

# **The Acute Management of Gastroenteritis in Infants and young Children**

## ***Audit Report***

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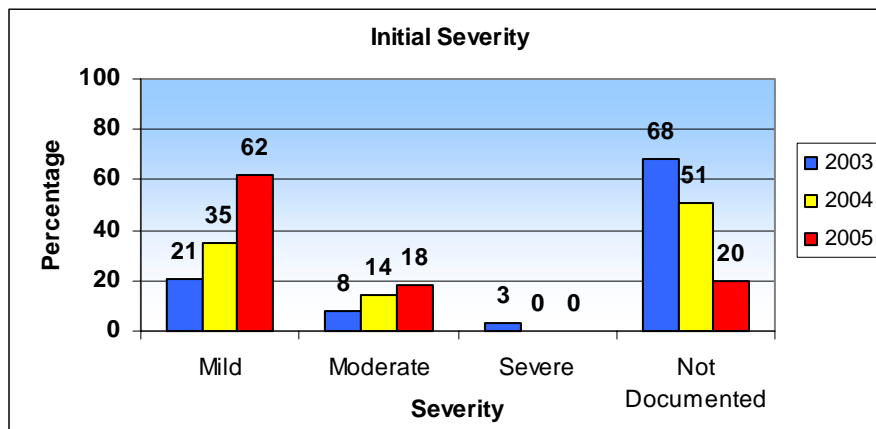
A retrospective medical record audit of all Paediatric Gastroenteritis presentations to Gosford Emergency Department was undertaken for the period of March/ April 2003. The audit particularly focused on appropriate oral rehydration, documentation of severity of dehydration, use of NG rehydration, and admission rates. Presentations were identified through EDIS codes (Emergency Department Information System) and were within 6 months - <16 yrs of age. Exclusion criteria included significant underlying co-morbidities and confirmed alternative diagnosis eg UTI, pneumonia.

An audit was then carried out on all paediatric gastroenteritis presentations in March/April 2004 utilising an audit pack (see appendix 1). Inservices, reminders, posters and audit packs were placed in the Emergency Department at Gosford Hospital one week prior to the commencement of the audit in 2004. Staff were provided incidental inservicing on the correct procedure as to how to fill out the tick box questionnaire which acted both as a prompt for patient management and an audit tool. Not all patients that presented had audit packs completed therefore; a retrospective medical record review was then carried out looking at the same presentations from March/April 2004.

In 2005, a repeat retrospective medical record audit was carried out utilising the same inclusion criteria and time period. This did not involve the use of a prospective audit pack. The intention of repeating the process was to evaluate the sustainability of change in clinical practice in line the NSW Department of Health Paediatric Gastroenteritis Guidelines.

The following document provides the graphical results of these audits and has demonstrated overwhelmingly positive results regarding the successes of oral rehydration therapy in children with mild-moderate gastroenteritis.

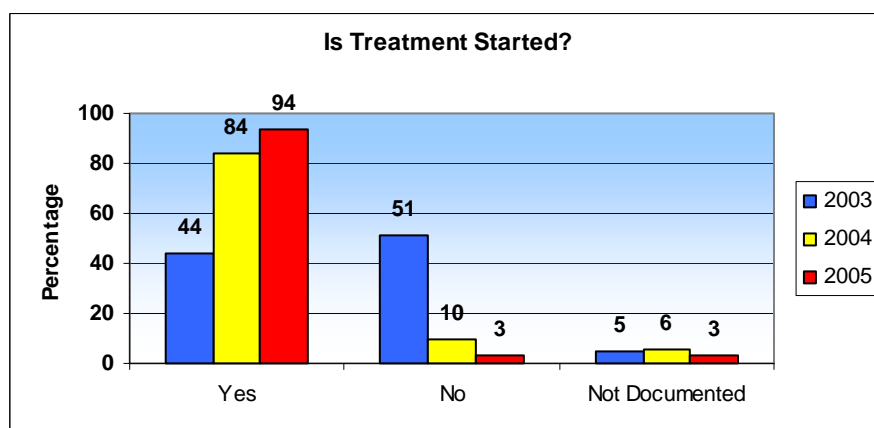
We would like to extend our appreciation to all clinicians involved in the audit process and congratulate all staff involved on their success in changing practice.



