

NATIONAL QUALITY FORUM

Measure Evaluation 4.1 January 2010

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The sub-criteria and most of the footnotes from the evaluation criteria are provided in Word comments and will appear if your cursor is over the highlighted area (or in the margin if your Word program is set to show revisions in balloons). Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized): Complete all **yellow highlighted** areas of the form. Evaluate the extent to which each sub-criterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the sub-criteria (yellow highlighted areas).*

Steering Committee: Complete all **pink** highlighted areas of the form. Review the workgroup/TAP assessment of the sub-criterion, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met

C = Completely (unquestionably demonstrated to meet the criterion)

P = Partially (demonstrated to partially meet the criterion)

M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)

N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)

NA = Not applicable (only an option for a few sub-criteria as indicated)

(for NQF staff use) NQF Review #: OT3-055-10		NQF Project: Patient Outcomes Measures: Child Health and Mental Health (Phase III)	
MEASURE DESCRIPTIVE INFORMATION			
De.1 Measure Title: Gastroenteritis Admission Rate (pediatric)			
De.2 Brief description of measure: Admission rate for gastroenteritis in children ages 3 months - 17 years, per 100,000 population (area level rate)			
1.1-2 Type of Measure: access			
De.3 If included in a composite or paired with another measure, please identify composite or paired measure The indicator is not a required part of a composite, but is included in the "Pediatric Quality Indicators (PDI) Area Level Composite" which also includes Asthma (PDI 14), Diabetes Short Term Complication (PDI 15), and UTI (PDI 18).			
De.4 National Priority Partners Priority Area: population health			
De.5 IOM Quality Domain: effectiveness			
De.6 Consumer Care Need: Staying Healthy			

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. <i>Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.</i>	A Y <input type="checkbox"/> N <input type="checkbox"/>
A.1 Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)? Yes	
A.2 Indicate if Proprietary Measure (as defined in measure steward agreement):	
A.3 Measure Steward Agreement: government entity- public domain- No Agreement	

A.4 Measure Steward Agreement attached:	
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section	B Y <input type="checkbox"/> N <input type="checkbox"/>
C. The intended use of the measure includes <u>both</u> public reporting <u>and</u> quality improvement. ► Purpose: public reporting, quality improvement 0,0,0,	C Y <input type="checkbox"/> N <input type="checkbox"/>
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 24 months of endorsement. D.1 Testing: Yes, fully developed and tested D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures? Yes	D Y <input type="checkbox"/> N <input type="checkbox"/>
(for NQF staff use) Have all conditions for consideration been met? Staff Notes to Steward (<i>if submission returned</i>):	Met Y <input type="checkbox"/> N <input type="checkbox"/>
Staff Notes to Reviewers (<i>issues or questions regarding any criteria</i>):	
Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria. (evaluation criteria) 1a. High Impact	Eval Rati ng
(for NQF staff use) Specific NPP goal:	
1a.1 Demonstrated High Impact Aspect of Healthcare: a leading cause of morbidity/mortality 1a.2 1a.3 Summary of Evidence of High Impact: Total admission rate for gastroenteritis in the US is 139 per 100,000 population. The rates for age strata are as follows: o-4 year 410/100,000 5-9 years 68/100,000 10-14 years 31/100,000 15-17 years 36/100,000 Male 146/100,000 Female 132/100,000 In addition, esophagitis, gastroenteritis and miscellaneous digestive disorders was the 4th leading DRG for admissions in 2007 in HCUPnet for patients age 1-17.	1a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
1a.4 Citations for Evidence of High Impact: http://hcupnet.ahrq.gov/HCUPnet.jsp?ld=4B2C165472F8066A&Form=SeIPDIs1&JS=Y&Action=%3E%3ENext%3E%3E&_QITables=PDI16	

http://hcupnet.ahrq.gov/HCUPnet.jsp?Id=9731A13254C6BB7F&Form=SeIPAT&JS=Y&Action=%3E%3ENext%3E%3E&_InPatChar=Yes&_InHospChar=Yes&_PatChar=AGE

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: The improvement in the measure equates to less hospitalizations for acute gastroenteritis. This essentially means the population is experiencing better management of acute gastroenteritis given the reduction in the complications related to gastroenteritis.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:

We see variation by gender and other patient characteristics. See responses to question 1a.3. In addition we observe variation by region:

Northeast	180/100,000
Midwest	131/100,000
South	158/100,000
West	89/100,000

1b.3 Citations for data on performance gap:

Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2007, and AHRQ Quality Indicators, version 3.1.

1b.4 Summary of Data on disparities by population group:

HCUPnet reports rates by patient characteristics as follows. We see increased rates in low income populations as large urban areas as well as rural areas.

HCUPnet reports rates by patient characteristics as follows. We see increased rates in low income populations as large urban areas as well as rural areas.

Median income of patient's ZIP code

1st quartile (lowest income)	173/100,000
2nd quartile	142/100,000
3rd quartile	122/100,000
4th quartile	114/100,000

Large central metropolitan	122/100,000
Large fringe metropolitan	135/100,000
Medium metropolitan	124/100,000
Small metropolitan	137/100,000
Micropolitan	207/100,000
Not metro/micropolitan	198/100,000

1b.5 Citations for data on Disparities:

Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2007, and AHRQ Quality Indicators, version 3.1.

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1c. Outcome or Evidence to Support Measure Focus

1c.1 Relationship to Outcomes (For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population): Gastroenteritis is a leading infectious disease of childhood acute infections and leading cause of hospitalization. Currently gastroenteritis

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hospitalization rates are tracked in the National Healthcare Quality Report as well as the National Healthcare Disparities Report.

