Pediatric Common Conditions: Children with Gastroenteritis

Provide evidence-based treatment for children with gastroenteritis to minimize the length of their hospital stay and prevent readmission.

Domain

Patient Care Processes:
Clinical processes that ensure delivery of high-quality care to individual patients

Aims

Effective:
An evidence-based practice that produces better outcomes than its alternative

Process Attributes

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<tr>
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<th>Cost to Implement</th>
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<td>The monetary resources required to implement this process</td>
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<td>Minimal: Just the cost of the improvement effort itself</td>
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<th>Time to Implement</th>
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<tr>
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<td>The amount of time, from months to years, it will take on average to establish this process</td>
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<td>Fewer than 12 months</td>
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<tr>
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<th>Difficulty to Implement</th>
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<td>The challenges of implementing this process</td>
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<td>Least Challenging: Involves a single unit or discipline and does not require a substantial shift in culture and/or operations</td>
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<th>Level of Evidence</th>
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<td>The degree to which the actions in this process are supported by research and experience; based on the Cochrane scale</td>
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<td>Some Evidence: Level III — Studies published with some control included</td>
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Details

Elements

- Record patient weight at admission for all patients hospitalized for gastroenteritis
- Document the patient’s hydration status at admission using CDC and WHO classification
- Repeatedly reassess hydration status during the hospitalization and deliver appropriate intravenous rehydration therapy until the patient is able to tolerate oral rehydration therapy
- Deliver high quality IV care for patients requiring peripheral intravenous fluid therapy by ensuring line stability, patency, and sterility
At hospital discharge, ensure that the child has a written discharge care plan that provides detailed instructions for oral rehydration therapy continuation, signs and symptoms of recurring dehydration, and the outpatient provider responsible for follow-up should the child need further assessment.

Outcomes

- **Harm**: Decreased harm to patient (e.g., Harms per 100 patient days, as measured by the IHI Global Trigger Tool)
- **Cost of Care**: Decreased cost per inpatient case

Service Lines and Critical Functions

- Pediatrics

Key Measures

- Percent of children admitted with gastroenteritis who had documentation of hydration status
- Percent of children admitted with gastroenteritis who had weight measurement recorded
- Percent of children admitted with gastroenteritis whose parent/caregiver received education on oral rehydration therapy, signs and symptoms of dehydration and contact information/instructions for follow-up with an outpatient physician following hospital discharge
- Percent of children with peripheral intravenous lines who develop an infiltration
- Percent of patients with gastroenteritis readmitted within 72 hours and seven days for dehydration

Reasons and Implications

Importance for Patients and Families

When children have a gastro-intestinal infection, they need to receive the best care that is proven to work to ensure a faster recovery. Educating families and patients on oral hydration therapy may prevent the child from being readmitted to the hospital and future gastroenteritis illness.

Requirement, Standards, Policies, and Guidelines

- **American Academy of Pediatrics (AAP)**
  Statement of Endorsement for the CDC's Policy "Managing Acute Gastroenteritis Among Children: Oral Rehydration, Maintenance, and Nutritional Therapy"
- **Centers for Disease Control and Prevention (CDC)**
  Managing Acute Gastroenteritis Among Children: Oral Rehydration, Maintenance, and Nutritional Therapy

Financial Implications

- Expense reduction can occur due to potential infection reduction.

Prerequisites

- Clinician knowledge of CDC/WHO dehydration classification groups
- Clinician knowledge of CDC/WHO recommended oral rehydration strategies

Resources

**Additional Resources**

- **National Database of Nursing Quality Indicators (NDNQI)**
  Pediatric Peripheral Intravenous Line Care
- **Agency for Healthcare Research and Quality (AHRQ)**
  AHRQ gastroenteritis area admission rates