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 subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. 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 subcriterion 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 subcriteria (yellow highlighted areas).

**Steering Committee:** Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, 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 subcriteria as indicated)

---

### MEASURE DESCRIPTIVE INFORMATION

<table>
<thead>
<tr>
<th>De.1 Measure Title:</th>
<th>Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>De.2 Brief description of measure:</td>
<td>Percentage of patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder with an assessment for suicide risk</td>
</tr>
</tbody>
</table>

**1.1-2 Type of Measure:** Process

**De.3 If included in a composite or paired with another measure, please identify composite or paired measure**

**De.4 National Priority Partners Priority Area:** Population health

**De.5 IOM Quality Domain:** Effectiveness, Patient-centered

**De.6 Consumer Care Need:** Getting better

---

### CONDITIONS FOR CONSIDERATION BY NQF

Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:

- **A.** The measure is in the public domain or an intellectual property (measure steward agreement) is signed. **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.**

  **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:** Agreement will be signed and submitted prior to or at the time of measure submission

  **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

---

**Rating:** C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
C. The intended use of the measure includes both public reporting and quality improvement.  

**Purpose:** Public reporting, Internal quality improvement  
Accountability

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 12 months of endorsement.

D.1 Testing: No, testing will be completed within 12 months
D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures? Yes

(for NQF staff use) Have all conditions for consideration been met?
Staff Notes to Steward (if submission returned):

Staff Notes to Reviewers (issues or questions regarding any criteria):

Staff Reviewer Name(s):

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**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

(for NQF staff use) Specific NPP goal:

1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Leading cause of morbidity/mortality, Severity of illness, Patient/societal consequences of poor quality

1a.2

1a.3 Summary of Evidence of High Impact: "Major depressive disorder (MDD) is a debilitating condition that has been increasingly recognized among youth, particularly adolescents. The prevalence of current or recent depression among children is 3% and among adolescents is 6%. The lifetime prevalence of MDD among adolescents may be as high as 20%. Adolescent-onset MDD is associated with an increased risk of death by suicide, suicide attempts, and recurrence of major depression by young adulthood. MDD is also associated with early pregnancy, decreased school performance, and impaired work, social, and family functioning during young adulthood." [6-8]

In 2006, suicide was the third leading cause of death for young people ages 15 to 24, accounting for 12% of all deaths annually. Of every 100,000 young people aged 10-14, 1.3 died by suicide. Of every 100,000 young people aged 15-19, 8.2 died by suicide. Among young adults ages 15 to 24 years old, there are approximately 100-200 attempts for every completed suicide. In 2007, 14.5% of U.S. high school students reported that they had seriously considered attempting suicide during the 12 months preceding the survey; 6.9% of students reported that they had actually attempted suicide one or more times during the same period.

1a.4 Citations for Evidence of High Impact: [1] Williams SB, O’Connor EA, Eder M, Whitlock EP. Screening for


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### NQF #1365

**Child and Adolescent Depression in Primary Care Settings: A Systematic Evidence Review for the US Preventive Services Task Force.** Pediatrics 2009;123:e716-e735. Citing:


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### 1b. Opportunity for improvement

#### 1b.1 Benefits (improvements in quality) envisioned by use of this measure: Research has shown that patients with major depressive disorder are at a high risk for suicide, which makes this assessment an important aspect of care that should be evaluated at each visit.

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

According to a study analyzing the quality of health care in the United States, only about 25.8% of patients with depression had documentation of the presence or absence of suicidal ideation during the first or second diagnostic visit. 76.11% of those patients who have suicidality were asked if they have specific plans to carry out suicide. A 2003 study reviewed medical records to assess the degree to which providers adhered to depression guidelines in a VA primary care setting. Providers documented exploration of suicidal ideation in 57% of the records.

#### 1b.3 Citations for data on performance gap:


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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): Suicide attempts and completion are among the most significant and devastating sequela of MDD. Suicide risk should therefore be assessed at each visit and subsequently managed to minimize that risk.

#### 1c.2-3. Type of Evidence: Evidence-based guideline

#### 1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that...)

---

### Rating:

- **C** = Completely
- **P** = Partially
- **M** = Minimally
- **N** = Not at all
- **NA** = Not applicable

---

Comment [K3]: 1 Examples of data on opportunity for improvement include, but are not limited to: prior studies, epidemiologic data, measure data from pilot testing or implementation. If data are not available, the measure focus is systematically assessed (e.g., expert panel rating) and judged to be a quality problem.

Comment [K4]: 1c. The measure focus is:

- **an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;**
- **OR**
  - **if of an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:**
    - **intermediate outcome**, evidence that the measured intermediate outcome (e.g., blood pressure, HbA1c) leads to improved health/avoidance of harm or cost/benefit.
    - **process**, evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
    - **structure**, evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
    - **Patient experience**, evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/population.
    - **access**, evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
    - **Efficiency**, demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

Comment [KP2]: 1b. Demonstration of quality improvement and opportunity for improvement, i.e., data demonstrating considerable variation, or overall poor performance, in the quality of care across providers and/or population groups (disparities in care).

Comment [K5]: 4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/patient input → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status: patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g.,... [1]
1c.8 Citations for Evidence (other than guidelines):

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

The evaluation must include assessment for the presence of harm to self or others (MS). (AACAP (1))

Suicidal behavior exists along a continuum from passive thoughts of death to a clearly developed plan and intent to carry out that plan. Because depression is closely associated with suicidal thoughts and behavior, it is imperative to evaluate these symptoms at the initial and subsequent assessments. For this purpose, low burden tools to track suicidal ideation and behavior such as the Columbia-Suicidal Severity Rating Scale can be used. Also, it is crucial to evaluate the risk (e.g., age, sex, stressors, comorbid conditions, hopelessness, impulsivity) and protective factors (e.g., religious belief, concern not to hurt family) that might influence the desire to attempt suicide. The risk for suicidal behavior increases if there is a history of suicide attempts, comorbid psychiatric disorders (e.g., disruptive disorders, substance abuse), impulsivity and aggression, availability of lethal agents (e.g., firearms), exposure to negative events (e.g., physical or sexual abuse, violence), and a family history of suicidal behavior. (AACAP (1))

http://www.aacap.org/galleries/PracticeParameters/Vol%2046%20Nov%202007.pdf

1c.11 National Guideline Clearinghouse or other URL: (1)
http://www.guideline.gov/content.aspx?id=11404

1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom):

Minimal Standard (MS) [see below for narrative description of the rating]

1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe rating and how it relates to USPSTF):

American Academy of Child and Adolescent Psychiatry (AACAP) Grades of Recommendations

• Minimal Standard [MS] is applied to recommendations that are based on rigorous empirical evidence (such as randomized, controlled trials) and/or overwhelming clinical consensus. Minimal standards apply more than 95% of the time; i.e., in almost all cases.

• Clinical Guideline [CG] is applied to recommendations that are based on strong empirical evidence (such as non-randomized control trials) and/or strong clinical consensus. Clinical guidelines apply approximately 75% of the time; i.e., in most cases.

• Option [OP] is applied to recommendations that are acceptable based on emerging empirical evidence (such as uncontrolled trials or reports) or clinical opinion, but lack strong empirical evidence and/or strong clinical consensus.

• Not Endorsed [NE] is applied to practices that are known to be ineffective or contraindicated.

1c.14 Rationale for using this guideline over others:

It is the PCPI policy to use guidelines, which are evidence-based, applicable to physicians and other healthcare providers, and developed by a national specialty organization or government agency. In addition, the PCPI has now expanded what is acceptable as the evidence base for measures to included...
documented quality improvement (QI) initiatives or implementation projects that have demonstrated improvement in the quality of care.

**TAP/Workgroup:** What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report?

**Steering Committee:** Was the threshold criterion, Importance to Measure and Report, met?

<table>
<thead>
<tr>
<th>Rationale:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
</tr>
</tbody>
</table>

## 2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

The extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)

### 2a. MEASURE SPECIFICATIONS

**S.1** Do you have a web page where current detailed measure specifications can be obtained?

**S.2** If yes, provide web page URL:

**2a. Precisely Specified**

<table>
<thead>
<tr>
<th>2a.1 <strong>Numerator Statement</strong> (Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient visits with an assessment for suicide risk</td>
</tr>
</tbody>
</table>

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

| Each patient visit within a 12-month period |

**2a.3 Numerator Details** (All information required to collect/calculate the numerator, including all codes, logic, and definitions):

<table>
<thead>
<tr>
<th>2a.4 <strong>Denominator Statement</strong> (Brief, text description of the denominator - target population being measured):</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder</td>
</tr>
</tbody>
</table>

**2a.5 Target population gender:** Female, Male

**2a.6 Target population age range:** Aged 6 through 17 years

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

| 12 months |

**2a.8 Denominator Details** (All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions):

See attached Level I EHR Specifications

**2a.9 Denominator Exclusions** (Brief text description of exclusions from the target population): None

**2a.10 Denominator Exclusion Details** (All information required to collect exclusions to the denominator, including all codes, logic, and definitions):

2a.11 **Stratification Details/Variables** (All information required to stratify the measure including the stratification variables, all codes, logic, and definitions):

| Stratification by insurance coverage (commercial, Medicare and Medicaid) is recommended by some implementers |

**2a.12-13 Risk Adjustment Type:** No risk adjustment necessary

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*Comment [KP8]: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF’s Health Information Technology Expert Panel (HITEP).*

*Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions. 12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.*
2a.14 Risk Adjustment Methodology/Variables (List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method):

2a.15-17 Detailed risk model available Web page URL or attachment:

2a.18-19 Type of Score: Rate/proportion
2a.20 Interpretation of Score: Better quality = Higher score
2a.21 Calculation Algorithm (Describe the calculation of the measure as a flowchart or series of steps): See attached documents

2a.22 Describe the method for discriminating performance (e.g., significance testing):

2a.23 Sampling (Survey) Methodology 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):

2a.24 Data Source (Check the source(s) for which the measure is specified and tested)
Electronic Health/Medical Record
2a.25 Data source/data collection instrument (identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):

2a.26-28 Data source/data collection instrument reference web page URL or attachment:

2a.29-31 Data dictionary/code table web page URL or attachment: Attachment MDD 3 Complete.pdf

2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested)
Clinicians: Individual

2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested)
Ambulatory Care: Office, Ambulatory Care: Clinic, Ambulatory Care: Hospital Outpatient, Behavioral health/psychiatric unit

2a.38-41 Clinical Services (Healthcare services being measured, check all that apply)
Behavioral Health: Mental Health, Clinicians: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO), Clinicians: Psychologist/LCSW

**TESTING/ANALYSIS**

2b. Reliability testing


The Challenge of Measuring Quality of Care From the Electronic Health Record. Carol P. Roth, Yee-Wei Lim, Joshua M. Pevnick, Steven M. Asch and Elizabeth A. McGlynn. American Journal of Medical Quality 2009; 24; 385 originally published online May 29, 2009.


2b.2 Analytic Method (type of reliability & rationale, method for testing): (Solberg, 2006) The objective of this study was to demonstrate a method to accurately identify patients with specific conditions from claims data for care improvement or performance measurement. Using an

Comment [K11]: 8 Examples of reliability testing include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing may address the data items or final measure score.
(Roth 2009) The electronic health record (EHR) is seen by many as an ideal vehicle for measuring quality of health care and monitoring ongoing provider performance. It is anticipated that the availability of EHR-extracted data will allow quality assessment without the expensive and time-consuming process of medical record abstraction. Each quality measure was classified by the anticipated difficulty of satisfying eligibility and scoring statements using an EHR-enhanced data warehouse as the source of data. Measures were considered level 1 if all requisite data elements were accessible. Measures were considered level 2 if the denominator was accessible but the numerator was in some way inaccessible. Measures were considered level 3 if the denominator was difficult to access.

(Dobscha 2003) Researchers created one composite, measure, based on 3 national guidelines. The Evaluate level of safety/suicide history criteria corresponds with our Suicide Risk Assessment measure. The DSM-IV Major depression criteria corresponds with our Diagnostic Evaluation measure. (Dobscha 2003) Researchers created one composite, measure, based on 3 national guidelines.

(Solberg, 2006) MDD had an unacceptably low PPV (0.65) when cases were identified on the basis of only 1 International Classification of Diseases, ninth revision, code per year. Requiring 2 outpatient ICD-9 codes or 1 inpatient ICD-9 code within 12 months (plus consideration of extra criteria for depression) resulted in PPV of 0.95. This approach is feasible and necessary for those wanting to use administrative data for case identification for performance measurement or quality improvement. The PCPI measure utilizes this approach.

(Roth 2009) Accurately identifying eligible cases for quality assessment and validly scoring those cases with EHR extracted data will pose challenges but could potentially plummet the cost and therefore expand the use of quality assessment. A review of the data requirements for the depression related indicators in the Quality Assessment Tools system suggests that 41% of measures would be readily accessible from EHR data. Another 29% of the depression-related indicators have denominators that are readily accessible.

Accessibility of data used to calculate the measure in an EHR reflects reliability of measure calculation. Extracted data will allow quality assessment without the expensive and time-consuming process of medical record abstraction. Each quality measure was classified by the anticipated difficulty of satisfying eligibility and scoring statements using an EHR-enhanced data warehouse as the source of data. Measures were considered level 1 if all requisite data elements were accessible. Measures were considered level 2 if the denominator was accessible but the numerator was in some way inaccessible. Measures were considered level 3 if the denominator was difficult to access.

(Dobscha 2003) Researchers created one composite, measure, based on 3 national guidelines. The Evaluate level of safety/suicide history criteria corresponds with our Suicide Risk Assessment measure. The DSM-IV Major depression criteria corresponds with our Diagnostic Evaluation measure.

2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted):
(Solberg, 2006) MDD had an unacceptably low PPV (0.65) when cases were identified on the basis of only 1 International Classification of Diseases, ninth revision, code per year. Requiring 2 outpatient ICD-9 codes or 1 inpatient ICD-9 code within 12 months (plus consideration of extra criteria for depression) resulted in PPV of 0.95. This approach is feasible and necessary for those wanting to use administrative data for case identification for performance measurement or quality improvement. The PCPI measure utilizes this approach.

(Dobscha 2003) Inter-rater reliability was assessed, using the kappa coefficient. The Self Harm measure (documentation of past or present suicidal ideation) had a kappa = 0.96. The performance rate for this measure was 56.8% (47.5 - 65.6 95%CI).

(Roth 2009) Accurately identifying eligible cases for quality assessment and validly scoring those cases with EHR extracted data will pose challenges but could potentially plummet the cost and therefore expand the use of quality assessment. A review of the data requirements for the depression related indicators in the Quality Assessment Tools system suggests that 41% of measures would be readily accessible from EHR data. Another 29% of the depression-related indicators have denominators that are readily accessible. Accessibility of data used to calculate the measure in an EHR reflects reliability of measure calculation.

2c. Validity testing
2c.1 Data/sample (description of data/sample and size);
2c.2 Analytic Method (type of validity & rationale, method for testing):
During measure development, the PCPI-convened expert work groups assess the face and content validity of each measure. The groups establish the measure’s ability to capture what it is designed to capture using a consensus process that consists of input from multiple stakeholders, including practicing physicians and experts with technical expertise, as well as a review of additional input received through a PCPI public comment period.

2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted);

2d. Exclusions Justified
2d.1 Summary of Evidence supporting exclusion(s):
No Exceptions are allowed for this measure.

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
2d.2 Citations for Evidence:

2d.3 Data/sample (description of data/sample and size):

2d.4 Analytic Method (type analysis & rationale):

2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses):

2e. Risk Adjustment for Outcomes/ Resource Use Measures

2e.1 Data/sample (description of data/sample and size):

2e.2 Analytic Method (type of risk adjustment, analysis, & rationale):

2e.3 Testing Results (risk model performance metrics):

2e.4 If outcome or resource use measure is not risk adjusted, provide rationale:

2f. Identification of Meaningful Differences in Performance

2f.1 Data/sample from Testing or Current Use (description of data/sample and size):

2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale):

2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):

2g. Comparability of Multiple Data Sources/Methods

2g.1 Data/sample (description of data/sample and size):

2g.2 Analytic Method (type of analysis & rationale):

2g.3 Testing Results (e.g., correlation statistics, comparison of rankings):

2h. Disparities in Care

2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): The measure is not stratified by patient groups or cohorts that could potentially be affected by disparities in care, nor are we aware of any existing research identifying disparities in care that may be relevant to this measure.

2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans;

We are not aware of any relevant disparities that have been identified.

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Scientific Acceptability of Measure Properties?

Steering Committee: Overall, to what extent was the criterion, Scientific Acceptability of Measure Properties?
### 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)**

<table>
<thead>
<tr>
<th>Properties, met?</th>
<th>C</th>
<th>P</th>
<th>M</th>
<th>N</th>
</tr>
</thead>
</table>

**Rationale:**

#### 3a. Meaningful, Understandable, and Useful Information

3a.1 Current Use: **In use**

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). If not publicly reported, state the plans to achieve public reporting within 3 years):**

This measure is in its adult form is currently utilized in the CMS PQRI Program

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). If not used for QI, state the plans to achieve use for QI within 3 years):**

Testing of Interpretability **(testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)**

3a.4 Data/sample **(description of data/sample and size):**

3a.5 Methods **(e.g., focus group, survey, QI project):**

3a.6 Results **(qualitative and/or quantitative results and conclusions):**

#### 3b/3c. Relation to other NQF-endorsed measures

3b.1 **NQF # and Title of similar or related measures:**

**104: Major Depressive Disorder: Suicide Risk Assessment**

**(for NQF staff use)**

**Notes on similar/related endorsed or submitted measures:**

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 or different topic but same target population):**

3b.2 Are the measure specifications harmonized? If not, why?

Yes

3c. Distinctive or Additive Value

3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:

5.1 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:**

TAP/Workgroup: **What are the strengths and weaknesses in relation to the subcriteria for Usability?**

Steering Committee: **Overall, to what extent was the criterion, Usability, met?**

#### Comment [KP22]: 3a. Demonstration that information produced by the measure is meaningful, understandable, and useful to the intended audience(s) for both public reporting and quality improvement.

#### Comment [KP23]: 3b. The measure specifications are harmonized with other measures, and are applicable to multiple levels and settings.

#### Comment [K24]: 16 Measure harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., influenza immunization of patients in hospitals or nursing homes), or related measures for the same target population (e.g., eye exam and HbA1c for patients with diabetes), or definitions applicable to many measures (e.g., age designation for children) so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

#### Comment [KP25]: 3c. Review of existing endorsed measures and measure sets demonstrates that the measure provides a distinctive or additive value to existing NQF-endorsed measures (e.g., provides a more complete picture of quality for a particular condition or aspect of healthcare, is a more valid or efficient way to measure).
4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)

<table>
<thead>
<tr>
<th>4a. Data Generated as a Byproduct of Care Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>How are the data elements that are needed to compute measure scores generated?</td>
</tr>
<tr>
<td>Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4b. Electronic Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are all the data elements available electronically?</td>
</tr>
<tr>
<td>(elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims)</td>
</tr>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4c. Exclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results.</td>
</tr>
<tr>
<td>We are not aware of any unintended consequences related to this measurement.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4e. Data Collection Strategy/Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>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:</td>
</tr>
<tr>
<td>This pediatric MDD measure has a corresponding adult measure, which differs only in having a different age range. Therefore, implementation results for the adult measures are expected to be applicable to the pediatric measures.</td>
</tr>
<tr>
<td>Through a partnership with the American Medical Association (AMA) and Healthcare Information and Management Systems Society (HIMSS), the Alliance of Chicago Community Health Centers developed the AHRQ-funded 3-year Enhancing Quality in Patient Care (EQUIP) project to augment its EHR implementation. This project implemented all 5 AMA-PCPI Adult MDD measures in the EHR. As part of the AHRQ-funded Effecting Change in Chronic Care: The Tipping Point project, 3 physicians implemented performance measures into existing electronic health record systems. One additional physician implemented a paper flow sheet documentation system where the flow sheet was placed in each chart at the time of the visit. This project found that the adult MDD measures were feasible to collect after the process changes were put into place. Additionally, the adult MDD version of this measure was utilized in the CMS PQRI program, in 2008, 2009, and 2010. The average performance rate for the 2008 PQRI program for the Suicide Risk Assessment measure was 81%, with n=5440.</td>
</tr>
<tr>
<td>Costs to implement the measure (costs of data collection, fees associated with proprietary</td>
</tr>
</tbody>
</table>
Costs to implement the measure have not been calculated.

4e.3 Evidence for costs:

4e.4 Business case documentation:

**TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Feasibility?**

<table>
<thead>
<tr>
<th>Steering Committee: Overall, to what extent was the criterion, Feasibility, met?</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td>Rationale:</td>
<td></td>
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</table>

**RECOMMENDATION**

(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.

| Steering Committee: Do you recommend for endorsement? | Y |
| Comments: | |

**CONTACT INFORMATION**

Co.1 **Measure Steward (Intellectual Property Owner)**
American Medical Association, 515 N State St., Chicago, Illinois, 60654

Co.2 **Point of Contact**
Mark, Antman, DDS, MBA, mark.antman@ama-assn.org, 312-464-5056-

**Measure Developer If different from Measure Steward**

Co.3 **Organization**
American Medical Association, 515 N State St., Chicago, Illinois, 60654

Co.4 **Point of Contact**
Mark, Antman, DDS, MBA, mark.antman@ama-assn.org, 312-464-5056-

Co.5 **Submitter If different from Measure Steward POC**
Mark, Antman, DDS, MBA, mark.antman@ama-assn.org, 312-464-5056-, American Medical Association

Co.6 **Additional organizations that sponsored/participated in measure development**
American Psychiatric Association, American Academy of Child and Adolescent Psychiatry

**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.

- Boris Birmaher, MD (child/adolescent psychiatry)
- Mary Dobbins, MD, FAAP (pediatrics/psychiatry)
- Scott Endsley, MD, MSc (family medicine)
- William E. Golden, MD, FACP (internal medicine)
- Margaret L. Keeler, MD, MS, FACEP (emergency medicine)
- Louis J. Kraus, MD (child/adolescent psychiatry)
- Laurent S. Lehmann, MD (psychiatry)
- Karen Pierce, MD (child/adolescent psychiatry)
- Reed E. Pyeritz, MD, PhD, FACP, FACMG (medical genetics)
- Laura Richardson, MD, MPH (internal medicine/pediatrics)
PCPI measures are developed through cross-specialty, multi-disciplinary work groups. All medical specialties and other health care professional disciplines participating in patient care for the clinical condition or topic under study must be equal contributors to the measure development process. In addition, the PCPI strives to include on its work groups individuals representing the perspectives of patients, consumers, private health plans, and employers. This broad-based approach to measure development ensures buy-in on the measures from all stakeholders and minimizes bias toward any individual specialty or stakeholder group. All work groups have at least two co-chairs who have relevant clinical and/or measure development expertise and who are responsible for ensuring that consensus is achieved and that all perspectives are voiced.

| Ad.2 If adapted, provide name of 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: 2008 |
| Ad.7 Month and Year of most recent revision: 09, 2008 |
| Ad.8 What is your frequency for review/update of this measure? Every 3 years or as new evidence becomes available that materially affects the measures |
| Ad.9 When is the next scheduled review/update for this measure? 09, 2011 |
| Ad.10 Copyright statement/disclaimers: Physician Performance Measures (Measures) and related data specifications are developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement® (PCPI). These performance Measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications. The Measures, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, e.g., use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial uses of the Measures require a license agreement between the user and the AMA, (on behalf of the PCPI). Neither the AMA, the PCPI nor its members shall be responsible for any use of the Measures. THE MEASURES AND SPECIFICATIONS ARE PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND. © 2008 American Medical Association. All Rights Reserved. Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. The AMA, NCQA, the PCPI and its members disclaim all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications. CPT® contained in the Measures specifications is copyright 2007 American Medical Association. LOINC® copyright 2004 Regenstrief Institute, Inc. SNOMED CLINICAL TERMS (SNOMED CT®) copyright 2004 College of American Pathologists (CAP). All Rights Reserved. Use of SNOMED CT® is only authorized within the United States. Ad.11 -13 Additional Information web page URL or attachment: Attachment NQF Aug 2010 Submission Letter.pdf |
| Date of Submission (MM/DD/YY): 08/30/2010 |
4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.
<table>
<thead>
<tr>
<th>Clinical Topic</th>
<th>Child and Adolescent Major Depressive Disorder (CA-MDD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure Title</td>
<td>Child and Adolescent Major Depressive Disorder (CA-MDD): Suicide Risk Assessment</td>
</tr>
<tr>
<td>Measure #</td>
<td>PCPI CA-MDD # 3</td>
</tr>
<tr>
<td>Measure Statement</td>
<td>Percentage of patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder with an assessment for suicide risk</td>
</tr>
<tr>
<td>Measurement Period</td>
<td>Twelve consecutive months</td>
</tr>
</tbody>
</table>
| Initial Patient Population | Patient Age: 6 through 17 years  
                             Diagnosis Active: Major Depressive Disorder New or Recurrent Episode  
                             Encounter: At least two visits with the physician, physician's assistant, or nurse practitioner during the measurement period |
| Denominator Statement| All patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder |
| Numerator Statement  | Patient visits with an assessment for suicide risk      |
| Denominator Exceptions| None                                                   |
**AMA-PCPI Level I EHR Specification**

**Measure Logic for Child Adolescent Major Depressive Disorder: Suicide Risk Assessment**

**Measure Statement:** Percentage of patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder with an assessment for suicide risk

**Measurement Period = Twelve consecutive months**

**PCPI Measure: CA-MDD-3**

<table>
<thead>
<tr>
<th>Identify Patients in Initial Patient Population (IPP)</th>
<th>Identify Patients in Denominator (D)</th>
<th>Identify Patients in Numerator (N)</th>
<th>Identify Patients who have valid Denominator Exceptions (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient Age</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6 through 17 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Diagnosis</strong>&lt;sup&gt;2&lt;/sup&gt;</td>
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<td></td>
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<tr>
<td>Active</td>
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<td></td>
<td></td>
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<tr>
<td>Major Depressive Disorder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New or Recurrent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value Set 000120</td>
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<td></td>
<td></td>
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<tr>
<td><strong>Encounter</strong>&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>Value Set 000040 or 000144</td>
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<tr>
<td><strong>Procedure</strong>&lt;sup&gt;4&lt;/sup&gt;</td>
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<td></td>
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<tr>
<td>Performed Suicide Risk Assessment</td>
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<td>Value Set 000125</td>
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<td><strong>Symptom</strong>&lt;sup&gt;5&lt;/sup&gt;</td>
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<tr>
<td>Assessed Suicide Risk Findings</td>
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<td></td>
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</tr>
<tr>
<td>Value Set 000126</td>
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<tr>
<td><strong>Risk Category / Assessment</strong>&lt;sup&gt;6&lt;/sup&gt;</td>
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<tr>
<td>Suicide Risk Scale</td>
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</tr>
<tr>
<td>Value Set 000127</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Parameter Specifications:

IPP- <sup>1</sup>Patient age: before the beginning of measurement period;  
<sup>2</sup>Diagnosis-active: before or simultaneously to the encounter date;  
<sup>3</sup>Encounter: >= to 2 visits during measurement period;  
<sup>4</sup>Procedure Performed: Suicide Risk Assessment: performed at each visit during the measurement period;  
<sup>5</sup>Symptom Assessed: Suicide Risk Findings: performed at each visit during the measurement period;  
<sup>6</sup>Risk Category/Assessment: Suicide Risk Scale: Value = NOT EMPTY.

