

**Pediatric Acute Gastroenteritis
Physician Performance Measurement Set
Consortium Approved
May 2005**

Pediatric Acute Gastroenteritis Work Group

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Physician Performance Measures (Measures) and related data specifications, developed by the Physician Consortium for Performance Improvement™ (the Consortium), are intended to facilitate quality improvement activities by physicians.

These Measures are intended to assist physicians in enhancing quality of care. Measures are designed for use by any physician who manages the care of a patient for a specific condition or for prevention. These performance Measures are not clinical guidelines and do not establish a standard of medical care. The Consortium has not tested its Measures for all potential applications. The Consortium encourages the testing and evaluation of its Measures.

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THE SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.

Purpose of Measures:

These clinical performance measures, developed by the American Academy of Pediatrics, the American Academy of Family Physicians, and the Physician Consortium for Performance Improvement® (Consortium), are designed for individual quality improvement. Unless otherwise indicated, the measures are also appropriate for accountability if appropriate methodological, statistical, and implementation rules are achieved.

Accountability Measures:

- Measure #1: Documentation of Hydration Status
- Measure #2: Weight Measurement
- Measure #3: Recommendation of Appropriate Oral Rehydration Solution
- Measure #4: Education

Intended Audience and Patient Population:

These measures are designed for use by physicians and for calculating reporting or performance measurement at the individual physician level. When existing hospital-level or plan-level measures are available for the same measurement topics, the Consortium attempts to harmonize the measures to the extent feasible.

These measures are designed for pediatricians and other physicians managing the care of patients aged one month to 5 years of age with a diagnosis of acute gastroenteritis in the office setting or in the emergency department.

The Consortium also encourages the use of these measures by non-physician health professionals, where appropriate.

Measure Specifications

The Consortium seeks to specify measures for implementation using multiple data sources, including paper medical record, administrative (claims) data, and particular emphasis on Electronic Health Record Systems (EHRS). Draft specifications to report on these measures for Oncology using administrative (claims) data are included in this document. We have identified codes for these measures, including ICD-9 and CPT (Evaluation & Management Codes, Category I and where Category II codes would apply). Specifications for additional data sources, including EHRS, will be fully developed at a later date. We welcome comments on the draft specifications included in addition to the measure language.

Measure Exclusions:

For process measures, the Consortium provides three categories of reasons for which a patient may be excluded from the denominator of an individual measure:

- **Medical reasons**
Includes:
 - not indicated (absence of organ/limb, already received/performed, other)
 - contraindicated (patient allergic history, potential adverse drug interaction, other)
- **Patient reasons**
Includes:
 - patient declined
 - economic, social, or religious reasons
 - other patient reasons
- **System reasons**
Includes:
 - resources to perform the services not available
 - insurance coverage/payor-related limitations
 - other reasons attributable to health care delivery system

These measure exclusion categories are not available uniformly across all measures; for each measure, there must be a clear rationale to permit an exclusion for a medical, patient, or system reason. The exclusion of a patient may be reported by appending the appropriate modifier to the CPT Category II code designated for the measure:

- **Medical reasons**: modifier 1P
- **Patient reasons**: modifier 2P
- **System reasons**: modifier 3P

Although this methodology does not require the external reporting of more detailed exclusion data, the Consortium recommends that physicians document the *specific* reasons for exclusion in patients' medical records for purposes of optimal patient management and audit-readiness. The Consortium also advocates the systematic review and analysis of each physician's exclusions data to identify practice patterns and opportunities for quality improvement. For example, it is possible for implementers to calculate the percentage of patients that physicians have identified as meeting the criteria for exclusion.

Please refer to documentation for each individual measure for information on the acceptable exclusion categories and the codes and modifiers to be used for reporting.

Measures #1-4 in the Pediatric Acute Gastroenteritis measurement set are process measures.

For **outcome measures**, the Consortium specifically identifies all acceptable reasons for which a patient may be excluded from the denominator. Each specified reason is reportable with a CPT Category II code designated for that purpose.

There are no outcome measures in the Pediatric Acute Gastroenteritis measurement set.

The Consortium continues to evaluate and likely will evolve its methodology for handling exclusions as it gains experience in the use of the measures. The Consortium welcomes comments on its exclusions methodology.

