

INCLUSION CRITERIA

Patients ≥ 6 mo old with diarrhea and/or vomiting

EXCLUSION CRITERIA

- Focal abdominal tenderness on exam or reported severe pain
- Bloody diarrhea
- Diarrhea >7 days
- Bilious emesis
- Dysuria, urinary frequency, urgency
- Recent head injury
- Feeding tube
- Metabolic disease
- Cardiac disease
- Bladder/kidney disease
- VP shunt
- Diabetes

MEASURES

- Percent ED arrival to Zofran administration within 60 minutes

DISCHARGE CRITERIA

- Well appearing or clinically improving
- Able to perform ORT at home if indicated

NOT ROUTINELY RECOMMENDED

- Lactose free diet if symptoms less than 7 days
- Probiotics
- Antidiarrheals
- Antispasmodics
- Zinc
- Antibiotics
- GI PCR/Culture ^{*see page 2}

*FLUID HOLIDAY INCLUSION CRITERIA

- No vomiting within 2 hours
- Well appearing
- Child is awake
- Voided at least once since ED arrival or urine output ≥ 1 mL/kg/hr if admitted >4 hours

ORT Fluids

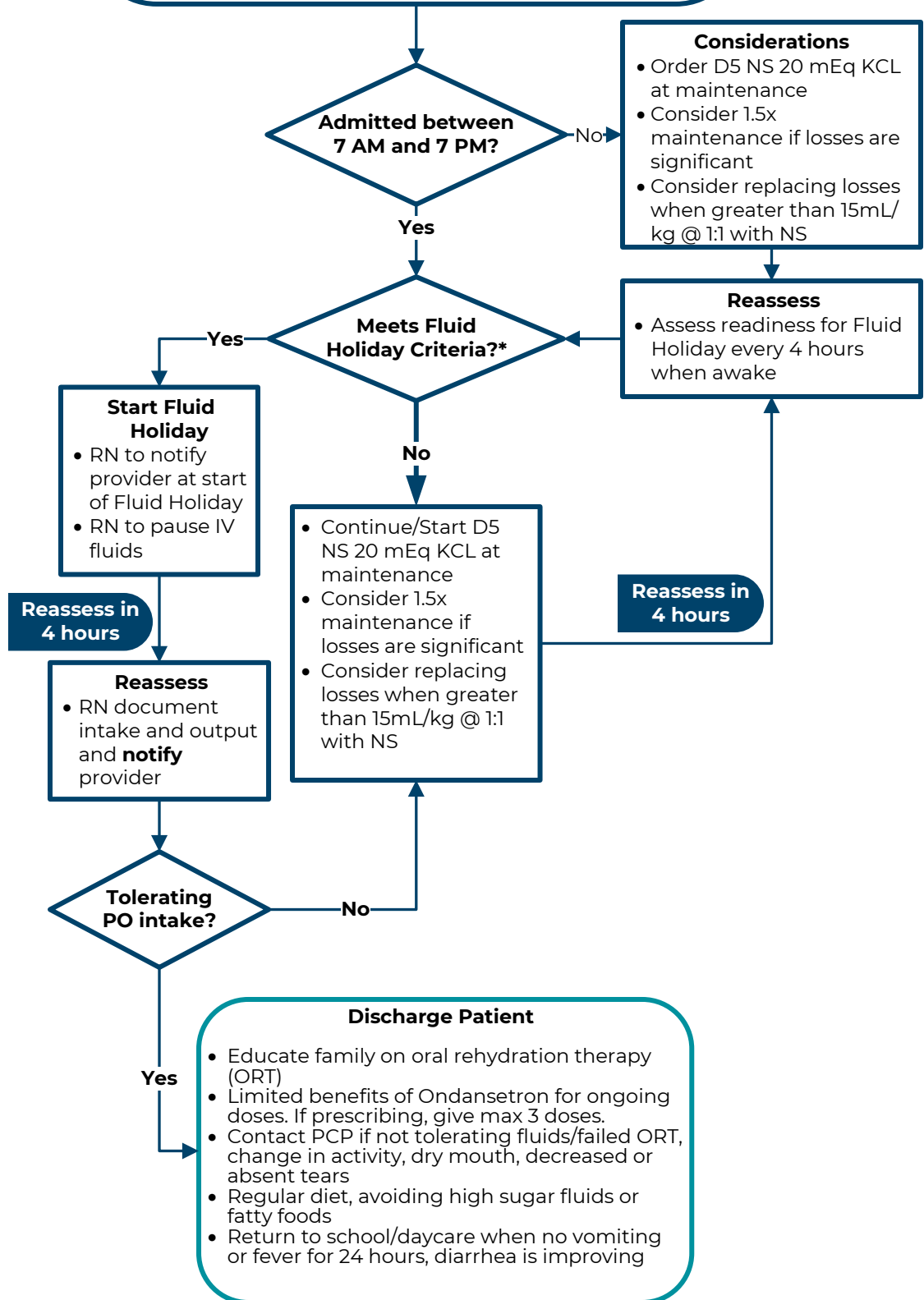
Patient's preferred oral fluids

Diarrhea: Stools that are more frequent or looser in consistency than an individual's regular stools. Stools may contain blood, mucus, fat, or undigested food particles

INITIAL ASSESSMENT

- Utilize Gastroenteritis Inpatient Admission Order Set
- Assess need for additional Normal Saline (NS) bolus 20 ml/kg to achieve euvoolemia
- Ondansetron Q8 PRN for vomiting and nausea
- Encourage PO intake and regular diet ad lib

Off Pathway
Signs of shock ($\downarrow$ BP, $\uparrow$ HR, AMS, delayed capillary refill)
Significant electrolyte abnormality



Clinical Dehydration Scale (CDS)			
Characteristic	Score of 0	Score of 1	Score of 2
General Appearance	Normal	Thirsty, restless or lethargic, but irritable when touched	Drowsy, limp, cold or sweaty, comatose or not responsive
Eyes	Normal	Slightly sunken	Very sunken
Mucous Membranes	Normal	Sticky	dry
Tears	Normal	Decreased tears	Absent tears