There are no denominator exceptions for this measure.
Basic Measure Calculation:
\[
\frac{(N)}{(D) - (E)} = \% 
\]

The PCPI strongly recommends that exception rates also be computed and reported alongside performance rates as follows:

Exception Calculation:
\[
\frac{(E)}{(D)} = \% 
\]

Exception Types:
\( E = E1 \) (Medical Exceptions) + \( E2 \) (Patient Exceptions) + \( E3 \) (System Exceptions)

For patients who have more than one valid exception, only one exception should be counted when calculating the exception rate.

<table>
<thead>
<tr>
<th>Initial Patient Population (IPP)</th>
<th>Denominator (D)</th>
<th>Numerator (N)</th>
<th>Denominator Exceptions (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition:</strong> The initial patient population identifies the general group of patients that the performance measure is designed to address; usually focused on a specific clinical condition (e.g., coronary artery disease, asthma). For example, a patient aged 18 years and older with a diagnosis of CAD who has at least 2 visits during the measurement period.</td>
<td><strong>Definition:</strong> The denominator defines the specific group of patients for inclusion in a specific performance measure based on specific criteria (e.g., patient's age, diagnosis, prior MI). In some cases, the denominator may be identical to the initial patient population.</td>
<td><strong>Definition:</strong> The numerator defines the group of patients in the denominator for whom a process or outcome of care occurs (e.g., flu vaccine received).</td>
<td><strong>Definition:</strong> Denominator exceptions are the valid reasons why patients who are included in the denominator population did not receive a process or outcome of care (described in the numerator). Patients may have Denominator Exceptions for medical reasons (e.g., patient has an egg allergy so they did not receive flu vaccine); patient reasons (e.g., patient declined flu vaccine); or system reasons (e.g., patient did not receive flu Vaccine due to vaccine shortage). These cases are removed from the denominator population for the performance calculation, however the number of patients with valid exceptions should be calculated and reported. This group of patients constitutes the Denominator Exception reporting population – patients for whom the numerator was not achieved and a there is a valid Denominator Exception.</td>
</tr>
</tbody>
</table>

Find the patients who meet the Initial Patient Population criteria (IPP) | Find the patients who qualify for the denominator (D): □ From the patients within the Patient Population criteria (IPP) select those people who meet Denominator selection criteria. (In some cases the IPP and D are identical). | Find the patients who qualify for the Numerator (N): □ From the patients within the Denominator (D) criteria, select those people who meet Numerator selection criteria. □ Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator | From the patients who did not meet the Numerator criteria, determine if the patient meets any criteria for the Denominator Exception (E1 + E2+E3). If they meet any criteria, they should be removed from the Denominator for performance calculation. As a point of reference, these cases are removed from the denominator population for the performance calculation, however the number of patients with valid exceptions should be calculated and reported. |
<table>
<thead>
<tr>
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<th>topic_indicator</th>
<th>measure_component</th>
<th>standard_concept</th>
<th>standard_category</th>
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<th>code</th>
<th>code_description</th>
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<tbody>
<tr>
<td>000120</td>
<td>CA-MDD</td>
<td>3</td>
<td>IPP</td>
<td>Major Depressive Disorder New or Recurrent</td>
<td>Diagnosis / Condition / Problem</td>
<td>I9</td>
<td>296.20</td>
<td>DEPRESS PSYCHOSIS-UNSPEC</td>
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<td>F33.3</td>
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<td>Risk category /</td>
<td>SNM 282471004</td>
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<td>BECK SCALE FOR SUICIDE IDEATION</td>
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</table>
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August 30, 2010

Helen Burstin, MD, MPH  
Senior Vice President for Performance Measures  
National Quality Forum  
601 13th Street NW  
Suite 500 North  
Washington, DC 20005

Dear Dr. Burstin:

On behalf of the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI), we are pleased to submit two measures for consideration for the Child Health Quality Measures 2010 call for measures.

The two measures, Diagnostic Evaluation and Suicide Risk Assessment, are part of a larger, more comprehensive set of measures that were developed by the AMA-PCPI to improve outcomes for children and adolescents with major depressive disorder (MDD). Of the measures in the set, these two measures are closely aligned with NQF-endorsed AMA-PCPI measures for adults with MDD and consequently have fully developed electronic health record (EHR) specifications completed.

We ask that NQF note our intention to submit a full set of measures for children and adolescents with MDD when we have additional EHR specifications and testing information and when NQF issues a call for such measures.

If you have questions or concerns with our submission of these measures, please let us know.

Thank you for your consideration.

Sincerely,

Karen Kmetik, PhD

cc:  Bernard Rosof, MD, MACP  
     Mark Antman, DDS, MBA  
     Samantha Tierney, MPH
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 subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. 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 subcriterion 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 subcriteria (yellow highlighted areas).

Steering Committee: Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, 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 subcriteria as indicated)

(for NQF staff use) NQF Review #: 1411 NQF Project: Child Health Quality Measures 2010

### MEASURE DESCRIPTIVE INFORMATION

<table>
<thead>
<tr>
<th>De.1 Measure Title: Adolescent Well Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>De.2 Brief description of measure: The percentage of enrolled members 12-21 years of age who had at least one comprehensive well-care visit with a PCP or an OB/GYN practitioner during the measurement year.</td>
</tr>
<tr>
<td>1.1-2 Type of Measure: Use of services</td>
</tr>
<tr>
<td>De.3 If included in a composite or paired with another measure, please identify composite or paired measure</td>
</tr>
<tr>
<td>NA</td>
</tr>
<tr>
<td>De.4 National Priority Partners Priority Area: Population health</td>
</tr>
<tr>
<td>De.5 IOM Quality Domain: Timeliness</td>
</tr>
<tr>
<td>De.6 Consumer Care Need: Staying healthy</td>
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</tbody>
</table>

### CONDITIONS FOR CONSIDERATION BY NQF

<table>
<thead>
<tr>
<th>Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. 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.</td>
</tr>
<tr>
<td>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</td>
</tr>
<tr>
<td>A.2 Indicate if Proprietary Measure (as defined in measure steward agreement): Proprietary measure</td>
</tr>
<tr>
<td>A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission</td>
</tr>
<tr>
<td>A.4 Measure Steward Agreement attached:</td>
</tr>
<tr>
<td>B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and</td>
</tr>
</tbody>
</table>

Rating: C= Completely; P= Partially; M= Minimally; N= Not at all; NA= Not applicable
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

C. The intended use of the measure includes both public reporting and quality improvement.

**Purpose:** Public reporting, Internal quality improvement
Accountability, Payment incentive

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 12 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

(for NQF staff use) Have all conditions for consideration been met?
Staff Notes to Steward (if submission returned):

Staff Notes to Reviewers (issues or questions regarding any criteria):
Staff Reviewer Name(s):

<table>
<thead>
<tr>
<th>TAP/Workgroup Reviewer Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steering Committee Reviewer Name:</td>
</tr>
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</table>

### 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**

1b. **Opportunity for Improvement**

1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Patient/societal consequences of poor quality

1a.2

1a.3 Summary of Evidence of High Impact: Investing in preventive care can reduce morbidity and mortality. In addition, this preventive services can result in significant cost savings. An analysis of the cost-effectiveness of recommended preventive services demonstrated that for a relatively small net cost, most of preventive services produce valuable health benefits. Eighteen of the 25 preventive services evaluated cost $50,000 or less per quality-adjusted life year (QALY), and 10 of these cost less than $15,000 per QALY, all within the range of what is considered a favorable cost-effectiveness ratio. (Schor T, 2007)


1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: This measure encourages health plans to invest in activities that use resources most effectively to maximize health. Routine well-care visits are an effective way for practitioners to dispense health promotion advice, intervene when an

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
adolescent is engaged in health risk behaviors (e.g., tobacco use) and identify patients who are at early stages of disease and illness.

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

Studies assessing pediatric preventive services have revealed deficits in recommended preventive and health promotion services. Mangione-Smith et al. found that children are receiving only about 43 percent of recommended preventive care. The national average of adolescent well-care visits was 41.8 percent in 2009.

The quality of well visits varies among physician practices. Approximately 72 percent of adolescents visit a physician at least once a year, but few are screened for or educated about health risks that affect adolescents directly (Halpern, 2000). Among Medicaid populations, only approximately one-fifth of children received preventive and developmental services that met a basic threshold of quality for each aspect of care assessed. A national survey of parents found that over 94 percent of parents reported an unmet need for parenting guidance, education, or screening by pediatric clinicians in one or more of the content of care areas. In general, substantially less than one-half of children and adolescents receive developmental and psychosocial surveillance, disease screening, and anticipatory guidance.

1b.3 Citations for data on performance gap:
http://health.utah.gov/hda/reports/2008/hmo/quality/commercial/wellcare.php#1
Edward L. Schor, MD. Rethinking Well-Child Care

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

Higher-need families, those with low incomes or low levels of maternal education, and those relying on Medicaid for their children’s health care do not receive additional anticipatory guidance or longer well-child visits, and sometimes receive less information and shorter visits. At-risk children have been found to be less likely to receive preventive and developmental services during well care visits, and low-income families are less likely to receive referrals to community resources that may be helpful to them.

In addition, variables such as age, race/ethnicity and socioeconomic status affect receipt of well care services. Hispanic adolescents are less likely than white and black adolescents to have had a health care visit in the past 12 months (CDC, 2000).

1b.5 Citations for data on Disparities:
Edward L. Schor T, MD. The future pediatrician: promoting children’s health and development.

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): Although outcomes can focus on both the long and short term, it is important to remember that well-child care can affect the seemingly distant future for both child and family. For example, altering dietary habits in childhood or adolescence outcome.

1c.2-3. Type of Evidence: Observational study, Evidence-based guideline, Expert opinion, Systematic synthesis of research

1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome):
Several national organizations have developed evidence-based guidelines and recommendations for adolescent preventive services, including the American Academy of Pediatrics (AAP), the American Academy of Family Practice (AAFP), the Maternal Child Health Bureau (MCHB) through Bright Futures, the American Medical Association (AMA) through the Guidelines for Adolescent Preventive Services (GAPS), and the United States Preventive Services Task Force (USPSTF). The federal government has also offered guidance regarding the provision of adolescent preventive services through its basic requirements of states’ Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) programs for Medicaid-enrolled adolescents. The American

Comment [k3]: 1 Examples of data on opportunity for improvement include, but are not limited to: prior studies, epidemiologic data, measure data from pilot testing or implementation. If data are not available, the measure focus is systematically assessed (e.g., expert panel rating) and judged to be a quality problem.

Comment [k4]: 1c. The measure focus is:
• an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed; OR
• if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
  • intermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, HbA1c) leads to improved health/avoidance of harm or cost/benefit.
  • process - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
  • structure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
  • patient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/the public.
  • access - evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
  • efficiency - demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

Comment [k5]: 4 Clinical care processes typically include multiple steps: assess -> identify problem/potential problem -> choose/plan intervention (with patient input) -> provide intervention -> evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status – patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.
Academy of Pediatrics recommends well care visits yearly for those aged ten to 21 years old (AAP, 2000). Guidelines recommend that all adolescents have an annual, confidential preventive services visit during which primary care physicians should screen, educate, and counsel adolescent patients on a number of biomedical, emotional, and socio-behavioral areas currently threatening adolescent health.

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

1c.6 Method for rating evidence: Expert Consensus

1c.7 Summary of Controversy/Contradictory Evidence: None


CDC. Medical-Care Spending - United States. MMWR Weekly. August 19,1994/43(32);581-586.

CDC. NCHS. Health, United States, 2000 with Adolescent Health Chartbook.


Towey, K., MEd, and Flaming, M., PhD. Healthy Youth 2010 - Supporting the 21 Critical Adolescent Objectives.

1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number):
The American Academy of Pediatrics recommends well care visits yearly for those aged ten to 21 years old (AAP, 2009). Guidelines recommend that all adolescents have an annual, confidential preventive services visit during which primary care physicians should screen, educate, and counsel adolescent patients on a number of biomedical, emotional, and socio-behavioral areas currently threatening adolescent health.

The American Medical Association recommends a preventive services package should be delivered during a series of annual health visits between the ages of 11-21. (AMA)

The Institute for Clinical Systems Improvement (ICSI, 2009) recommends to provide a comprehensive approach to the provision of preventive services, counseling, education and disease screening for average-risk, asymptomatic individuals. The guideline targets asymptomatic children seeking health care who would benefit from preventive services. This resource is intended to assist in the prioritization of screening maneuvers, testing and counseling opportunities. (Level 1)

1c.10 Clinical Practice Guideline Citation: American Academy of Pediatric Committee on Practice and Ambulatory Medicine. Recommendations for pediatric preventive healthcare. PEDIATRICS Vol. 105 No. 3 March 2000, pp. 645-646


http://www.icsi.org/preventive_services_for_children__guideline_/preventive_services_for_children_and_a dolescents_2531.html. Access August 2010

1c.11 National Guideline Clearinghouse or other URL: Routine preventive services for children and adolescents (ages 2 - 21):
ventive+AND+Services

1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom):
ICSI: Level 1

1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe rating and how it relates to USPSTF):
ICSI Criteria:
Level I Preventive Services that providers and care systems must deliver (based on best evidence).
(Annotation #2)
Level II Preventive Services that providers and care systems should deliver (based on good evidence).
(Annotation #3)
Level III Preventive Services for which the evidence is currently incomplete and/or high burden and low cost, therefore left to the judgment of individual medical groups, clinicians and their patients. (Annotation #4)
Level IV Preventive services that are not supported by evidence and not recommended. (Annotation #5)

1c.14 Rationale for using this guideline over others:
NA

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report?

Steering Committee: Was the threshold criterion, Importance to Measure and Report, met?
Rationale:

Y N

2. 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. (evaluation criteria)

2a. MEASURE SPECIFICATIONS

S.1 Do you have a web page where current detailed measure specifications can be obtained?  S.2 If yes, provide web page URL:

2a. Precisely Specified

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):
Had at least one comprehensive well-care visit with a PCP or an OB/GYN practitioner

2a.2 Numerator Time Window (The time period in which cases are eligible for inclusion in the numerator):
1 year

2a.3 Numerator Details (All information required to collect/calculate the numerator, including all codes, logic, and definitions):
At least one comprehensive well-care visit with a PCP or an OB/GYN practitioner during the measurement year.
The PCP does not have to be assigned to the member. Adolescents who had a claim/encounter with a code listed in Table AWC-A are considered to have received a comprehensive well-care visit.
Codes to Identify Adolescent Well-Care Visits:
99383-99385, 99393-99395
V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

2a.4 Denominator Statement (Brief, text description of the denominator - target population being measured):
| 2a.5 | Target population gender: Female, Male |
| 2a.6 | Target population age range: 12–21 years |

**Denominator Time Window** (The time period in which cases are eligible for inclusion in the denominator):
- 1 year

**Denominator Details** (All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions):
- Product lines: Commercial, Medicaid (report each product line separately).
- Ages: 12–21 years as of December 31 of the measurement year.
- Continuous enrollment: The measurement year.
- Allowable gap: Members who have had no more than one gap in enrollment of up to 45 days during the measurement year. To determine continuous enrollment for a Medicaid member for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).
- Anchor date: December 31 of the measurement year.
- Benefit: Medical

**Denominator Exclusions** (Brief text description of exclusions from the target population):
- No exclusions

**Denominator Exclusion Details** (All information required to collect exclusions to the denominator, including all codes, logic, and definitions):
- NA

**Stratification Details/Variables** (All information required to stratify the measure including the stratification variables, all codes, logic, and definitions):
- Not stratified

**Risk Adjustment Type**: No risk adjustment necessary

**Risk Adjustment Methodology/Variables** (List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method):
- NA

**Detailed risk model available Web page URL or attachment**:

**Type of Score**: Rate/proportion
**Interpretation of Score**: Better quality = Higher score

**Calculation Algorithm** (Describe the calculation of the measure as a flowchart or series of steps):
- Step 1: Determine the denominator
  - Children who turned the requisite age in the measurement year
- Step 2: Determine the numerator
  - Children who had documentation in the medical record of the screening or service during the measurement year or the year previous to the measurement year.

**Describe the method for discriminating performance (e.g., significance testing)**:
- Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance.

**Sampling (Survey) Methodology** 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):
- None

**Data Source** (Check the source(s) for which the measure is specified and tested)
- Electronic administrative data/claims

**Data source/data collection instrument** (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):

Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions.
12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.
Clinicians: Physicians (MD/DO)

2a.36-37 Health Plan, Integrated delivery system (tested)

2a.32-35 Measurement and child health care. This panel included representatives from key stakeholder groups, reviewed the results of the field test and assessed whether the results were consistent with expectations, whether the measure represented quality care, and whether we were measuring the most important aspect of quality care in this area.

2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted): This measure was deemed valid by the expert panel.

2d. Exclusions Justified

2d.1 Summary of Evidence supporting exclusion(s): No exclusions

2d.2 Citations for Evidence: NA

2d.3 Data/sample (description of data/sample and size): NA

2d.4 Analytic Method (type analysis & rationale): NA

2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses): NA

---

**TESTING/ANALYSIS**

<table>
<thead>
<tr>
<th>2b. Reliability testing</th>
<th>2c. Validity testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2b.1 Data/sample (description of data/sample and size):</td>
<td>We did not conduct reliability testing for this measure.</td>
</tr>
<tr>
<td>2b.2 Analytic Method (type of reliability &amp; rationale, method for testing):</td>
<td>NA</td>
</tr>
<tr>
<td>2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted):</td>
<td>NA</td>
</tr>
<tr>
<td>2c.1 Data/sample (description of data/sample and size):</td>
<td>stakeholders and experts</td>
</tr>
<tr>
<td>2c.2 Analytic Method (type of validity &amp; rationale, method for testing):</td>
<td>NCQA tested the measure for face validity using a panel of stakeholders with specific expertise in measurement and child health care. This panel included representatives from key stakeholder groups, including pediatricians, family physicians, health plans, state Medicaid agencies and researchers. Experts reviewed the results of the field test and assessed whether the results were consistent with expectations, whether the measure represented quality care, and whether we were measuring the most important aspect of care in this area.</td>
</tr>
<tr>
<td>2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted):</td>
<td>This measure was deemed valid by the expert panel.</td>
</tr>
</tbody>
</table>

**Rating:** C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable

---

**Citations for Evidence:**

**Data source/data collection instrument reference web page URL or attachment:**

**Data dictionary/code table web page URL or attachment:**

**Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested)**

**Health Plan, Integrated delivery system**

**Care Settings (Check the setting(s) for which the measure is specified and tested)**

**Clinical Services (Healthcare services being measured, check all that apply)**

Clinicians: Physicians (MD/DO)
### 2e. Risk Adjustment for Outcomes/ Resource Use Measures

#### 2e.1 Data/sample (description of data/sample and size): NA

#### 2e.2 Analytic Method (type of risk adjustment, analysis, & rationale):

NA

#### 2e.3 Testing Results (risk model performance metrics):

NA

#### 2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: The measure assesses prevention and wellness in a general population; risk adjustment is not indicated.

### 2f. Identification of Meaningful Differences in Performance

#### 2f.1 Data/sample from Testing or Current Use (description of data/sample and size): Currently used in HEDIS

#### 2f.2 Methods to identify statistically significant and practically meaningfully differences in performance (type of analysis & rationale):

Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance

#### 2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):

**HEDIS 2006 Data**
- National Mean: 43.66
  - 10th %tile: 31.32
  - 50th %tile: 42.36
  - 90th %tile: 58.88

**HEDIS 2007 Data**
- National Mean: 41.88
  - 10th %tile: 26.24
  - 50th %tile: 42.09
  - 90th %tile: 56.67

### 2g. Comparability of Multiple Data Sources/Methods

#### 2g.1 Data/sample (description of data/sample and size): NA

#### 2g.2 Analytic Method (type of analysis & rationale):

This measure is administrative data only

#### 2g.3 Testing Results (e.g., correlation statistics, comparison of rankings):

NA

### 2h. Disparities in Care

#### 2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): The measure is not stratified to detect disparities.

#### 2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:

NA

### TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Scientific Acceptability of Measure Properties?

Steering Committee: Overall, to what extent was the criterion, Scientific Acceptability of Measure

<table>
<thead>
<tr>
<th>Rating</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2e</td>
<td>C</td>
</tr>
<tr>
<td>2f</td>
<td>C</td>
</tr>
<tr>
<td>2g</td>
<td>C</td>
</tr>
<tr>
<td>2h</td>
<td>C</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
### 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)

<table>
<thead>
<tr>
<th>Properties, met?</th>
<th>Rationale:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3a. Meaningful, Understandable, and Useful Information</strong></td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>3a.1 Current Use:</strong> In use</td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>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). If not publicly reported, state the plans to achieve public reporting within 3 years):</strong> This measure is used in public reporting</td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>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). If not used for QI, state the plans to achieve use for QI within 3 years):</strong> This measure is a measure in the Healthcare Effectiveness Data and Information Set (HEDIS)</td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>3a.4 Data/sample (description of data/sample and size):</strong> Expert panel, other stakeholders, and 19 physician field test participants</td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>3a.5 Methods (e.g., focus group, survey, QI project):</strong> For this health plan measure, we released the measure for public comment and reviewed all results with the NCQA Committee on Performance Measurement (CPM). We also reviewed first-year results with the CPM.</td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>3a.6 Results (qualitative and/or quantitative results and conclusions):</strong> NCQA received feedback that the measure is understandable, feasible, important and valid. Upon review of public comment results, the Committee on Performance Measurement approved the NCQA staff recommendation to add the measure to HEDIS. After reviewing first-year analysis results, the CPM approved the staff recommendation to publicly report the measure. The measure was deemed usable and feasible.</td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>3b/3c. Relation to other NQF-endorsed measures</strong></td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>3b.1 NQF # and Title of similar or related measures:</strong> NA</td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>(for NQF staff use) Notes on similar/related endorsed or submitted measures:</strong></td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>3b. Harmonization</strong></td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td>If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population-setting/data source or different topic but same target population):</td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>3b.2 Are the measure specifications harmonized? If not, why?</strong> NA</td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>3c. Distinctive or Additive Value</strong></td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:</strong> NA</td>
<td><img src="" alt="Table" /></td>
</tr>
<tr>
<td><strong>5.1 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:</strong></td>
<td><img src="" alt="Table" /></td>
</tr>
</tbody>
</table>
### TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?

- **Rationale:**

#### Steering Committee: Overall, to what extent was the criterion, Usability, met?

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feasibility</strong></td>
<td></td>
</tr>
<tr>
<td>Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)</td>
<td>3</td>
</tr>
</tbody>
</table>

#### 4. FEASIBILITY

**Comment [KP26]:** 4a. For clinical measures, required data elements are routinely generated concurrent with and as a byproduct of care processes during care delivery. (e.g., BP recorded in the electronic record, not abstracted from the record later by other personnel; patient self-assessment tools, e.g., depression scale; lab values, meds, etc.)