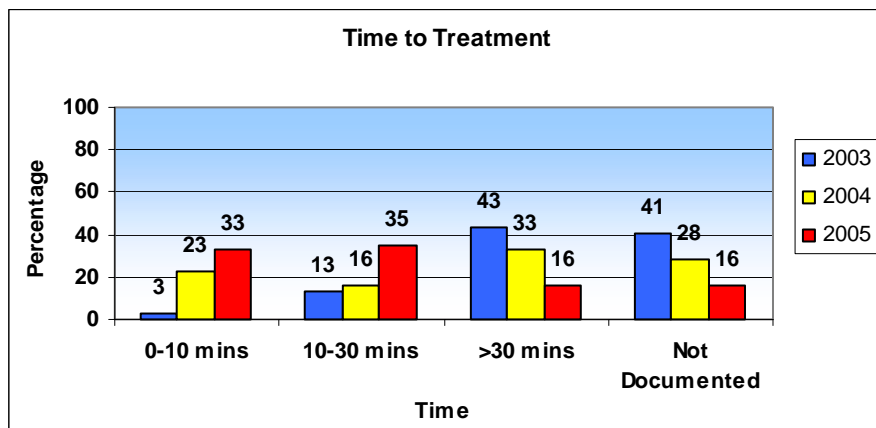
An overall improvement in documented initial degree of severity of dehydration has occurred. This improvement has continued in 2005.

Anecdotally, the documentation of initial severity was recorded by nursing and medical staff when the audit packs were used in 2004, however the documentation in 2003 and 2005 was predominantly undertaken by medical staff.

This suggests the use of prompts such as the audit pack encourages better documentation of assessment by all clinical staff.

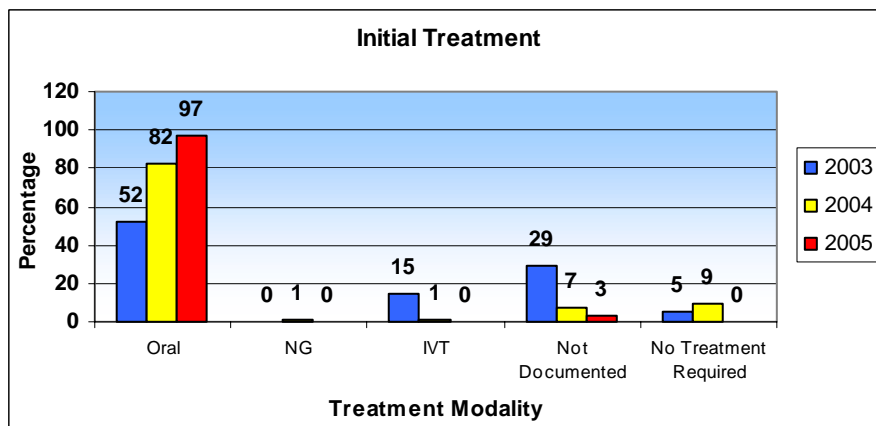


A 40% improvement in nursing staff commencing oral rehydration therapy prior to being reviewed by a medical officer in 2004 compared to 2003. A further 10% improvement was noted in 2005.



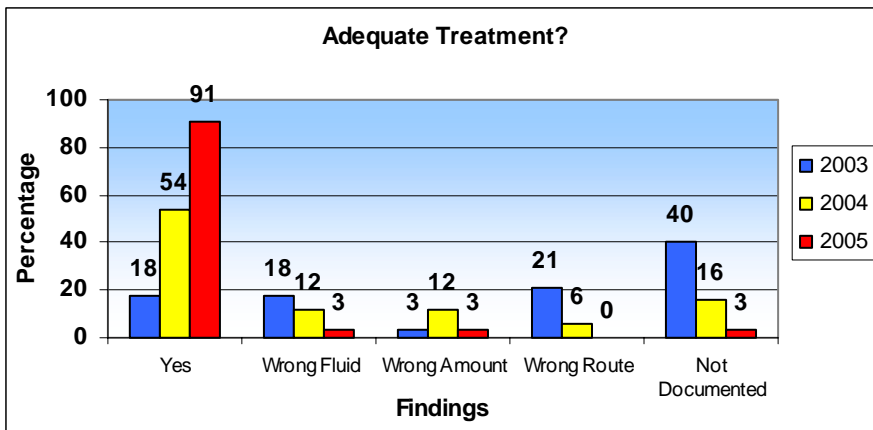
68% of all patients presenting in March/ April 2005 are receiving their initial treatment within 30/60 of arrival. Only 16% have a documented delay > 30 mins. The time of initiation remains undocumented in 16%.

