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
- **Cost to Implement**
  - The monetary resources required to implement this process
    - **Minimal:** Just the cost of the improvement effort itself

- **Time to Implement**
  - The amount of time, from months to years, it will take on average to establish this process
    - Fewer than 12 months

- **Difficulty to Implement**
  - The challenges of implementing this process
    - **Least Challenging:** Involves a single unit or discipline and does not require a substantial shift in culture and/or operations

- **Level of Evidence**
  - The degree to which the actions in this process are supported by research and experience; based on the Cochrane scale
    - **Some Evidence:** Level III — Studies published with some control included

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

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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 gastrointestinal 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
American Medical Association (AMA)
Pediatric Acute Gastroenteritis
Physician Performance Measurement Set

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