**Comment [KP27]:** 4b. The required data elements are available in electronic sources. If the required data are not in existing electronic sources, a credible, near-term path to electronic collection by most providers is specified and clinical data elements are specified for transition to the electronic health record.

**Comment [KP28]:** 4c. Exclusions should not require additional data sources beyond what is required for scoring the measure (e.g., numerator and denominator) unless justified as supporting measure validity.

**Comment [KP29]:** 4d. Susceptibility to inaccuracies, errors, or unintended consequences and the ability to audit the data items to detect such problems are identified.

**Comment [KP30]:** 4e. Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, etc.) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use).
### User feedback

4e.4 Business case documentation:

<table>
<thead>
<tr>
<th>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Feasibility?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steering Committee: Overall, to what extent was the criterion, Feasibility, met?</td>
</tr>
<tr>
<td>Rationale:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

### RECOMMENDATION
(for NQF staff use)
Check if measure is untested and only eligible for time-limited endorsement.

<table>
<thead>
<tr>
<th>Time-limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
</tr>
</tbody>
</table>

### Steering Committee: Do you recommend for endorsement?
Comments:

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CONTACT INFORMATION

**Co.1 Measure Steward (Intellectual Property Owner)**
Co.1 Organization
National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005

Co.2 Point of Contact
Sepheen, Byron, byron@ncqa.org, 202-955-3573-

**Measure Developer if different from Measure Steward**
Co.3 Organization
National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005

Co.4 Point of Contact
Sepheen, Byron, byron@ncqa.org, 202-955-3573-

Co.5 Submitter If different from Measure Steward POC
Sepheen, Byron, byron@ncqa.org, 202-955-3573-, National Committee for Quality Assurance

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.

Over the years, the following expert panel has contributed to many of the measures in the HEDIS set that apply to women and children.

- David Archer, MD
  Eastern Virginia Medical School
- Grant P. Bagley, MD, JD
  Arnold & Porter
- Thomas J. Benedetti, MD
  University of Washington Medical Center
- Denis Dougherty
  Agency for Healthcare Research and Quality (AHRQ)
- Christopher B. Forrest, MD, PhD
  The Children’s Hospital of Philadelphia
<table>
<thead>
<tr>
<th>Shirley Girouard, PhD, RN</th>
<th>Southern Connecticut State University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill Heuston, MD</td>
<td>Medical University of South Carolina</td>
</tr>
<tr>
<td>Mary Kay Holleran</td>
<td>Highmark Caring Foundation</td>
</tr>
<tr>
<td>Charles Homer MD, MPH</td>
<td>National Initiative for Children's Healthcare Quality</td>
</tr>
<tr>
<td>Marilyn C. Jones, MD</td>
<td>Children's Hospital</td>
</tr>
<tr>
<td>Milton Kotchuck, PhD, MPH</td>
<td>Boston University School of Public Health</td>
</tr>
<tr>
<td>Mark Mandell, MD</td>
<td>Partners Community Health Care, Inc.</td>
</tr>
<tr>
<td>Dorothy Mann, PhD, MPH</td>
<td>Consultant</td>
</tr>
<tr>
<td>Lee Partridge</td>
<td>Health Resources and Services Administration (HRSA)</td>
</tr>
<tr>
<td>Mark Pearlman, MD</td>
<td>University of Michigan Health Systems</td>
</tr>
<tr>
<td>Robin S. Richman, MD</td>
<td>Harvard Vanguard Medical Associates</td>
</tr>
<tr>
<td>Michael G. Ross, MD, MPH</td>
<td>University of California, Los Angeles</td>
</tr>
<tr>
<td>University of California, San Francisco</td>
<td>Medical Center</td>
</tr>
<tr>
<td>Maureen Shannon, CNM, FNP, MS</td>
<td>University of California, San Francisco</td>
</tr>
<tr>
<td>Jeff Susman, MD</td>
<td>Lynne S. Wilcox, MD, MPH</td>
</tr>
<tr>
<td>University of Cincinnati</td>
<td>Centers for Disease Control and Prevention (CDC)</td>
</tr>
</tbody>
</table>

Ad.2 If adapted, provide name of original measure:
Ad.3-5 If adapted, provide original specifications URL or attachment

<table>
<thead>
<tr>
<th>Measure Developer/Steward Updates and Ongoing Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad.6 Year the measure was first released: 1995</td>
</tr>
<tr>
<td>Ad.7 Month and Year of most recent revision: 07, 2010</td>
</tr>
<tr>
<td>Ad.8 What is your frequency for review/update of this measure? Annual</td>
</tr>
<tr>
<td>Ad.9 When is the next scheduled review/update for this measure? 07, 2011</td>
</tr>
</tbody>
</table>

Ad.10 Copyright statement/disclaimers: © 1995 by the National Committee for Quality Assurance
1100 13th Street, NW, Suite 1000
Washington, DC 20005

Ad.11 -13 Additional Information web page URL or attachment:

Date of Submission (MM/DD/YY): 09/02/2010
2d. Clinically necessary measure exclusions are identified and must be:

- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion;
- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus;
- precisely defined and specified:
  - if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
- if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).
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 subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. 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 subcriterion 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 subcriteria **(yellow highlighted areas).**

**Steering Committee:** Complete all **pink highlighted** areas of the form. Review the workgroup/TAP assessment of the subcriteria, 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 subcriteria as indicated)

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**MEASURE DESCRIPTIVE INFORMATION**

<table>
<thead>
<tr>
<th>De.1 Measure Title: Adolescent Immunization</th>
</tr>
</thead>
<tbody>
<tr>
<td>De.2 Brief description of measure: The percentage of adolescents who had proper immunizations. Two measures are reported. We are combining the measures into one form because measure features and evidence are the same or similar.</td>
</tr>
<tr>
<td>1. Immunizations by 13 years of age</td>
</tr>
<tr>
<td>2. Immunizations by 18 years of age</td>
</tr>
<tr>
<td>1.1-2 Type of Measure: Process</td>
</tr>
<tr>
<td>De.3 If included in a composite or paired with another measure, please identify composite or paired measure This measure appears in the composite Comprehensive Well Care by Age 13 Years and Comprehensive Well Care by Age 18 Years.</td>
</tr>
<tr>
<td>De.4 National Priority Partners Priority Area: Care coordination, Population health</td>
</tr>
<tr>
<td>De.5 IOM Quality Domain: Effectiveness, Timeliness</td>
</tr>
<tr>
<td>De.6 Consumer Care Need: Staying healthy</td>
</tr>
</tbody>
</table>

---

**CONDITIONS FOR CONSIDERATION BY NQF**

| A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. 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. |
| 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): Proprietary measure |

---

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
**measure submission**

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

C. The intended use of the measure includes both public reporting and quality improvement.

- **Purpose:** Public reporting, Internal quality improvement
  
  Accountability

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 12 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

---

**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.

1a. High Impact

1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Leading cause of morbidity/mortality, Severity of illness, Patient/societal consequences of poor quality

1a.2

1a.3 Summary of Evidence of High Impact: Preventing disease through vaccination eliminates the costs associated with treating that disease including doctor visits and hospital stays, as well as time lost from work for parents. A study analyzing a cohort of 4.1 million children estimated that 2.87 million pertussis cases would occur, resulting in 1,131 deaths; 276,750 diphtheria cases, resulting in 27,675 deaths; and 165 tetanus cases, resulting in 25 deaths. From the societal perspective, these cases would cost $23,536.5 million, with approximately $18,772.4 million (80%) for diphtheria and $4,770.1 million (20%) for pertussis (Ekwueme, D.U., P.M. Strebel, S.C. Hadler, M.I. Meltzer, J.W. Allen and J.R. Livengood, 2000). With the use of the Tdap vaccine, the number of diphtheria, tetanus and pertussis cases has been reduced by 99%, 93% and 96%, respectively (Ekwueme, D.U., P.M. Strebel, S.C. Hadler, M.I. Meltzer, J.W. Allen, and J.R. Livengood, 2000).

Costs associated with pertussis cases include medical costs of visits and treatment, as well as nonmedical costs that include time missed from work or school. The mean medical cost of an adolescent case of pertussis can reach $256 for severe cases, and $416 when nonmedical expenses are included (figures in

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**Comment [KP1]:** 1a. The measure focus addresses:

- A specific national health goal/priority identified by NQF’s National Priorities Partners; OR
- A demonstrated high impact aspect of healthcare (e.g., affects large numbers, leading cause of morbidity/mortality, high resource use (current and/or future), severity of illness, and patient/societal consequences of poor quality).
The total costs associated with pertussis are highly dependent on the incidence estimate of the disease, which ranged from 155 per 100,000 to 507 per 100,000 across two studies (CDC, 2006). The estimated lifetime costs of sequelae ranged from $44,000 for cases of hearing loss to almost $865,000 for severe retardation. Indirect costs in lost productivity were estimated to be $1 million per case (NFID, 2005). Because of the potential severity of the disease, the financial costs per case of meningococcal disease are high per case but low for society due to the low incidence.


National Foundation for Infectious Disease. Reducing the Impact of Meningococcal Disease in Adolescents and Young Adults. July 2005.

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: Preventing pertussis in adolescents would reduce disease among that population and perhaps others by eliminating a reservoir of the disease. Pertussis symptoms can be unpleasant and long for months but long term effects are rare. Meningococcal disease, on the other hand, can be deadly or debilitating. MCV4 has the potential to prevent morbidity and mortality among vaccinated adolescents as well as create a herd immunity effect, but the strategic importance is lessened due to low incidence of the disease. The fact that meningococcal disease requires a public health response is communicable and can cause significant stress within a community increases its strategic importance.

Most cases of meningococcal disease are sporadic—less than 5% of cases occur in outbreaks—but the frequency of outbreaks has increased (Jackson 1995; Woods 1998). Each case requires a public health response which includes contact tracing and antimicrobial prophylaxis. The meningococcus bacterium is spread by direct, close contact with respiratory and oral secretions of an infected person. It is often misdiagnosed because early symptoms (including sudden onset of fever, headache and stiff neck) are similar to the flu. The infection can develop and spread very quickly within the body. Even with rapid and appropriate treatment, the disease can kill an otherwise healthy young person in 48 hours or less (NFID, 2005). Statistics show that even with treatment, 10%-15% of those who get the disease will die and 20% of survivors suffer permanent problems, including brain damage, kidney damage, hearing loss or limb amputation (NFID 2005). Antibiotics are also recommended for those in close contact with an identified case of meningococcal disease.

Many states have mandates regarding meningococcal disease and college students residing on campus. The majority of states (n=33) require education about the disease and strategies for prevention. Twelve states require proof of the vaccination or a waiver for incoming students residing on campus (Immunization Action Coalition 2006).

While almost 90 percent of both low- and high-risk HPV infections occur without any symptoms and go away without treatment, (CDC) persistent HPV infection, or HPV infection lasting several months or years, significantly increases a person’s risk of developing cancer. While it is not yet known how long vaccine-induced immunity will last, nearly 100 percent of the precancerous cervical cell changes caused by the types of HPV targeted by vaccination have been prevented for up to four years. (National Cancer Institute, 2007)

Citation:

National Foundation for Infectious Disease. Reducing the Impact of Meningococcal Disease in Adolescents and Young Adults. July 2005.
1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:

In the United States, adolescent immunization rates have historically lagged behind early childhood immunization rates. In 2000, the American Academy of Pediatrics reported that 35 million adolescents failed to receive at least one recommended vaccination (Little, 2000). Low immunization rates among adolescents have the potential to cause outbreaks of preventable diseases and to establish reservoirs of disease in adolescents that can affect other populations including infants, the elderly and individuals with chronic conditions. Immunization recommendations for adolescents have changed in recent years. In addition to catch-up immunizations that may have been missed during childhood and infancy, there are new vaccines targeted specifically to adolescents. The ACIP recommended the following immunizations for adolescents age 11–12 years:
- 1 dose Tdap (or Td)
- 1 dose MCV4 (or MPSV4)

Gardasil® was approved by the Food and Drug Administration in 2006 and incorporated into ACIP recommendations published in March 2007. Since then, early reports have indicated that about one quarter (25.1 percent) of adolescent females age 13 to 17 years had initiated the vaccine series (>1 dose). (MMWR, 2008) An estimated 32.3 percent had received 1 dose, 44.2 percent had received 2 doses, and 23.5 percent had received 3 doses. (MMWR, 2008) This was the first year HPV coverage was reported.

1b.3 Citations for data on performance gap:


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

Variations in immunization coverage exist among some populations. Children of lower socioeconomic status are less likely to be fully immunized, as the vaccine is expensive, at $120-125 per dose on average for the three shot series. While some health insurance plans cover the costs of the HPV vaccine doses and clinic visits, not all currently provide coverage. Those without coverage are unlikely to be able to afford the vaccine. Children age 18 and younger who are eligible for the Vaccines for Children (VFC) program, including those who are Medicaid eligible, uninsured, or American Indian or Alaska Native, may be able to receive the HPV vaccine for a nominal cost.

Parental acceptance of the HPV vaccine also affects vaccine usage. One study found that 25 percent of parents have reservations about having their daughters immunized, due to concern that vaccination might influence their daughter’s sexual behaviors, their uneasiness about the morality of immunizing to prevent sexually transmitted infections, and worries about the safety of the vaccine.

1b.5 Citations for data on Disparities:

NCHS, Health, United States, 2002, Table 73.
Kane, Mark M.D., M.P.H., Heidi Lasher. The Case for Childhood Immunization.
Genital HPV viruses are divided into two categories: “low-risk,” or wart-causing, and “high-risk,” which are mucosal, or genital, and are often associated with genital warts and certain types of cancer. About 60 types of HPV cause warts, or papillomas, on the hands and feet. The other 40 viruses are mucosal, or genital, and are often associated with genital warts and certain types of cancer. Vaccination has been recognized as a leading medical achievement of the 20th century and the U.S. early childhood immunization program that focuses on infant and early childhood immunizations has been a remarkable success (NFID, 2004). Translating that success to the adolescent population is of significant health importance because the failure to do so can result in outbreaks of vaccine-preventable diseases, increased disease-associated costs and reservoirs of disease in the adolescent population that can affect others, including infants and the elderly. The diseases prevented by recommended adolescent vaccines—pertussis, meningococcal disease, HPV infection and eventually, cervical cancer—can be serious and deadly. Preventing these diseases is a significant public health accomplishment.

### 1c.2-3. Type of Evidence: Evidence-based guideline, Expert opinion

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

**Pertussis** is an acute respiratory infection characterized by a prolonged cough. It is a highly communicable disease that is transmitted via respiratory droplets from coughing or sneezing. A vaccine against the disease—DTP or pediatric diphtheria and tetanus toxoids—has been routinely recommended for young children since the 1940s. Early childhood vaccination resulted in dramatic declines in cases of pertussis to an historic low of 1,010 in 1976, but since the 1980s the number of cases has been increasing, especially among adolescents and adults (CDC 2006; CDC 2005; Farizo 1992; Guris 1999). A primary reason for the continued circulation of pertussis is that immunity to pertussis wanes approximately 5–10 years after completion of the childhood pertussis vaccination, leaving adolescents and adults vulnerable. Vaccinating adolescents against pertussis would not only protect against disease but would likely reduce the reservoir of pertussis within the population at large thereby reducing the risk for vulnerable populations such as infants. During 2004, a total of 25,827 cases of pertussis were reported in the U.S. and 8,897 of those (34%) were among adolescents for an incidence for adolescents of 30 per 100,000 (CDC 2005). From 1996-2004, Massachusetts’ enhanced surveillance system reported an average annual incidence among adolescents of 93 per 100,000 (CDC 2005). The incidence of pertussis varies widely from state to state and from year to year. One reason for the variance is that reported cases of pertussis in adolescents often happen in outbreaks at schools where close interaction occurs among large number of students with waning immunity (CDC 2005).

Data from enhanced surveillance sites and prospective studies indicate that the national passive surveillance data substantially underestimate the true incidence of pertussis because reliable diagnostic tests are not widely available and not all diagnosed cases are reported. One study suggested that approximately 1 million cases of pertussis occur annually among persons over age 15 years in the U.S. (Ward 2005).

Meningococcal disease is a serious illness caused by the bacterium neisseria meningitides, which can cause meningitis and meningococcemia, an infection of the blood. The disease affects up to 2,600 people in the U.S. every year and is a leading cause of bacterial meningitis in children 2-18 years of age in the U.S. (HealthLink 2004). Incidence of meningococcal disease is highest in children under 2 years, but also spikes in adolescents and young adults. In the 1990s, 13%-14% of disease nationwide was in persons 11-18 years (NIFD 2005). Other studies have shown that the disease peaks in 15-18-year-olds and that adolescents have the highest fatality rate, at about 20% (AAP 2005).

Human papillomaviruses (HPVs) are a group of more than 100 related viruses. Approximately 20 million Americans are currently infected with HPV, and another 6.2 million people become newly infected each year. (CDC) Genital HPVs are passed from one person to another through sexual contact (Devision of STD Prevention, 1999) and is currently the most common sexually transmitted infection (STI). (CDC) It is estimated that approximately 50 percent of sexually active men and women will acquire a genital HPV infection at some point in their lives. (CDC) Genital HPV viruses are divided into two categories: “low-risk,” or wart-causing, and “high-risk”, or those that put a person at risk for cancer. These high-risk, or oncogenic, types of HPV cause 100 percent of cervical cancers, 90 percent of anal cancers, 40 percent of vulvar and vaginal cancers, 12 percent of oropharyngeal cancers, and three percent of oral cancers. (Parkin DM, 2006)
1c.5 Rating of strength/quality of evidence (also provide narrative description of the rating and by whom):
NA

1c.6 Method for rating evidence: The U.S. Preventive Services Task Force, an independent panel of experts that rate the evidence for preventive services, defers to the CDC’s Advisory Committee on Immunization Practices (ACIP) guidelines for recommended vaccinations. ACIP consists of 15 experts in fields associated with immunization, who have been selected by the Secretary of the U. S. Department of Health and Human Services to provide advice and guidance to the Secretary, the Assistant Secretary for Health, and the Centers for Disease Control and Prevention (CDC) on the control of vaccine-preventable diseases. In addition to the 15 voting members, ACIP includes 8 ex officio members who represent other federal agencies with responsibility for immunization programs in the United States, and 26 non-voting representatives of liaison organizations that bring related immunization expertise.

The role of the ACIP is to provide advice that will lead to a reduction in the incidence of vaccine preventable diseases in the United States, and an increase in the safe use of vaccines and related biological products.

The Committee develops written recommendations for the routine administration of vaccines to children and adults in the civilian population; recommendations include age for vaccine administration, number of doses and dosing interval, and precautions and contraindications. The ACIP is the only entity in the federal government that makes such recommendations.

To formulate policy recommendations, the ACIP reviews data on morbidity and mortality associated with the disease in the general US population and in specific risk groups along with available scientfic literature (both published and unpublished) on the safety, efficacy, effectiveness, cost-effectiveness, and acceptability of the immunizing agent, with consideration of the relevant quality and quantity of data. When data permit, specific rules of evidence - such as those followed by the US Preventive Services Task Force - are used to judge the quality of data and to make decisions regarding the nature and strength of recommendations. In the absence of data or when data are inadequate, expert opinions of voting members and other experts are used to make recommendations.

Other considerations and inputs used in formulating policy recommendations include clinical trial results and information pro-vvided in the manufacturer’s labeling or package insert; equity in access to the vaccine and responsible management of public funds; recommendations of other professional liaison organizations; and the feasibility of incorporating the vaccine into existing immunization programs. ACIP Work Groupss often review WHO recommendations as a secondary source of information in their deliberations.

1c.7 Summary of Controversy/Contradictory Evidence: None


CDC. Prevention and Control of Meningococcal Disease: Recommendation of the Advisory Committee on Immunization Practices. MMWR. May 27, 2005.


| National Foundation for Infectious Disease. Reducing the Impact of Meningococcal Disease in Adolescents and Young Adults. July 2005. |

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

**ACIP [CDC , AAP, AAFP] (2009): Children 7—18:**

1. Tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap). (Minimum age: 10 years for BOOSTRIX® and 11 years for ADACEL®)
   - Administer at age 11 or 12 years for those who have completed the recommended childhood DTP/DTaP vaccination series and have not received a tetanus and diphtheria toxoid (Td) booster dose.
   - Persons aged 13 through 18 years who have not received Tdap should receive a dose.
   - A 5-year interval from the last Td dose is encouraged when Tdap is used as a booster dose; however, a shorter interval may be used if pertussis immunity is needed.

2. Human papillomavirus vaccine (HPV). (Minimum age: 9 years)
   - Administer the first dose to females at age 11 or 12 years.
   - Administer the second dose 2 months after the first dose and the third dose 6 months after the first dose (at least 24 weeks after the first dose).
   - Administer the series to females at age 13 through 18 years if not previously vaccinated.

3. Meningococcal conjugate vaccine (MCV).
   - Administer at age 11 or 12 years, or at age 13 through 18 years if not previously vaccinated.
   - Administer to previously unvaccinated college freshmen living in a dormitory.
   - MCV is recommended for children aged 2 through 10 years with terminal complement component deficiency, anatomic or functional asplenia, and certain other groups at high risk. See MMWR 2005;54(No. RR-7).
   - Persons who received MPSV 5 or more years previously and remain at increased risk for meningococcal disease should be revaccinated with MCV.

4. Influenza vaccine.
   - Administer annually to children aged 6 months through 18 years.
   - For healthy nonpregnant persons (i.e., those who do not have underlying medical conditions that predispose them to influenza complications) aged 2 through 49 years, either LAIV or TIV may be used.
   - Administer 2 doses (separated by at least 4 weeks) to children aged younger than 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time during the previous influenza season but only received 1 dose.

5. Pneumococcal polysaccharide vaccine (PPSV).
   - Administer to children with certain underlying medical conditions (see MMWR 1997;46[No. RR-8]), including a cochlear implant. A single revaccination should be administered to children with functional or anatomic asplenia or other immunocompromising condition after 5 years.

6. Hepatitis A vaccine (HepA).
   - Administer 2 doses at least 6 months apart.
   - HepA is recommended for children older than 1 year who live in areas where vaccination programs target older children or who are at increased risk of infection. See MMWR 2006;55(No. RR-7).

7. Hepatitis B vaccine (HepB).
   - Administer the 3-dose series to those not previously vaccinated.
   - A 2-dose series (separated by at least 4 months) of adult formulation Recombivax HB is licensed for
children aged 11 through 15 years.

8. Inactivated poliovirus vaccine (IPV).
   - For children who received an all-IPV or all-oral poliovirus (OPV) series, a fourth dose is not necessary if
     the third dose was administered at age 4 years or older.
   - If both OPV and IPV were administered as part of a series, a total of 4 doses should be administered,
     regardless of the child’s current age.

   - For persons aged 7 through 18 years without evidence of immunity (see MMWR 2007;56[No. RR-4]),
     administer 2 doses or the second dose if they have received only 1 dose.
   - For persons aged 7 through 12 years, the minimum interval between doses is 3 months. However, if
     the second dose was administered at least 28 days after the first dose, it can be accepted as valid.
   - For persons aged 13 years and older, the minimum interval between doses is 28 days.

ICSI (2008): Children Ages 11—18:
1. Diphtheria and Tetanus Toxoids and Acellular Pertussis (DTaP/Td/Tdap) Vaccine
   Tdap should be given routinely at age 11–12 years of age, as well as to older adolescents 13-18 of age who
   missed the 11- to 12-year-old dose, as a one-time booster for adults in place of Td.

2. Meningococcal Vaccine
   For those adolescents who have not previously received the meningococcal conjugate vaccine, vaccination
   is recommended before high school entry for children at 11 to 12 years of age. Those unvaccinated
   adolescents 13 to 18 years of age should also undergo vaccination

3. Human Papillomavirus (HPV) Vaccine
   A vaccine for human papillomavirus (HPV) has been licensed for women ages 9 through 26, and the Advisory
   Committee on Immunization Practices has recommended routine use of the vaccine for all 11- to 12-year-
   old females, and catch-up use of the vaccine for females ages 12 through 26
2a. MEASURE SPECIFICATIONS

S.1 Do you have a web page where current detailed measure specifications can be obtained?
S.2 If yes, provide web page URL:

2a. Precisely Specified

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):

"Numerator 1: Children who had documentation in the medical record of recommended immunizations by age 13 years. Numerator 2: Children who had documentation in the medical record of recommended immunizations by age 18 years."

2a.2 Numerator Time Window (The time period in which cases are eligible for inclusion in the numerator):

2 years

2a.3 Numerator Details (All information required to collect/calculate the numerator, including all codes, logic, and definitions):

"For immunization evidence obtained from the medical record, the organization may count members where there is evidence that the antigen was rendered from one of the following:
• A note indicating the name of the specific antigen and the date of the immunization, or
• A certificate of immunization prepared by an authorized health care provider or agency including the specific dates and types of immunizations administered.
One meningococcal conjugate or meningococcal polysaccharide vaccine on or between the 11th and 13th birthdays.
One tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) or one tetanus, diphtheria toxoids vaccine (Td) on or between the 10th and 13th birthdays.
One meningococcal vaccine on or between the 11th and 13th birthday and one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) or one tetanus, diphtheria toxoids vaccine (Td) on or between the 10th and 13th birthdays.
Three HPV vaccinations, with different dates of service on or before the 13th birthday.
For documented history of illness or a seropositive test result, the organization must find a note indicating the date of the event, which must have occurred by the member’s 13th birthday.
Notes in the medical record indicating that the member received the immunization “at delivery” or “in the hospital” may be counted toward the numerator. This applies only to immunizations that do not have minimum age restrictions (e.g., before 42 days after birth). A note that the “member is up to date” with all immunizations but which does not list the dates of all immunizations and the names of the immunization agents does not constitute sufficient evidence of immunization for HEDIS reporting.
Immunizations documented using a generic header or “DTaP/DTP/DT” can be counted as evidence of DTaP. The burden on organizations to substantiate the DTaP antigen is excessive compared to any risk associated with data integrity."