Data Capture and Measure Calculation

The Consortium intends for physicians to collect data on each patient eligible for a measure. Feedback on measures should be available to physicians by patient to facilitate patient management and in aggregate to identify opportunities for improvement across a physician's patient population.

Measure calculations will differ depending on whether a rate is being calculated for performance or reporting purposes.

The method of calculation for performance follows these steps: first, identify the patients who meet the eligibility criteria for the denominator (PD); second, identify which of those patients meet the numerator criteria (A); and third, for those patients who do not meet the numerator criteria, determine whether an appropriate exclusion applies and subtract those patients from the denominator (C). (see examples below)

The methodology also enables implementers to calculate the rates of patient exclusions and to further analyze both low and high rates, as appropriate (see examples below).

The method of calculation for reporting differs. One program which currently focuses on reporting rates is the Centers for Medicare and Medicaid Services (CMS) Physician Quality Reporting Initiative (PQRI). Currently, under that program design, there will be a reporting denominator determined solely from claims data (CPT and ICD-9), which in some cases result in a reporting denominator that is much larger than the eligible population for the performance denominator. Additional components of the reporting denominator are explained below.

The components that make up the numerator for reporting include all patients from the eligible population for which the physician has reported, including: the number of patients who meet the numerator criteria (A), the number of patients for whom valid exclusions apply (C) and also the number of patients who do not meet the numerator criteria (D). These components, where applicable, are summed together to make up the inclusive reporting numerator. The calculation for reporting will be the reporting numerator divided by the reporting denominator. (see examples below).

Examples of calculations for reporting and performance are provided for each measure.

Calculation for Performance

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

Numerator (A) Includes:

Number of patients meeting numerator criteria

Performance Denominator (PD) Includes:

Number of patients meeting criteria for denominator inclusion

Denominator Exclusions (C) Include:

Number of patients with valid medical, patient or system exclusions (where applicable; will differ by measure)

Performance Calculation

$$\frac{A \text{ (# of patients meeting numerator criteria)}}{PD \text{ (# patients in denominator)} - C \text{ (# patients with valid denominator exclusions)}}$$

It is also possible to calculate the percentage of patients excluded overall, or excluded by medical, patient, or system reason where applicable:

Overall Exclusion Calculation

$$\frac{C \text{ (# of patients with any valid exclusion)}}{PD \text{ (# patients in denominator)}}$$

OR

Exclusion Calculation by Type

$$\frac{C_1 \text{ (# patients with medical reason)}}{PD \text{ (# patients in denominator)}}$$

$$\frac{C_2 \text{ (# patients with patient reason)}}{PD \text{ (# patients in denominator)}}$$

$$\frac{C_3 \text{ (# patients with system reason)}}{PD \text{ (# patients in denominator)}}$$

Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator

Reporting Numerator includes each of the following components, where applicable. (There may be instances where there are no patients to include in A, C, D, or E).

A. Number of patients meeting additional denominator criteria (for measures where true denominator cannot be determined through ICD-9 and CPT Category I coding alone) AND numerator criteria

C. Number of patients with valid medical, patient or system exclusions (where applicable; will differ by measure)

D. Number of patients not meeting numerator criteria and without a valid exclusion

E. All other patients not meeting additional denominator criteria (for measures where true denominator cannot be determined through ICD-9 and CPT Category I coding alone)

Reporting Denominator (RD) Includes:

RD. Denominator criteria (identifiable through ICD-9 and CPT Category I coding)

Reporting Calculation

A(# of patients meeting additional denominator criteria AND numerator criteria) + **C**(# of patients with valid exclusions) + **D**(# of patients NOT meeting numerator criteria) + **E**(# of patients not meeting additional denominator criteria)

RD (# of patients in denominator)

Pediatric Acute Gastroenteritis
Measure#1: Documentation of Hydration Status

This measure may be used as an accountability measure.