1c.2-3. Type of Evidence: cohort study, observational study

1c.4 Summary of Evidence (*as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome*):

No published studies have specifically addressed the relationship of the gastroenteritis hospitalization rate to quality of outpatient care. John Billings' original study from New York reported 1.87-fold variation in gastroenteritis hospitalization rates for ages 0-64, with a coefficient of variation of 0.438 and 22% of variance explained by household income.¹ Millman et al.² reported that low-income zip codes had 1.9 times more pediatric gastroenteritis hospitalizations per capita than high-income zip codes in the same 11 states in 1988. Similarly, a retrospective analysis of the 1995-96 cohort of infants born in Western Australia showed that aboriginal infants were hospitalized for gastroenteritis 8 times more frequently, and readmitted 2.7 times more frequently than their non-Aboriginal peers.³ These findings suggest that this indicator may be marker for poor access to outpatient care.

In a before and after study conducted on the effectiveness of a clinical pathway for gastroenteritis in the emergency department of the Children's Hospital at Westmead, the admission rate was reduced from 20.0% in 1996 to 9.1% in 1999 ($p < 0.05$) without adverse sequelae.⁴ Similarly, a study in South Australia found that adoption of a pediatric rehydration protocol in an emergency department significantly reduced admission rates - 22.5% before intervention, 5.1% after ($p < 0.05$).⁵ These findings are consistent with the hypothesis that timely and effective care for gastroenteritis reduces the need for hospitalization.

The ability of this indicator to flag possible healthcare access issues may have been strengthened with the recent approval of a new rotavirus vaccine. RotaTeq has been shown to be efficacious in both preventing rotavirus gastroenteritis and decreasing severe disease, thus decreasing the need for hospitalizations.⁶ The vaccine is still in post-licensure monitoring to assess possible side-effects when used in the general population.^{7, 8} However if no increased risk of adverse events is found, access to recommended care (vaccine currently given at 2, 4 and 6 months, per CDC & American Academy of Pediatrics recommendations)⁸ could be reflected in decreased admission rates for gastroenteritis due to rotavirus.

1c.5 Rating of strength/quality of evidence (*also provide narrative description of the rating and by whom*):

The evidence has been reviewed by a clinical review panel. The panel recommended the use of this indicator. For quality improvement purposes, the panel rated the indicator as acceptable without agreement (highest rating possible) but had concerns about use for comparative reporting. Details on this review and methods can be found at http://www.qualityindicators.ahrq.gov/downloads/pdi/pdi_measures_v31.pdf.

1c.6 Method for rating evidence: Details on the methods can be found at www.qualityindicators.ahrq.gov/downloads/pdi/pdi_measures/v31.pdf

Acceptable with agreement: Median falls between 7 and 9 inclusive of both with two or fewer panelists rating below 7.

Acceptable without agreement. Median falls between 7 and 9 inclusive of both without agreement or disagreement

1c.7 Summary of Controversy/Contradictory Evidence: No major contradictory guidelines.

1c.8 Citations for Evidence (*other than guidelines*): 1. Billings J, Zeital L, Lukomnik J, Carey T, Blank A, Newman L. Analysis of variation in hospital admission rates associated with area income in New York City: Unpublished Report.; 1992.

2. Millman M, ed Committee on Monitoring Access to Personal Health Care Services. Washington, D.C.: National Academy Press; 1993. Access to health care in America/ Committee on Monitoring Access to Personal Health Care Services, Institute of Medicine.

3. Gracey M, Lee AH, Yau KK. Hospitalisation for gastroenteritis in Western Australia. Arch Dis Child. Aug 2004;89(8):768-772.

4. Browne GJ, Giles H, McCaskill ME, Fasher BJ, Lam LT. The benefits of using clinical pathways for

managing acute paediatric illness in an emergency department. *J Qual Clin Pract.* Sep 2001;21(3):50-55.

5. Boyd R, Busuttill M, Stuart P. Pilot study of a paediatric emergency department oral rehydration protocol. *Emergency Medicine Journal.* 2005;22(2):116-117.

6. Vesikari T, Matson DO, Dennehy P, et al. Safety and efficacy of a pentavalent human-bovine (WC3) reassortant rotavirus vaccine. [see comment]. *New England Journal of Medicine.* 2006;354(1):23-33.

7. Centers for Disease Control. *MMWR* 8/11/2006, SS(RR12); 1-13. 2006; www.cdc.gov/mmwr.

8. Centers for Disease Control, American Academy of Pediatrics, Department of Health & Human Services. Childhood Immunization Support Program. 2007; www.cispimmunize.org.

1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number):

Cincinnati Children's Hospital Medical Center. Evidence-based clinical care guideline for acute gastroenteritis (AGE) in children aged 2 months through 5 years. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2006 May. 15 p. [50 references]

Assessment and Diagnosis

Clinical Assessment

1. It is recommended that the history and physical examination be the primary basis for the diagnosis of acute gastroenteritis (AGE). See Figure and Appendix 1 in the original guideline document (Local Expert Consensus, 2005 [E]).

2. It is recommended that clinical assessment be initially performed for the presence and degree of dehydration (Steiner, DeWalt, & Byerley, 2004 [M]). See Appendix 2 in the original guideline document for physical parameters associated with degree of dehydration. See Table 2 and Table 3 in the original guideline document for likelihood ratios of clinical signs.

Note 1: Prolonged capillary refill time, abnormal skin turgor, and absent tears are the best individual examination measures (Steiner, DeWalt, & Byerley, 2004 [M]) (see Table 2, Table 3, and Appendix 2 in the original guideline document).

Note 2: Clinical diagnosis of dehydration has been shown to be imprecise and thus a general classification of a child's dehydration status such as none, some (mild/moderate), or severe is suggested by the literature as a useful starting point in the management of the child at risk for dehydration (Steiner, DeWalt, & Byerley, 2004 [M]; King et al., 2003 [S, E]).

Note 3: Acute body weight change is considered the gold standard measure of dehydration in a child but is often impractical for the initial assessment due to lack of an accurate pre-illness weight measurement (Gorelick, Shaw, & Murphy, 1997 [C]; Duggan et al., 1996 [C]).

