Acute Gastroenteritis (AGE) Clinical Practice Guideline
Inpatient Department Management

CDS 0 No Dehydration
- Patient Failed Oral Challenge
  - Refusing fluids
  - Emesis with Ondansetron given

CDS 1-4 Some Dehydration
- Ondansetron 0.15mg/kg x 1 Oral in ED/UC if pt. had emesis
- Failed Oral Challenge or was unable to tolerate oral rehydration
- NG was placed for hydration

CDS 5-8 Moderate/Severe Dehydration
- Infused Isotonic Crystalloids, NS or LR, at 20 ml/kg Bolus X2
- BMP completed
- Concern with VS, Lethargy or Hydration
- Failed Oral Challenge

Admission from Emergency Department
CDS performed, initial treatment started

Refused Fluids < 2 yrs CDS 0-4
Failed Oral Challenge ≥ 2 yrs CDS 5-8

NG/ORAL REHYDRATION
Continue Oral or Initiate NG rehydration
NG rehydration: Consider NG if pt. < 2 yrs, NO emesis and AND refusing po fluids.
- Use: Enfalyte 40-50 ml/kg over 3-6hrs
- Continue NG hydration at maintenance rate
- If pt. begins vomiting, stop Oral/NG fluids and start IV for parenteral rehydration
- Consider Ondansetron *

PARENTERAL REHYDRATION
Consider Repeat Bolus: NS or LR at 20 ml/kg x 1
Start IV Isotonic (DSNS) Fluids
- May add K+ or other additives as indicated

CDS 0 - 4: Maintenance Fluids
CDS 5 - 8:
- Moderate dehydration: 1.5x maintenance
- Severe dehydration: 2x maintenance.

Physicians assesses patient Daily for VS and Intake is > Output

MAINTENANCE
- Continue hydration and notify MD as needed for improvement or deterioration in condition
If patient is tolerating fluids consider:
- Wean IVF/NG hydration to promote oral intake
- Stopping supplemental hydration or reduce by ½.
- Consider BMP if NPO longer than 24hrs or abnormal labs on admission

EXCESSIVE ONGOING LOSSES?

Ongoing losses?³

YES

OFF GUIDELINE & CONSIDER GI PCR

Discharge Criteria
- Able to tolerate oral fluids without emesis or excessive stooling
- Ability to replace losses without IV fluid
- VSS
- Afebrile

Off Guideline & Consider GI PCR

Inclusion Criteria
- Patients > 90 days of age
- 3 loose stools in 24 hrs or any loose stools with vomiting
- Acute AGE is < 7 days of loose stools

Exclusion Criteria
- Fuegtner Exclusion List for Chronic/Complex patients
- Patients < 90 days
- Hyper or Hyponatremia (once confirmed remove from guideline)

Oral Rehydration
- Avoid high carbohydrate liquids and optimize with low osmols and higher Na
  - Preferred > 1yr Pedialyte then try a sports drink
  - Infants < 1yr: Enfalyte oral, syringe or NG

Notify MD
- Call MD to Advance Diet when pt:
  - Baseline sensorium
  - Acting hungry/asking for food
  - Mucous membranes moist
  - VS stable
  - No more than 3 loose stools after oral intake

Nursing Care
- Contact Precautions
- Diaper Dermatitis Protocol
- Strict I&O
- Clear liquid diet, if no vomiting may advance diet as tolerated.

Ongoing Losses
- Vomiting: monitor frequency & volume
- Stooling: Since stool measurement is difficult to measure accurately the fluids should be adjusted based on clinical assessment

GI PCR and Stool Culture
- GI PCR Panel is NOT necessary for all patients with diarrhea
- May consider sending PCR for:
  - Severe illness (severe abd. pain, tenderness ± fever)
  - Prolonged symptoms >7 Days
  - Travel related diarrhea if persistent or with fever
  - Persistent Fever
  - Bloody diarrhea esp. if mucoid
- Do not order a stool culture if PCR is ordered

PCR Panel does not include C-diff

Inpatient Medications
- Ondansetron: Evidence supports giving one dose of Zofran in ED/UC, be aware that multi doses may prolong diarrhea
- Probiotic: Limited evidence suggest some improvement and may decrease IP LOS but not clear to support use in every patient

Developed through the efforts of Children’s Healthcare of Atlanta and physicians on Children’s medical staff in the interest of advancing pediatric healthcare. This is a general guideline and does not represent a professional care standard guiding providers’ obligation to patients. Ultimately the patient’s physician must determine the most appropriate care. © 2018 Children’s Healthcare of Atlanta, Inc.
Patient Presents with ≥ 3 loose stools in 24 hrs. ¹,²
+/- vomiting; +/- fever

Score the Clinical Dehydration Scale (CDS)

*Score each element as 0, 1, or 2 for a total score from 0-8*

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>General appearance</td>
<td>Normal</td>
<td>Thirsty, Restless or Lethargic, but irritable when touched</td>
<td>Drowsy, limp, cold or sweaty, +/- comatose</td>
</tr>
<tr>
<td>Eyes</td>
<td>Normal</td>
<td>Slightly sunken</td>
<td>Extremely sunken</td>
</tr>
<tr>
<td>Mucous membrane (tongue)</td>
<td>Moist</td>
<td>Sticky</td>
<td>Dry</td>
</tr>
<tr>
<td>Tears</td>
<td>Tears</td>
<td>Decreased tears</td>
<td>Absent tears</td>
</tr>
</tbody>
</table>

¹JPGN.Volume 59, number 1, July 2014, validated for patients < 3yrs, in older patients clinical judgement may supersede the CDS score