

Document 2

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

July 2003

***Some comparisons are made with a previous
audit of Documentation of Fluid Balance
charts***

***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.*

Re audit results

*The results of this audit are compared with results of 'Intake and
Output Chart Documentation Audit' for CHW only (February 2003)*

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?*

Feb '03 **Yes 100%** **No 0%**

July '03 **Yes 93%** **No 7%**

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

Feb '03 **Yes 80%** **No 20%**

July '03 **Yes 50%** **No 50%**

6. *Is the date on the chart?*

Feb '03 **Yes 100%** **No 0%**

July '03 **Yes 86%** **No 14%**

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

Feb '03 **Yes 70%** **No 30%**

July '03 **Yes 29%** **No 71%**

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

Feb '03 **Yes 20%** **No 80%**

July '03 **Yes 0%** **No 100%**

9. *Is the patient on IV fluids?*

Feb '03 **Yes 20%** **No 80%**

July '03 **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?

Feb '03 **Yes 50% No 50%**

July '03 **Yes 100% No 0%**

13. If yes, are they legible?

Feb '03 **Yes 50% No 50%**

July '03 **Yes 100% No 0%**

14. Are they signed?

Feb '03 **Yes 50% No 50%**

July '03 **Yes 86% No 14%**

15. Were they commenced as ordered on prescription?

Feb '03 **Yes 50% No 50%**

July '03 **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. *tissued 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 *tissued* – 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

	Feb	July
20. Was urinary output entered by (a) amount e.g. <i>mls</i>	10%	62%
(b) Description e.g. <i>PU</i>	80%	100%
(c) No detail	10%	7% (in one 24hr)
(d) “++++”	0%	0%

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

	Feb 03	July 03
21. Had the patient diarrhoea	14%	20%
22. If yes, how is it described? (a) By amount e.g. <i>mls</i>	0%	0%
(b) By “ + + + ”	0%	0%
(c) By description e.g. <i>large</i>	100%	100%

	(d) No detail	0%	0%
23. Was the patient vomiting		36%	30%
24. If yes, how is it described?	(a) By amount e.g. mls	33%	60%
	(b) By “ + + + ”	0%	0%
	(c) By description e.g. large	66%	60%
	(d) No detail	0%	0%

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

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

Feb '03 **Yes 90%**

July '03 **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. The February 2003 Audit was better than July 2003 Audit
- 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)
- IV fluids management was improved in July 2003, except that, not all IV prescriptions are signed.
- July 2003 - 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