Laboratory Studies

3. It is recommended that laboratory tests not be routinely performed in children with signs and symptoms of AGE, including tests for specific pathogens, such as those for rotavirus, ova and parasites, bacteria, and fecal antigen tests for parasites (Northrup & Flanigan, 1994 [S]; Local Expert Consensus, 2005 [E]).

Note: Serum electrolytes are sometimes useful in assessing children with moderate to severe dehydration and who require intravenous (IV) or nasogastric (NG) fluids. A normal bicarbonate concentration may be useful in ruling out dehydration (Steiner, DeWalt & Byerley, 2004 [M]).

Management Recommendations

Prevention of Dehydration

4. It is recommended that continued use of the child's preferred, usual, and age appropriate diet be encouraged to prevent or limit dehydration (Brown, Peerson, & Fontaine, 1994 [M]; Fayad et al., 1993 [A]; Alarcon et al., 1992 [A]). Regular diets are generally more effective than restricted and progressive diets, and in numerous trials have consistently produced a reduction in the duration of diarrhea (Alarcon et al., 1991 [A]; Margolis et al., 1990 [B]; Placzek & Walker-Smith, 1984 [B]; Khin et al., 1985 [C]).

Note 1: The historical BRAT diet (consisting of bananas, rice, applesauce, and toast) is unnecessarily restrictive, but may be offered as part of the child's usual diet (King et al., 2003 [S,E]).

Note 2: Clear liquids are not recommended as a substitute for oral rehydration solutions (ORS) or regular diets in the prevention or therapy of dehydration (King et al., 2003 [S,E]) (See Appendix 4 in the original guideline document).

Note 3: The vast majority of patients with AGE do not develop clinically important lactose intolerance. In

selected patients with documented, persistent lactose intolerance, lactose-free formulas are recommended (Brown, Peerson, & Fontaine, 1994 [M]).

Note 4: A meta-analysis of 16 studies found no significant clinical advantage to diluting milk or formula in the management of AGE (Brown, Peerson, & Fontaine, 1994 [M]).

5. It is recommended that the vomiting child be offered frequent small feedings (every 10 to 60 minutes) of any tolerated foods or ORS (Wan et al., 1999 [A]; Santosham et al., 1985 [A]).

6. It is recommended that a child with recurrent vomiting but no signs of significant dehydration may be managed by frequent telephone follow up or by direct supervision in the office, emergency department, or in a hospital setting (see Appendix 1 in the original guideline document for triage suggestions) (Local Expert Consensus, 2005 [E]).

Rehydration

7. It is recommended that dehydration be treated with ORS, if tolerated and if intake exceeds losses, for a period of 4 to 6 hours or until an adequate degree of rehydration is achieved (Gavin, Merrick, & Davidson, 1996 [M]; Gore, Fontaine, & Pierce, 1992 [M]; Cohen et al., 1995 [A]; Molina et al., 1995 [A]; Fayad et al., 1993 [A]; Santosham et al., 1985 [A]; Santosham et al., 1982 [A]; Atherly-John, Cunningham, & Crain, 2002 [B]; Nager & Wang, 2002 [B]; Listernick, Zieserl, & Davis, 1986 [B]; Tamer et al., 1985 [C]; King et al., 2003 [S,E]; Holliday, 1996 [S,E]).

8. It is recommended

- when unable to replace the estimated fluid deficit and keep up with the on-going losses using oral feedings alone, and/or

- for severely dehydrated children with obtunded mental status

that IV fluids or NG ORS be given for a period of 4 to 6 hours or until an adequate degree of rehydration is achieved. It is appropriate to involve the family in the decision regarding the method of fluid replacement (Cohen et al., 1995 [A]; Mackenzie & Barnes, 1991 [A]; Santosham et al., 1982 [A]; Nager & Wang, 2002 [B]; Vesikari, Isolauri, & Baer, 1987 [B]; Listernick, Zieserl, & Davis, 1986 [B]; Tamer et al., 1985 [C]; King et al., 2003 [S,E]).

Oral Feeding Following Rehydration

9. It is recommended that refeeding of the usual diet be started at the earliest opportunity after an adequate degree of rehydration is achieved (Cohen et al., 1995 [A]; Fayad et al., 1993 [A]; Santosham et al., 1982 [A]; Fox et al., 1990 [B]; Hjelt et al., 1989 [B]; Gazala et al., 1988 [B]; Walker-Smith et al., 1997 [S,E]).

Note 1: Following rehydration therapy in the child with mild to moderate dehydration, regular diets may be supplemented with oral rehydration solutions containing at least 45 mEq Na⁺/L, and targeted to deliver 10mL/kg for each stool or emesis (Cohen et al., 1995 [A]) (see Appendix 4 in the original guideline document).

Note 2: It is advisable to reassess hydration status by phone or in the office when a child refuses ORS. Refusal may indicate an absence of salt craving, and, as such, the absence or resolution of dehydration (Local expert Consensus, 2005 [E]).

On-going IV or NG Fluids following Rehydration

10. It is recommended that maintenance IV fluids or NG ORS be given:

- when unable to replace the estimated fluid deficit and keep up with the on-going losses using oral feedings alone, and/or

- to severely dehydrated children with obtunded mental status, and after discussion with family regarding choice of IV or NG (Cohen et al., 1995 [A]; Mackenzie & Barnes, 1991 [A]; Santosham et al., 1982 [A]; Nager & Wang, 2002 [B]; Vesikari, Isolauri, & Baer, 1987 [B]; Listernick, Zieserl, & Davis, 1986 [B]; Tamer et al., 1985 [C]).

Other Therapy

11. It is recommended that anti-diarrheal agents or antiemetics not be used in the routine management of children with AGE (King et al., 2003 [S,E]).

