

ORAL REHYDRATION: PATIENTS WITH VOMITING AND DIARRHOEA - EMERGENCY DEPARTMENT - SCH

PRACTICE GUIDELINE

DOCUMENT SUMMARY/KEY POINTS

- This document describes the requirements for nurse initiated oral rehydration within the extended skills Scope of Practice for the Clinical Initiative Nurse in the SCH Emergency Department.
- Children with vomiting and dehydration can often be successfully managed with oral fluids. Using appropriate oral solutions, clinical assessment, monitoring and evaluation this method can be effective for children with diarrhoea and vomiting in the Emergency Department.
- This document is to be read in conjunction with the following:
- [Hand Hygiene – SCHN](#)
- CIN Position Description – SCH
- [Gastroenteritis: Acute Management Practice Guideline - SCHN](#)

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1st October, 2017	Review Period: 3 years
Team Leader:	Nurse Educator	Area/Dept: Emergency Departments - SCHN

Date of Publishing: 4 October 2017 3:32 PM

Date of Printing:

Page 1 of 9

K:\CHW P&P\Policy\Sept 17\Oral Rehydration_Vomiting_Diarrhoea_ED - SCH.docx

This Guideline may be varied, withdrawn or replaced at any time.

CHANGE SUMMARY

- This document replaces document 2013-1019

READ ACKNOWLEDGEMENT

- All SCH Emergency Department Clinical nurses must ensure they have read and understand the contents of this guideline
- This guideline provides scope for the ED Clinical Initiatives Nurse (CIN) and is a component of the CIN Resource manual/package
- All Clinical Initiatives Nurses must practice within this scope

TABLE OF CONTENTS

1	Introduction	4
	Purpose/Scope.....	4
	Criteria	4
	Exclusion Criteria	4
	Signs and Symptoms of Dehydration ¹ :	5
	Responsibilities	5
2	Procedure	6
3	Documentation	6
4	Oral rehydration fluids	6
5	Medication	7
6	Outcomes	7
	References.....	7
	Appendix 1: Parent/carer administration of oral fluid (Paediatric) form.....	8

1 Introduction

Children with vomiting and dehydration can often be successfully managed with oral fluids. Using appropriate oral solutions, clinical assessment, monitoring and evaluation this method can be effective for children with vomiting in the Emergency Department.

Purpose/Scope

This document provides guidelines for the Clinical Initiatives Nurse and/or Triage Nurse to initiate oral rehydration for appropriate children within the extended skills Scope of Practice for the Clinical Initiative Nurse (CIN) in the SCH Emergency Department. The CIN will have undertaken a course of education and supervision to achieve this scope of practice.

This guideline aims to:

- Decrease the number of children receiving nasogastric or intravenous fluid therapy resulting in a decreased need for admission and unnecessary intervention
- Utilise waiting times effectively and commence oral rehydration treatment in those children with vomiting, with or without diarrhoea, at the time of triage or whilst waiting in the waiting room where appropriate
- Demonstrate and educate parents/carers on the purpose of commencing oral rehydration in the waiting room prior to medical assessment and to encourage them to document progress
- Maintain ongoing observation and assessment of those children receiving oral rehydration
- Ensure children who present to the emergency department with vomiting, +/- diarrhoea are considered for a trial of oral fluids before medical assessment providing they meet the inclusion criteria.

Criteria

The patient suitable for intervention under this guideline has been assessed and triaged as a category 4 or 5, and has been allocated to the waiting room.

- The patient has vomiting - with or without diarrhoea
- The child has some signs of dehydration consistent with mild dehydration (see table below).

Exclusion Criteria

- abdominal distension
- bile-stained vomiting
- blood in vomitus or stool
- severe abdominal pain
- moderate to severe headache
- < 6 months old
- respiratory distress
- moderate tachycardia or hypotension

As well as gastroenteritis there are other causes of vomiting including:

- Obstruction eg. intussusception, volvulus
- Infection eg. pneumonia, appendicitis, meningitis, urinary tract infection
- Raised intracranial pressure eg. brain tumour
- Metabolic disease eg. diabetes.

Children with exclusion criteria are likely to be triaged for urgent medical assessment as a category 3 or higher. Do NOT attempt to orally rehydrate a child with any of the above exclusion criteria.

