



## Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to sub criterion 1b).

### Brief Measure Information

**NQF #:** 0283

**Corresponding Measures:**

**De.2. Measure Title:** Asthma in Younger Adults Admission Rate (PQI 15)

**Co.1.1. Measure Steward:** Agency for Healthcare Research and Quality

**De.3. Brief Description of Measure:** Admissions for a principal diagnosis of asthma per 100,000 population, ages 18 to 39 years. Excludes admissions with an indication of cystic fibrosis or anomalies of the respiratory system, obstetric admissions, and transfers from other institutions.

**1b.1. Developer Rationale:** This indicator is intended to identify hospitalizations for asthma in younger adults age 18-39. With appropriate pharmaceutical and other outpatient management, risk of hospitalization is decreased.

**S.4. Numerator Statement:** Discharges, for patients ages 18 through 39 years, with a principal ICD-10-CM diagnosis code for asthma (ACASTD\*). Exclude cases (1) transferred from a hospital (different facility); (2) transferred from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF); (3) transferred from another health care facility; (4) with any-listed ICD-10-CM diagnosis codes for cystic fibrosis and anomalies of the respiratory system (RESPAN\*); (5) with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing).

See Appendix A – Admission Codes for Transfers

**S.6. Denominator Statement:** Population ages 18 through 39 years in metropolitan area or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

**S.8. Denominator Exclusions:** Not applicable.

**De.1. Measure Type:** Outcome

**S.17. Data Source:** Claims

**S.20. Level of Analysis:** Population : Community, County or City

**IF Endorsement Maintenance – Original Endorsement Date:** Nov 15, 2007 **Most Recent Endorsement Date:** Aug 03, 2016

**IF this measure is included in a composite, NQF Composite#/title:**

**IF this measure is paired/grouped, NQF#/title:**

**De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results?** n/a

### 1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. **Measures must be judged to meet all sub criteria to pass this criterion and be evaluated against the remaining criteria.**

**1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form**

PQI15\_NQF\_0283\_Measure\_Evidence\_Form\_151214.docx

**1a.1 For Maintenance of Endorsement: Is there new evidence about the measure since the last update/submission?**

Do not remove any existing information. If there have been any changes to evidence, the Committee will consider the new evidence. Please use the most current version of the evidence attachment (v7.1). Please use red font to indicate updated evidence.

**1b. Performance Gap**

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- Disparities in care across population groups.

**1b.1. Briefly explain the rationale for this measure** (e.g., how the measure will improve the quality of care, the benefits or improvements in quality envisioned by use of this measure)

*If a COMPOSITE (e.g., combination of component measure scores, all-or-none, any-or-none), SKIP this question and answer the composite questions.*

This indicator is intended to identify hospitalizations for asthma in younger adults age 18-39. With appropriate pharmaceutical and other outpatient management, risk of hospitalization is decreased.

**1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis.** *(This is required for maintenance of endorsement. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.*

This table is also included in the supplemental files.

Table 1. Reference Population Rate and Distribution of County Performance for PQI 15

Overall Reference Population Rate

Year	Number of Counties	Number of Events
(Numerator)a	Population at Risk	
(Denominator)a	Observed Rate	
Per 1,000a		

2009	3,135	52,986	91,475,217	0.5792
2010	3,138	46,476	91,767,953	0.5065
2011	3,141	43,685	92,184,336	0.4739
2012	3,139	43,746	90,798,464	0.4818
2013	3,140	34,549	91,667,214	0.3769

Distribution of County-level Observed Rates in Reference Population Per 1,000

Year	Number of Counties(p=percentile)b	Mean	SD	p5	p25	Median	p75	p95
2009	3,135	0.50	0.63	0.00	0.00	0.38	0.70	1.51
2010	3,138	0.46	0.63	0.00	0.00	0.34	0.64	1.38
2011	3,141	0.40	0.53	0.00	0.00	0.29	0.56	1.25
2012	3,139	0.67	17.85	0.00	0.00	0.26	0.51	1.07
2013	3,140	0.28	0.37	0.00	0.00	0.18	0.42	0.90