Note: Ondansetron may decrease vomiting and hospitalization rates in those patients who require IV or NG fluids (Reeves, Shannon, & Fleisher, 2002 [A]; Ramsook et al., 2002 [B]).

12. It is recommended that antimicrobial therapies be used only for selected children with AGE who present with special risks or evidence of a serious bacterial infection (SBI) (Barbara et al., 2000 [C]) (see Appendix 5 in the original guideline document).

Note: Giardia lamblia and Cryptosporidium are common causes of persistent diarrhea and, if found,

treatment is available with metronidazole or nitazoxanide (American Academy of Pediatrics, 2003 [O]).

13. It is recommended that probiotics be considered as adjunctive therapy, as they have been shown to reduce the duration of diarrhea (Allen et al., 2004 [M]). Family preference may be central to the decision to use probiotics. Parameters influencing the family's decision may include cost, degree of potential benefit, availability, and unverified effectiveness of commercial products.

Note 1: A Cochrane meta-analysis of 23 randomized controlled trials found mild therapeutic benefit from probiotics that was generally reproducible regardless of organism, quality of study design, or outcome measure (Allen et al., 2004 [M]). The following organisms/combinations showed benefit in one or more study (in alphabetical order):

- Enterococcus LAB strain SF68
- Lactobacillus acidophilus and Lactobacillus bifidus
- Lactobacillus acidophilus LB strain (killed)
- Lactobacillus casei strain GG
- Lactobacillus reuteri

Note 2: Probiotics may be more effective for rotavirus diarrhea, compared to all-cause diarrhea (Allen et al., 2004 [M]).

Note 3: The microorganisms used to culture yogurt, Streptococcus thermophilus and Lactobacillus bulgaricus, are not considered probiotics because they do not survive the acidity of the stomach to colonize the intestines. One study of malnourished infants found that yogurt, compared to milk, was not effective in reducing the duration of diarrhea (Allen et al., 2004 [M]; Bhatnagar et al., 1998 [B]).

Inpatient Management Considerations

14. It is recommended that those patients who are treated in the hospital setting and who are eligible for the AGE guideline be placed as Short Stay patients with a discharge goal of 23 hours or less (Browne & Penna, 1996 [C]; McConnochie et al., 1999 [D]).

15. It is recommended that for children receiving care in a hospital setting, prompt discharge be considered when the following levels of recovery are reached:

- Sufficient rehydration achieved as indicated by weight gain and/or clinical status
- IV or NG fluids not required
- Oral intake equals or exceeds losses
- Adequate family teaching has occurred
- Medical follow up is available via telephone or office visit

(Local Expert Consensus, 2005 [E]).

Education

16. It is recommended that return to school/daycare be discussed in the context of the following parameters:

- Consideration for controlling disease transmission
- No vomiting for 24 hours
- Stools are able to be adequately contained
- Assurance that daycare/school adheres to appropriate handwashing policies
- Temperature less than 38.0 degrees C (100.4 degrees F)

(Local Expert Consensus, 2005 [E]).

17. It is recommended that risk factors and preventive activities be discussed with parents, including:

- Continue breastfeeding (Wan et al., 1999 [A]; Khin et al., 1985 [C])
- Handwashing

Guideline author's rating of strength of evidence (If different from USPSTF, also describe it and how it relates to USPSTF): Evidence Grading Scale:

A: Randomized controlled trial: large sample

B: Randomized controlled trial: small sample

C: Prospective trial or large case series

D: Retrospective analysis

E: Expert opinion or consensus

F: Basic laboratory research

S: Review article

M: Meta-analysis

Q: Decision analysis

<p>L: Legal requirement O: Other evidence X: No evidence</p> <p>1c.10 Clinical Practice Guideline Citation: Cincinnati Children's Hospital Medical Center. Evidence-based clinical care guideline for acute gastroenteritis (AGE) in children aged 2 months through 5 years. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2006 May. 15 p. [50 references]</p> <p>1c.11 National Guideline Clearinghouse or other URL: http://guidelines.gov/summary/summary.aspx?doc_id=10163&nbr=005348&string=cincinnati+AND+urinary</p> <p>1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom): No rating available.</p> <p>1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe rating and how it relates to USPSTF): NA</p> <p>1c.14 Rationale for using this guideline over others: National clinical organization guideline.</p>	
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the sub-criteria for <i>Importance to Measure and Report</i>?</p>	1
<p>Steering Committee: Was the threshold criterion, <i>Importance to Measure and Report</i>, met? Rationale:</p>	1 Y <input type="checkbox"/> N <input type="checkbox"/>
<p>2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES</p>	
<p>Extent to which the measure, <u>as specified</u>, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)</p>	Eval Rati ng
<p>2a. MEASURE SPECIFICATIONS</p>	
<p>S.1 Do you have a web page where current detailed measure specifications can be obtained? S.2 If yes, provide web page URL:</p> <p>2a. Precisely Specified</p>	
<p>2a.1 Numerator Statement (Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome): Discharges ages 3 months to 17 years with ICD-9-CM principal diagnosis code of gastroenteritis, OR with secondary diagnosis code of gastroenteritis and a principal diagnosis code of dehydration.</p> <p>Exclude cases: - MDC 14 (pregnancy, childbirth, and puerperium) - transfer from other institution - age less than or equal to 90 days (or neonates if age in days is missing) - with any diagnosis code of gastrointestinal abnormalities or bacterial gastroenteritis</p>	2a- spec s
<p>2a.2 Numerator Time Window (The time period in which cases are eligible for inclusion in the numerator): Time window can be determined by user, but is generally 1 year.</p>	C <input type="checkbox"/> P <input type="checkbox"/>
<p>2a.3 Numerator Details (All information required to collect/calculate the numerator, including all codes, logic, and definitions):</p>	M <input type="checkbox"/> N <input type="checkbox"/>

Inpatient discharges with ICD-9-CM principal diagnosis code of gastroenteritis:

ICD-9-CM Gastroenteritis diagnosis codes:

00861 ENTERITIS ROTAVIRUS
 00862 ENTERITIS ADENOVIRUS
 00863 ENTERITIS NORWALK VIRUS
 00864 ENTERITIS OTH SML RND VIRUS
 00865 ENTERITIS CALICIVIRUS
 00866 ENTERITIS ASTROVIRUS
 00867 ENTERITIS ENTEROVIRUS NEC
 00869 ENTERITIS NOS
 0088 VIRAL ENTERITIS NOS
 0090 INFECTIOUS ENTERITIS NOS
 0091 ENTERITIS OF INFECT ORIG
 0092 INFECTIOUS DIARRHEA
 0093 DIARRHEA OF PRESU INFECT ORIG
 5589 NONINF GASTROENTERIT NEC

ICD-9-CM Dehydration diagnosis codes:

2765 HYPOVOLEMIA
 27651 DEHYDRATION OCT06-
 27650 VOL DEPLETION, UNSPECIFIED OCT06-
 27652 HYPOVOLEMIA OCT06--

ICD-9-CM Gastrointestinal Abnormalities diagnosis codes (excluded):

53570 EOSINOPHILIC GASTRITIS WO HEM
 538 GASTROINTESTINAL MUCOSITIS OCT08- (ULCERATIVE)
 53571 EOSINOPHILIC GASTRITIS W HEM
 5550 REGIONAL ENTERITIS, SMALL OCT08- INTESTINE
 5551 REGIONAL ENTERITIS, LARGE INTESTINE
 5552 REGIONAL ENTERITIS, SMALL INTESTINE WITH LARGE INTESTINE
 5559 REGIONAL ENTERITIS, UNSPECIFIED SITE
 5560 ULCERATIVE CHRONIC ENTEROCOLITIS
 5561 ULCERATIVE CHRONIC ILEOCOLITIS
 5562 ULCERATIVE CHRONIC PROCTITIS
 5563 ULCERATIVE CHRONIC PROCTOSIGMOIDITIS
 5564 PSEUDOPOLYPOSIS OF COLON
 5565 LEFT-SIDED ULCERATIVE CHRONIC COLITIS
 5566 UNIVERSAL ULCERATIVE CHRONIC COLITIS
 5568 OTHER ULCERATIVE COLITIS
 5569 ULCERATIVE COLITIS NOS
 5581 GASTROENTERITIS AND COLITIS DUE TO RADIATION
 5582 TOXIC GASTROENTERITIS AND COLITIS
 5583 ALLERGIC GASTROENTERITIS AND COLITIS
 55841 EOSINOPHILIC GASTROENTERITIS OCT08-
 55842 EOSINOPHILIC COLITIS OCT08-
 5790 CELIAC DISEASE
 5791 TROPICAL SPRUE
 5792 BLIND LOOP SYNDROME
 5793 OTHER AND UNSPECIFIED POSTSURGICAL NONABSORPTION
 5794 PANCREATIC STEATORRHEA
 5798 OTHER SPECIFIED INTESTINAL MALABSORPTION
 5799 UNSPECIFIED INTESTINAL MALABSORPTION

ICD-9-CM Bacterial Gastroenteritis diagnosis codes:

0030 SALMONELLA GASTROENTERITIS
 0040 SHIGELLA DYSENTERIAE
 0041 SHIGELLA FLEXNERI

0042 SHIGELLA BOYDII
 0043 SHIGELLA SONNEI
 0048 OTHER SPECIFIED SHIGELLA INFECTIONS
 0049 SHIGELLOSIS, NOS
 0050 STAPHYLOCOCCAL FOOD POISONING
 0051 BOTULISM
 0052 FOOD POISONING DUE TO CLOSTRIDIUM PERFRINGENS
 0053 FOOD POISONING DUE TO OTHER CLOSTRIDIA
 0054 FOOD POISONING DUE TO VIBRIO PARAHAEMOLYTICUS
 0058 OTHER BACTERIAL FOOD POISONING
 00581 FOOD POISONING DUE TO VIBRIO VULNIFICUS
 00589 OTHER BACTERIAL FOOD POISONING
 0059 FOOD POISONING NOS
 0060 ACUTE AMEBIC DYSENTERY WO MENTION OF ABSCESS
 0061 CHRONIC INTESTINAL AMEBIASIS WO MENTION OF ABSCESS
 0062 AMEBIC NONDYSENTERIC COLLITIS
 0070 BALANTIDIASIS
 0071 GIARDIASIS
 0072 COCCIDIOSIS
 0073 INTESTINAL TRICHOMONIASIS
 0074 CRYPTOSPORIDIOSIS
 0075 CYCLOSPORIASIS
 0078 OTHER SPECIFIED PROTOZOAL INTESTINAL DISEASES
 0079 UNSPECIFIED PROTOZOAL INTESTINAL DISEASE
 0080 ESCHERICHIA COLI
 00800 E. COLI NOS
 00801 ENTEROPATHOGENIC E. COLI
 00802 ENTEROTOXIGENIC E. COLI
 00803 ENTEROINVASIVE E. COLI
 00804 ENTEROHEMORRHAGE E. COLI
 00809 OTHER INTESTINAL E. COLI INFECTIONS
 0081 ARIZONA GROUP OF PARACOLON BACILLI
 0082 AEROBACTER AEROGENES
 0083 PROTEUS
 0084 OTHER SPECIFIED BACTERIA
 00841 OTHER SPECIFIED BACTERIA, STAPHYLOCOCCUS
 00842 OTHER SPECIFIED BACTERIA, PSEUDOMONAS
 00843 OTHER SPECIFIED BACTERIA, CAMPYLOBACTER
 00844 OTHER SPECIFIED BACTERIA, YERSINIA ENTEROCOLITICA
 00845 OTHER SPECIFIED BACTERIA, CLOSTRIDIUM DIFFICILE
 00846 OTHER SPECIFIED BACTERIA, OTHER ANAEROBES
 00847 OTHER SPECIFIED BACTERIA, OTHER GRAM-NEGATIVE BACTERIA
 00849 OTHER SPECIFIED BACTERIA, OTHER
 0085 BACTERIAL ENTERITIS, NOS
 11285 CANDIDAL ENTERITIS

2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured*):

Population ages 3 mo. to 17 years in Metro Area or county.