Signs and Symptoms of Dehydration ¹:

Description of dehydration	Dehydration (% of Body Weight)	Signs and Symptoms
No clinical signs of dehydration		Reduced urine output Thirst No physical signs
Mild	3%	Reduced urine output Thirst Dry mucous membranes Mild tachycardia
Moderate	5%	Dry mucous membranes Tachycardia Abnormal respiratory pattern Lethargy Reduced skin turgor Sunken eyes
Severe	10%	Above signs Poor Perfusion - <i>mottled, cool limbs/slow capillary refill/altered consciousness</i> Shock - <i>thready peripheral pulses with marked tachycardia and other signs of poor perfusion stated above</i>

Responsibilities

Children commenced on a trial of oral fluids should have ongoing observation and assessment. This includes reassessment of the patient at least hourly and documentation of the child's progress in the patient's clinical record. **The Clinical Initiative Nurse is responsible for the care and ongoing assessment of the child in the waiting room. If a CIN is not available, an identified RN should be assigned to this role.**

2 Procedure

1. Explain to parents / carers the reason for trialling oral fluids
2. Supply the parent/carer with an appropriate solution/ fluid, medicine cup and/or syringe, vomit bag, Parent/carer Administration of Oral Fluids form (an example can be found in Appendix 1) and pen, as well as instructions on how to complete the form. The importance of documenting the child's progress should be discussed with the parent/carer
3. The child should be offered 0.5ml/kg every 5 minutes.¹ This amount should be documented on the form provided to parents. Explain that giving frequent small amounts of fluid is often more successful than larger amounts taken less often
4. Inform parent/carer the CIN will review their child and the progress of the trial of fluids
5. Request that the parents ask a nurse to see their child if they become more unwell, or are refusing fluids or continuing to vomit
6. Lignocaine 4% cream (LMX4® cream) may be applied on those children with vomiting and /or diarrhoea attempting oral rehydration in the waiting room if:
 - o > 1months of age
 - o signs of dehydration present i.e. mild or mild-moderate dehydration;
 - o repeated vomiting and/ or frequency of diarrhoea
7. Parents/carers should be provided with a SCHN factsheet on gastroenteritis if applicable.

Breastfed infants should continue to be offered small frequent breastfeeds

If at any time the CIN feels the patient needs urgent medical attention they should up triage or escalate care as per local protocols.

3 Documentation

Oral rehydration is an ED Nurse Protocol in the Electronic Medical Record. If oral rehydration is initiated by the CIN/Triage nurse this must be documented by firing the ED "Approved Protocol" icon. Ongoing assessment of the child, including vital signs, and care should be documented in the patient's electronic medical record.

Other documentation includes completion of the Trial of Fluids form by the parents/carers.

4 Oral rehydration fluids

- Babies who are breast-fed should receive small frequent breast feeds, to ensure they are slowly rehydrated. This may also be supplemented with Oral Rehydration Solution (ORS) as required.¹

- ORS such as Hydralyte® and Gastrolyte® should be used within the Emergency Department. They can be used in liquid or frozen form. The Nurse may give the child a dilution of one part lemonade or apple juice in 4 parts water ^{1,2} if the child is refusing the above options or ORS is unavailable. These should only be used if there are no clinical signs of dehydration. ¹
- Sports drinks, low calorie and diet drinks should not be used as a rehydration fluid. ¹

5 Medication

- Anti-motility and anti-diarrhoeal medications should not be used in infants and children with gastroenteritis ¹
- Antiemetics may be used to reduce vomiting in infants and children who are undergoing a trial of fluid. ^{1,3} These should only be prescribed after medical assessment.

6 Outcomes

- Children with vomiting who are mildly dehydrated will be rehydrated orally in a timely manner.