Source: HCUP State Inpatient Databases (SID). Healthcare Cost and Utilization Project (HCUP). 2009-2013. Agency for Healthcare Research and Quality, Rockville, MD. [www.hcup-us.ahrq.gov/sidoverview.jsp](http://www.hcup-us.ahrq.gov/sidoverview.jsp). (AHRQ QI Software Version 6.0)

aThe observed rate refers to the total rate for all observations included in the reference population data (numerator) divided by the total combined eligible (ages 18-39) population of all counties included in the reference population data (denominator). Note: Observations from counties with rates outside of 1.5\*interquartile range are excluded as outliers.

bThe distribution of area rates reports the mean and standard deviation (SD) of the observed rates for all counties included in the dataset, as well as the observed rate for counties in the 5th, 25th, 50th (median), 75th, and 95th percentile. Note: Counties with rates outside of 1.5\*interquartile range are excluded as outliers.

**1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of**

**measurement.**

n/a

**1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability.** *(This is required for maintenance of endorsement. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included.) For measures that show high levels of performance, i.e., “topped out”, disparities data may demonstrate an opportunity for improvement/gap in care for certain sub-populations. This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.*

This table is also included in the supplemental files.

Table 2. Admission Rates per 1,000 (PQI 15), by patient and hospital characteristics, 2013

Patient/hospital characteristic	Estimate	Std Error	p-value	(Ref Grp = *)	Lower	95% CL	Upper
95% CL							
Total U.S.	37.69	0.2027			37.29	38.09	
Patient Characteristics							
Age Groups:							
18-39	37.70	0.2028			37.30	38.10	
40-64							
65 and over							
Gender:							
Male*	25.11	0.2855			24.55	25.67	
Female	50.47	0.2879	<.001		49.91	51.04	
Patient Zip Code Median Income							
First quartile (lowest income)					48.05	0.7265	<.001
Second quartile	45.80	0.5079	<.001		44.80	46.79	
Third quartile	38.66	0.4207	<.001		37.84	39.49	
Fourth quartile (highest income)*	33.31	0.2783			32.76	33.85	
Location of patient residence (NCHS):							
Rural	16.88	1.4584	<.001		14.02	19.74	
Urban*	38.10	0.2047			37.70	38.50	
Location of Care:							
Northeast*	46.318	0.484			45.37	47.27	
Midwest	46.835	0.441	0.215		45.97	47.70	
South	34.867	0.333	<.001		34.21	35.52	
West	28.511	0.412	<.001		27.70	29.32	

Source: Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2013, and AHRQ Quality Indicators, version 6.0.

Rates are adjusted by age and gender using the AHRQ QI PQI Reference Population for 2013 as the standard population; when reporting is by age, the adjustment is by gender only; when reporting is by gender, the adjustment is by age only.

NCHS - National Center for Health Statistics designation for urban-rural locations.

**1b.5. If no or limited data on disparities from the measure as specified is reported in 1b.4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations. Not necessary if performance data provided in 1b.4**

n/a

## 2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **Measures must be judged to meet the sub criteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.**

**2a.1. Specifications** The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

**De.5. Subject/Topic Area** (check all the areas that apply):

Respiratory : Asthma

**De.6. Non-Condition Specific**(check all the areas that apply):

Access to Care, Primary Prevention

**De.7. Target Population Category** (Check all the populations for which the measure is specified and tested if any):

Populations at Risk

**S.1. Measure-specific Web Page** (Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)

[http://qualityindicators.ahrq.gov/Modules/PQI\\_TechSpec\\_ICD10\\_v70.aspx](http://qualityindicators.ahrq.gov/Modules/PQI_TechSpec_ICD10_v70.aspx)

**S.2a. If this is an eMeasure**, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

This is not an eMeasure Attachment:

**S.2b. Data Dictionary, Code Table, or Value Sets** (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

Attachment Attachment: [PQI\\_15\\_Asthma\\_in\\_Younger\\_Adults\\_Admission\\_Rate.xlsx](#)

**S.2c.** Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

Attachment:

**S.2d.** Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

Not an instrument-based measure

**S.3.1. For maintenance of endorsement:** Are there changes to the specifications since the last updates/submission. If yes, update the specifications for S1-2 and S4-22 and explain reasons for the changes in S3.2.