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

"Denominator 1. Children who turned 13 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child’s birthday by at least 12 months.
Denominator 2: Children who turned 18 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child’s birthday by at least 12 months."

2a.5 Target population gender: Female, Male
2a.6 Target population age range: Measure 1: 6 years-13 years; Measure 2: 13-18 years
2a.7 Denominator Time Window (The time period in which cases are eligible for inclusion in the denominator):

1 year

Comment [KP8]: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF’s Health Information Technology Expert Panel (HITEP).
2a.8 **Denominator Details** *(All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions):*

See above; chart review only

2a.9 **Denominator Exclusions** *(Brief text description of exclusions from the target population)*: HPV:

Exclude males

2a.10 **Denominator Exclusion Details** *(All information required to collect exclusions to the denominator, including all codes, logic, and definitions)*:

See above; chart review only

2a.11 **Stratification Details/Variables** *(All information required to stratify the measure including the stratification variables, all codes, logic, and definitions)*: None

2a.12-13 **Risk Adjustment Type**: No risk adjustment necessary

2a.14 **Risk Adjustment Methodology/Variables** *(List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method)*:

NA

2a.15-17 **Detailed risk model available Web page URL or attachment**:

2a.18-19 **Type of Score**: Rate/proportion

2a.20 **Interpretation of Score**: Better quality = Higher score

2a.21 **Calculation Algorithm** *(Describe the calculation of the measure as a flowchart or series of steps)*:

Step 1: Determine the denominator
Children who turned the requisite age in the measurement year, AND
Who had a visit within the past 12 months of the child’s birthday
Step 2: Determine the numerator
Children who had documentation in the medical record of the screening or service during the measurement year or the year previous to the measurement year.

2a.22 **Describe the method for discriminating performance** *(e.g., significance testing)*:

Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance.

2a.23 **Sampling (Survey) Methodology** *(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))*:

For this physician-level measure, we anticipate the entire population will be used in the denominator. If a sample is used, a random sample is ideal. NCQA’s work has indicated that a sample size of 30-50 patients would be necessary for a typical practice size of 2000 patients.

2a.24 **Data Source** *(Check the source(s) for which the measure is specified and tested)*:

Paper medical record/flow-sheet, Electronic clinical data, Electronic Health/Medical Record

2a.25 **Data source/data collection instrument** *(Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.)*:

Medical Record

2a.26-28 **Data source/data collection instrument reference web page URL or attachment**:

2a.29-31 **Data dictionary/code table web page URL or attachment**:

2a.32-35 **Level of Measurement/Analysis** *(Check the level(s) for which the measure is specified and tested)*:


2a.36-37 **Care Settings** *(Check the setting(s) for which the measure is specified and tested)*:

Ambulatory Care: Office, Ambulatory Care: Clinic, Ambulatory Care: Hospital Outpatient

Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions.

12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.
2d.3 Clinical Services (Healthcare services being measured, check all that apply)
Clinicians: Nurses, Clinicians: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO)

### TESTING/ANALYSIS

<table>
<thead>
<tr>
<th>2b. Reliability testing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2b.1 Data/sample (description of data/sample and size):</strong> NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure).</td>
</tr>
<tr>
<td><strong>2b.2 Analytic Method (type of reliability &amp; rationale, method for testing):</strong> We did not conduct reliability testing for this measure.</td>
</tr>
<tr>
<td><strong>2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted):</strong> We did not conduct reliability testing for this measure.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>2c. Validity testing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2c.1 Data/sample (description of data/sample and size):</strong> NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure).</td>
</tr>
<tr>
<td><strong>2c.2 Analytic Method (type of validity &amp; rationale, method for testing):</strong> NCQA tested the measure for face validity using a panel of stakeholders with specific expertise in measurement and child health care. This panel included representatives from key stakeholder groups, including pediatricians, family physicians, health plans, state Medicaid agencies and researchers. Experts reviewed the results of the field test and assessed whether the results were consistent with expectations, whether the measure represented quality care, and whether we were measuring the most important aspect of care in this area. This measure was deemed valid by the expert panel. In addition, this measure does not utilize administrative data sources; data recorded in the chart is considered the gold standard.</td>
</tr>
<tr>
<td><strong>2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted):</strong> NA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2d. Exclusions Justified</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2d.1 Summary of Evidence supporting exclusion(s):</strong> For the HPV antigen, males are excluded. ACIP only recently (May 28, 2010) released guidance that males could receive HPV vaccination. NCQA’s policy is to allow time between new vaccine releases and reporting requirements for measures.</td>
</tr>
<tr>
<td><strong>2d.2 Citations for Evidence:</strong> Centers for Disease Control and Prevention. MMWR May 28, 2010. <a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5920a5.htm#s_cid=mm5920a5_e">http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5920a5.htm#s_cid=mm5920a5_e</a></td>
</tr>
<tr>
<td><strong>2d.3 Data/sample (description of data/sample and size):</strong> NA</td>
</tr>
<tr>
<td><strong>2d.4 Analytic Method (type analysis &amp; rationale):</strong> NA</td>
</tr>
<tr>
<td><strong>2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses):</strong> NA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2e. Risk Adjustment for Outcomes/ Resource Use Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2e.1 Data/sample (description of data/sample and size):</strong> NA</td>
</tr>
<tr>
<td><strong>2e.2 Analytic Method (type of risk adjustment, analysis, &amp; rationale):</strong> NA</td>
</tr>
</tbody>
</table>

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
2e.3 Testing Results (risk model performance metrics):
NA

2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: The measure assesses prevention and wellness in a general population; risk adjustment is not indicated.

2f. Identification of Meaningful Differences in Performance

2f.1 Data/sample from Testing or Current Use (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)

2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale):
Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance

2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):

- Measure 1: Immunizations for Adolescents by Age 13 Years
  - Rate: Meningococcal
    - Elig Population: 179
    - Immunization Documented in Medical Record: 82%
  - Rate: Tdap/Td
    - Elig Population: 179
    - Immunization Documented in Medical Record: 11%
  - Rate: HPV
    - Elig Population: 89
    - Immunization Documented in Medical Record: 21%

- Measure 2: Immunizations for Adolescents by Age 18 Years
  - HPV Rate: Fixing analysis

2g. Comparability of Multiple Data Sources/Methods

2g.1 Data/sample (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)

2g.2 Analytic Method (type of analysis & rationale):
This measure is chart review only; no other sources were identified by the expert panel; this measure does not utilize administrative data

2g.3 Testing Results (e.g., correlation statistics, comparison of rankings):
NA

2h. Disparities in Care

2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): The measure is not stratified to detect disparities.

2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:
NA

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Scientific Acceptability of Measure Properties?

Steering Committee: Overall, to what extent was the criterion, Scientific Acceptability of Measure Properties, met?
Rationale:
### 3. USABILITY

<table>
<thead>
<tr>
<th></th>
<th>3a. Meaningful, Understandable, and Useful Information</th>
<th>3b. Harmonization</th>
<th>3c. Distinctive or Additive Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3a.1 Current Use: Not in use but testing completed</td>
<td>3b. If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source or different topic but same target population):</td>
<td>3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:</td>
</tr>
<tr>
<td></td>
<td>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). If not publicly reported, state the plans to achieve public reporting within 3 years):</td>
<td>3b.2 Are the measure specifications harmonized? If not, why?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This measure is not currently publicly reported. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate.</td>
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<td>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). If not used for QI, state the plans to achieve use for QI within 3 years):</td>
<td></td>
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<tr>
<td></td>
<td>This measure is not currently used in QI. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate. NCQA anticipates that after we release these measures, they will become widely used, as all our measures do.</td>
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<tr>
<td></td>
<td>Testing of Interpretability (Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)</td>
<td></td>
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<tr>
<td></td>
<td>3a.4 Data/sample (description of data/sample and size): Not applicable</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>3a.5 Methods (e.g., focus group, survey, QI project): NCQA vetted the measures with its expert panel. In addition, throughout the development process, NCQA vetted the measure concepts and specifications with other stakeholder groups, including the National Association of State Medicaid Directors, NCQA’s Health Plan Advisory Council, NCQA’s Committee on Performance Measurement, and the American Academy of Pediatrician’s Quality Improvement Innovation Network. After field testing, NCQA also conducted a debrief call with field test participants. In the form of a group interview, NCQA systematically sought feedback on whether the measures were understandable, feasible, important, and had face validity.</td>
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<td>3a.6 Results (qualitative and/or quantitative results and conclusions): NCQA received feedback that the measure is understandable, feasible, important and valid.</td>
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<td></td>
<td>3b/3c. Relation to other NQF-endorsed measures</td>
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<tr>
<td></td>
<td>(for NQF staff use) Notes on similar/related endorsed or submitted measures:</td>
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</table>

**Comment [KP22]:** 3a. Demonstration that information produced by the measure is meaningful, understandable, and useful to the intended audience(s) for both public reporting (e.g., focus group, cognitive testing) and informing quality improvement (e.g., quality improvement initiatives). An important outcome that may not have an identified improvement strategy still can be useful for informing quality improvement by identifying the need for and stimulating new approaches to improvement.

**Comment [KP23]:** 3b. The measure specifications are harmonized with other measures, and are applicable to multiple levels and settings.

**Comment [K24]:** 16 Measure harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., influenza immunization of patients in hospitals or nursing homes), or related measures for the same target population (e.g., age designation for children) so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

**Comment [KP25]:** 3c. Review of existing endorsed measures and measure sets demonstrates that the measure provides a distinctive or additive value to existing NQF-endorsed measures (e.g., provides a more complete picture of quality for a particular condition or aspect of healthcare, is a more valid or efficient way to measure).
5.1 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

<table>
<thead>
<tr>
<th>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steering Committee: Overall, to what extent was the criterion, Usability, met? Rationale:</td>
</tr>
</tbody>
</table>

### 4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)

<table>
<thead>
<tr>
<th>4a. Data Generated as a Byproduct of Care Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4a.1-2 How are the data elements that are needed to compute measure scores generated? Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition), Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4b. Electronic Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>4b.1 Are all the data elements available electronically? (elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims) No</td>
</tr>
<tr>
<td>4b.2 If not, specify the near-term path to achieve electronic capture by most providers. NCQA plans to eventually specify this measure for electronic health records.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4c. Exclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? No</td>
</tr>
<tr>
<td>4c.2 If yes, provide justification.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>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. During the measure development process the Child Health MAP and measure development team worked with NCQA’s certified auditors and audit department to ensure that the measure specifications were clear and auditable. The denominator, numerator and optional exclusions are concisely specified and align with our audit standards.</td>
</tr>
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</table>

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<tr>
<th>4e. Data Collection Strategy/Implementation</th>
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<tbody>
<tr>
<td>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: Based on field test results, we have specified the measure to assess whether screening was documented and whether use of a standardized tool was documented. Our field test results showed that these data</td>
</tr>
</tbody>
</table>

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
elements are available in the medical record. In addition, our field test participants noted that many were able to program these requirements into their electronic health record systems, and several implemented point-of-service physician reminders for this measure.

4e.2 Costs to implement the measure (costs of data collection, fees associated with proprietary measures):
Collecting measures from medical charts is time-consuming and can be burdensome. Adapting this measure in electronic health records may relieve some of this burden.

4e.3 Evidence for costs:
Based on field test participant feedback and other stakeholder input.

4e.4 Business case documentation:

<table>
<thead>
<tr>
<th>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Feasibility?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steering Committee: Overall, to what extent was the criterion, Feasibility, met?</td>
</tr>
<tr>
<td>Rationale:</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

RECOMMENDATION
(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.

<table>
<thead>
<tr>
<th>Steering Committee: Do you recommend for endorsement?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments:</td>
</tr>
<tr>
<td>Y</td>
</tr>
</tbody>
</table>

CONTACT INFORMATION

Co.1 Measure Steward (Intellectual Property Owner)
Co.1 Organization
National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005

Co.2 Point of Contact
Sepheen, Byron, byron@ncqa.org, 202-955-3573-

Measure Developer If different from Measure Steward
Co.3 Organization
National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005

Co.4 Point of Contact
Sepheen, Byron, byron@ncqa.org, 202-955-3573-

Co.5 Submitter If different from Measure Steward POC
Sepheen, Byron, byron@ncqa.org, 202-955-3573-, National Committee for Quality Assurance

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.
Child Health Measurement Advisory Panel:
Jeanne Alicandro
Barbara Dailey  
Denise Dougherty, PhD  
Ted Ganiats, MD  
Foster Gesten, MD  
Nikki Highsmith, MPA  
Charlie Homer, MD, MPH  
Jeff Kamil, MD  
Elizabeth Siteman  
Mary McIntyre, MD, MPH  
Virginia Moyer, MD, MPH, FAAP  
Lee Partridge  
Xavier Sevilla, MD, FAAP  
Michael Siegal  
Jessie Sullivan

Ad.2 If adapted, provide name of original measure: NA

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:

Ad.7 Month and Year of most recent revision:

Ad.8 What is your frequency for review/update of this measure?

Ad.9 When is the next scheduled review/update for this measure?

Ad.10 Copyright statement/disclaimers: © 2009 by the National Committee for Quality Assurance  
1100 13th Street, NW, Suite 1000  
Washington, DC 20005

Ad.11 -13 Additional Information web page URL or attachment:

Date of Submission (MM/DD/YY): 08/30/2010
2d. Clinically necessary measure exclusions are identified and must be:

- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion; AND
- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus; AND
- precisely defined and specified:
  - if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
  - if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

2e. For outcome measures and other measures (e.g., resource use) when indicated:

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care; OR rationale/data support no risk adjustment.

13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.
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 subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. 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 subcriterion 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 subcriteria (yellow highlighted areas).

**Steering Committee**: Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, 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 subcriteria as indicated)

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**MEASURE DESCRIPTIVE INFORMATION**

**De.1 Measure Title**: Risky Behavior Screening

**De.2 Brief description of measure**: We are combining 2 measures into one form because measure features and evidence are the same or similar.

- **Measure 1**: Risky Behavior Assessment or Counseling by Age 13 Years
- **Measure 2**: Risky Behavior Assessment or Counseling by Age 18 Years

**De.3 Type of Measure**: Process

**De.3 If included in a composite or paired with another measure, please identify composite or paired measure**
This measure appears in the composite Comprehensive Well Care by Age 13 Years and Comprehensive Well Care by Age 18 Years.

**De.4 National Priority Partners Priority Area**: Care coordination, Population health

**De.5 IOM Quality Domain**: Effectiveness, Timeliness

**De.6 Consumer Care Need**: Staying healthy

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**CONDITIONS FOR CONSIDERATION BY NQF**

Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:

- **A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. 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.**
  - **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): Proprietary measure**

- **A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission**

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
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*

C. The intended use of the measure includes both public reporting and quality improvement.

**Purpose:** Public reporting, Internal quality improvement
Accountability

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 12 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*

(for NQF staff use) Have all conditions for consideration been met?
Staff Notes to Steward (if submission returned):

Staff Notes to Reviewers (issues or questions regarding any criteria):

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.*

**1a. High Impact**

(for NQF staff use) Specific NPP goal:

1a.1 Demonstrated High Impact Aspect of Healthcare: Leading cause of morbidity/mortality, Severity of illness, Patient/societal consequences of poor quality

1a.2

1a.3 Summary of Evidence of High Impact: Adolescents are at risk for participating in risky behaviors that include sexual activity and alcohol, tobacco and substance use. Alcohol and drug abuse can have serious consequences for the user: heavy drinking increases one's risk for many forms of cancer and are connected to many injuries, abuse cases, and near-fatal and fatal accidents. Illegal drug use is connected to serious health consequences such as heart failure, convulsions, chronic sexual problems, depression, and societal costs such as increasing crime, loss of familial ties and employment. Adolescents that abuse drugs are more likely to engage in other risky behavior such as stealing, sexual intercourse, and more intense drug abuse (HHS, 2000). Nationwide, 45 percent of students had at least one alcoholic beverage in the past month; 20 percent had used marijuana one or more times in the month; seven percent had used some form of cocaine, four percent had used methamphetamine, two percent had used heroin, and eight percent had used hallucinogenic drugs one or more times in their life (CDC, 2008). The Youth Risk Behavior Surveillance national survey showed that, nationwide, 50 percent of teenagers have smoked at least one puff of a cigarette. Twenty percent of students in grades 9-12 are categorized as “currently smoking,” and ten percent smoked ten or more cigarettes a day (CDC, 2008).

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**Comment [KP1]:** 1a. The measure focus addresses:
- a specific national health goal/priority identified by NQF’s National Priorities Partners;
- a demonstrated high impact aspect of healthcare (e.g., affects large numbers, leading cause of morbidity/mortality, high resource use (current and/or future), severity of illness, and patient/societal consequences of poor quality).
The annual direct and indirect costs to society due to sexually transmitted diseases (STDs) and the resulting complications are conservatively estimated at $17 billion (HHS, 2000). For example: Many unintended pregnancies receive late to no prenatal care and result in low-birth-weight infants, children with behavioral problems, and child abuse. In 1995, the nation incurred $246 billion in costs due to substance abuse to cover health care, vehicle accidents, crime, and other adverse effects. Direct costs due to tobacco use totaled at least $50 billion per year.

1a.4 Citations for Evidence of High Impact:

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: This measure promotes counseling to educate adolescents on the dangers of risky behavior (sexual activity and alcohol, tobacco and substance use). The need to prevent tobacco and other substance use early in a child’s life is important. Tobacco use and addiction usually begin in adolescence. Of adults that smoke daily, 82 percent tried their first cigarette before age 18, and 53 percent became daily smokers before that age. Age of onset of drinking is connected to the amount of alcohol dependency over a lifetime: 40 percent of people that begin drinking at age 14 or under develop alcohol dependency sometime in their life compared to ten percent of those that begin at age 21 or older (CDC, 2008).

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
Of students grade 9-12 nationwide who have had sexual intercourse at least once, seven percent had sexual intercourse before they were age 13. Of the 35 percent considered sexually active, only 62 percent of students used condoms during the last encounter, and 23 percent had consumed drugs or alcohol before their last sexual encounter (CDC, 2008). Unintended pregnancies and STDs may be the consequences of this behavior. Sexually transmitted diseases remain a large national public health problem despite efforts to curb them.

Approximately one quarter of teenage girls in the United States currently have a sexually transmitted disease (STD), which suggests that an estimated 3.2 million teenagers between the ages of 14 and 19 are infected with HPV, Chlamydia, herpes or trichomoniasis. This is evidence there is a lack of STD screening and counseling in contraceptive services for teens and young women (Hampton, 2008).

In 2008, 1,210,523 Chlamydia trachomatis infection cases were reported to CDC, the largest number of cases ever reported for any condition. This is a 9.7 percent increase from 2007 (CDC, 2008).

1b.3 Citations for data on performance gap:

1b.4 Summary of Data on disparities by population group:
Overall, the prevalence of sexual intercourse among students in grades nine through 12 was higher among African American and Hispanic males and females than white males and females; among African Americans and Hispanics, prevalence was higher in males than females. Prevalence of sex before age 13 was higher

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
among males than females and higher among African American and Hispanic males and females than white males and females. Prevalence of condom use during last sexual intercourse was higher among African Americans than whites and higher among African American male than white male students (CDC, 2008). STDs disproportionately affect adolescents. Overall, women have more serious STDs than men, and African Americans and Hispanics have the highest rates of STDs (CDC, 2008).

Overall, whites and Hispanics are more likely to use alcohol and illicit drugs than African Americans (CDC 2008). Heavy episodic drinking was more common among males than females, in white males and females and Hispanics males and females than in African Americans males and females.

Males are more likely to smoke tobacco than females. American Indians or Alaska Natives are more likely to smoke than other racial/ethnic groups and Hispanics, and Asians are least likely to smoke (JAMA, 2009). Among students, frequent smoking was more common among white students in grades 9-12 (both males and females) than among African American and Hispanic males and females (CDC, 2009).

Males and females are more likely to engage in sexual behavior than females, in white males and females and Hispanics males and females than in African American males and females. Prevalence of condom use during last sexual intercourse was higher among African American male than white male students (CDC, 2008).

Heavy episodic drinking was more common among males than females, in white males and females and Hispanics males and females than in African American males and females.

Adolescents could benefit greatly through risk behavior counseling. Primary care clinicians are able to identify those at increased risk of participating in risky behavior, including substance abuse and unsafe sexual activities. There is evidence that behavioral counseling targeted at sexually active adolescents could reduce the incidence of sexually transmitted infections (STIs). There is also no evidence of behavioral or biological harms of the counseling (Lin, Whitlock, O’Connor, Bauer, 2008). There are nearly 19 million new STIs diagnosed in the United States each year, occurring in those between the ages of 15 and 24 years.

Counseling for Sexual Activity

Good evidence suggests the effectiveness of moderate- to high-intensity behavioral counseling in reducing the incidence of overall STIs (excluding herpes simplex virus) and common bacterial STIs (such as gonorrhea and Chlamydia). However, evidence is lacking for the effectiveness of low-intensity behavioral counseling interventions, especially in lower-risk populations (Lin, Whitlock, O’Connor, Bauer, 2008).

Counseling for Substance Use, including Alcohol and Tobacco

As part of a larger risk reduction intervention among 13- to 16-year-olds and their parents, intensive counseling demonstrated decreased use of illicit drugs, though no change in alcohol use was reported. (Hagan et al., 2008).
No studies were found that addressed the effectiveness of screening for substance abuse/misuse in the primary care setting. In the school setting, mandatory drug testing among athletes decreased the use of body image-changing substances and illicit drugs, but was associated with increased risk factors that are known to be associated with drug misuse. (Hagan et al, 2008)

The USPSTF found limited evidence that screening and counseling children and adolescents in the primary care setting are effective in either preventing initiation or promoting cessation of tobacco use (USPSTF, 2003).

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

1c.6 Method for rating evidence: Expert consensus

1c.7 Summary of Controversy/Contradictory Evidence: While Bright Futures and other major bodies recommend counseling adolescents on risky behavior topics, the U.S. Preventive Services Task Force concluded the evidence was insufficient to recommend for or against screening for illicit drug use and routine screening and interventions for tobacco use in adolescents. (Hagan et al, 2008)

1c.8 Citations for Evidence (other than guidelines):

1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number):
Risky Behavior: Risk Reduction, Sexual Activity, Substance Abuse, and Tobacco Use

Bright Futures
Bright Futures recommends that health care providers counsel adolescents age 11-18 years on risk reduction of tobacco, alcohol or other drugs and STIs
Consensus Based

U.S. Preventive Services Task Force
The USPSTF recommends high-intensity behavioral counseling to prevent sexually transmitted infections (STIs) for all sexually active adolescents and for adults at increased risk for STIs.
Grade: B Recommendation.

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of behavioral counseling to prevent STIs in non-sexually-active adolescents and in adults not at increased risk for STIs.
Grade: I Statement.

The USPSTF concludes that the evidence is insufficient to recommend for or against routine screening for tobacco use or interventions to prevent and treat tobacco use and dependence among children or adolescents.
Grade: I Statement.
The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening adolescents, adults, and pregnant women for illicit drug use.

Grade: I Statement.

Institute for Clinical Systems Improvement (2009)

ICSI recommends the following discussion topics on alcohol use for adolescents age 7-12:
- Reinforce alcohol abuse prevention and education.

ICSI recommends the following discussion topics for adolescents age 13 and older:
- Don’t ride with someone who is under the influence of alcohol.
- Prevent others from driving in this condition: “Friends don’t let friends drive drunk.”
- Avoid not drinking and driving, and the dangers of it.
  - Abstinence if driving
  - Have a designated driver
- Discuss characteristics of dependency.
- Assess current use of alcohol (by history and/or use of standardized screening questionnaire).
- Advise all females of the harm of alcohol on a fetus, and advise them to limit or cease alcohol intake.

Level III

ICSI recommends the following discussion topics on sexual activity for adolescents age 12 and older, or earlier if sexually active
- Obtain a sexual history from all adolescents.
- Inform adolescents that abstinence is the most effective way to prevent pregnancy and sexually transmitted infections.
- Provide detailed education and written information regarding all contraceptive methods including barrier contraceptives, birth control pills, injectables, implantables, tubal sterilization and vasectomy. Longer-duration methods may improve compliance and efficacy.
- To enhance acceptance of contraceptive methods, health benefits should be discussed:
  - Use of oral contraceptives will reduce lifetime risks of ovarian and uterine cancer.
  - Use of barrier contraceptives and spermicides will reduce the risk of developing cervical cancer and sexually transmitted infections.

These messages should also be given as indicated by clinical discretion (e.g., genitourinary symptoms).