2a.5 Target population gender: Female, Male

2a.6 Target population age range: ages 3 mo. to 17 years

2a.7 Denominator Time Window (*The time period in which cases are eligible for inclusion in the denominator*):

Time window can be determined by user, but is generally 1 year.

2a.8 Denominator Details (*All information required to collect/calculate the denominator - the target*

<p><i>population being measured - including all codes, logic, and definitions</i>): Population ages 3 mo. to 17 years in Metro Area or county.</p>
<p>2a.9 Denominator Exclusions (<i>Brief text description of exclusions from the target population</i>): There are no denominator exclusions</p>
<p>2a.10 Denominator Exclusion Details (<i>All information required to collect exclusions to the denominator, including all codes, logic, and definitions</i>): There are no denominator exclusions</p>
<p>2a.11 Stratification Details/Variables (<i>All information required to stratify the measure including the stratification variables, all codes, logic, and definitions</i>): The measure is not stratified.</p>
<p>2a.12-13 Risk Adjustment Type: case-mix adjustment</p>
<p>2a.14 Risk Adjustment Methodology/Variables (<i>List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method</i>): The measure uses age and sex in the risk adjustment. Poverty risk adjustment is optional</p>
<p>2a.15-17 Detailed risk model available Web page URL or attachment: Attachment submission_PDI16_attachment.doc</p>
<p>2a.18-19 Type of Score: rate/proportion 2a.20 Interpretation of Score: better quality = lower score 2a.21 Calculation Algorithm (<i>Describe the calculation of the measure as a flowchart or series of steps</i>): 1) Determine unit of analysis. For this example use county. 2) Use zip code on the discharge claim to assign the numerator event to a given county 3) The software outputs the county population for use as the denominator. 4) The rate is calculated as the numerator divided by the denominator.</p>
<p>2a.22 Describe the method for discriminating performance (<i>e.g., significance testing</i>): A lower rate reflects a lower incidence of acute hospital events for the outcome of interest.</p>
<p>2a.23 Sampling (Survey) Methodology <i>If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate)</i>: The application of this indicator uses inpatient administrative data. All patient discharges are used without sampling.</p>
<p>2a.24 Data Source (<i>Check the source(s) for which the measure is specified and tested</i>) Electronic administrative data/claims</p>
<p>2a.25 Data source/data collection instrument (<i>Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.</i>): The user supplies an inpatient electronic claims data set for the calculation of the measures.</p>
<p>2a.26-28 Data source/data collection instrument reference web page URL or attachment: URL http://www.qualityindicators.ahrq.gov/downloads/pdi/pdi_nqi_sas_documentation_v41.pdf</p>
<p>2a.29-31 Data dictionary/code table web page URL or attachment: URL http://www.qualityindicators.ahrq.gov/downloads/pdi/pdi_nqi_sas_documentation_v41.pdf</p>
<p>2a.32-35 Level of Measurement/Analysis (<i>Check the level(s) for which the measure is specified and tested</i>) Population: states, Population: counties or cities, Population: national, Population: regional/network</p>
<p>2a.36-37 Care Settings (<i>Check the setting(s) for which the measure is specified and tested</i>) Other (specify) This indicator utilizes hospital data as a proxy for ambulatory care.</p>
<p>2a.38-41 Clinical Services (<i>Healthcare services being measured, check all that apply</i>) Other This indicator uses hospital data to examine ambulatory care and access.</p>

TESTING/ANALYSIS	
<p>2b. Reliability testing</p> <p>2b.1 Data/sample <i>(description of data/sample and size)</i>: Reliability testing was conducted on 1995-1997 Nationwide Inpatient Sample (NIS) and State Inpatient Databases for 5 states (CA, FL, IL, NY, PA)</p> <p>2b.2 Analytic Method <i>(type of reliability & rationale, method for testing)</i>: The technique used for reliability testing on this indicator is signal extraction. This technique is designed to “clean” or “smooth” the data of noise and extract the actual signal associated with the are performance. We used two techniques for signal extraction to potentially improve the precision of the indicator. First, univariate methods estimated the “true” quality signal of an indicator based on information from the specific indicator and one year of data. Second, new multivariate signal extraction (MSX) methods estimated the signal based on information from a set of indicators and multiple years of data. In most cases, MSX methods extract additional signal.</p> <p>2b.3 Testing Results <i>(reliability statistics, assessment of adequacy in the context of norms for the test conducted)</i>: Reliability testing was completed during the original development of the indicator and reflects the original definition. The indicator demonstrated high variation between area. The signal ratio was high at 85.1%</p>	<p>2b</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>2c. Validity testing</p> <p>2c.1 Data/sample <i>(description of data/sample and size)</i>: Face validity of the indicators has been evaluated by a clinical review panel using a structured review process.</p> <p>2c.2 Analytic Method <i>(type of validity & rationale, method for testing)</i>: We evaluated the potential exclusions using a structured review process based on the RAND Appropriateness Method (Nominal Group Technique).</p> <p>2c.3 Testing Results <i>(statistical results, assessment of adequacy in the context of norms for the test conducted)</i>: The panel recommended the use of this indicator. For quality improvement purposes, the panel rated the indicator as acceptable with agreement (highest rating possible) and for comparative reporting purposes as not recommended with indeterminate agreement.</p>	<p>2c</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>2d. Exclusions Justified</p> <p>2d.1 Summary of Evidence supporting exclusion(s): Exclusions were evaluated by a clinical review panel using a structured review process.</p> <p>2d.2 Citations for Evidence: http://www.qualityindicators.ahrq.gov/downloads/pdi/pdi_measures_v31.pdf</p> <p>2d.3 Data/sample <i>(description of data/sample and size)</i>: Sampling not employed given use of a clinical review panel.</p> <p>2d.4 Analytic Method <i>(type analysis & rationale)</i>: We evaluated the potential exclusions using a structured review process based on the RAND Appropriateness Method (Nominal Group Technique).</p> <p>2d.5 Testing Results <i>(e.g., frequency, variability, sensitivity analyses)</i>: Panelists recommended that patients with a principle diagnosis of dehydration and a secondary diagnosis of gastroenteritis included in the numerator would more accurately reflected gastroenteritis hospital admissions. They also suggested the exclusion of patients with any diagnosis code for bacterial gastroenteritis as this may require hospitalization despite high quality of care, and infants 2 months or younger as they are often better managed as inpatients. Finally they advocated for the exclusion of GI abnormalities as these disorders may mimic infectious diarrhea.</p>	<p>2d</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>2e. Risk Adjustment for Outcomes/ Resource Use Measures</p>	<p>2e</p>