Yes

**S.3.2. For maintenance of endorsement**, please briefly describe any important changes to the measure specifications since last measure update and explain the reasons.

As standard protocol, the AHRQ QI program annually updates all measures with Fiscal Year coding changes, refinements based on stakeholder input, refinements to improve specificity and sensitivity based on additional analyses, and necessary software changes. In addition, approximately every two years, AHRQ updates the risk adjustment parameter estimates and composite weights based on the most recent year of data (i.e., the most current reference population possible). The refined measures are tested and confirmed to be valid and reliable prior to release of the updated software.

**S.4. Numerator Statement** (Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome) DO NOT include the rationale for the measure.

IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

Discharges, for patients ages 18 through 39 years, with a principal ICD-10-CM diagnosis code for asthma (ACASTD\*). Exclude cases (1) transferred from a hospital (different facility); (2) transferred from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF); (3) transferred from another health care facility; (4) with any-listed ICD-10-CM diagnosis codes for cystic fibrosis and

anomalies of the respiratory system (RESPAN\*); (5) with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing).

See Appendix A – Admission Codes for Transfers

**S.5. Numerator Details** (All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

See technical specifications for full list of codes included in numerator.

**S.6. Denominator Statement** (Brief, narrative description of the target population being measured)

Population ages 18 through 39 years in metropolitan area or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

**S.7. Denominator Details** (All information required to identify and calculate the target population/denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)

IF an OUTCOME MEASURE, describe how the target population is identified. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

† The term “metropolitan area” (MA) was adopted by the U.S. Census in 1990 and referred collectively to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs) and primary metropolitan statistical areas (PMSAs). In addition, “area” could refer to either 1) FIPS county, 2) modified FIPS county, 3) 1999 OMB Metropolitan Statistical Area or 4) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software.

See AHRQ QI website for 2014 Population File Denominator report for calculation of population estimates embedded within AHRQ QI software programs. [http://www.qualityindicators.ahrq.gov/Downloads/Software/SAS/V50/AHRQ\\_QI\\_Population\\_File\\_V50.pdf](http://www.qualityindicators.ahrq.gov/Downloads/Software/SAS/V50/AHRQ_QI_Population_File_V50.pdf)

**S.8. Denominator Exclusions** (Brief narrative description of exclusions from the target population)

Not applicable.

**S.9. Denominator Exclusion Details** (All information required to identify and calculate exclusions from the denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)

Not applicable.

**S.10. Stratification Information** (Provide all information required to stratify the measure results, if necessary, including the stratification variables, definitions, specific data collection items/responses, code/value sets, and the risk-model covariates and coefficients for the clinically-adjusted version of the measure when appropriate – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b.)

Not applicable.

**S.11. Risk Adjustment Type** (Select type. Provide specifications for risk stratification in measure testing attachment)

No risk adjustment or risk stratification

If other:

**S.12. Type of score:**

Rate/proportion

If other:

**S.13. Interpretation of Score** (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)

Better quality = Lower score

**S.14. Calculation Algorithm/Measure Logic** (*Diagram or describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period for data, aggregating data; risk adjustment; etc.*)

Risk adjustment is not currently included in the ICD-10-CM/PCS v7.0 of the AHRQ QI specifications, due to the transition to ICD-10-CM/PCS (October 1, 2015). At least one full year of data coded in ICD-10-CM/PCS is needed in order to develop robust risk adjustment models. A full year of ICD-10-CM/PCS coded all-payer data will not be available until 2018. AHRQ will announce an anticipated date as soon as one is known.