Scoring 0 = no dehydration (<3%), Scoring 1-4 = some dehydration (≥3%-6%), Scoring 5-8 = moderate dehydration(≥6%)			

ORT Volume Goal					
Weight (kg)	Age*	Every 5 minutes	Within 30 minutes	Within 1 hour	Within 4-6 hours
5 – 7.9	6 to 12 months	10 mL	60 mL	120 mL	200 - 400
8 – 10.9	12 to 23 months	15 mL	90 mL	180 mL	600 – 800 mL
11 – 15.9	2 to 4 years	20 mL	120 mL	240 mL	800 – 1200 mL
16 – 29.9	5 to 14 years	35 mL	200 mL	400 mL	1200 -2200 mL
>30	15 years or older	60 mL	360 mL	720 mL	2200 – 4000 mL
WHO Guidelines for Administering ORT in Children *Use the patient's age only if the weight is not known					

Ondansetron Warning
Risk of QTc prolongation increases if the patient is on other QTc altering medications, such as cardiac, antimalarial, psychiatric, ADHD, chemotherapy, and diuretics. Consult Lexicomp for a complete list. Caution using ondansetron if: • Child or first-degree family member has been diagnosed with an irregular heartbeat • A family member has ever had sudden death due to or presumed to be due to a heart condition at a young age

Stool PCR/Culture Criteria

1. Children with underlying chronic conditions
2. Extremely severe clinical conditions
3. Prolonged symptoms (>7 days)
4. During outbreaks
5. Children with severe bloody diarrhea and high fever
6. Recent history of travel to at-risk area? [LOE Guideline(FISPGHAN 2018)]

Disclaimer: The clinical pathways are based upon publicly available medical evidence and/or a consensus of medical practitioners at Nemours Children's Health ("Nemours") and are current at the time of publication. These clinical pathways are intended to be a guide for practitioners and may need to be adapted for each specific patient based on the practitioner's professional judgment, consideration of any unique circumstances, the needs of each patient and their family, and/or the availability of various resources at the health care institution where the patient is located.

