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

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