Clinical Performance Measure							
Numerator Patients with documentation of hydration status							
Denominator All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis							
Denominator Exclusions: None							
Measure: Percentage of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis who had documentation of hydration status							
<p>The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical guideline and represent the evidence base for the measure:</p> <p>Successful implementation of oral rehydration therapy (ORT) starts with the evaluation of the child's degree of dehydration (AAP/CDC¹)</p> <p>Certain signs and symptoms can quantify the extent of a patient's dehydration. Clinical examination of the child provides an opportunity for physical assessment, including vital signs, degree of dehydration, a more detailed history, and for providing instructions to caregivers. (AAP/CDC¹)</p>							
<p>Rationale for the Measure:</p> <p>Determining the level of hydration in a child with acute gastroenteritis provides the basis for beginning appropriate oral rehydration therapy, along with assisting the provider in determining the severity of the condition and whether or not the child's condition can be safely managed at home by the parent/caregiver</p> <p>Date elements required for the measure can be captured and the measure is actionable by the physician.</p>							
Data capture and calculations:							
<p>Calculation for Performance</p> <p>For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator and Denominator.</p> <p>Performance Numerator (A) Includes:</p> <ul style="list-style-type: none"> Patients with documentation of hydration status <p>Performance Denominator (PD) Includes:</p> <ul style="list-style-type: none"> All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis 							
<p>Performance Calculation</p> <table border="1" style="margin: auto;"> <tr> <td align="center" colspan="2">A (# of patients meeting numerator criteria)</td> </tr> <tr> <td align="center" colspan="2"><hr/></td> </tr> <tr> <td align="center" colspan="2">PD (# of patients in denominator)</td> </tr> </table>		A (# of patients meeting numerator criteria)		<hr/>		PD (# of patients in denominator)	
A (# of patients meeting numerator criteria)							
<hr/>							
PD (# of patients in denominator)							
Components for this measure are defined as:							
A	# of patients with documentation of hydration status						
PD	# of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis						

Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator

Reporting Numerator includes each of the following instances:

- A. Patients with documentation of hydration status

- D. Patients who do not have documentation of hydration status and there is no documented reason for not doing so

Reporting Denominator (RD) Includes:

- All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis

Reporting Calculation

$$\frac{A(\text{\# of patients meeting numerator criteria}) + D(\text{\# of patients NOT meeting numerator criteria})}{RD (\text{\# of patients in denominator})}$$

Components for this measure are defined as:

A	# of patients with documentation of hydration status
D	# of patients who do not have documentation of hydration status
RD	# of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis

Measure Specifications – Measure #1: Documentation of Hydration Status

Measure specifications for data sources other than administrative claims will be developed at a later date.

A. Administrative claims data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis

ICD-9 diagnosis codes: 003.0, 004.9, 005.0, 007.1, 007.8, 007.9, 008.0, 008.01, 008.02, 008.09, 008.2, 008.3, 008.41, 008.42, 008.43, 008.44, 008.49, 008.5, 008.61, 008.62, 008.63, 008.64, 008.65, 008.66, 008.67, 008.69, 008.8, 009.0, 009.1, 556.9

AND

CPT service code: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99281, 99282, 99283, 99284, 99285, 99381, 99382, 99383, 99391, 99392, 99393

Denominator Exclusion: *None*

Numerator: Patients who have documentation of hydration status

- Report one of the following CPT Category II codes:
 - 2030F – Hydration status documented, normally hydrated
- OR
- 2031F – Hydration status documented, dehydrated

B. Electronic Health Record System *(in development)*

C. Paper Medical Record *(in development)*

**Pediatric Acute Gastroenteritis
Measure #2: Weight Measurement**

This measure may be used as an accountability measure.

Clinical Performance Measure							
Numerator Patients who had their weight measurement recorded							
Denominator All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis							
Denominator Exclusions: None							
Measure: Percentage of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis who had weight measurement recorded							
<p>The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical guideline and represent the evidence base for the measure:</p> <p>If an accurate weight is available, determination of the percentage of weight loss is an objective measure of dehydration. (AAP/CDC¹)</p> <p>As part of the physical examination, an accurate body weight must be obtained, along with temperature, heart rate, respiratory rate, and blood pressure. When recent premorbid weight is unknown but a previous growth curve is available, an estimate of fluid loss can be obtained by subtracting current weight from expected weight as determined on the basis of previous weight-for-age profile. (AAP/CDC¹)</p>							
<p>Rationale for the Measure: Weight measurement enables the provider in determining the child's level of dehydration and in calculating the amount of oral rehydration therapy that is required.</p> <p>Data elements for the measure can be captured and the measure is actionable by the physician.</p>							
<p>Data capture and calculations:</p> <p>Calculation for Performance For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator and Denominator.</p> <p>Performance Numerator (A) Includes:</p> <ul style="list-style-type: none"> Patients with weight measurement recorded <p>Performance Denominator (PD) Includes:</p> <ul style="list-style-type: none"> All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis 							
<p>Performance Calculation</p> <table border="1" style="margin: auto;"> <tr> <td align="center" colspan="2">A (# of patients meeting numerator criteria)</td> </tr> <tr> <td align="center" colspan="2"><hr/></td> </tr> <tr> <td align="center" colspan="2">PD (# of patients in denominator)</td> </tr> </table>		A (# of patients meeting numerator criteria)		<hr/>		PD (# of patients in denominator)	
A (# of patients meeting numerator criteria)							
<hr/>							
PD (# of patients in denominator)							
<p>Components for this measure are defined as:</p> <table border="1" style="width: 100%;"> <tr> <td align="center">A</td> <td># of patients with weight measurement</td> </tr> <tr> <td align="center">PD</td> <td># of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis</td> </tr> </table>		A	# of patients with weight measurement	PD	# of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis		
A	# of patients with weight measurement						
PD	# of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis						

Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator

Reporting Numerator includes each of the following instances:

- A. Patients with weight measurement recorded

- D. Patients who do not have weight measurement recorded and there is no documented reason for not doing so

Reporting Denominator (RD) Includes:

- All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis

Reporting Calculation

A(# of patients meeting numerator criteria) + **D**(# of patients NOT meeting numerator criteria)

RD (# of patients in denominator)

Components for this measure are defined as:

A	# of patients with weight measurement recorded
D	# of patients who do not have weight measurement recorded
RD	# of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis

Measure Specifications – Measure #2: Weight Measurement

Measure specifications for data sources other than administrative claims will be developed at a later date.

A. Administrative claims data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis

ICD-9 diagnosis codes: 003.0, 004.9, 005.0, 007.1, 007.8, 007.9, 008.0, 008.01, 008.02, 008.09, 008.2, 008.3, 008.41, 008.42, 008.43, 008.44, 008.49, 008.5, 008.61, 008.62, 008.63, 008.64, 008.65, 008.66, 008.67, 008.69, 008.8, 009.0, 009.1, 556.9

AND

CPT service code: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99281, 99282, 99283, 99284, 99285, 99381, 99382, 99383, 99391, 99392, 99393

Denominator Exclusion: *None*

Numerator: Patients with weight measurement recorded

- **Report the CPT Category II Code: 2001F – Weight recorded**

D. Electronic Health Record System *(in development)*

E. Paper Medical Record *(in development)*

Pediatric Acute Gastroenteritis
Measure #3: Recommendation of Appropriate Oral Rehydration Solution

This measure may be used as an accountability measure.

Clinical Performance Measure
<p><u>Numerator</u> Patients for whom appropriate oral rehydration* solution was recommended</p> <p><i>*Appropriate oral rehydration solution includes, Pedialyte®, Enfalyte®, Rehydralyte®, CeraLyte®, or WHO solution.</i></p>
<p><u>Denominator</u> All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis</p> <p>Denominator Exclusions: Documentation of medical reason(s) for not recommending appropriate oral rehydration solution (patient was not dehydrated; patient was admitted to the hospital)</p> <p>Measure: Percentage of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis for whom an appropriate oral rehydration solution was recommended</p>
<p>The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical guideline and represent the evidence base for the measure:</p> <p>Oral rehydration therapy (ORT) is the preferred treatment of fluid and electrolyte losses caused by diarrhea in children with mild to moderate dehydration. (AAP/CDC¹)</p> <p>A variety of oral rehydration solutions are available in the United States. Those most readily available commercially and used most commonly have sodium concentrations ranging from 45 to 50 mmol/L. (AAP/CDC¹)</p> <p>Oral rehydration solutions should be used for rehydration, Oral rehydration therapy should be performed rapidly (within 3-4 hours) for rehydration in patients with mild to moderate dehydration, Patients should receive 50-100ml of oral rehydration solution (ORS/kg of body weight during 2-4 hours to replace the estimated fluid deficit, with additional ORS administered to replace ongoing losses. (AAP/CDC¹)</p>
<p>Rationale for the Measure:</p> <p>Oral rehydration solutions (ORS) are the preferred solution for oral rehydration therapy (ORT). Other fluids, such as fruit juices, do not contain the necessary electrolytes that need to be replaced when a child is dehydrated due to vomiting and/or diarrhea². Additionally, due to the high sugar content and low sodium content of fruit juice, the administration of fruit juice to children who are diagnosed with acute gastroenteritis can make diarrhea worse and result in hyponatremia, resulting in a higher level of dehydration and severity of condition due to fluid loss and electrolyte imbalance².</p> <p>Data elements required for the measure can be captured and the measure is actionable by the physician.</p>
<p>Data capture and calculations:</p> <p><u>Calculation for Performance</u> For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions..</p> <p>Performance Numerator (A) Includes:</p> <ul style="list-style-type: none"> • Patients for whom an appropriate oral rehydration solution was recommended <p>Performance Denominator (PD) Includes:</p> <ul style="list-style-type: none"> • All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis <p>Denominator Exclusions (C) Includes:</p> <ul style="list-style-type: none"> • Documentation of medical reason(s) for not recommending appropriate rehydration solution (patient was not dehydrated, patient was admitted to the hospital)