Grade: Level III

Bright Futures (2008)

Bright Futures recommends the following topics about sexual activity for adolescents age 11-18 years.
At every visit: talk to parent and adolescent: abstinence for those who have not had sex, and as an option to those who are sexually experienced, is the best protection from pregnancy, STIs, and the emotional distress.

Provide information and/or role-play on how to resist peer pressure to smoke, drink alcohol, or use drugs.

Administer alcohol and drug screening tool

Grade: Expert consensus

AAFP
- Risks for sexually transmitted diseases and how to prevent them.
- Effective sexuality education, pregnancy prevention and sexually transmitted disease prevention programs as those using a comprehensive approach to sexuality education that includes medically accurate information on contraception and abstinence.
- Stress abstinence which, when practiced consistently, is the most effective method of preventing unplanned pregnancy and the transmission of sexually transmitted disease(s).
- Responsible sexual behavior is also an effective method of preventing pregnancy and sexually transmitted diseases.
- Adolescents receiving contraceptive services should be accorded strict patient confidentiality.

Work to prevent unintended teenage pregnancies and prevention of STDs, by providing appropriate guidance/ counseling and effective sex education to their adolescent patient population.

1c.10 Clinical Practice Guideline Citation: Hagan, JF, Shaw JS, Duncan PM, eds. 2008. Bright Futures:
|-----------------|

1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom): Fair to good

1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe rating and how it relates to USPSTF): USPSTF based

1c.14 Rationale for using this guideline over others: Healthy People 2010, Bright Futures, and other major bodies recommend the following risky behavior topics be discussed with adolescents: sexual activity, substance abuse, and tobacco use and cessation. Based on expert feedback, we based the measure on these guidelines and the body of evidence.

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report? Steering Committee: Was the threshold criterion, Importance to Measure and Report, met? Rationale:

2. 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. (evaluation criteria)

2a. MEASURE SPECIFICATIONS

S.1 Do you have a web page where current detailed measure specifications can be obtained? S.2 If yes, provide web page URL: 2a. Precisely Specified

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):

*Numerator 1. Children who had documentation in the medical record of a Risky Behavior Assessment or Counseling By Age 13 Years
Numerator 2. Children who had documentation in the medical record of a Risky Behavior Assessment or Counseling By Age 13 Years

Comment [KP8]: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF’s Health Information Technology Expert Panel (HITEP).
### Counseling By Age 18 Years*

**2a.2 Numerator Time Window (The time period in which cases are eligible for inclusion in the numerator):**
2 years

**2a.3 Numerator Details (All information required to collect/calculate the numerator, including all codes, logic, and definitions):**
Documentation must include a note indicating the date and that the provider asked or counseled about the following.
- Sexual activity
- Substance use
- Alcohol use
- Tobacco use

Documentation of counseling must include a note indicating at least one of the following.
- Engagement in discussion of current risky behaviors (e.g., sexual activity or substance use)
- Checklist indicating that risky behavior was addressed
- Counseling or referral for risky behavior education
- Member received educational materials on risky behavior
- Anticipatory guidance for risky behavior

**2a.4 Denominator Statement (Brief, text description of the denominator - target population being measured):**
Denominator 1. Children who turned 13 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child’s birthday by at least 12 months.
Denominator 2: Children who turned 18 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child’s birthday by at least 12 months.

**2a.5 Target population gender: Female, Male**

**2a.6 Target population age range:** Measure 1: 6 years-13 years, Measure 2: 13 years-18 years

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

**2a.8 Denominator Details (All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions):**
See 2a4; chart review only

**2a.9 Denominator Exclusions (Brief text description of exclusions from the target population): None**

**2a.10 Denominator Exclusion Details (All information required to collect exclusions to the denominator, including all codes, logic, and definitions):**
NA

**2a.11 Stratification Details/Variables (All information required to stratify the measure including the stratification variables, all codes, logic, and definitions):**
The measure is not stratified

**2a.12-13 Risk Adjustment Type:** No risk adjustment necessary

**2a.14 Risk Adjustment Methodology/Variables (List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method):**
NA

**2a.15-17 Detailed risk model available Web page URL or attachment:**

**2a.18-19 Type of Score:** Rate/proportion

**2a.20 Interpretation of Score:** Better quality = Higher score

---

Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions.
12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.
2a.21 Calculation Algorithm (Describe the calculation of the measure as a flowchart or series of steps):
Step 1: Determine the denominator
Children who turned the requisite age in the measurement year, AND
Who had a visit within the past 12 months of the child’s birthday
Step 2: Determine the numerator
Children who had documentation in the medical record of the screening or service during the measurement year or the year previous to the measurement year.

2a.22 Describe the method for discriminating performance (e.g., significance testing):
Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance.

2a.23 Sampling (Survey) Methodology 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):
For this physician-level measure, we anticipate the entire population will be used in the denominator. If a sample is used, a random sample is ideal. NCQA’s work has indicated that a sample size of 30-50 patients would be necessary for a typical practice size of 2000 patients.

2a.24 Data Source (Check the source(s) for which the measure is specified and tested)
Paper medical record/flow-sheet, Electronic clinical data, Electronic Health/Medical Record

2a.25 Data source/data collection instrument (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.): Medical Record

2a.26-28 Data source/data collection instrument reference web page URL or attachment:

2a.29-31 Data dictionary/code table web page URL or attachment:

2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested)

2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested)
Ambulatory Care: Office, Ambulatory Care: Clinic, Behavioral health/psychiatric unit

2a.38-41 Clinical Services (Healthcare services being measured, check all that apply)
Behavioral Health: Mental Health, Clinicians: Physicians (MD/DO)

TESTING/ANALYSIS

2b. Reliability testing

2b.1 Data/sample (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)

2b.2 Analytic Method (type of reliability & rationale, method for testing):
We did not conduct reliability testing for this measure.

2c. Validity testing

2c.1 Data/sample (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)

2c.2 Analytic Method (type of validity & rationale, method for testing):
NCQA tested the measure for face validity using a panel of stakeholders with specific expertise in measurement and child health care. This panel included representatives from key stakeholder groups,
including pediatricians, family physicians, health plans, state Medicaid agencies and researchers. Experts reviewed the results of the field test and assessed whether the results were consistent with expectations, whether the measure represented quality care, and whether we were measuring the most important aspect of care in this area.

2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted): This measure was deemed valid by the expert panel. In addition, this measure does not utilize administrative data sources; data recorded in the chart is considered the gold standard.

2d. Exclusions Justified

2d.1 Summary of Evidence supporting exclusion(s): No exclusions

2d.2 Citations for Evidence: NA

2d.3 Data/sample (description of data/sample and size): NA

2d.4 Analytic Method (type analysis & rationale): NA

2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses): NA

2e. Risk Adjustment for Outcomes/ Resource Use Measures

2e.1 Data/sample (description of data/sample and size): NA

2e.2 Analytic Method (type of risk adjustment, analysis, & rationale): NA

2e.3 Testing Results (risk model performance metrics): NA

2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: The measure assesses prevention and wellness in a general population; risk adjustment is not indicated.

2f. Identification of Meaningful Differences in Performance

2f.1 Data/sample from Testing or Current Use (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)

2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale):

Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance

2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance): Below is eligible population for each of the 2 measures. The eligible population applies to all four rates. Measure 1: By 13 Years: 179 Measure 2: By 18 Years: 163

Below are performance rates for each measure listed by rates.

<table>
<thead>
<tr>
<th>Rate 1: Sexual Activity</th>
<th>Measure 1: By 13 Years: 70%</th>
<th>Measure 2: By 18 Years: 89%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating</td>
<td>C</td>
<td>P</td>
</tr>
</tbody>
</table>

Comment [KP14]: 2d. Clinically necessary measure exclusions are identified and must be:
- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion;
- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus;
- precisely defined and specified: if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
- if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category excluded, exclusion rates by type of exclusion).

Comment [KP15]: 10 Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, sensitivity analyses with and without the exclusion, and variability of exclusions across providers.

Comment [KP16]: 2e. For outcome measures and other measures (e.g., resource use) when indicated:
- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care (e.g., BMI); and
- the exclusion; and
- rationale/data support no risk adjustment.

Comment [KP17]: 13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.

Comment [KP18]: 2f. Data analysis demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful differences in performance.

Comment [KP19]: 14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of $25 in cost for a...
### Rate 2: Substance Use
Measure 1: By 13 Years: 72%
Measure 2: By 18 Years: 79%

Rate 3: Alcohol Use
Measure 1: By 13 Years: 74%
Measure 2: By 18 Years: 81%

Rate 4: Tobacco Use
Measure 1: By 13 Years: 78%
Measure 2: By 18 Years: 79%

### 2g. Comparability of Multiple Data Sources/Methods

2g.1 Data/sample (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)

2g.2 Analytic Method (type of analysis & rationale): This measure is chart review only; no other sources were identified by the expert panel; this measure does not utilize administrative data

2g.3 Testing Results (e.g., correlation statistics, comparison of rankings): NA

### 2h. Disparities in Care

2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): The measure is not stratified to detect disparities.

2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans: NA

### TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Scientific Acceptability of Measure Properties?

Steering Committee: Overall, to what extent was the criterion, Scientific Acceptability of Measure Properties, met?
Rationale:

### 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)

### 3a. Meaningful, Understandable, and Useful Information

3a.1 Current Use: Not in use but testing completed

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). If not publicly reported, state the plans to achieve public reporting within 3 years): This measure is not currently publicly reported. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate.

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). If not used for QI, state the plans to achieve use for QI within 3 years): This measure is not currently used in QI. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate. NCQA anticipates that after we release these measures, they will become widely used, as all our measures do.
Testing of Interpretability  
*(Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)*

3a.4 Data/sample (description of data/sample and size):  Expert panel, other stakeholders, and 19 physician field test participants

3a.5 Methods (e.g., focus group, survey, QI project):  
NCQA vetted the measures with its expert panel. In addition, throughout the development process, NCQA vetted the measure concepts and specifications with other stakeholder groups, including the National Association of State Medicaid Directors, NCQA's Health Plan Advisory Council, NCQA's Committee on Performance Measurement, and the American Academy of Pediatrician's Quality Improvement Innovation Network.

After field testing, NCQA also conducted a debrief call with field test participants. In the form of a group interview, NCQA systematically sought feedback on whether the measures were understandable, feasible, important, and had face validity.

3a.6 Results (qualitative and/or quantitative results and conclusions):  
NCQA received feedback that the measure is understandable, feasible, important and valid.

3b/3c. Relation to other NQF-endorsed measures

3b.1 NQF # and Title of similar or related measures:

(for NQF staff use) Notes on similar/related endorsed or submitted measures:

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 or different topic but same target population):

3b.2 Are the measure specifications harmonized? If not, why?

3c. Distinctive or Additive Value
3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:

5.1 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

**TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?**

3

Steering Committee: Overall, to what extent was the criterion, Usability, met?

**Rationale:**

**4. FEASIBILITY**

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)

4a. Data Generated as a Byproduct of Care Processes

4a.1-2 How are the data elements that are needed to compute measure scores generated? 
Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition),

**Comment [KP23]:** 3b. The measure specifications are harmonized with other measures, and are applicable to multiple levels and settings.

**Comment [K24]:** 16 Measure harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., influenza immunization of patients in hospitals or nursing homes), or related measures for the same target population (e.g., eye exam and Hba1c for patients with diabetes), or definitions applicable to many measures (e.g., age designation for children), so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

**Comment [KP25]:** 3c. Review of existing endorsed measures and measure sets demonstrates that the measure provides a distinctive or additive value to existing NQF-endorsed measures (e.g., provides a more complete picture of quality for a particular condition or aspect of care, e.g., a valid or efficient way to measure).

**Comment [KP26]:** 4a. For clinical measures, required data elements are routinely generated concurrent with and as a byproduct of care processes during care delivery, (e.g., BP recorded in the electronic record, not abstracted from the record later by other personnel; patient self-assessment tools, e.g., depression scale; lab values, meds, etc.)
**Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)**

| 4b. Electronic Sources | 4b.1 Are all the data elements available electronically? (elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims) | No |

| 4b.2 If not, specify the near-term path to achieve electronic capture by most providers. NCQA plans to eventually adapt this measure for use in electronic health records. |

| 4c. Exclusions | 4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? | No |

| 4c.2 If yes, provide justification. |

| 4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences | 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. |

During the measure development process the Child Health MAP and measure development team worked with NCQA's certified auditors and audit department to ensure that the measure specifications were clear and auditable. The denominator, numerator and any exclusions are concisely specified and align with our audit standards.

| 4e. Data Collection Strategy/Implementation | 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: |

Based on field test results, we have specified the measure to assess whether physicians assessed OR counseled adolescents on the four risky behavior topics. Our field test results showed that these data elements are available in the medical record. In addition, our field test participants noted that many were able to program these requirements into their electronic health record systems, and several implemented point-of-service physician reminders for this measure.

| 4e.2 Costs to implement the measure (costs of data collection, fees associated with proprietary measures): |

Collecting measures from medical charts is time-consuming and can be burdensome. Adapting this measure in electronic health records may relieve some of this burden.

| 4e.3 Evidence for costs: |

Based on field test participant feedback and other stakeholder input.

| 4e.4 Business case documentation: |

**TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Feasibility?**

**Steering Committee: Overall, to what extent was the criterion, Feasibility, met?**

**Rationale:**

**RECOMMENDATION**
**NQF #1406**

<table>
<thead>
<tr>
<th>(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.</th>
<th>Time-limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steering Committee: Do you recommend for endorsement?</td>
<td>Y □</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
</tr>
<tr>
<td>CONTACT INFORMATION</td>
<td></td>
</tr>
</tbody>
</table>

Co.1 **Measure Steward (Intellectual Property Owner)**
**Organization**
National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005

Co.2 **Point of Contact**
Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-

**Measure Developer if different from Measure Steward**
Co.3 **Organization**
National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005

Co.4 **Point of Contact**
Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-

Co.5 **Submitter If different from Measure Steward POC**
Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-, National Committee for Quality Assurance

Co.6 **Additional organizations that sponsored/participated in measure development**

**ADDITIONAL INFORMATION**

Ad.1 **Provide a list of sponsoring organizations and workgroup/panel members’ names and organizations.**

**Child Health Measurement Advisory Panel:**
Jeanne Alicandro
Barbara Dailey
Denise Dougherty, PhD
Ted Ganiats, MD
Foster Gesten, MD
Nikki Highsmith, MPA
Charlie Homer, MD, MPH
Jeff Kamil, MD
Elizabeth Siteman
Mary McIntyre, MD, MPH
Virginia Moyer, MD, MPH, FAAP
Lee Partridge
Xavier Sevilla, MD, FAAP
Michael Siegal
Jessie Sullivan

Ad.2 If adapted, provide name of original measure: NA
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:**
Ad.7 **Month and Year of most recent revision:**
Ad.8 **What is your frequency for review/update of this measure?**
Ad.9 **When is the next scheduled review/update for this measure?**
2d. Clinically necessary measure exclusions are identified and must be:

- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion;
- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus;
- precisely defined and specified:
  - if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
  - if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of $25 in cost for an episode of care (e.g., $5,000 v. $5,025) is practically meaningful. Measures with overall poor performance may not demonstrate much variability across providers.
NATIONAL QUALITY FORUM

Measure Evaluation 4.1
December 2009

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 subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. 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 subcriterion 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 subcriteria (yellow highlighted areas).

Steering Committee: Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, 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 subcriteria as indicated)

<table>
<thead>
<tr>
<th>(for NQF staff use) NQF Review #: 1395</th>
<th>NQF Project: Child Health Quality Measures 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEASURE DESCRIPTIVE INFORMATION</strong></td>
<td></td>
</tr>
<tr>
<td>De.1 Measure Title: Chlamydia Screening and Follow Up</td>
<td></td>
</tr>
<tr>
<td>De.2 Brief description of measure: The percentage of female adolescents who turned 18 years old during the measurement year and who had a chlamydia screening and proper follow-up visit.</td>
<td></td>
</tr>
<tr>
<td>1.1-2 Type of Measure: Process</td>
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<tr>
<td>De.3 If included in a composite or paired with another measure, please identify composite or paired measure This measure appears in the composite Comprehensive Well Care by Age 18 Years</td>
<td></td>
</tr>
<tr>
<td>De.4 National Priority Partners Priority Area: Care coordination, Population health</td>
<td></td>
</tr>
<tr>
<td>De.5 IOM Quality Domain: Effectiveness, Timeliness</td>
<td></td>
</tr>
<tr>
<td>De.6 Consumer Care Need: Staying healthy</td>
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</table>

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<tr>
<th>CONDITIONS FOR CONSIDERATION BY NQF</th>
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<tbody>
<tr>
<td>Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:</td>
</tr>
</tbody>
</table>

A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. 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.

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): Proprietary measure

A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission

A.4 Measure Steward Agreement attached:

B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
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

C. The intended use of the measure includes both public reporting and quality improvement.

Purpose: Public reporting, Internal quality improvement

Accountability

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 12 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

(for NQF staff use) Have all conditions for consideration been met?

Staff Notes to Steward (if submission returned):

Met

Staff Notes to Reviewers (issues or questions regarding any criteria):

Staff Reviewer Name(s):

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.

1a. High Impact

(for NQF staff use) Specific NPP goal:

1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Leading cause of morbidity/mortality, High resource use, Severity of illness, Patient/societal consequences of poor quality

1a.2 Summary of Evidence of High Impact: Chlamydia trachomatis is the most common sexually transmitted bacterial infection in the US (USPSTF, 2006). Among women with chlamydial infection, 20-40 percent will experience pelvic inflammatory disease (Mangione-Smith, 1999), 50-75 percent will experience tubal factor infertility if untreated (Mangione-Smith, 1999; Sellors, 1998), and 65 percent will experience an ectopic pregnancy if untreated. It is the leading cause of preventable infertility and, among other adverse pregnancy related problems, can cause preterm birth, miscarriages, infant mortality, and neonatal chlamydial infections (USPSTF, 2007).

Over 900,000 chlamydial infections were reported to the Centers for Disease Control and Prevention (CDC) from 50 states and the District of Columbia in 2004. Since many cases are not reported or even diagnosed, it is estimated that there are actually 2.8 million new cases of chlamydia each year (Weinstock, 2004). From 1987 through 2004, the reported rate of chlamydial infection in women increased from 78.5 cases to 485.0 cases per 100,000 people. A portion of the increase in prevalence is attributed to continued expansion of chlamydia screening programs (CDC, 2005).

Cost-effectiveness data of Chlamydia screening found that routinely screening women younger than age 25

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
saves $45 for every woman screened (Mangione-Smith, 1999). The CDC estimated that every dollar spent on Chlamydia testing and treatment saves $12 in complications arising from untreated Chlamydia (CDC, 2001). Studies suggest the most cost-effective screening interval is yearly screening for women aged 15-29 followed by screening every 6 months for those with a history of infection (Hu, 2004).


1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: Most individuals infected with chlamydia are asymptomatic. Screening is necessary to detect cases and to reduce the risk of complications. This measure encourages secondary prevention of chlamydia.

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

Despite the widespread availability of non-invasive testing methods for chlamydia and single dose therapy using azithromycin, chlamydia screening rates have, overall, remained low (Fairley, 2005). This rate may reflect barriers to testing that relate to both patients and health care providers. For instance, adolescents may be reluctant to seek care for their sexual health because of embarrassment or concerns about their confidentiality, while health care providers may have limited awareness of chlamydia as an issue or lack the time, knowledge and skills to manage and discuss sexual health issues (Verhoeven, 2005; Poljski, 2004).

1b.3 Citations for data on performance gap:


Samitha Ginige, Christopher K Fairley, Jane S Hocking, Francis J Bowden and Marcus Y Chen. Interventions for increasing chlamydia screening in primary care: a review. BMC Public Health 2007, 7:95
1b.4 Summary of Data on disparities by population group:
In general, females have higher rates of chlamydia, though they also utilize screening services more often, which may cause misleading statistics (NRCIM, 2009). In 2003, the highest age-specific rates of reported Chlamydia in women were among 15-19 year olds and 20 to 24 year olds. For females ages 10-14, the age-specific rate was 132 per 100,000 (CDC, 2003). Approximately five to 14 percent of 16-20 year olds and three to 12 percent of 20-24 year old women who were routinely screened are infected with Chlamydia (Walsh, 2002).

African American adolescents have the highest rate of chlamydia than any other racial or ethnic group. African American female adolescents have the highest percentage compared to African American males of the same age group (NRCIM, 2009).

1b.5 Citations for data on Disparities:


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): Early detection and intervention can prevent the many complications of chlamydia, including pelvic inflammatory disease and infertility.

1c.2-3. Type of Evidence: Evidence-based guideline, Expert opinion

1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome):
The U.S. Preventive Services Task Force (USPSTF) concluded there is good evidence that screening for chlamydial infection in non-pregnant women who are at increased risk can reduce the incidence of pelvic inflammatory disease (PID). The USPSTF concluded that the benefits of screening women at increased risk are substantial.

While the USPSTF found no studies evaluating the effectiveness of screening for chlamydial infection in pregnant women who are at increased risk, they did find the following:
1. Screening identifies infection in asymptomatic pregnant women.
2. There is a relatively high prevalence of infection among pregnant women who are at increased risk.
3. There is fair evidence of improved pregnancy and birth outcomes for women who are treated for chlamydial infection.

Thus, the USPSTF concluded that the benefits of screening pregnant women who are at increased risk are substantial.

The USPSTF identified no studies documenting the benefits of screening women, including pregnant women, who are not at increased risk for chlamydial infection. While recognizing the potential benefit to women identified through screening, the USPSTF concluded the overall benefit of screening would be small, given the low prevalence of infection among women not at increased risk.

Other guideline-setting bodies generally align with the USPSTF.

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

Comment [k4]: 1c. The measure focus is:
• an outcome (e.g., mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;
OR
• if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
  • intermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
  • Process - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and
  • if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
  • Structure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
  • Patient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
• Access - evidence that an association exists between access to a health service and the outcomes of, or experience with, care. [...]

Comment [k5]: 4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status – patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.

Comment [k6]: 3 The strength of the body of evidence for the specific measure focus should be systematically assessed and rated (e.g., USPSTF grading system http://www.ahrq.gov/clinic/upsdft97/methods/s/benefit.htm). If the USPSTF grading system was not used, the grading system is explained including how it relates to the USPSTF grades or why it does not. However, evidence is not limited to quantitative studies and the best type of evidence depends upon the question being studied (e.g., randomized controlled trials appropriate for studying drug efficacy are not well suited for complex system changes). When qualitative studies are used, appropriate qualitative research criteria are used to judge the strength of the evidence.
1c.6 Method for rating evidence: USPSTF based

1c.7 Summary of Controversy/Contradictory Evidence: Other guideline-setting bodies generally align with the USPSTF, though a few recommend screening for slightly different age ranges. For example, ICSI recommends screening up to age 25 years instead of 24 years.


Center for Disease Control and Prevention (CDC). Sexually Transmitted Diseases Treatment Guidelines, 2006. MMWR August 4, 2006 / 55(RR11);1-94

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

The U.S. Preventive Services Task Force (2007)
The USPSTF recommends screening for chlamydial infection for all sexually active non-pregnant young women aged 24 and younger and for older non-pregnant women who are at increased risk.
Grade: A Recommendation.

The USPSTF recommends screening for chlamydial infection for all pregnant women aged 24 and younger and for older pregnant women who are at increased risk.
Grade: B Recommendation.

The USPSTF recommends against routinely providing screening for chlamydial infection for women aged 25 and older, whether or not they are pregnant, if they are not at increased risk.
Grade: C Recommendation.

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for chlamydial infection for men.
Grade: I Statement.

Institute for Clinical System Improvement (2009)
ICSI recommends routinely screening sexually active women age 25 years and younger.
Grade: Level 1 Evidence (Providers Must Assess)

Centers for Disease Control and Prevention (2010)
Chlamydia Screening Recommendations
During routine health care contacts, assess for infection with chlamydia women who:
- are sexually active and 24 years of age or younger,
- have new or multiple sexual partners, regardless of age,
- have a history of sexually transmitted disease within the last year, regardless of age,
- have partners who have had multiple partners within the last year, regardless of age.

Test all pregnant women at least once, regardless of age, including those who plan to terminate the pregnancy.

Re-screen all women who tested positive, especially adolescents, 3-4 months after treatment due to the high incidence of re-infection.

Note: The above recommendations are general guidelines based on national statistics. The prevalence of chlamydia in the immediate geographical area may warrant more or less aggressive screening activities and resources.

American Congress of Obstetricians and Gynecologists (2006)
ACOG recommends routinely screening all sexually active women age 25 years and younger as well as asymptomatic women at high risk for infection.
Grade: Expert Consensus
AAP recommends at least annual screening of sexually active adolescent females.
Grade: Expert Consensus

American Academy of Family Practitioners (2007)
Aligns with USPSTF 2007

Bright Futures (2008)
Bright Futures states that providers should screen sexually active youth age 11-21 years.
Grade: Expert Consensus

1c.10 Clinical Practice Guideline Citation: American Academy of Family Physicians (AAFP). Summary of recommendations for clinical preventive services. Revision 6.4. Leawood (KS): American Academy of Family Physicians (AAFP); 2007 Aug.