<p>2e.1 Data/sample (<i>description of data/sample and size</i>): We assessed the need for risk adjustment during the initial development of the indicator, using the 1997-1999 State Inpatient Databases. We calculated the c-statistic of the current indicator, using the 2006 State Inpatient Databases.</p> <p>2e.2 Analytic Method (<i>type of risk adjustment, analysis, & rationale</i>): To assess the need for risk adjustment we calculated the change in signal variation before and after risk adjustment, the average absolute change in area performance, and the relative change in performance. We calculated the c-statistic of the current indicator and RA model.</p> <p>2e.3 Testing Results (<i>risk model performance metrics</i>): The indicator was rated as Good or Very Good on all measures. However, these tests only account for the bias that can be observed using available data, namely age and gender, and does not account for issues such as underlying disease burden associated risk adjustment. The indicator's current risk adjustment performance is modest, with a c-statistic of 0.75. Adjusting for underlying disease burden would likely improve performance but has not been tested.</p> <p>2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: NA</p>	<p>C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p>2f. Identification of Meaningful Differences in Performance</p> <p>2f.1 Data/sample from Testing or Current Use (<i>description of data/sample and size</i>): The following is an example of use from one major report. Users can specify their own parameters of use, but the following example demonstrates one successful use of the area level indicators: National Healthcare Disparities Report</p> <p>2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (<i>type of analysis & rationale</i>): In order to identify disparities between populations of interest (race / ethnicity and SES) the NHDR incorporates multivariate models, controlling for race, ethnicity, income, education, insurance, age, gender and residence location. Rates are also examined relative to a standard reference group to quantify the magnitude of disparities and to identify the largest disparities.</p> <p>2f.3 Provide Measure Scores from Testing or Current Use (<i>description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance</i>): See responses in "importance": 1a.3, 1b.2, 1b.4.</p>	<p>2f C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p>2g. Comparability of Multiple Data Sources/Methods</p> <p>2g.1 Data/sample (<i>description of data/sample and size</i>): This does not apply as there is only one data method.</p> <p>2g.2 Analytic Method (<i>type of analysis & rationale</i>): This does not apply as there is only one data method.</p> <p>2g.3 Testing Results (<i>e.g., correlation statistics, comparison of rankings</i>): This does not apply as there is only one data method.</p>	<p>2g C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p>2h. Disparities in Care</p> <p>2h.1 If measure is stratified, provide stratified results (<i>scores by stratified categories/cohorts</i>): Stratification is not required for this measure.</p> <p>2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans: Stratification is not required for this measure.</p>	<p>2h C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the sub-criteria for Scientific</p>	<p>2</p>

Acceptability of Measure Properties?	
Steering Committee: Overall, to what extent was the criterion, <i>Scientific Acceptability of Measure Properties</i> , met? Rationale:	2 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
3. USABILITY	
Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	Eval Rati ng
<p>3a. Meaningful, Understandable, and Useful Information</p> <p>3a.1 Current Use: in use</p> <p>3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large) (If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). <u>If not publicly reported</u>, state the plans to achieve public reporting within 3 years): National Healthcare Disparities Report, National Healthcare Quality Report http://www.ahrq.gov/qual/nhdr07/nhdr07.pdf, http://www.ahrq.gov/qual/nhqr08/nhqr08.pdf, New York State Preventable Hospitalizations Report www.myhealthfinder.com/newyork09/ahrq-pqi/PQI09.doc California Office of Statewide Health Planning and Development has published rates through 2007 http://www.oshpd.ca.gov/HID/Products/PatDischargeData/AHRQ/pdi_overview.html Health Council of South Florida http://www.healthcouncil.org/documents/Remaining_Miami_Dade_PQI.pdf North Carolina CATCH report www.ncpublichealthcatch.com/ Vermont Explore www.vtexplor.org Center for Health Statistics Texas Health Care Information Collection, Preventable Hospitalizations 2005 http://www.dshs.state.tx.us/THCIC/Publications/Hospitals/PQIReport2005/PreventableHospitalizations2005.shtm Preventable Hospitalizations in Kansas http://www.kdheks.gov/ches/download/ASCpreventionPfinal.pdf Preventable Hospitalizations and Associated Costs in Connecticut http://www.ct.gov/ohca/lib/ohca/publications/2009/preventablehospitalizationsandcosts_2007.pdf Nevada Compare Care http://nevadacomparecare.net/additionalresources/QIDefinitions.aspx</p> <p>3a.3 If used in other programs/initiatives (If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). <u>If not used for QI</u>, state the plans to achieve use for QI within 3 years): Norton Health System (a 12 hospital system in KY publicly reporting their performance), Norton Healthcare Quality Report http://www.nortonhealthcare.com/body.cfm?id=157</p>	
	3a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>