Performance Calculation

A (# of patients meeting numerator criteria)	
<hr/>	
PD (# of patients in denominator) - C (# of patients with valid exclusions)	

Components for this measure are defined as:

A	# of patients who were dehydrated and for whom appropriate oral rehydration solution was recommended
PD	# of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis
C	# of patients with documented medical reason(s) for not recommending appropriate oral rehydration solution (patient was not dehydrated, patient was admitted to the hospital)

Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator

Reporting Numerator includes each of the following instances:

- A. Patients for whom appropriate oral rehydration solution was recommended

- C. Patients who did not have appropriate oral rehydration solution recommended but for whom there is a documented medical reason for not doing so

- D. Patients who do not have appropriate oral rehydration solution recommended and there is no documented reason for not doing so

Reporting Denominator (RD) Includes:

- All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis

Reporting Calculation

A (# of patients meeting additional denominator criteria and numerator criteria) + C (number of patients with valid exclusions) + D(# of patients NOT meeting numerator criteria)	
<hr/>	
RD (# of patients in denominator)	

Components for this measure are defined as:

A	# of patients who were dehydrated and for whom appropriate oral rehydration solution was recommended
C	# of patients who did not have appropriate oral rehydration solution recommended, <u>but for whom there is a documented medical reason for not doing so</u>
D	# of patients who do <u>not</u> have documentation of hydration status and there is <u>no</u> documented reason for <u>not</u> doing so
RD	# of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis

Measure Specifications – Measure #3: Recommendation of Appropriate Oral Rehydration Solution
Measure specifications for data sources other than administrative claims will be developed at a later date.

A. Administrative claims data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis

ICD-9 diagnosis codes: 003.0, 004.9, 005.0, 007.1, 007.8, 007.9, 008.0, 008.01, 008.02, 008.09, 008.2, 008.3, 008.41, 008.42, 008.43, 008.44, 008.49, 008.5, 008.61, 008.62, 008.63, 008.64, 008.65, 008.66, 008.67, 008.69, 008.8, 009.0, 009.1, 556.9

AND

CPT service code: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99281, 99282, 99283, 99284, 99285, 99381, 99382, 99383, 99391, 99392, 99393

AND

CPT Category II Code: 2031F: Hydration status documented, dehydrated

Denominator Exclusion: Documentation of medical reason(s) for not recommending appropriate oral rehydration solution.

Note: There are only **two** allowable medical exclusions for this measure

- Report CPT Category II Code: 2030F: Hydration status documented, normally hydrated

OR

- Append Modifier to CPT Category II Code: 4056F-1P

Numerator: Patients for who appropriate oral rehydration solution was recommended

- Report the CPT Category II Code: **4056F – Appropriate oral rehydration solution recommended**

F. Electronic Health Record System *(in development)*

G. Paper Medical Record *(in development)*

**Pediatric Acute Gastroenteritis
Measure #4: Education**

This measure may be used as an accountability measure.