References

1. [NSW Health Guideline- Infants and Children: Management of Acute Gastroenteritis \(4th ed.\) 2014.](#)
2. Freedman S, Willan A, Boutis, S, Schuh, S. Effect of Dilute Apple Juice and Preferred Fluids vs Electrolyte Maintenance Solution on Treatment Failure among Children with Mild Gastroenteritis: A randomized Clinical Trial. JAMA, 2016: 315(18)
3. Freedman S, Ali, S, Oleszczuk S, Hartling L. Treatment of acute gastroenteritis in children's: an overview of systemic reviews of interventions commonly used in developed countries. Evidence Based Child Health, 2013: 8(4)

Copyright notice and disclaimer:

The use of this document outside Sydney Children's Hospitals Network (SCHN), or its reproduction in whole or in part, is subject to acknowledgement that it is the property of SCHN. SCHN has done everything practicable to make this document accurate, up-to-date and in accordance with accepted legislation and standards at the date of publication. SCHN is not responsible for consequences arising from the use of this document outside SCHN. A current version of this document is only available electronically from the Hospitals. If this document is printed, it is only valid to the date of printing.

Appendix 1: Parent/carer administration of oral fluid (Paediatric) form



Holes Punched as per AS2828.1 - 2012
BINDING MARGIN - NO WRITING

NH700044 180215

	FAMILY NAME		MRN	
	GIVEN NAME		<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	
	D.O.B. ____/____/____		M.O.	
	ADDRESS			
	LOCATION / WARD			

Facility: _____

PARENT / CARER ADMINISTRATION OF ORAL FLUID (PAEDIATRIC)

COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE

Oral fluids for your child with dehydration (e.g. from gastroenteritis)

- Small and frequent breastfeeds **OR**
- Oral rehydration solution (ORS) e.g. gastrolyte or hydralyte (fluid or ice block) **OR**
- Dilute juice (only if oral rehydration solution is refused) - 1 part apple juice to 4 parts water.

Your child's weight is: _____ kg (nurse to complete)

Your child should drink _____ mL every 5 minutes (0.5 mL / kg) (nurse to complete)








Notes: For breastfeeding babies please write length of time spent breastfeeding (i.e. number of minutes). For infants and children, giving frequent small amount of fluids is often more successful than larger amounts taken less often, even if the child is thirsty.

Use the measuring cup or orange syringe to measure the fluid (One Hydralyte® iceblock = 60 mL)

Give the fluid to your child to drink with an orange syringe, teaspoon, cup or bottle

Children should be reviewed by a doctor or nurse after an hour or earlier if parent/ carer is concerned (e.g. blood in stools or 'coffee ground' brown colour vomit)

Date/ Time _/_/___	IN	IN	OUT	OUT	OUT
	Type of fluid your child drinks (e.g. breast, milk, diluted juice, hydralyte)	Amount your child drinks (mL or minutes breastfeeding)	Tick if your child vomits	Tick if your child passes urine (toilet or wet nappy)	Tick if your child has diarrhoea
YOUR CHILD SHOULD NOW BE REVIEWED BY A NURSE OR DOCTOR					
Totals					

	FAMILY NAME		MRN			
	GIVEN NAME		<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE			
Facility:	D.O.B. ____/____/____		M.O.			
	ADDRESS					
PARENT / CARER ADMINISTRATION OF ORAL FLUID (PAEDIATRIC)						
LOCATION / WARD						
COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE						
Every 5 minutes write down how much your child drinks, and if they toilet	Date/ Time _/_/___	IN Type of fluid your child drinks (e.g. breast, milk, diluted juice, hydralyte)	IN Amount your child drinks (mL or minutes breastfeeding)	OUT Tick if your child vomits	OUT Tick if your child passes urine (toilet or wet nappy)	OUT Tick if your child has diarrhoea
						
YOUR CHILD SHOULD NOW BE REVIEWED BY A NURSE OR DOCTOR						
Totals						
<p>Fact sheets on common childhood conditions such as gastroenteritis, fever etc. can be accessed via the Sydney Children's Hospitals Network website under parents and carers, or the Kaleidoscope website under health fact sheets or ask your nurse.</p> <p style="text-align: center;"> http://www.schn.health.nsw.gov.au/parents-and-carers/fact-sheets http://www.kaleidoscope.org.au/site/fact-sheets </p> <p><small>References: Gastroenteritis Factsheet (2014) The Children's Hospital at Westmead, Sydney Children's Hospital, Randwick and Kaleidoscope Children, Young People and Families. http://www.schn.health.nsw.gov.au/files/factsheets/gastroenteritis_in_children-en.pdf Infants and Children - Management of Acute Gastroenteritis - Fourth Edition (GL2014_024)</small></p>						

Holes Punched as per AS2828-1: 2012
BINDING MARGIN - NO WRITING