The AHRQ QI v7.0 software (SAS and WinQI) for use with ICD-10-CM/PCS produces observed rates, which may be used to evaluate performance within hospitals. However, caution should be used when comparing observed rates across hospitals because observed rates do not account for differences in patient populations (i.e., case mix).

**S.15. Sampling** (*If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.*)

IF an instrument-based performance measure (e.g., PRO-PM), identify whether (and how) proxy responses are allowed.

n/a

**S.16. Survey/Patient-reported data** (*If measure is based on a survey or instrument, provide instructions for data collection and guidance on minimum response rate.*)

Specify calculation of response rates to be reported with performance measure results.

n/a

**S.17. Data Source** (*Check ONLY the sources for which the measure is SPECIFIED AND TESTED*).

*If other, please describe in S.18.*

Claims

**S.18. Data Source or Collection Instrument** (*Identify the specific data source/data collection instrument (e.g. name of database, clinical registry, collection instrument, etc., and describe how data are collected.)*)

IF instrument-based, identify the specific instrument(s) and standard methods, modes, and languages of administration.

While the measure is tested and specified using data from the Healthcare Cost and Utilization Project (HCUP) (see section 1.1 and 1.2 of the measure testing form), the measure specifications and software are specified to be used with any ICD-9-CM or ICD-10-CM/PCS coded administrative billing/claims/discharge dataset.

**S.19. Data Source or Collection Instrument** (*available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1*)

Available at measure-specific web page URL identified in S.1

**S.20. Level of Analysis** (*Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED*)

Population : Community, County or City

**S.21. Care Setting** (*Check ONLY the settings for which the measure is SPECIFIED AND TESTED*)

Other: All community based care

If other:

**S.22. COMPOSITE Performance Measure** - Additional Specifications (*Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.*)

n/a

## 2. Validity – See attached Measure Testing Submission Form

PQI15\_NQF\_0283\_Measure\_Testing\_Form\_160129.docx

### 2.1 For maintenance of endorsement

*Reliability testing: If testing of reliability of the measure score was not presented in prior submission(s), has reliability testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to*

indicate updated testing.

## **2.2 For maintenance of endorsement**

*Has additional empirical validity testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.*

## **2.3 For maintenance of endorsement**

*Risk adjustment: For outcome, resource use, cost, and some process measures, risk-adjustment that includes social risk factors is not prohibited at present. Please update sections 1.8, 2a2, 2b1,2b4.3 and 2b5 in the Testing attachment and S.140 and S.11 in the online submission form. NOTE: These sections must be updated even if social risk factors are not included in the risk-adjustment strategy. You MUST use the most current version of the Testing Attachment (v7.1) -- older versions of the form will not have all required questions.*

## **3. Feasibility**

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

### **3a. Byproduct of Care Processes**

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

#### **3a.1. Data Elements Generated as Byproduct of Care Processes.**

Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims)

If other:

### **3b. Electronic Sources**

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

**3b.1. To what extent are the specified data elements available electronically in defined fields** (i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields) Update this field for **maintenance of endorsement**.

ALL data elements are in defined fields in electronic claims

**3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources.** For **maintenance of endorsement**, if this measure is not an eMeasure (eCQM), please describe any efforts to develop an eMeasure (eCQM).

**3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL. Please also complete and attach the NQF Feasibility Score Card.**

Attachment:

### **3c. Data Collection Strategy**

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

**3c.1. Required for maintenance of endorsement.** Describe difficulties (as a result of testing and/or operational use of the measure) regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient



confidentiality, time and cost of data collection, other feasibility/implementation issues.

**IF instrument-based,** consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.

Because the indicator is based on readily available administrative billing and claims data and U.S. Census data, feasibility is not an issue.

The AHRQ QI software has been publicly available at no cost since 2001; Users have over ten years of experience using the AHRQ QI software in SAS and Windows.

**3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm).**

There are no fees. Software is freely available from the AHRQ Quality Indicators website (<http://www.qualityindicators.ahrq.gov/>).

