls infused in theatre but not entered on chart
- Fluids stopped for antibiotics – documented on chart
- Cannula tissues – documented on chart
- Stopped to go to X-ray – documented on chart
- Fluids in theatre not entered on chart – “bag disposed of in theatre”
- Fluids reduced – documented on chart
- No fluids entered for time in theatre – left blank
- Fluids changed to 0.9% NACL as Na low – documented in care plan
- Fluids discontinued as prescribed – documented
- Fluids in Theatre commented on – but no total entered
- Fluids stopped for period - documented but not reason
- 500mls infused in theatre but not entered on chart
- 300mls infused in theatre but not entered on chart – left blank

20. Was urinary output entered by (a) amount e.g. mls **62%**
- (b) Description e.g. PU **100%**
- (c) No detail **7%**(in one 24hr)
- (d) “++++” **0%**

Note: Some patients had both “mls” and “PU” documented

21. Had the patient diarrhoea **Yes 14% No 86%**

22. If yes, how is it described? (a) By amount e.g. mls **0%**
- (b) By “ + + + ” **0%**
- ( c) By description e.g. large **100%**
- (d) No detail **0%**

23. Was the patient vomiting **Yes 36% No 64%**

24. If yes, how is it described? (a) By amount e.g. mls **60%**
- (b) By “ + + + ” **0%**
- ( c) By description e.g. large **60%**
- (d) No detail **0%**

Note: Some patients had both “mls” and “PU” documented

25. Is the oral intake recorded regularly e.g. after each meal

**Yes 100% (after period of fasting)**

26. *If so, are IV fluids adjusted accordingly?*

**Yes 93%      No 7%**

***Comment – on 2 occasions oral fluids tolerated for 12 and 15 hrs before fluids reduced***

***Conclusions***

- Patient's details are not documented on all Fluid balance charts
- Fluid balance charts are not totalled at end of the day
- When patient goes to Theatre, fluids infused in Theatre are not documented on to the Fluid balance chart (Total infused in theatre is calculated on anaesthetic sheet)
- Not all IV prescriptions are signed.
- 93% children received Maintenance Fluids in line with DOH guidelines (2002).
- Urinary output not documented for long periods, some documented in millilitres and 'PU' on same chart
- IV Fluids are not always reduced as oral fluids increased