1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom):
Good

1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe rating and how it relates to USPSTF):
USPSTF based

1c.14 Rationale for using this guideline over others:
There is broad guideline support for this measure.

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report?

Steering Committee: Was the threshold criterion, Importance to Measure and Report, met?
Rationale:

1

2. 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. (evaluation criteria)
### 2a. MEASURE SPECIFICATIONS

**S.1** Do you have a web page where current detailed measure specifications can be obtained?
**S.2** If yes, provide web page URL:

<table>
<thead>
<tr>
<th>2a. Precisely Specified</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2a.1 Numerator Statement</strong> <em>(Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome)</em>:</td>
</tr>
<tr>
<td>Children who had documentation in the medical record of chlamydia screening By Age 18 Years</td>
</tr>
<tr>
<td><strong>2a.2 Numerator Time Window</strong> <em>(The time period in which cases are eligible for inclusion in the numerator)</em>:</td>
</tr>
<tr>
<td>2 years</td>
</tr>
<tr>
<td><strong>2a.3 Numerator Details</strong> <em>(All information required to collect/calculate the numerator, including all codes, logic, and definitions)</em>:</td>
</tr>
<tr>
<td>&quot;Documentation must include a note indicating the date and the following. • A chlamydia test result • For abnormal or indeterminate results, evidence of confirmatory testing, referral or treatment&quot;</td>
</tr>
<tr>
<td><strong>2a.4 Denominator Statement</strong> <em>(Brief, text description of the denominator - target population being measured)</em>:</td>
</tr>
<tr>
<td>&quot;Children who turned 18 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child’s birthday by at least 12 months. Additional denominator criterion: Only include women with evidence of sexual activity. Evidence of sexual activity can include the following: • Documentation of sexual activity • Prescription for contraception • Treatment or Screening for sexually transmitted disease • Pregnancy • Pelvic examination</td>
</tr>
<tr>
<td><strong>2a.5 Target population gender</strong>: Female</td>
</tr>
<tr>
<td><strong>2a.6 Target population age range</strong>: 13 years-18 years</td>
</tr>
<tr>
<td><strong>2a.7 Denominator Time Window</strong> <em>(The time period in which cases are eligible for inclusion in the denominator)</em>:</td>
</tr>
<tr>
<td>1 year</td>
</tr>
<tr>
<td><strong>2a.8 Denominator Details</strong> <em>(All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions)</em>:</td>
</tr>
<tr>
<td>See above; chart review only</td>
</tr>
<tr>
<td><strong>2a.9 Denominator Exclusions</strong> <em>(Brief text description of exclusions from the target population)</em>: Exclude males</td>
</tr>
<tr>
<td><strong>2a.10 Denominator Exclusion Details</strong> <em>(All information required to collect exclusions to the denominator, including all codes, logic, and definitions)</em>:</td>
</tr>
<tr>
<td>See above; chart review only</td>
</tr>
<tr>
<td><strong>2a.11 Stratification Details/Variables</strong> <em>(All information required to stratify the measure including the stratification variables, all codes, logic, and definitions)</em>:</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td><strong>2a.12-13 Risk Adjustment Type</strong>: No risk adjustment necessary</td>
</tr>
<tr>
<td><strong>2a.14 Risk Adjustment Methodology/Variables</strong> <em>(List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method)</em>:</td>
</tr>
<tr>
<td>NA</td>
</tr>
</tbody>
</table>

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**Comment [KP8]**: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF’s Health Information Technology Expert Panel (HITEP).

**Comment [k9]**: 11 Risk factors that influence outcomes should not be specified as exclusions. 12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.
2a.15-17 Detailed risk model available Web page URL or attachment:

2a.18-19 Type of Score: Rate/proportion
2a.20 Interpretation of Score: Better quality = Higher score
2a.21 Calculation Algorithm (Describe the calculation of the measure as a flowchart or series of steps):
   Step 1: Determine the denominator
   Children who turned the requisite age in the measurement year, AND
   Who had a visit within the past 12 months of the child’s birthday
   Step 2: Determine the numerator
   Children who had documentation in the medical record of the screening or service during the measurement
   year or the year previous to the measurement year.

2a.22 Describe the method for discriminating performance (e.g., significance testing):
   Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is
   >400, we would use an analysis of variance

2a.23 Sampling (Survey) Methodology 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):
   For this physician-level measure, we anticipate the entire population will be used in the denominator. If a
   sample is used, a random sample is ideal. NCQA’s work has indicated that a sample size of 30-50 patients
   would be necessary for a typical practice size of 2000 patients.

2a.24 Data Source (Check the source(s) for which the measure is specified and tested)
   Paper medical record/flow-sheet, Electronic clinical data, Electronic Health/Medical Record

2a.25 Data source/data collection instrument (identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):
   Medical Record

2a.26-28 Data source/data collection instrument reference web page URL or attachment:

2a.29-31 Data dictionary/code table web page URL or attachment:

2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested)

2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested)
   Ambulatory Care: Office, Ambulatory Care: Clinic, Ambulatory Care: Hospital Outpatient

2a.38-41 Clinical Services (Healthcare services being measured, check all that apply)
   Clinicians: Nurses, Clinicians: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO)

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2b. Reliability testing

2b.1 Data/sample (description of data/sample and size): NCQA received data from 19 physician practices
   who submitted 10 records per measure (total 190 records per measure)

2b.2 Analytic Method (type of reliability & rationale, method for testing):
   We did not conduct reliability testing for this measure.

2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test
   conducted):
   We did not conduct reliability testing for this measure.

2c. Validity testing

2c.1 Data/sample (description of data/sample and size): NCQA received data from 19 physician practices

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Comment [KP10]: 2b. Reliability testing demonstrates the measure results are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period.

Comment [k12]: 8 Examples of reliability testing include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing may address the data items or final measure score.

Comment [KP12]: 2c. Validity testing demonstrates that the measure reflects the quality of care provided, adequately distinguishing good and poor quality. If face validity is the only validity addressed, it is systematically assessed.
who submitted 10 records per measure (total 190 records per measure)

2c.2 Analytic Method (type of validity & rationale, method for testing): NCQA tested the measure for face validity using a panel of stakeholders with specific expertise in measurement and child health care. This panel included representatives from key stakeholder groups, including pediatricians, family physicians, health plans, state Medicaid agencies and researchers. Experts reviewed the results of the field test and assessed whether the results were consistent with expectations, whether the measure represented quality care, and whether we were measuring the most important aspect of care in this area. This measure was deemed valid by the expert panel. In addition, this measure does not utilize administrative data sources; data recorded in the chart is considered the gold standard.

2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted):
Elig Population: 52
Screening documented: 61.5
Results documented: 57.7
Results and Proper Follow Up Documented 48.0

2d. Exclusions Justified
2d.1 Summary of Evidence supporting exclusion(s): NA
2d.2 Citations for Evidence: NA
2d.3 Data/sample (description of data/sample and size): NA
2d.4 Analytic Method (type analysis & rationale): NA
2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses): NA

2e. Risk Adjustment for Outcomes/ Resource Use Measures
2e.1 Data/sample (description of data/sample and size): NA
2e.2 Analytic Method (type of risk adjustment, analysis, & rationale): NA
2e.3 Testing Results (risk model performance metrics): NA
2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: The measure assesses prevention and wellness in the general population; risk adjustment is not indicated.

2f. Identification of Meaningful Differences in Performance
2f.1 Data/sample from Testing or Current Use (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)
2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale); Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance
2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):
Upon reviewing the measure, the expert panel suggested adding an exclusion for children already diagnosed or in treatment. Note, this exclusion is not evidence dependent but rather a specification issue.

<table>
<thead>
<tr>
<th>2g. Comparability of Multiple Data Sources/Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>2g.1 Data/sample (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)</td>
</tr>
<tr>
<td>2g.2 Analytic Method (type of analysis &amp; rationale): This measure is chart review only; no other sources were identified by the expert panel; this measure does not utilize administrative data</td>
</tr>
<tr>
<td>2g.3 Testing Results (e.g., correlation statistics, comparison of rankings): NA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2h. Disparities in Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): The measure is not stratified to detect disparities.</td>
</tr>
<tr>
<td>2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans: NA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Scientific Acceptability of Measure Properties?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steering Committee: Overall, to what extent was the criterion, Scientific Acceptability of Measure Properties, met?</td>
</tr>
<tr>
<td>Rationale:</td>
</tr>
</tbody>
</table>

### 3. USABILITY

<table>
<thead>
<tr>
<th>3a. Meaningful, Understandable, and Useful Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>3a.1 Current Use: Not in use but testing completed</td>
</tr>
<tr>
<td>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). If not publicly reported, state the plans to achieve public reporting within 3 years): This measure is not currently publicly reported. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate.</td>
</tr>
<tr>
<td>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). If not used for QI, state the plans to achieve use for QI within 3 years): This measure is not currently used in QI. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate. NCQA anticipates that after we release these measures, they will become widely used, as all our measures do.</td>
</tr>
<tr>
<td>Testing of Interpretabilit (Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)</td>
</tr>
<tr>
<td>3a.4 Data/sample (description of data/sample and size): NA</td>
</tr>
<tr>
<td>3a.5 Methods (e.g., focus group, survey, QI project): NCQA vetted the measures with its expert panel. In addition, throughout the development process, NCQA</td>
</tr>
</tbody>
</table>

Comment [KP20]: 2g. If multiple data sources/methods are allowed, there is demonstration they produce comparable results.

Comment [KP21]: 2h. If disparities in care have been identified, measure specifications, scoring, and analysis allow for identification of disparities through stratification of results (e.g., by race, ethnicity, socioeconomic status, gender); OR rationale/data justifies why stratification is not necessary or not feasible.

Comment [KP22]: 3a. Demonstration that information produced by the measure is meaningful, understandable, and useful to the intended audience(s) for both public reporting (e.g., focus group, cognitive testing) and informing quality improvement (e.g., quality improvement initiatives). An important outcome that may not have an identified improvement strategy still can be useful for informing quality improvement by identifying the need for and stimulating new approaches to improvement.
vatted the measure concepts and specifications with other stakeholder groups, including the National Association of State Medicaid Directors, NCQA’s Health Plan Advisory Council, NCQA’s Committee on Performance Measurement, and the American Academy of Pediatrician’s Quality Improvement Innovation Network.

After field testing, NCQA also conducted a debrief call with field test participants. In the form of a group interview, NCQA systematically sought feedback on whether the measures were understandable, feasible, important, and had face validity.

3a.6 Results (qualitative and/or quantitative results and conclusions):
NCQA received feedback that the measure is understandable, feasible, important and valid.

3b/3c. Relation to other NQF-endorsed measures
3b.1 NQF # and Title of similar or related measures:

(for NQF staff use) Notes on similar/related endorsed or submitted measures:

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 or different topic but same target population):
3b.2 Are the measure specifications harmonized? If not, why?

3c. Distinctive or Additive Value
3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:

5.1 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: NCQA’s Chlamydia Screening HEDIS measure is currently NQF endorsed; however, this measure is for health plan level of measurement. In addition, the HEDIS measure does not currently assess follow-up of abnormal results.

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?

Steering Committee: Overall, to what extent was the criterion, Usability, met?
Rationale:

4. FEASIBILITY
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)

4a. Data Generated as a Byproduct of Care Processes
4a.1-2 How are the data elements that are needed to compute measure scores generated?
Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition), Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)

4b. Electronic Sources
4b. Are all the data elements available electronically? *(elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims)*

<table>
<thead>
<tr>
<th></th>
<th>P</th>
<th>M</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>4b.1</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4b.2</td>
<td>NCQA plans to eventually adapt this measure for use in electronic health records.</td>
<td></td>
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</tr>
</tbody>
</table>

4c. Exclusions

<table>
<thead>
<tr>
<th></th>
<th>C</th>
<th>P</th>
<th>M</th>
<th>N</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>4c.1</td>
<td>Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4c.2</td>
<td>No</td>
<td></td>
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</tbody>
</table>

4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences

<table>
<thead>
<tr>
<th></th>
<th>C</th>
<th>P</th>
<th>M</th>
<th>N</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>4d.1</td>
<td>Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>During the measure development process the Child Health MAP and measure development team worked with NCQA’s certified auditors and audit department to ensure that the measure specifications were clear and auditable. The denominator, numerator and optional exclusions are concisely specified and align with our audit standards.</td>
<td></td>
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</table>

4e. Data Collection Strategy/Implementation

<table>
<thead>
<tr>
<th></th>
<th>C</th>
<th>P</th>
<th>M</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>4e.1</td>
<td>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:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Based on field test results, we have specified the measure to assess whether screening was documented and whether use of a standardized tool was documented. Our field test results showed that these data elements are available in the medical record. In addition, our field test participants noted that many were able to program these requirements into their electronic health record systems, and several implemented point-of-service physician reminders for this measure.</td>
<td></td>
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</tr>
<tr>
<td>4e.2</td>
<td>Costs to implement the measure <em>(costs of data collection, fees associated with proprietary measures)</em>:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collecting measures from medical charts is time-consuming and can be burdensome. Adapting this measure in electronic health records may relieve some of this burden.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4e.3</td>
<td>Evidence for costs:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Based on field test participant feedback and other stakeholder input.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4e.4</td>
<td>Business case documentation:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4f. Evidence for costs: Based on field test participant feedback and other stakeholder input.

4g. Business case documentation:

**TAP/Workgroup:** What are the strengths and weaknesses in relation to the subcriteria for **Feasibility**?

4. **Rationale:**

**RECOMMENDATION**

(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.

Steering Committee: Do you recommend for endorsement?  Y
<table>
<thead>
<tr>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Co.1 Measure Steward (Intellectual Property Owner)</strong></td>
</tr>
<tr>
<td><strong>Co.1 Organization</strong> National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005</td>
</tr>
<tr>
<td><strong>Co.2 Point of Contact</strong> Sepheen, Byron, MHS, <a href="mailto:byron@ncqa.org">byron@ncqa.org</a>, 202-955-3573-</td>
</tr>
<tr>
<td><strong>Measures Developer if different from Measure Steward</strong></td>
</tr>
<tr>
<td><strong>Co.3 Organization</strong> National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005</td>
</tr>
<tr>
<td><strong>Co.4 Point of Contact</strong> Sepheen, Byron, MHS, <a href="mailto:byron@ncqa.org">byron@ncqa.org</a>, 202-955-3573-</td>
</tr>
<tr>
<td><strong>Co.5 Submitter if different from Measure Steward POC</strong> Sepheen, Byron, MHS, <a href="mailto:byron@ncqa.org">byron@ncqa.org</a>, 202-955-3573-, National Committee for Quality Assurance</td>
</tr>
<tr>
<td><strong>Co.6 Additional organizations that sponsored/participated in measure development</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Workgroup/Expert Panel involved in measure development</strong></td>
</tr>
<tr>
<td>Ad.1 Provide a list of sponsoring organizations and workgroup/panel members’ names and organizations. Describe the members’ role in measure development. <strong>Child Health Measurement Advisory Panel:</strong> Jeanne Alicandro Barbara Dailey Denise Dougherty, PhD Ted Ganiats, MD Foster Gesten, MD Nikki Highsmith, MPA Charlie Homer, MD, MPH Jeff Kamil, MD Elizabeth Siteman Mary McIntyre, MD, MPH Virginia Moyer, MD, MPH, FAAP Lee Partridge Xavier Sevilla, MD, FAAP Michael Siegal Jessie Sullivan</td>
</tr>
<tr>
<td>Ad.2 If adapted, provide name of original measure: NA</td>
</tr>
<tr>
<td>Ad.3-5 If adapted, provide original specifications URL or attachment</td>
</tr>
<tr>
<td><strong>Measure Developer/Steward Updates and Ongoing Maintenance</strong></td>
</tr>
<tr>
<td>Ad.6 Year the measure was first released:</td>
</tr>
<tr>
<td>Ad.7 Month and Year of most recent revision:</td>
</tr>
<tr>
<td>Ad.8 What is your frequency for review/update of this measure?</td>
</tr>
<tr>
<td>Ad.9 When is the next scheduled review/update for this measure?</td>
</tr>
<tr>
<td>Ad.10 Copyright statement/disclaimers: © 2009 by the National Committee for Quality Assurance 1100 13th Street, NW, Suite 1000 Washington, DC 20005</td>
</tr>
<tr>
<td>Ad.11 -13 Additional Information web page URL or attachment:</td>
</tr>
<tr>
<td>Date of Submission (MM/DD/YY):</td>
</tr>
</tbody>
</table>

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
1c. The measure focus is:
- an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;
- OR
- if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
  - Intermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
  - Process - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
  - Structure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
  - Patient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/the public.
  - Access - evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
  - Efficiency - demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

2d. Clinically necessary measure exclusions are identified and must be:
- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion; AND
- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus; AND
- precisely defined and specified:
  - if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
  - if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

2e. For outcome measures and other measures (e.g., resource use) when indicated:
- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care; OR rationale/data support no risk adjustment.

13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.

14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of $25 in cost for an episode of care (e.g., $5,000 v. $5,025) is practically meaningful. Measures with overall poor performance may not
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 subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. 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 subcriterion 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 subcriteria (yellow highlighted areas).

**Steering Committee:** Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, 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 subcriteria as indicated)

---

### MEASURE DESCRIPTIVE INFORMATION

**De.1 Measure Title:** Depression Screening

**De.2 Brief description of measure:** We are combining two measures into one form because measure features and evidence are the same or similar.

- Measure 1: Depression Screening By 13 years of age
- Measure 2: Depression Screening By 18 years of age

**De.3 National Priority Partners Priority Area:** Population health

**De.5 IOM Quality Domain:** Effectiveness, Timeliness

**De.6 Consumer Care Need:** Staying healthy

---

### CONDITIONS FOR CONSIDERATION BY NQF

<table>
<thead>
<tr>
<th>A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. 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.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>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)?</strong></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable</th>
</tr>
</thead>
</table>

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**for NQF staff use** NQF Review #: 1394  
NQF Project: Child Health Quality Measures 2010
### A.4 Measure Steward Agreement attached:

<table>
<thead>
<tr>
<th>B</th>
<th>Y</th>
<th>N</th>
</tr>
</thead>
</table>

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**

<table>
<thead>
<tr>
<th>C</th>
<th>Y</th>
<th>N</th>
</tr>
</thead>
</table>

C. The intended use of the measure includes **both** public reporting and quality improvement.  

**Purpose:** Public reporting, Internal quality improvement  
Accountability

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 12 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**

**(for NQF staff use)** Have all conditions for consideration been met?  
Staff Notes to Steward (if submission returned):

| Met | Y | N |

Staff Notes to Reviewers (issues or questions regarding any criteria):  
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)

<table>
<thead>
<tr>
<th>1a</th>
<th>High Impact</th>
<th>Eval Rating</th>
</tr>
</thead>
</table>

**Comment [KP1]:** 1a. The measure focus addresses:  
- a specific national health goal/priority identified by NQF’s National Priorities Partners; OR  
- a demonstrated high impact aspect of healthcare (e.g., affects large numbers, leading cause of morbidity/mortality, high resource use [current and/or future], severity of illness, and patient/societal consequences of poor quality).

1a.1 Demonstrated High Impact Aspect of Healthcare: High resource use, Severity of illness, Patient/societal consequences of poor quality  
1a.2

1a.3 Summary of Evidence of High Impact: Major depressive disorder (MDD) affects more than 7 percent of adolescents in the U.S. In 2006, around 2.3 million 12-17 year-old adolescents had a major depressive episode in their life. Depression is much less common in children under the age of 11 (Williams, 2009); MDD occurs in about 2.8 percent of children younger than 13 years old (USPSTF, 2009). Depression can disrupt daily life at home, at school or in the community and can lead to drug use and other risky behavior, even suicide (Taylor, 1996; Foley, 1996; Friedman, 1996; NRCIM, 2009). Most adolescents that committed suicide, which is the third leading cause of death in 15 to 24 year olds and the sixth leading for children 5 to 14 years, had a history of depression or long-term MDD (NRCIM, 2009; Williams, 2009). The adolescent-onset depressed have upwards of a five-fold increase in attempting suicide risk compared to non-depressed adolescents (Williams SB,

| 1a | C | P | M | N |

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
Children with MDD have higher medical expenditures, including general health care and mental health care, than children without (USPSTF, 2009). Outpatient care is the most common treatment; it accounts for nearly 60 percent of all mental health expenditures, including major depressive disorder, for young people, a large portion of which is from school-based programs (MHCY, 2001). Inpatient care accounts for about 33 percent of all mental health expenditures, and the remaining seven percent is for medications and other mental health services related to mental health (MHCY, 2001).


1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: This measure highlights the need for screening of major depressive disorder in adolescents. Early intervention in adolescents diagnosed with depression can lead to needed treatment. Once depression is diagnosed, around 95 percent of physicians report further assessment of specific symptoms and contributing factors. Another study found that 52 percent of the times that depression was reported in adolescent primary care visits, antidepressants were prescribed; 68 percent of cases led to psychotherapy or counseling (Williams SB, 2009).

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

Despite the prevalence of mental health concerns, most adolescents are undiagnosed and untreated (USPSTF, 2009). Documentation from community health centers shows screening for only 3 percent of patients. HMO providers screen around 40 percent of their patients for depression. Those physicians that do screen for depression report not systematically using a standardized tool or the DSM-IV criteria (Williams, 2009).

1b.3 Citations for data on performance gap:

Comment [KP2]: 1b. Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating considerable variation, or overall poor performance, in the quality of care across providers and/or population groups (disparities in care).

Comment [k3]: 1 Examples of data on opportunity for improvement include, but are not limited to: prior studies, epidemiologic data, measure data from pilot testing or implementation. If data are not available, the measure focus is systematically assessed (e.g., expert panel rating) and judged to be a quality problem.
The USPSTF concluded that co-morbid mental health problems, chronic conditions, parental depression, along with major life-changing events are risk factors of depression that can be assessed accurately and reliably. Similarly, external risk factors such as poverty, deprivation, abuse and neglect, unsatisfactory relationships, or exposure to traumatic events may also play a role in depression (Surgeon General report).

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

1c.6 Method for rating evidence: Expert consensus based on evidence review

1c.7 Summary of Controversy/Contradictory Evidence: None

1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number): U.S. Preventive Services Task Force (2009)
The USPSTF recommends that adolescents aged 12-18 years old be screened for major depressive disorder when there are systems in place to ensure accurate diagnosis.
The USPSTF recommends using the Patient Health Questionnaire for Adolescents (PHQ-A) or the Beck Depression Inventory-Primary Care Version (BDI-PC). (B Recommendation)

American Academy of Family Physicians (AAFP) (2009)
The AAFP endorses the USPSTF recommendation.

The Michigan Quality Improvement Consortium recommends that health care professionals screen adolescents age 13-18 years. Parent/Child education and counseling should include: depression, suicide threats, alcohol/drug abuse, anxiety, stress reduction, coping skills. (Expert Consensus)

Bright Futures (2008)
Bright Futures states that health care professionals should screen adolescents 15 to 21 years of age.
Discussion topics should include coping, mood regulation and mental health sexuality. (Expert Consensus)

1c.10 Clinical Practice Guideline Citation: American Academy of Family Physicians (AAFP). Summary of recommendations for clinical preventive services. Revision 6.4. Leawood (KS): American Academy of Family Physicians (AAFP); 2008
  * The AAFP “clinical considerations” link goes to USPSTF 2009 updated recommendation


1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom):
USPSTF B Recommendation

1c.13 Method for rating strength of recommendation (if different from USPSTF system, also describe rating and how it relates to USPSTF):
USPSTF Based

1c.14 Rationale for using this guideline over others:
In general, guidelines from major clinical bodies are in alignment with the USPSTF Recommendation.

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report?

Steering Committee: Was the threshold criterion, Importance to Measure and Report, met?
Rationale:
2. 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. (evaluation criteria)

<table>
<thead>
<tr>
<th>Eval Rating</th>
<th>2a. MEASURE SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S.1 Do you have a web page where current detailed measure specifications can be obtained?</td>
</tr>
<tr>
<td></td>
<td>S.2 If yes, provide web page URL:</td>
</tr>
</tbody>
</table>

2a. Precisely Specified

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):

*Numerator 1: Children who had documentation in the medical record of depression screening by age 13 years
Numerator 2: Children who had documentation in the medical record of depression screening by age 18 years*

2a.2 Numerator Time Window (The time period in which cases are eligible for inclusion in the numerator):

2 years

2a.3 Numerator Details (All information required to collect/calculate the numerator, including all codes, logic, and definitions):

*Documentation must include a note indicating the date and that depression screening was conducted. Documentation that the child is already in treatment for depression may also count toward this measure.*

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

*Denominator 1. Children who turned 13 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child’s birthday by at least 12 months.
Denominator 2: Children who turned 18 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child’s birthday by at least 12 months.*

2a.5 Target population gender: Female, Male

2a.6 Target population age range: Measure 1: 6 years-13 years, Measure 2: 13 years-18 years

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

1 year

2a.8 Denominator Details (All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions):

See above; chart review only

2a.9 Denominator Exclusions (Brief text description of exclusions from the target population): None

2a.10 Denominator Exclusion Details (All information required to collect exclusions to the denominator, including all codes, logic, and definitions): NA

2a.11 Stratification Details/Variables (All information required to stratify the measure including the stratification variables, all codes, logic, and definitions):

None

2a.12-13 Risk Adjustment Type: No risk adjustment necessary

Comment [KP8]: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF’s Health Information Technology Expert Panel (HITEP).

Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions.
12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.
2a.14 Risk Adjustment Methodology/Variables (List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method):
NA

2a.15-17 Detailed risk model available Web page URL or attachment:

2a.18-19 Type of Score: Rate/proportion
2a.20 Interpretation of Score: Better quality = Higher score
2a.21 Calculation Algorithm (Describe the calculation of the measure as a flowchart or series of steps):

Step 1: Determine the denominator
Children who turned the requisite age in the measurement year, AND
Who had a visit within the past 12 months of the child’s birthday
Step 2: Determine the numerator
Children who had documentation in the medical record of the screening or service during the measurement year or the year previous to the measurement year.

2a.22 Describe the method for discriminating performance (e.g., significance testing):
Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance.

2a.23 Sampling (Survey) Methodology 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):
For this physician-level measure, we anticipate the entire population will be used in the denominator. If a sample is used, a random sample is ideal. NCQA’s work has indicated that a sample size of 30-50 patients would be necessary for a typical practice size of 2000 patients.

2a.24 Data Source (Check the source(s) for which the measure is specified and tested)
Paper medical record/flow-sheet, Electronic clinical data, Electronic Health/Medical Record

2a.25 Data source/data collection instrument (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):
Medical Record

2a.26-28 Data source/data collection instrument reference web page URL or attachment:

2a.29-31 Data dictionary/code table web page URL or attachment:

2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested)

2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested)
Ambulatory Care: Office, Ambulatory Care: Clinic, Ambulatory Care: Hospital Outpatient, Behavioral health/psychiatric unit

2a.38-41 Clinical Services (Healthcare services being measured, check all that apply)
Behavioral Health: Mental Health, Clinicians: Nurses, Clinicians: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO), Clinicians: Psychologist/LCSW

<table>
<thead>
<tr>
<th>TESTNG/ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2b. Reliability testing</td>
</tr>
<tr>
<td>2b.1 Data/sample (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)</td>
</tr>
<tr>
<td>2b.2 Analytic Method (type of reliability &amp; rationale, method for testing): We did not conduct reliability testing for this measure.</td>
</tr>
<tr>
<td>2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted):</td>
</tr>
</tbody>
</table>

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
We did not conduct reliability testing for this measure.

2c. Validity testing

2c.1 Data/sample (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)

2c.2 Analytic Method (type of validity & rationale, method for testing): NCQA tested the measure for face validity using a panel of stakeholders with specific expertise in measurement and child health care. This panel included representatives from key stakeholder groups, including pediatricians, family physicians, health plans, state Medicaid agencies and researchers. Experts reviewed the results of the field test and assessed whether the results were consistent with expectations, whether the measure represented quality care, and whether we were measuring the most important aspect of care in this area. This measure was deemed valid by the expert panel. In addition, this measure does not utilize administrative data sources; data recorded in the chart is considered the gold standard.

2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted): NA

2d. Exclusions Justified

2d.1 Summary of Evidence supporting exclusion(s): None

2d.2 Citations for Evidence: NA

2d.3 Data/sample (description of data/sample and size): NA

2d.4 Analytic Method (type analysis & rationale): NA

2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses): NA

2e. Risk Adjustment for Outcomes/ Resource Use Measures

2e.1 Data/sample (description of data/sample and size): NA

2e.2 Analytic Method (type of risk adjustment, analysis, & rationale): NA

2e.3 Testing Results (risk model performance metrics): NA

2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: The measure assesses prevention and wellness in a general population; risk adjustment is not indicated.

2f. Identification of Meaningful Differences in Performance

2f.1 Data/sample from Testing or Current Use (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)

2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale): Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance

2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by...
NQF #1394

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable

| Measure 1: Depression Screening by Age 13 Years | Elig Population: 179 | Screening Documented: 52.0 |
| Measure 2: Depression Screening by Age 18 Years | Elig Population: 163 | Screening Documented: 49.7 |

2g. Comparability of Multiple Data Sources/Methods

2g.1 Data/sample (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)

2g.2 Analytic Method (type of analysis & rationale): This measure is chart review only; no other sources were identified by the expert panel; this measure does not utilize administrative data

2g.3 Testing Results (e.g., correlation statistics, comparison of rankings): NA

2h. Disparities in Care

2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): The measure is not stratified to detect disparities.

2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:

NA

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Scientific Acceptability of Measure Properties?

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)

3a. Meaningful, Understandable, and Useful Information

3a.1 Current Use: Not in use but testing completed

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). If not publicly reported, state the plans to achieve public reporting within 3 years):

This measure is not currently publicly reported. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate.

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). If not used for QI, state the plans to achieve use for QI within 3 years):

This measure is not currently used in QI. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate. NCQA anticipates that after we release these measures, they will become widely used, as all our measures do.
Testing of Interpretability  
(Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)

3a.4 Data/sample (description of data/sample and size):  NA

3a.5 Methods (e.g., focus group, survey, QI project):
NCQA vetted the measures with its expert panel. In addition, throughout the development process, NCQA vetted the measure concepts and specifications with other stakeholder groups, including the National Association of State Medicaid Directors, NCQA’s Health Plan Advisory Council, NCQA’s Committee on Performance Measurement, and the American Academy of Pediatrician’s Quality Improvement Innovation Network.

After field testing, NCQA also conducted a debrief call with field test participants. In the form of a group interview, NCQA systematically sought feedback on whether the measures were understandable, feasible, important, and had face validity.

3a.6 Results (qualitative and/or quantitative results and conclusions):
NCQA received feedback that the measure is understandable, feasible, important and valid.

3b/3c. Relation to other NQF-endorsed measures

3b.1 NQF # and Title of similar or related measures:

(for NQF staff use) Notes on similar/related endorsed or submitted measures:

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 or different topic but same target population):
3b.2 Are the measure specifications harmonized? If not, why?

3c. Distinctive or Additive Value
3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:
5.1 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:

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?

Steering Committee: Overall, to what extent was the criterion, Usability, met?
Rationale:

4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)

4a. Data Generated as a Byproduct of Care Processes
4a.1-2 How are the data elements that are needed to compute measure scores generated?
Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition). Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
### 4b. Electronic Sources

Are all the data elements available electronically? *(elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims)*
- **No**

If not, specify the near-term path to achieve electronic capture by most providers. NCQA plans to eventually adopt this measure in electronic health records.

### 4c. Exclusions

Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?
- **No**

### 4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences

Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results.

During the measure development process the Child Health MAP and measure development team worked with NCQA’s certified auditors and audit department to ensure that the measure specifications were clear and auditable. The denominator, numerator and optional exclusions are concisely specified and align with our audit standards.

### 4e. Data Collection Strategy/Implementation

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:

Based on field test results, we have specified the measure to assess whether screening was documented and whether use of a standardized tool was documented. Our field test results showed that these data elements are available in the medical record. In addition, our field test participants noted that many were able to program these requirements into their electronic health record systems, and several implemented point-of-service physician reminders for this measure.

**Costs to implement the measure** *(costs of data collection, fees associated with proprietary measures)*:
Collecting measures from medical charts is time-consuming and can be burdensome. Adapting this measure in electronic health records may relieve some of this burden.

**Evidence for costs**:
Based on field test participant feedback and other stakeholder input

**Business case documentation**:

**TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Feasibility?**

Steering Committee: Overall, to what extent was the criterion, Feasibility, met?

**Rationale**:

### RECOMMENDATION

(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.

**Time-limited**
<table>
<thead>
<tr>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Co.1 Measure Steward (Intellectual Property Owner)</strong></td>
</tr>
<tr>
<td><strong>Organization</strong></td>
</tr>
<tr>
<td>National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005</td>
</tr>
</tbody>
</table>

| **Co.2 Point of Contact** |
| Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573- |

| **Measure Developer if different from Measure Steward** |
| **Organization**  |
| National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005 |

| **Co.4 Point of Contact** |
| Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573- |

| **Co.5 Submitter if different from Measure Steward POC** |
| Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-, National Committee for Quality Assurance |

| **Co.6 Additional organizations that sponsored/participated in measure development** |

### ADDITIONAL INFORMATION

- **Ad.1** Provide a list of sponsoring organizations and workgroup/panel members’ names and organizations. Describe the members’ role in measure development.
  - Child Health Measurement Advisory Panel:
    - Jeanne Alicandro
    - Barbara Dailey
    - Denise Dougherty, PhD
    - Ted Ganiats, MD
    - Foster Gesten, MD
    - Nikki Highsmith, MPA
    - Charlie Homer, MD, MPH
    - Jeff Kamil, MD
    - Elizabeth Siteman
    - Mary McIntyre, MD, MPH
    - Virginia Moyer, MD, MPH, FAAP
    - Lee Partridge
    - Xavier Sevilla, MD, FAAP
    - Michael Siegal
    - Jessie Sullivan

- **Ad.2** If adapted, provide name of original measure: NA

- **Ad.6** Year the measure was first released:

- **Ad.7** Month and Year of most recent revision:

- **Ad.8** What is your frequency for review/update of this measure?

- **Ad.9** When is the next scheduled review/update for this measure?

- **Ad.10** Copyright statement/disclaimers: © 2009 by the National Committee for Quality Assurance 1100 13th Street, NW, Suite 1000
<table>
<thead>
<tr>
<th>Washington, DC 20005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad.11 -13 Additional Information web page URL or attachment:</td>
</tr>
<tr>
<td>Date of Submission (MM/DD/YY): 08/30/2010</td>
</tr>
</tbody>
</table>
1c. The measure focus is:

- an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed; OR

- if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
  - Intermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
  - Process - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
  - Structure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
  - Patient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
  - Access - evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
  - Efficiency - demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

2d. Clinically necessary measure exclusions are identified and must be:

- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion; AND

- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus; AND

- precisely defined and specified:
  - if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
  - if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

2e. For outcome measures and other measures (e.g., resource use) when indicated:

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care; OR rationale/data support no risk adjustment.

13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.

14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of $25 in cost for an episode of care (e.g., $5,000 v. $5,025) is practically meaningful. Measures with overall poor performance may not
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 subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. 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 subcriterion 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 subcriteria (yellow highlighted areas).

**Steering Committee:** Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, 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 subcriteria as indicated)

### MEASURE DESCRIPTIVE INFORMATION

<table>
<thead>
<tr>
<th>De.1 Measure Title:</th>
<th>Blood Pressure Screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>De.2 Brief description of measure:</td>
<td>The percentage of children who had a blood pressure screening and proper follow-up performed. We are combining three measures into one form because measure features and evidence are the same or similar. Measure 1. Blood Pressure Screening By age 6 years. Measure 2. Blood Pressure Screening By age 13 years. Measure 3. Blood Pressure Screening By age 18 years</td>
</tr>
<tr>
<td>De.3 If included in a composite or paired with another measure, please identify composite or paired measure</td>
<td>This measure appears in the composite Comprehensive Well Care by Age 6 Years, Comprehensive Well Care by Age 13 Years and Comprehensive Well Care by Age 18 Years.</td>
</tr>
<tr>
<td>De.4 National Priority Partners Priority Area:</td>
<td>Care coordination, Population health</td>
</tr>
<tr>
<td>De.5 IOM Quality Domain:</td>
<td>Effectiveness, Timeliness</td>
</tr>
<tr>
<td>De.6 Consumer Care Need:</td>
<td>Staying healthy</td>
</tr>
</tbody>
</table>

### CONDITIONS FOR CONSIDERATION BY NQF

Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:

- **A.** The measure is in the public domain or an intellectual property (measure steward agreement) is signed. **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.**
  - **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): Proprietary measure

Rating: **C= Completely; P= Partially; M= Minimally; N= Not at all; NA= Not applicable**
A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission
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

C. The intended use of the measure includes both public reporting and quality improvement.

<table>
<thead>
<tr>
<th>Purpose: Public reporting, Internal quality improvement Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
</tr>
</tbody>
</table>

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 12 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

(for NQF staff use) Have all conditions for consideration been met? Met

Staff Notes to Reviewers (issues or questions regarding any criteria):

Staff Reviewer Name(s):

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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

1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, High resource use, Severity of illness, Patient/societal consequences of poor quality

1a.2

1a.3 Summary of Evidence of High Impact: High blood pressure (hypertension) is a growing concern for children in the U.S., due mostly in part to a rapid increase in childhood obesity (Luma, 2006). A recent study of National Health and Nutrition Examination Survey data showed that, during 2003-2006, 2.6 percent of boys and 3.4 percent of girls age eight to 17 years had high blood pressure. Moreover, 13.6 percent of boys and 5.7 percent of girls in this age group had pre-high blood pressure. Overweight boys and obese boys and girls were significantly more likely to have these classifications (Ostchega Y, 2009). Autopsy reports of children and adolescents who have died unexpectedly have shown a positive and significant association with systolic and diastolic blood pressure and body mass index (BMI) (Hayman, 2003). Autopsy reports of adults with high levels of cholesterol and coronary heart disease showed that precursors to these diseases began in childhood (National Cholesterol Education Program).

High blood pressure represents a significant financial burden. In 2006, the direct and indirect costs of high
blood pressure were estimated at $63.5 billion overall (CDC, 2007). In addition to costs, resource utilization is also significantly higher among hypertensive people. Prescription medicines, inpatient visits, and outpatient visits constitute more than 90 percent of the overall incremental cost of treating hypertension (Balu, 2005). These costs can be expected to rise with increasing prevalence among children.

1a.4 Citations for Evidence of High Impact:
- Luma, GB, MD and Spiotta RT, MD. Hypertension in Children and Adolescents. American Family Physician; Vol 73, Number 9, May, 2006

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: If hypertension is detected early, children can be monitored and treated, which can lead to a normal and healthy life. If not detected or treated, hypertension can lead to damage of the eyes, heart, kidneys, and brain. In addition, high blood pressure can put children at a higher risk for heart attacks, strokes, kidney failure, and a hardening of the arteries (atherosclerosis) (The Nemours Foundation, 2005). Doctors may discover high blood pressure during a regular blood pressure screening. An early diagnosis and treatment leads to a better prognosis. Blood pressure screening can save lives by starting treatment well before the patient was aware of a problem.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
Despite the importance of measurement and treatment, one study found that almost three quarters of children diagnosed with hypertension did not have a diagnosis of high blood pressure in the electronic medical record; this led to undiagnosed hypertension for 75 percent of the children in this study (Hansen, 2007). Moreover, studies have found that hypertension and prehypertension were frequently undiagnosed in this pediatric population (Hansen, 2007).

1b.3 Citations for data on performance gap:

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
### 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):** Trials of hypertension treatment that compared pharmacologic and behavioral intervention to usual care showed a beneficial effect of treatment in patients who were enrolled on the basis of elevated blood pressures detected on screening examinations.

**1c.2-3. Type of Evidence:** Evidence-based guideline, Expert opinion

**1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome):** Hypertension is defined as being in the 95th percentile for one's age, height, and gender (The Nemours Foundation, 2005), and it is a precursor to many serious conditions, such as kidney problems, stroke and heart failure (NIH, 2008). The National Heart, Lung and Blood Institute (NHLBI), the American Heart Association and the American Academy of Pediatrics recommend that children who are seen in medical care settings have their blood pressure measured at least once during every health care episode. Children less than 3 years of age should have their BP measured in special circumstances.

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

**1c.6 Method for rating evidence:** Expert Consensus with evidence review

**1c.7 Summary of Controversy/Contradictory Evidence:** Though the National Heart, Lung and Blood Institute, the American Academy of Pediatrics, and the AMERICAN HEART ASSOCIATION recommend that children be screened for blood pressure, the U.S. Preventive Services Task Force (USPSTF) concluded that evidence is insufficient to recommend for or against routine screening for high blood pressure in children and adolescents to reduce the risk of cardiovascular disease. The USPSTF found poor evidence that routine blood pressure measurement accurately identifies children and adolescents at increased risk for cardiovascular disease, and poor evidence to determine whether treatment of elevated blood pressure in children or adolescents decreases the incidence of cardiovascular disease. As a result, the USPSTF could not determine the balance of benefits and harms of routine screening for high blood pressure in children and adolescents (I Statement, 2003).


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**Comment [k4]:** 1c. The measure focus is:

- an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;
- OR
- an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
  - Intermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
  - Process - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
  - Structure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
  - Patient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/the public.

**Comment [k5]:** 4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose plan/intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.

**Comment [k6]:** 3 The strength of the body of evidence for the specific measure focus should be systematically assessed and rated (e.g., USPSTF grading system http://www.ahq.gov/clinic/uspstf07/methods/benefit.htm). If the USPSTF grading system was not used, the grading system is explained including how it relates to the USPSTF grades or why it does not. However, evidence is not limited to quantitative studies and the best type of evidence depends upon the question being studied (e.g., randomized controlled trials appropriate for studying drug efficacy are not well suited for complex system changes). When qualitative studies are used, appropriate qualitative research criteria are used to judge the strength of the evidence.
Method for rating strength of recommendation:
- A - The USPSTF recommends the service.
- B - The USPSTF recommends the service.
- C - The USPSTF recommends against the service.
- D - The USPSTF recommends against the service.
- I - The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient.
- O - The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

Rationale for using this guideline over others:
The evidence and guidelines were evaluated by a group of diverse stakeholders and experts, which

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
concluded that the guidelines were sufficient to develop as a measure that would improve quality of well child care.

**TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report?**

<table>
<thead>
<tr>
<th>Rationale:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Steering Committee: Was the threshold criterion, Importance to Measure and Report, met?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable</td>
</tr>
<tr>
<td>Y</td>
</tr>
</tbody>
</table>

## 2. 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. (evaluation criteria)

### 2a. MEASURE SPECIFICATIONS

<table>
<thead>
<tr>
<th>2a. Do you have a web page where current detailed measure specifications can be obtained?</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.1 If yes, provide web page URL:</td>
</tr>
</tbody>
</table>

#### 2a. Precisely Specified

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):*

- **Numerator 1:** Children who had documentation in the medical record of blood pressure screening by age 6 years
- **Numerator 2:** Children who had documentation in the medical record of blood pressure screening by age 13 years
- **Numerator 3:** Children who had documentation in the medical record of blood pressure screening by age 18 years

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

- 2 years

2a.3 **Numerator Details** *(All information required to collect/calculate the numerator, including all codes, logic, and definitions):*

Documentation must include a note indicating the following.

- A blood pressure result
- For abnormal or indeterminate results, evidence of confirmatory testing, referral or treatment

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

- **Denominator 1:** Children who turned 6 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child’s birthday by at least 12 months.
- **Denominator 2:** Children who turned 13 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child’s birthday by at least 12 months.
- **Denominator 3:** Children who turned 18 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child’s birthday by at least 12 months.

2a.5 **Target population gender:** Female, Male

2a.6 **Target population age range:** Measure 1: 2 years-6 years, Measure 2: 6 years-13 years, Measure 3: 13 years-18 years

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

- 1 year

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**Comment [KP8]:** 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF’s Health Information Technology Expert Panel (HITEP).
2a.8 Denominator Details (All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions):
See above; chart review measure

2a.9 Denominator Exclusions (Brief text description of exclusions from the target population): None

2a.10 Denominator Exclusion Details (All information required to collect exclusions to the denominator, including all codes, logic, and definitions):
NA

2a.11 Stratification Details/Variables (All information required to stratify the measure including the stratification variables, all codes, logic, and definitions):
None

2a.12-13 Risk Adjustment Type: No risk adjustment necessary

2a.14 Risk Adjustment Methodology/Variables (List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method):
NA

2a.15-17 Detailed risk model available Web page URL or attachment:

2a.18-19 Type of Score: Rate/proportion
2a.20 Interpretation of Score: Better quality = Higher score

2a.21 Calculation Algorithm (Describe the calculation of the measure as a flowchart or series of steps):
Step 1: Determine the denominator
Children who turned the requisite age in the measurement year, AND
Who had a visit within the past 12 months of the child’s birthday
Step 2: Determine the numerator
Children who had documentation in the medical record of the screening or service during the measurement year or the year previous to the measurement year.

2a.22 Describe the method for discriminating performance (e.g., significance testing):
Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance

2a.23 Sampling (Survey) Methodology 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):
For this physician-level measure, we anticipate the entire population will be used in the denominator. If a sample is used, a random sample is ideal. NCQA’s work has indicated that a sample size of 30-50 patients would be necessary for a typical practice size of 2000 patients.

2a.24 Data Source (Check the source(s) for which the measure is specified and tested)
Paper medical record/flow-sheet, Electronic clinical data, Electronic Health/Medical Record

2a.25 Data source/data collection instrument (identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):
Medical Record

2a.26-28 Data source/data collection instrument reference web page URL or attachment:

2a.29-31 Data dictionary/code table web page URL or attachment:

2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested)

2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested)
Ambulatory Care: Office, Ambulatory Care: Clinic, Ambulatory Care: Hospital Outpatient

2a.38-41 Clinical Services (Healthcare services being measured, check all that apply)
Clinicians: Nurses, Clinicians: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO)

### 2b. Reliability testing

2b.1 Data/sample (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure).

2b.2 Analytic Method (type of reliability & rationale, method for testing): We did not conduct reliability testing for this measure.

2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted): We did not conduct reliability testing for this measure.

### 2c. Validity testing

2c.1 Data/sample (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure).

2c.2 Analytic Method (type of validity & rationale, method for testing): NCQA tested the measure for face validity using a panel of stakeholders with specific expertise in measurement and child health care. This panel included representatives from key stakeholder groups, including pediatricians, family physicians, health plans, state Medicaid agencies and researchers. Experts reviewed the results of the field test and assessed whether the results were consistent with expectations, whether the measure represented quality care, and whether we were measuring the most important aspect of care in this area. This measure was deemed valid by the expert panel. In addition, this measure does not utilize administrative data sources; data recorded in the chart is considered the gold standard.

2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted): NA

### 2d. Exclusions Justified

2d.1 Summary of Evidence supporting exclusion(s): No exclusions

2d.2 Citations for Evidence: NA

2d.3 Data/sample (description of data/sample and size): NA

2d.4 Analytic Method (type analysis & rationale): NA

2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses): NA

### 2e. Risk Adjustment for Outcomes/ Resource Use Measures

2e.1 Data/sample (description of data/sample and size): NA

2e.2 Analytic Method (type of risk adjustment, analysis, & rationale): NA

2e.3 Testing Results (risk model performance metrics): NA

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
### 2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: The measure assesses prevention and wellness in a general population; risk adjustment is not indicated.

### 2f. Identification of Meaningful Differences in Performance

**2f.1 Data/sample from Testing or Current Use** (description of data/sample and size): NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)

**2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale):**
- Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance

**2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):**

<table>
<thead>
<tr>
<th>Age</th>
<th>Elig Population</th>
<th>Screening Documented</th>
<th>Results Documented</th>
<th>Results and Proper Follow Up Documented</th>
</tr>
</thead>
<tbody>
<tr>
<td>By Age 6 Years</td>
<td>180</td>
<td>99.4</td>
<td>99.4</td>
<td>92.2%</td>
</tr>
<tr>
<td>By Age 13 Years</td>
<td>179</td>
<td>98.9</td>
<td>98.9</td>
<td>97.8</td>
</tr>
<tr>
<td>By Age 18 Years</td>
<td>163</td>
<td>96.3</td>
<td>96.3</td>
<td>89.6</td>
</tr>
</tbody>
</table>

**2f.4 If outcome or resource use measure is not risk adjusted, provide rationale:** The measure assesses prevention and wellness in a general population; risk adjustment is not indicated.

**2g. Comparability of Multiple Data Sources/Methods**

**2g.1 Data/sample (description of data/sample and size):** NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)

**2g.2 Analytic Method (type of analysis & rationale):**
- This measure is chart review only; no other sources were identified by the expert panel; this measure does not utilize administrative data

**2g.3 Testing Results (e.g., correlation statistics, comparison of rankings):**
- NA

**2h. Disparities in Care**

**2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts):** The measure is not stratified to detect disparities.

**2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:**
- NA

### TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Scientific Acceptability of Measure Properties?

**Steering Committee: Overall, to what extent was the criterion, Scientific Acceptability of Measure Properties, met?**

<table>
<thead>
<tr>
<th>Rating</th>
<th>C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 3. USABILITY

**3a. Meaningful, Understandable, and Useful Information**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Value:</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Not in use but testing completed</td>
<td></td>
</tr>
</tbody>
</table>

3a.1 Current Use: Not in use but testing completed

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). If not publicly reported, state the plans to achieve public reporting within 3 years):

This measure is not currently publicly reported. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate.

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). If not used for QI, state the plans to achieve use for QI within 3 years):

This measure is not currently used in QI. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate. NCQA anticipates that after we release these measures, they will become widely used, as all our measures do.

3a.4 Data/sample (description of data/sample and size): NA

3a.5 Methods (e.g., focus group, survey, QI project):

NCQA vetted the measures with its expert panel. In addition, throughout the development process, NCQA vetted the measure concepts and specifications with other stakeholder groups, including the National Association of State Medicaid Directors, NCQA’s Health Plan Advisory Council, NCQA’s Committee on Performance Measurement, and the American Academy of Pediatrician’s Quality Improvement Innovation Network.