## 4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

### 4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

#### 4.1. Current and Planned Use

*NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.*

Specific Plan for Use	Current Use (for current use provide URL)

#### 4a1.1 For each CURRENT use, checked above (update for maintenance of endorsement), provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included
- Level of measurement and setting

#### Public Reporting:

Arizona Department of Health Services, AZ Hospital Compare, MONAHRQ website

Hospital quality ratings from all hospitals in Arizona.

<http://pub.azdhs.gov/hospital-discharge-stats/2011/Methodology.html>

#### CMS Medicaid Adult Core Measures

<http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/adult-health-care-quality-measures.html>

ACA mandated reporting system, in which Medicaid states can voluntarily report on a set of core measures.

#### Connecticut Department of Health Services, CT Hospital Compare, MONAHRQ website

Hospital quality ratings from all hospitals in Connecticut.

<http://ctmonahrq.ct.gov/2012/index.html#/resources/AboutQualityRatings>

#### Maine Health Data Organization (MHDO), MONAHRQ Website

Hospital quality ratings from all hospitals in Maine.

<http://gateway.maine.gov/mhdo/monahrq/Methodology.html>

#### Nevada Compare Care, MONAHRQ website

Hospital quality ratings from most hospitals in Nevada: Quality reporting on hospitals across the state of Nevada Under NV



Regulation R151-8 this transparency website presents hospital quality and utilization information.

<http://nevadacomparecare.net/>

Oklahoma State Department of Health, MONAHRQ

Compares quality ratings on hospitals across Oklahoma.

<https://www.phin.state.ok.us/ahrq/MONAHRQ%202010/Methodology.html>

Utah Department of Health, MONAHRQ website

Hospital quality ratings from all hospitals in Utah.

<https://health.utah.gov/myhealthcare/monahrq/>

Virginia Health Information, MONAHRQ website

Compares quality ratings on hospitals across Virginia.

<http://www.vhi.org/MONAHRQ/default.asp?yr=2013>

Washington State, MONAHRQ website

Information system of inpatient care utilization, quality, and potentially avoidable stays in Washington State's community hospitals.

[http://www.wamonahrq.net/MONAHRQ\\_5p0\\_WA\\_2012/index.html#/resources/Definitions](http://www.wamonahrq.net/MONAHRQ_5p0_WA_2012/index.html#/resources/Definitions)

California Office of Statewide Health Planning and Development, Healthcare Information Division

OSHPD Patient Discharge Data from all hospitals in California, totaling over 4 million records annually.

<http://oshpd.ca.gov/HID/Products/PatDischargeData/AHRQ/>

Connecticut, Office of Health Care Access

Preventable Hospitalizations in Connecticut: A Current Assessment of Access to Community Health Services: 2004-2009 state- and county-level hospital admission rate data from most hospitals in CT.

[http://www.ct.gov/dph/lib/dph/ohca/publications/2010/prev\\_hosp\\_report01-2010.pdf](http://www.ct.gov/dph/lib/dph/ohca/publications/2010/prev_hosp_report01-2010.pdf)

Arkansas Department of Human Services: Arkansas Medicaid Performance

Arkansas state Department of Human Services with use of Medicaid funds for children and elderly.

<http://humanservices.arkansas.gov/dms/Pages/aqg-Report-Methodology.aspx#Quality>

Department of Health and Human Services (DHHS), Health Indicators Warehouse (HIW)

Purpose of the HIW is to: Provide a single, user-friendly, source for national, state, and community health indicators; Facilitate harmonization of indicators across initiatives; Link indicators with evidence-based interventions.

[http://www.healthindicators.gov/Resources/Initiatives/CMS/Prevention-Quality-Indicators-Report\\_20/Indicator/Report](http://www.healthindicators.gov/Resources/Initiatives/CMS/Prevention-Quality-Indicators-Report_20/Indicator/Report)

Quality Improvement:

West Jefferson Medical Center

Reports indicators of potentially avoidable hospitalizations associated with the parish in which it is located, and compared those indicators with state-level indicators.