<p>Testing of Interpretability (<i>Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement</i>)</p> <p>3a.4 Data/sample (<i>description of data/sample and size</i>): No interpretability testing performed.</p> <p>3a.5 Methods (<i>e.g., focus group, survey, QI project</i>): No interpretability testing performed.</p> <p>3a.6 Results (<i>qualitative and/or quantitative results and conclusions</i>): No interpretability testing performed.</p>	
<p>3b/3c. Relation to other NQF-endorsed measures</p> <p>3b.1 NQF # and Title of similar or related measures:</p> <p>(for NQF staff use) Notes on similar/related endorsed or submitted measures:</p>	
<p>3b. Harmonization If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source <u>or</u> different topic but same target population):</p> <p>3b.2 Are the measure specifications harmonized? If not, why?</p>	<p>3b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p>3c. Distinctive or Additive Value</p> <p>3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:</p> <p>5.1 Competing Measures If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), describe why it is a more valid or efficient way to measure quality: NA</p>	<p>3c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the sub-criteria for Usability?</p>	<p>3</p>
<p>Steering Committee: Overall, to what extent was the criterion, Usability, met? Rationale:</p>	<p>3 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
4. FEASIBILITY	
<p>Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)</p>	<p>Eval Rati ng</p>
<p>4a. Data Generated as a Byproduct of Care Processes</p> <p>4a.1-2 How are the data elements that are needed to compute measure scores generated? coding/abstraction performed by someone other than person obtaining original information,</p>	<p>4a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p>4b. Electronic Sources</p> <p>4b.1 Are all the data elements available electronically? (<i>elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims</i>) Yes</p> <p>4b.2 If not, specify the near-term path to achieve electronic capture by most providers.</p>	<p>4b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>

<p>4c. Exclusions</p> <p>4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? No</p> <p>4c.2 If yes, provide justification.</p>	<p>4c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p>4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences</p> <p>4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results. Our panelists suggested two specific sources of inaccuracy, although they still recommended its use.</p> <p>Panelists expressed concern that certain patients may be less likely to seek timely care regardless of access to quality care. These patients may present with advanced disease. Panelists argued, as for all potentially preventable hospitalizations, that this indicator be adjusted for socioeconomic status and that differences in cultural groups be considered when analyzing results.</p> <p>- Panelists also noted that areas with hospitals that have short stay units or similar practice patterns (e.g. holding patients in the ER instead of admitting) may appear to have lower rates without actually having higher quality of care. Given data limitations, no changes to the indicator definition could be made to address this issue. However, users of the indicator could explore admitting patterns with additional data.</p>	<p>4d C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p>4e. Data Collection Strategy/Implementation</p> <p>4e.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: The indicator has been in use for nearly 10 years and AHRQ operates a user support system for users to submit concerns and successes with the indicators. The issues involved in data collection for this measure are standard for all administrative based indicators. The cost of implementation is minimal, and software to compute the measure is provided at not charge from AHRQ. Cost to obtain electronic data sets vary state by state. Census data to calculate population rates by MSA or county are integrated in the software.</p> <p>4e.2 Costs to implement the measure (<i>costs of data collection, fees associated with proprietary measures</i>): In regard to data: Since the measure is based on electronic administrative data, the cost of implementation is minimal.</p> <p>In regard to use of the measure: There is no cost to use the measure.</p> <p>4e.3 Evidence for costs: Cost to acquire data varies by State.</p> <p>The software to calculate the measure can be downloaded at no cost at http://www.qualityindicators.ahrq.gov/software.htm .</p> <p>4e.4 Business case documentation: None</p>	<p>4e C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the sub-criteria for <i>Feasibility</i>?</p>	<p>4</p>
<p>Steering Committee: Overall, to what extent was the criterion, <i>Feasibility</i>, met? Rationale:</p>	<p>4 C <input type="checkbox"/> P <input type="checkbox"/></p>

	M <input type="checkbox"/> N <input type="checkbox"/>
RECOMMENDATION	
(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.	Time-limited <input type="checkbox"/>
Steering Committee: Do you recommend for endorsement? Comments:	Y <input type="checkbox"/> N <input type="checkbox"/> A <input type="checkbox"/>
CONTACT INFORMATION	
Co.1 Measure Steward (Intellectual Property Owner) Co.1 Organization Agency for Healthcare Research and Quality 540 Gaither Road Rockville Maryland 20850 Co.2 Point of Contact John Bott, MSSW, MBA john.bott@ahrq.hhs.gov 301-427-1317	
Measure Developer If different from Measure Steward Co.3 Organization Agency for Healthcare Research and Quality 540 Gaither Road Rockville Maryland 20850 Co.4 Point of Contact John Bott, MSSW, MBA john.bott@ahrq.hhs.gov 301-427-1317	
Co.5 Submitter If different from Measure Steward POC John Bott, MSSW, MBA john.bott@ahrq.hhs.gov 301-427-1317- Agency for Healthcare Research and Quality	
Co.6 Additional organizations that sponsored/participated in measure development	
ADDITIONAL INFORMATION	
Workgroup/Expert Panel involved in measure development Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development. Battelle Memorial Institute UC Davis Stanford University	
Ad.2 If adapted, provide name of original measure: NA. An original measure. Ad.3-5 If adapted, provide original specifications URL or attachment	
Measure Developer/Steward Updates and Ongoing Maintenance Ad.6 Year the measure was first released: 2001 Ad.7 Month and Year of most recent revision: 2010-01 Ad.8 What is your frequency for review/update of this measure? annual Ad.9 When is the next scheduled review/update for this measure? 2011-01	
Ad.10 Copyright statement/disclaimers: The AHRQ QI software is publicly available. We have no copyright disclaimers.	
Ad.11 -13 Additional Information web page URL or attachment:	
Date of Submission (MM/DD/YY): 02/23/2010	