This is an obvious improvement compared to the data in 2003 and 2004.

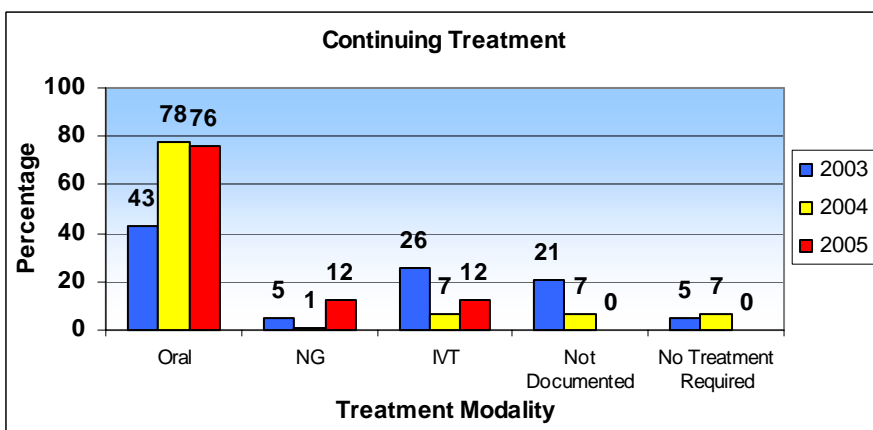


The audit results revealed a 45% increase in the use of oral rehydration as an initial treatment modality over the 2 year period. It is assumed that the lack of increase in nasogastric rapid rehydration is a direct result of the successes gained in the use of oral rehydration.

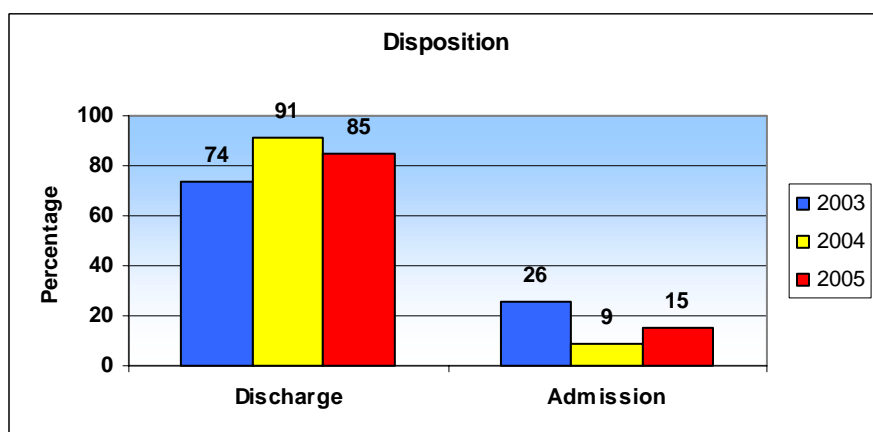
A sustained reduction in the use of IV therapy as initial treatment has been noted.



There has been a sustainable increase in appropriate treatment for children who present with gastroenteritis to Gosford hospital from 2003 to 2005. There has also been marked improvement in documentation.



Most children are receiving oral rehydration therapy throughout their treatment profile. Worthy of comment is the fact that the change of treatment modality from oral to NG or IV is a decision made by more senior staff i.e. ED and paediatric. The inappropriate switch from PO to IV without trial of NG continues to be a problem.



Overall there is a continued decrease in admission rate in 2005 compared to 2003, especially for the mild – moderate gastroenteritis patients.