VERSION MANAGEMENT

- Version 1.0 (11/11/2022): Go Live.
- Version 2.0 (10/23/2025): Look back review completed.
- Version 2.1 (8/13/26): Guidance for mild/mod/severe classification and language about CDS being used in 1-36 months.

Questions about this pathway should be directed to **clinicalpathways@nemours.org**.

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- Cheng H, Ma Y, Liu X, Tian C, Zhong X, Zhao L, et al. A Systematic Review and Meta-Analysis: Lactobacillus acidophilus for Treating Acute Gastroenteritis in Children. *Nutrients*. 2022; 14 (3). <https://ovidsp.ovid.com/ovidweb.cgi?&T=JS&PAGE=reference&MODE=ovidclassic&CSC=y&NEWS=n&D=medall&SEARCH=35277042.ui>. doi:10.3390/nu14030682.
- Bonvanie, I.J., Weghorst, A.A.H., Holtman, G.A., Russchen, H.A., Fickweiler, F., Verkade, H.J., Kollen, B.J., & Berger, M.Y. (2021). Oral ondansetron for pediatric gastroenteritis in primary care: A randomized controlled trial. *British Journal of General Practice*, 71(711), e728-e735. <https://doi.org/10.3399/BJGP.2021.0211>
- European Society for Pediatric Gastroenterology, Hepatology, and Nutrition/European Society for Pediatric Infectious Diseases Evidence-Based Guidelines for the Management of Acute Gastroenteritis in Children in Europe: Update 2014? Alfredo Guarino (Coordinator), yShai Ashkenazi, zDominique Gendrel, ?Andrea Lo Vecchio, yRaanan Shamir, and §Hania Szajewska
- Fedorowicz Z, Jagannath VA, Carter B. Antiemetics for reducing vomiting related to acute gastroenteritis in children and adolescents. *Cochrane Database of Systematic Reviews* 2011, Issue 9. Art. No.: CD005506. DOI: 10.1002/14651858.CD005506.pub5.
- Freedman, S.B., Willan, A.R., Bouts, K., Schuh, S., Bouts, K., & Schuh, S. (2016). 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*, 315(18), 1966-1974. <https://doi.org/10.1001/jama.2016.5352>
- Golshekan K, Badeli H, Miri M, Mirzaie M, Hassanzadeh-Rad A, Salamat F, et al. Suitable intravenous fluid for preventing dysnatremia in children with gastroenteritis; a randomized clinical trial. *J Renal Inj Prev*. 2016;5(2):69-73. DOI: 10.15171/jrip.2016.15
- Niño-Serna LF, Florez ID, Niño-Serna LF, Acosta-Reyes J, Veroniki A-A, Veroniki A-A, et al. Antiemetics in Children With Acute Gastroenteritis: A Meta-analysis. *Pediatrics*. 2020; 145 (4). <https://ovidsp.ovid.com/ovidweb.cgi?&T=JS&PAGE=reference&MODE=ovidclassic&CSC=y&NEWS=n&D=medall&SEARCH=32132152.ui>. doi:10.1542/peds.2019-3260.
- Toaimah FHS, Toaimah FHS, Toaimah FHS Mohammad HF. Rapid intravenous rehydration therapy in children with acute gastroenteritis : A systematic review. *Pediatr. Emerg. Care*. 2016; 32 (2): 131-135. <https://ovidsp.ovid.com/ovidweb.cgi?&T=JS&PAGE=reference&MODE=ovidclassic&CSC=y&NEWS=n&D=medall&SEARCH=26835574.ui>. doi:10.1097/PEC.0000000000000708.