<http://www.wjmc.org/docs/WJMC-Secondary-Data-Profile-09-23-2013.pdf>

Regulatory/Accreditation:

Statewide Quality Advisory Committee (Massachusetts): Center for Health Information and Analysis

The committee annually recommends a standard set of health metrics to use throughout statewide health quality efforts.

<http://chiamass.gov/sqms/>

Payment Programs:

CMS Medicare Shared Savings Program [https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality\\_Measures\\_Standards.html](https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality_Measures_Standards.html)

ACO program uses quality measures to establish a performance standard to qualify for receipt of a share of savings.

Oregon Health Authority

Coordinated Care Organization (CCO) implementing Oregon's pay for performance program using quality health metrics.

<http://www.oregon.gov/oha/analytics/Pages/CCO-Baseline-Data.aspx>

**4a1.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons? (e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?)**

n/a

**4a1.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement. (Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.)**

n/a

**4a2.1.1. Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.**

**How many and which types of measured entities and/or others were included? If only a sample of measured entities were included, describe the full population and how the sample was selected.**

The Agency for Healthcare Research and Quality (AHRQ) provides free software, in both SAS and Windows format, to calculate the AHRQ Quality Indicators. Users may use their own hospital administrative data to calculate the QIs using this software.

In addition, AHRQ provides technical assistance to users through a QI User Support email address, [QISupport@ahrq.hhs.gov](mailto:QISupport@ahrq.hhs.gov). AHRQ triages, troubleshoots and responds to technical inquiries related to methodology and rationale behind the indicator and general questions related to the use of the software. During a calendar year, AHRQ typically provides technical support to over 1,000 queries.

**4a2.1.2. Describe the process(es) involved, including when/how often results were provided, what data were provided, what educational/explanatory efforts were made, etc.**

The AHRQ QI software is updated annually. Technical support is available on an on-going basis. No data updates are necessary; users apply the AHRQ QIs to their own hospital administrative data.

**4a2.2.1. Summarize the feedback on measure performance and implementation from the measured entities and others described in 4d.1.**

**Describe how feedback was obtained.**

Feedback is obtained from users through a variety of channels, in particular through a technical assistance support service described above. In addition, AHRQ incorporates input on QI implementation from technical workgroups convened to support QI development and maintenance, stakeholder committees such as NQF standing committees, and peer-reviewed or other research publications.

**4a2.2.2. Summarize the feedback obtained from those being measured.**

See the response to 4d2.1.

**4a2.2.3. Summarize the feedback obtained from other users**

See the response to 4d2.1.

**4a2.3. Describe how the feedback described in 4a2.2.1 has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.**

The AHRQ Quality Indicators are updated annually, including updating indicator technical specifications in accordance with the latest coding guidance; suggestions from users and other stakeholders obtained through Technical Assistance, committees, or workgroups; and the latest clinical and scientific research. AHRQ regularly reviews these sources, identifies possible indicator updates, and prioritizes updates for each indicator and software update based on expected impact on users.

#### **Improvement**

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results

could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

**4b1. Refer to data provided in 1b but do not repeat here. Discuss any progress on improvement (trends in performance results, number and percentage of people receiving high-quality healthcare; Geographic area and number and percentage of accountable entities and patients included.)**

**If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.**

n/a

**4b2. Unintended Consequences**

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

**4b2.1. Please explain any unexpected findings (positive or negative) during implementation of this measure including unintended impacts on patients.**

During a structured clinical panel review, panelists postulated that some uses of this indicator could disincentive care for high risk individuals. However, no evidence of this unintended consequence has arisen during actual use of the indicator. Rather, identification of high rates can help to target populations most in need of intervention.