Clinical Performance Measure
<p><u>Numerator</u> Patients whose parent/caregiver received education on diet and when to contact the physician</p>
<p><u>Denominator</u> All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis seen in the ambulatory setting*</p> <p><i>*Ambulatory setting is defined as seen in the physician office or emergency department and discharged home.</i></p> <p>Denominator Exclusions: None</p> <p>Measure: Percentage of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis whose parent/caregiver received education on diet and when to contact the physician</p>
<p>The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical guideline and represent the evidence base for the measure:</p> <p>Oral rehydration therapy (ORT) is the preferred treatment of fluid and electrolyte losses caused by diarrhea in children with mild to moderate dehydration. (AAP/CDC¹)</p> <p>A variety of oral rehydration solutions are available in the United States. Those most readily available commercially and used most commonly have sodium concentrations ranging from 45 to 50 mmol/L. (AAP/CDC¹)</p> <p>Oral rehydration solutions should be used for rehydration, Oral rehydration therapy should be performed rapidly (within 3-4 hours) for rehydration in patients with mild to moderate dehydration, Patients should receive 50-100ml of oral rehydration solution (ORS/kg of body weight during 2-4 hours to replace the estimated fluid deficit, with additional ORS administered to replace ongoing losses. (AAP/CDC¹)</p>
<p>Rationale for the Measure:</p> <p>Successful home management of dehydration associated with acute gastroenteritis is dependent upon the parent/caregiver receiving proper education. Instructions regarding the frequency of administration of appropriate ORS, continuation of regular diet, and when the parent/caregiver should contact the physician are all topics that should be covered prior to discharging the child home with the parent/caregiver.</p> <p>Data elements for the measure can be captured and the measure is actionable by the physician.</p>
<p>Data capture and calculations:</p> <p><u>Calculation for Performance</u> For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator and Denominator.</p> <p>Performance Numerator (A) Includes:</p> <ul style="list-style-type: none"> • Patients whose parent/caregiver received education on diet and when to contact the physician • <p>Performance Denominator (PD) Includes:</p> <ul style="list-style-type: none"> • All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis seen in the ambulatory setting <p align="center">Performance Calculation</p> <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: fit-content;"> $\frac{\text{A (\# of patients meeting numerator criteria)}}{\text{PD (\# of patients in denominator)}}$ </div>

Components for this measure are defined as:

A	# of patients whose parent/caregiver received education on diet and when to contact the physician
PD	# of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis seen in the ambulatory setting

Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator

Reporting Numerator includes each of the following instances:

- A. Patients whose parent/caregiver received education on diet and when to contact the physician
- D. Patients who do not have appropriate oral rehydration solution recommended and there is no documented reason for not doing so

Reporting Denominator (RD) Includes:

- All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis seen in the ambulatory setting

Reporting Calculation

$\frac{A(\text{\# of patients meeting numerator criteria}) + D(\text{\# of patients NOT meeting numerator criteria})}{RD (\text{\# of patients in denominator})}$

Components for this measure are defined as:

A	# of patients whose parent/caregiver received education on diet and when to contact the physician
D	# of patients who do <u>not</u> have documentation of hydration status and there is <u>no</u> documented reason for <u>not</u> doing so
RD	# of patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis seen in the ambulatory setting

Measure Specifications – Measure #4: Education

Measure specifications for data sources other than administrative claims will be developed at a later date.

A. Administrative claims data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients aged 1 month to 5 years of age with a diagnosis of acute gastroenteritis seen in the ambulatory setting

ICD-9 diagnosis codes: 003.0, 004.9, 005.0, 007.1, 007.8, 007.9, 008.0, 008.01, 008.02, 008.09, 008.2, 008.3, 008.41, 008.42, 008.43, 008.44, 008.49, 008.5, 008.61, 008.62, 008.63, 008.64, 008.65, 008.66, 008.67, 008.69, 008.8, 009.0, 009.1, 556.9

AND

CPT service code: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99281, 99282, 99283, 99284, 99285, 99381, 99382, 99383, 99391, 99392, 99393

Denominator Exclusion: None

Numerator: Patients whose parent/caregiver received education on diet and when to contact the physician

- Report the CPT Category II Code: 4058F – Pediatric gastroenteritis education provided to caregiver

H. Electronic Health Record System *(in development)*

I. Paper Medical Record *(in development)*

References

- ¹ King CK, Glass R, Bresee JS, Duggan C. Managing Acute Gastroenteritis Among Children: Oral Rehydration, Maintenance, and Nutritional Therapy from the Centers of Disease Control and Prevention. *MMWR Recomm Rep*. 2003;52(RR-16):1-16.
- ² American Academy of Pediatrics: Committee on Nutrition. The use and misuse of fruit juices. *Pediatrics*. 2007;107:1210-1213.