Panelists in the same structured review and subsequent expert panel review noted that treatment of asthma in observation care may substitute for inpatient treatment, that this substitution may be systematic between areas and that this will impact the rate of the indicator. During a literature review, we identified no studies that specifically examined observation stays as a substitute for inpatient care. In a retrospective analysis of a 2002-2011 large administrative claims database of commercially insured individuals in the USA, asthma did not appear in the most frequent diagnosis categories in either emergency department-based or inpatient-based observation units.(1) A retrospective analysis of observation stays from three distinct data sources: 2010 Atlanta hospitals protocol driven observation units, 2010 Georgia hospitals for observation units (including protocol-driven, discretionary care and all bed locations), and 2009-10 National Hospital Ambulatory Medical Care Survey (NHAMCS) for similarly diverse of observation units found that asthma ranked 5th, 7th, & 8th, respectively, as the most common condition managed in observation services. However the study did not examine diagnoses by age group.(2)

1. Overman RA, Freburger JK, Assimon MM, Li X, Brookhart MA. Observation stays in administrative claims databases: underestimation of hospitalized cases. *Pharmacoepidemiology and drug safety*. Sep 2014;23(9):902-910.

2. Ross MA, Hockenberry JM, Mutter R, Barrett M, Wheatley M, Pitts SR. Protocol-driven emergency department observation units offer savings, shorter stays, and reduced admissions. *Health Aff (Millwood)*. Dec 2013;32(12):2149-2156.

**4b2.2. Please explain any unexpected benefits from implementation of this measure.**

**5. Comparison to Related or Competing Measures**

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

**5. Relation to Other NQF-endorsed Measures**

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.  
No

**5.1a. List of related or competing measures (selected from NQF-endorsed measures)**

**5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.**

**5a. Harmonization of Related Measures**

The measure specifications are harmonized with related measures;

**OR**

The differences in specifications are justified

**5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):**

**Are the measure specifications harmonized to the extent possible?**

**5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.**

**5b. Competing Measures**

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);

**OR**

Multiple measures are justified.

**5b.1. If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s):**

**Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)**

**Appendix**

**A.1 Supplemental materials may be provided in an appendix.** All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.

[Attachment Attachment: PQI15\\_NQF0283\\_Supplemental\\_Files\\_151214.pdf](#)

**Contact Information**

**Co.1 Measure Steward (Intellectual Property Owner):** [Agency for Healthcare Research and Quality](#)

**Co.2 Point of Contact:** [Carol Stocks, Carol.Stocks@ahrq.hhs.gov](#)

**Co.3 Measure Developer if different from Measure Steward:**

**Co.4 Point of Contact:**

**Additional Information**

**Ad.1 Workgroup/Expert Panel involved in measure development**

**Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.**

The following panelists participated in a 2009 structured panel review of the Agency for Healthcare Research and Quality Prevention Quality Indicators, which focused on evaluating expansion of the indicators to alternative denominator populations. The panel used a modified Delphi approach to evaluate the indicators, using a method that combined a nominal group technique and a Delphi technique.<sup>1</sup> All panelists rated the indicators and received feedback from other panelists. The panelists participated in a conference call to discuss the indicators and the discussion was summarized and distributed to the group before final rating. Some panelists requested that their affiliation with this report remain anonymous, and this list is therefore a partial representation of the individuals that comprised the panels in their entirety.

1. Davies S, McDonald KM, Schmidt E, Geppert J, Romano PS. Expanding the uses of AHRQ's Prevention Quality Indicators: Validity from the clinician perspective. *Med Care*. Aug 2011; 49(8): 679-685.

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**Measure Developer/Steward Updates and Ongoing Maintenance**

**Ad.2** Year the measure was first released: 2007

**Ad.3** Month and Year of most recent revision: 11, 2007

**Ad.4** What is your frequency for review/update of this measure? Annually

**Ad.5** When is the next scheduled review/update for this measure? 12, 2015

**Ad.6** Copyright statement: The AHRQ QI software is publicly available. We have no copyright disclaimers.

**Ad.7** Disclaimers: None

**Ad.8** Additional Information/Comments: None