After field testing, NCQA also conducted a debrief call with field test participants. In the form of a group interview, NCQA systematically sought feedback on whether the measures were understandable, feasible, important, and had face validity.

3a.6 Results (qualitative and/or quantitative results and conclusions):

NCQA received feedback that the measure is understandable, feasible, important and valid.

3b/3c. Relation to other NQF-endorsed measures

3b.1 NQF # and Title of similar or related measures:

(for NQF staff use) Notes on similar/related endorsed or submitted measures:

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 or different topic but same target population):

3b.2 Are the measure specifications harmonized? If not, why?

3c. Distinctive or Additive Value

3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:

5.1 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

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?

Steering Committee: Overall, to what extent was the criterion, Usability, met?
Rationale:

4. FEASIBILITY

<table>
<thead>
<tr>
<th>Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)</th>
<th>Eval Rating</th>
</tr>
</thead>
</table>

4a. Data Generated as a Byproduct of Care Processes

4a.1-2 How are the data elements that are needed to compute measure scores generated?
Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition), Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)

4b. Electronic Sources

4b.1 Are all the data elements available electronically? (elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims)
No

4b.2 If not, specify the near-term path to achieve electronic capture by most providers.
NCQA plans to eventually specify this measure for electronic health records.

4c. Exclusions

4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?
No

4c.2 If yes, provide justification.

4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences

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.
During the measure development process the Child Health MAP and measure development team worked with NCQA’s certified auditors and audit department to ensure that the measure specifications were clear and auditable. The denominator, numerator and optional exclusions are concisely specified and align with our audit standards.

4e. Data Collection Strategy/Implementation

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:
Based on field test results, we have specified the measure to assess whether screening was documented and whether use of a standardized tool was documented. Our field test results showed that these data elements are available in the medical record. In addition, our field test participants noted that many were able to program these requirements into their electronic health record systems, and several implemented...
point-of-service physician reminders for this measure.

4e.2 Costs to implement the measure (costs of data collection, fees associated with proprietary measures):
Collecting measures from medical charts is time-consuming and can be burdensome. Adapting this measure in electronic health records may relieve some of this burden.

4e.3 Evidence for costs:
Based on field test participant feedback and other stakeholder input.

4e.4 Business case documentation: NA

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Feasibility?

<table>
<thead>
<tr>
<th>Steer Committee: Overall, to what extent was the criterion, Feasibility, met?</th>
<th>4</th>
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<tbody>
<tr>
<td>Rationale:</td>
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<tr>
<th>RECOMMENDATION</th>
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<tbody>
<tr>
<td>(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.</td>
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<tr>
<td>Steer Committee: Do you recommend for endorsement?</td>
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<tr>
<td>Comments:</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co.1 Measure Steward (Intellectual Property Owner)</td>
</tr>
<tr>
<td>Co.1 Organization</td>
</tr>
<tr>
<td>National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005</td>
</tr>
<tr>
<td>Co.2 Point of Contact</td>
</tr>
<tr>
<td>Sepheen, Byron, MHS, <a href="mailto:byron@ncqa.org">byron@ncqa.org</a>, 202-955-3573-</td>
</tr>
<tr>
<td>Co.3 Measure Developer if different from Measure Steward</td>
</tr>
<tr>
<td>Co.3 Organization</td>
</tr>
<tr>
<td>National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005</td>
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<td>Sepheen, Byron, MHS, <a href="mailto:byron@ncqa.org">byron@ncqa.org</a>, 202-955-3573-</td>
</tr>
<tr>
<td>Co.5 Submitter if different from Measure Steward POC</td>
</tr>
<tr>
<td>Sepheen, Byron, MHS, <a href="mailto:byron@ncqa.org">byron@ncqa.org</a>, 202-955-3573-, National Committee for Quality Assurance</td>
</tr>
<tr>
<td>Co.6 Additional organizations that sponsored/participated in measure development</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>ADDITIONAL INFORMATION</th>
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<tbody>
<tr>
<td>Workgroup/Expert Panel involved in measure development</td>
</tr>
<tr>
<td>Ad.1 Provide a list of sponsoring organizations and workgroup/panel members’ names and organizations. Describe the members’ role in measure development.</td>
</tr>
<tr>
<td>Child Health Measurement Advisory Panel:</td>
</tr>
<tr>
<td>Jeanne Alicandro</td>
</tr>
<tr>
<td>Barbara Dailey</td>
</tr>
<tr>
<td>Denise Dougherty, PhD</td>
</tr>
</tbody>
</table>

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
<table>
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<tr>
<th>Ad.2</th>
<th>If adapted, provide name of original measure: NA</th>
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<tbody>
<tr>
<td>Ad.3-8</td>
<td>If adapted, provide original specifications URL or attachment</td>
</tr>
<tr>
<td>Measure Developer/Steward Updates and Ongoing Maintenance</td>
<td></td>
</tr>
<tr>
<td>Ad.6</td>
<td>Year the measure was first released:</td>
</tr>
<tr>
<td>Ad.7</td>
<td>Month and Year of most recent revision:</td>
</tr>
<tr>
<td>Ad.8</td>
<td>What is your frequency for review/update of this measure?</td>
</tr>
<tr>
<td>Ad.9</td>
<td>When is the next scheduled review/update for this measure?</td>
</tr>
<tr>
<td>Ad.10</td>
<td>Copyright statement/disclaimers: © 2009 by the National Committee for Quality Assurance</td>
</tr>
<tr>
<td>1100 13th Street, NW, Suite 1000</td>
<td></td>
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<tr>
<td>Washington, DC 20005</td>
<td></td>
</tr>
<tr>
<td>Ad.11 -13</td>
<td>Additional Information web page URL or attachment:</td>
</tr>
<tr>
<td>Date of Submission (MM/DD/YY): 08/30/2010</td>
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</table>
1c. The measure focus is:

- an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;

OR

- if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
  - Intermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
  - Process - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
  - Structure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
  - Patient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
  - Access - evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
  - Efficiency - demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

2d. Clinically necessary measure exclusions are identified and must be:

- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion; AND

- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus; AND

- precisely defined and specified:
  - if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
  - if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

2e. For outcome measures and other measures (e.g., resource use) when indicated:

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care; OR

- rationale/data support no risk adjustment.

13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.
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 subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. 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 subcriterion 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 subcriteria (yellow highlighted areas).

**Steering Committee:** Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, 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 subcriteria as indicated)

---

**Measure Descriptive Information**

- **De.1 Measure Title:** Preventive Services for Children and Adolescents: Children and Adolescents On Time with Recommended Immunizations
- **De.2 Brief description of measure:** Percentage of children and adolescents who are on time with recommended immunizations.
- **De.3 Type of Measure:** Process
- **De.4 National Priority Partners Priority Area:** Population health
- **De.5 IOM Quality Domain:** Timeliness
- **De.6 Consumer Care Need:** Staying healthy

---

**Conditions for Consideration by NQF**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
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<tbody>
<tr>
<td>A.1</td>
<td>The measure is in the public domain or an intellectual property (measure steward agreement) is signed. 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.</td>
</tr>
<tr>
<td>A.2</td>
<td>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</td>
</tr>
<tr>
<td>A.3</td>
<td>Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission</td>
</tr>
<tr>
<td>A.4</td>
<td>Measure Steward Agreement attached: NQFMeasureStewardAgreement.pdf</td>
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</tbody>
</table>

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**Rating:** C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
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

C. The intended use of the measure includes both public reporting and quality improvement.

Purpose: Public reporting, Internal quality improvement

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 12 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

(for NQF staff use) Have all conditions for consideration been met?

Staff Notes to Steward (if submission returned):

Staff Notes to reviewers (issues or questions regarding any criteria):

Staff Reviewer Name(s):

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.

1a. High Impact

1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Frequently performed procedure, Patient/societal consequences of poor quality

1a.2

1a.3 Summary of Evidence of High Impact: Although most preventive services target high-burden conditions, not all are equally effective in reducing disease, and each service has its own cost. A 2006 study ranked the 25 clinical preventive services and groups of services recommended by the U.S. Preventive Services Task Force or the Advisory Committee on Immunization Practices for the U.S. general population based on the services’ health impact and cost effectiveness. By focusing on services with relatively high health impact and favorable cost effectiveness, health care decision-makers can direct limited resources to a set of preventive services that produce the largest health improvements.

Immunizations are a Level I Preventive Service that providers and care systems must assess the need for and offer to each patient. These have the highest priority value. Combination immunizations offer the benefit of a single injection and may improve compliance and reduce morbidity. Several deadly diseases have been controlled as a result of vaccines, such as smallpox. The elimination of polio from the Western Hemisphere has occurred due to vaccination. Since the use of vaccines, diseases that once caused thousands of childhood deaths each year in the United States are now rare. For example, diphtheria declined from a high of 206,939 cases in 1921 to just one in 1998; whooping cough declined from 265,269 cases in 1934 to 6,279 in 1998; and measles has fallen from 894,134 cases in 1941 to just 89 in

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
The ultimate goal of immunization programs is to prevent or eliminate infectious disease. For infectious diseases that can only be transmitted from person to person, immunization results in the elimination of the disease and, eventually, can achieve the eradication of the organism that causes it.

1a.4 Citations for Evidence of High Impact: http://www.immunizationinfo.org/parents/why-immunize/history-and-achievements
Advisory Committee on Immunization Practices
U.S. Preventive Services Task Force

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: Since vaccinations are frequently performed procedures and affect a large patient population, it is important that vaccinations are performed. There can be patient/societal consequences of poor quality.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
Physicians and other pediatric vaccination providers should adhere to the standards for child and adolescent vaccination practices. The standards provide guidance on practices that will result in eliminating barriers to vaccination. These include practices aimed at eliminating unnecessary prerequisites for receiving vaccinations, eliminating missed opportunities to vaccinate, improving procedures to assess vaccination needs, enhancing knowledge about vaccinations among parents and providers, and improving the management and reporting of adverse events. In addition, the standards address the importance of recall and reminder systems and using assessments to monitor clinic or office vaccination coverage levels.
Assessments are most effective in improving vaccination coverage when they combine chart reviews to determine coverage with the provision of results to health care professionals and staff. Provider assessment can be performed by the staff in the practice or by other organizations, including state and local health departments. Effective interventions that include assessment and provision of results may also incorporate incentives or compare performance to a goal or standard. This process is commonly referred to as AFIX (assessment, feedback, incentives and exchange of information). Coverage should be assessed annually so that reasons for low coverage in the practice, or in a subgroup of the patients served, can be identified and interventions implemented to address them.
Reminder/recall systems improve vaccination coverage. Provider reminder/recall systems alert health care professionals when vaccines are due or overdue. Notices should be placed in patient charts or communicated to health care professionals by computer or other means. Immunization registries can facilitate automatic generation of reminder/recall notices.

1b.3 Citations for data on performance gap:
National Vaccine Advisory Committee, Standards for child and adolescent immunization practices.
CDC. Recommended childhood and adolescent immunization schedule---United States, 2006. MMWR 2005

1b.4 Summary of Data on disparities by population group:
Older adults are at increased risk for many vaccine-preventable diseases. In 1999 approximately 90 percent of all influenza and pneumonia-related deaths occurred in individuals aged 65 and older. Older Hispanic and African-American adults are much less likely to be vaccinated against influenza and pneumococcal disease than their white counterparts. Data show that in 2000 children living below the poverty level have lower immunization coverage rates as well. Although great progress has been made in improving childhood immunization rates, some disparities in overall immunization coverage rates among racial and ethnic
groups still exist. This disparity is of great concern in large urban areas with underserved populations because of the potential for outbreaks of vaccine-preventable diseases. Overall childhood immunization rates are extremely high. Efforts must be continued to maintain 90 percent vaccine coverage in all populations.

1b.5 Citations for data on Disparities:
Healthy People 2010, 2002.
NCHS, Health, United States, 2002, Table 73.
www.health.state.mn.us/immunize

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):
Prevent negative health care outcomes for children and adolescents by increasing the rate of on time immunizations and positively affecting population health.

1c.2 Type of Evidence: Observational study, Evidence-based guideline, Randomized controlled trial, Systematic synthesis of research, Meta-analysis, Other Consensus Statement

1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome):
Pertussis can cause substantial morbidity in adolescents as well as transmission to incompletely immunized infants. Hepatitis A vaccination in children and adolescents can decrease incidence of Hepatitis A. The Advisory Committee on Immunization Practice (ACIP) has recommended universal vaccination for all. ICSI guideline recommends universal recommendation in children and adolescents.

HPV is a very common infection. About 5.5 million people in the U.S. become infected with HPV. Currently 20 million have infection. About 9.2 million sexually active adolescents and young adults 15 to 24 years of age are currently infected. HPV virus is a cause of invasive cervical cancer. Persistent cervical infection with certain HPV types is the single most important cervical risk factor. The World Health Organization recognizes cervical cancer as the first cancer 100% attributable to infection, with the prevalence of HPV DNA in cervical cancer biopsies from 22 countries at 99.7%. Most adults living in the United States are immune to polio as a result of vaccination received as children.

Influenza vaccination of all children ages 6 months through 18 years is recommended annually. Some preliminary evidence suggests in addition to decreasing morbidity in this population this strategy significantly decreases morbidity and mortality for high-risk patients in the community.

The MCV4 meningococcal vaccine is considered efficacious for the prevention of meningococcal disease during adolescence when administered to individuals between 11 and 12 years old or at 15 years old. Research shows that the vaccination would reduce burden of disease.

Pneumococcal vaccine is 97% effective in preventing invasive disease by the selected strains of pneumococcus. This prevention of invasive disease is the most important aspect. In children with pneumococcal meningitis, 10%-15% die and 25% are left with hearing loss.

The use of rotavirus vaccine has decreased all rotavirus infections by about 75%, hospitalizations and emergency room visits by about 95%, and severe rotavirus gastroenteritis by 98% to 100%.

Varicella vaccine is effective in preventing moderate and severe disease and 80% effective in preventing all disease.

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

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable

Comment [k4]: 1c. The measure focus is:
• an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed; OR
• if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
  • Intermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
  • Process - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
  • Structure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
  • Patient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
  • Access - evidence that an association exists between access to a health service and the outcomes of, or experience with, care.  

Comment [k5]: 4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose intervention (with patient input) → evaluate impact → improve quality of care and quality of care delivery. If the measure focus is one step in a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.

Comment [k6]: 3 The strength of the body of evidence for the specific measure focus should be systematically assessed and rated (e.g., USPSTF grading system http://www.ahrq.gov/clinic/uspsft07/methods/benefit.htm). If the USPSTF grading system was not used, the grading system is explained including how it relates to the USPSTF grades or why it does not. However, evidence is not limited to quantitative studies and the best type of evidence depends upon the question being studied (e.g., randomized controlled trials appropriate for studying drug efficacy are not well suited for complex system changes). When qualitative studies are used, appropriate qualitative research criteria are used to judge the strength of the evidence.
Class A (randomized controlled trial); Class C (non-randomized trial with concurrent or historical controls); Class D (cross-sectional study, case series, case report); Class M (meta-analysis, systematic review, decision analysis, cost-effectiveness analysis); Class R (consensus statement, consensus report, narrative review)

1c.6 Method for rating evidence: ICSI has a grading process based on classes of research reports. The classes of research reports are primary reports of new data collection or reports that synthesize or reflect upon collection of primary reports.

1c.7 Summary of Controversy/Contradictory Evidence: None

1c.8 Citations for Evidence (other than guidelines): Advisory Committee on Immunization Practices (ACIP). The Recommendations for use of Haemophilus b conjugate vaccine and a combined diphtheria, tetanus, pertussis, and Haemophilus b vaccine. MMWR 1993;42(RR-13):1-15
Bilukha OO, Rosenstein N. Prevention and control of meningococcal disease: recommendations of the advisory committee on immunization practices (ACIP). MMWR 2005;54:1-21
Centers for Disease Control and Prevention. Notice to readers: revised recommendations of the advisory committee on immunization practices to vaccinate all persons aged 11-18 years with meningococcal conjugate vaccine. MMWR 2007b;56:794-95
Centers for Disease Control and Prevention. Updated recommendations of the advisory committee on immunization practices (ACIP) regarding routine poliovirus vaccination. MMWR 2009; 58:829-30
Fiore AE, Shay DK, Broder K et al. Prevention and control of influenza: recommendations of the advisory committee on immunization practices (ACIP), 2008. MMWR 2008;57:1-60
Vesikari T, Matson DO, Dennehy P et al. Safety and efficacy of pentavalent human-bovine (WC3) reassortant rotavirus vaccine. NEJM 2006;354:23-33

1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number): It is recommended that children receive a series of five doses of vaccine against diptheria, tetanus and pertussis before age 7 years. Page 20
Initiation of Hepatitis A vaccine is recommended for all children between 12-23 months. Page 23
ICSI workgroup recommends universal vaccination for Hepatitis B for those less than 40 years of age and for those over age 40 at high risk. Page 24
The Advisory Committee on Immunization Practices has recommended routine use of Human Papillomavirus vaccine for all 11-12 years old females, and catch up use of the vaccine for females ages 12 through 26. Page 29
There should be a total of 4 doses of inactivated poliovirus (IPV) vaccine: 2 months of age, 4 months of age, 6-18 months of age and 4-6 years of age. Page 31
Influenza vaccine should be administered annually, through the entire influenza season, to all persons, who
### 1c.10 Clinical Practice Guideline Citation:
Institute for Clinical Systems Improvement (ICSI), Immunizations, 14th ed. Bloomington MN: Institute for Clinical Systems Improvement (ICSI), March 2010

### 1c.11 National Guideline Clearinghouse or other URL:
http://www.icsi.org/immunizations__guideline_/immunizations__guideline__38400.html

### 1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom):
Not applicable

### 1c.13 Method for rating strength of recommendation (if different from USPSTF system, also describe rating and how it relates to USPSTF):
Key conclusions (as determined by the guideline workgroup) are supported by a conclusion grading worksheet that summarizes the important studies pertaining to that conclusion. Individual studies are classed and are assigned a designator of strong, weak or neutral to reflect the study quality.

### 1c.14 Rationale for using this guideline over others:
ICSI guidelines are developed and revised on a regular schedule with input from multidisciplinary health professionals using best evidence and consensus. Other guidelines are referenced and their recommendations are reviewed to determine relevance to ICSI’s primary care audience.

### TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report?

<table>
<thead>
<tr>
<th>Steering Committee: Was the threshold criterion, Importance to Measure and Report, met?</th>
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<tbody>
<tr>
<td>Yes [Y] No [N]</td>
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<td>1 [Y]</td>
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### 2. 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.**

**Eval Rating**

#### 2a. MEASURE SPECIFICATIONS

**S.1 Do you have a web page where current detailed measure specifications can be obtained?**

**S.2 If yes, provide web page URL:**

**Rating:**
C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable

**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):**

**Number of patients on time with recommended immunizations**

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

**Comment [K8]:** USPSTF grading system
http://www.ahrq.gov/clinic/usps/grades.html

A - The USPSTF recommends the service.
B - The USPSTF recommends the service.
C - The USPSTF recommends the service.
D - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient.

D - The USPSTF recommends against providing the service. There is moderate or high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

Comment [K9]: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF’s Health Information Technology Expert Panel (HITEP).
Clinic's internal quality improvement staff can determine the time period for which this should be measured. For example, registries could be reviewed monthly to determine how many patients were seen in primary care for non-emergent visit and if they were up to date with recommended immunizations.

2a.3 Numerator Details (All information required to collect/calculate the numerator, including all codes, logic, and definitions):
Numerator should include:
- two year olds on time with their primary series of immunizations
- adolescents on time with recommended immunizations
- children age 6-59 months and older on time with recommended influenza vaccine

Primary series of immunizations for two year olds:
- DtaP-diphteria, tetanus toxoids and acellular pertussis vaccine
- IPV-inactivated poliovirus
- MMR-measles, mumps and rubella
- PCV7-pneumococcal
- VZV-varicella vaccine
- Hib-haemophilus influenza type b conjugate vaccine
- Hep B-Hepatitis B vaccine-schedule 1
- Hep B-Hepatitis B vaccine-schedule 2
- Hep A-Hepatitis A vaccine
- Rota-rotovirus vaccine

Adolescents recommended immunizations:
- Hep B-Hepatitis B vaccine
- HPV-human papillomavirus vaccine
- MMR-measles, mumps and rubella
- MCV4-meningococcal
- Tdap-tetanus, diphteria toxoids and acellular pertussis vaccine
To persons without evidence of immunity: VZV-varicella vaccine

13 year olds specific recommended immunizations:
- 1-dose of meningococcal conjugate vaccine
- 1-tetanus, diphteria toxoids, and acellular pertussis vaccine (Tdap)

Or

1-tetanus, diphteria toxoids vaccine (Td) by 13th birthday

Children age 6-59 months and older on time with recommended influenza vaccine

2a.4 Denominator Statement (Brief, text description of the denominator - target population being measured):
Total number of patients who present in the clinic for a non-emergent primary care visit

Target population:
- two year olds
- adolescents
- children age 6-59 months and older

2a.5 Target population gender: Female, Male
2a.6 Target population age range: 6 months through adolescence

2a.7 Denominator Time Window (The time period in which cases are eligible for inclusion in the denominator):
Clinic's internal quality improvement staff can determine the time period for which this should be measured. For example, registries could be reviewed monthly to determine how many patients in target population age range were seen in primary care for non-emergent visit.
### 2a.8 Denominator Details (All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions):
Collect data on target population:
- two year olds
- adolescents
- children age 6-59 months and older

who have an office visit with provider in the clinic for a non-emergent primary care visit

### 2a.9 Denominator Exclusions (Brief text description of exclusions from the target population):
Male patients should be excluded from HPV vaccine measurement. This recommendations is for female patients only.

### 2a.10 Denominator Exclusion Details (All information required to collect exclusions to the denominator, including all codes, logic, and definitions):
When measuring the number of adolescents on time with HPV vaccine, exclude male patients from denominator. Include female patients only.

### 2a.11 Stratification Details/Variables (All information required to stratify the measure including the stratification variables, all codes, logic, and definitions):
Data elements needed:
- non-emergent primary care visit with provider occurred for patients in the target population age range,
- Patients who at the time of the visit were on time with recommended immunizations

Target population age range:
- two year olds with primary series of immunizations
- adolescents on time with recommended immunizations
- children age 6-59 months and older on time with recommended influenza vaccine

Primary series of immunizations for two year olds:
- DtaP-diphtheria, tetanus toxoids and acellular pertussis vaccine
- IPV-inactivated poliovirus
- MMR-measles, mumps and rubella
- PCV7-pneumococcal
- VZV-varicella vaccine
- Hib-haemophilus influenza type b conjugate vaccine
- Hep B-Hepatitis B vaccine-schedule 1
- Hep B-Hepatitis B vaccine-schedule 2
- Hep A-Hepatitis A vaccine
- Rota-rotavirus vaccine

Adolescents recommended immunizations:
- Hep B-Hepatitis B vaccine
- HPV-human papillomavirus vaccine
- MMR-measles, mumps and rubella
- MCV4-meningococcal
- Tdap-tetanus, diphtheria toxoids and acellular pertussis vaccine

To persons without evidence of immunity: VZV-varicella vaccine

13 year olds specific recommended immunizations:
- 1-dose of meningococcal conjugate vaccine
- 1-tetanus, diphtheria toxoids, and acellular pertussis vaccine (Tdap)

Or

1-tetanus, diphtheria toxoids vaccine (Td) by 13th birthday

Children age 6-59 months and older on time with recommended influenza vaccine

### 2a.12-13 Risk Adjustment Type: No risk adjustment necessary

---

Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions.
12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2a.14</td>
<td>Risk Adjustment Methodology/Variables (List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method): Not applicable</td>
</tr>
<tr>
<td>2a.15-17</td>
<td>Detailed risk model available Web page URL or attachment:</td>
</tr>
<tr>
<td>2a.18-19</td>
<td>Type of Score: Rate/proportion</td>
</tr>
<tr>
<td>2a.20</td>
<td>Interpretation of Score: Better quality = Higher score</td>
</tr>
<tr>
<td>2a.21</td>
<td>Calculation Algorithm (Describe the calculation of the measure as a flowchart or series of steps):</td>
</tr>
<tr>
<td></td>
<td>1. Identify patients who are in the age range of 6 months through adolescence with visits to primary care for non-emergent issues</td>
</tr>
<tr>
<td></td>
<td>2. a) Identify if at the time of the visit two years old patients were on time with their primary series of immunizations. Primary series of immunizations are: DtaP-diphtheria, tetanus toxoids and acellular pertussis vaccine</td>
</tr>
<tr>
<td></td>
<td>IPV-inactivated poliovirus</td>
</tr>
<tr>
<td></td>
<td>MMR-measles, mumps and rubella</td>
</tr>
<tr>
<td></td>
<td>PCV7-pneumococcal</td>
</tr>
<tr>
<td></td>
<td>VZV-varicella vaccine</td>
</tr>
<tr>
<td></td>
<td>Hib-haemophilus influenza type b conjugate vaccine</td>
</tr>
<tr>
<td></td>
<td>Hep B-Hepatitis B vaccine-schedule 1</td>
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<tr>
<td></td>
<td>Hep B-Hepatitis B vaccine-schedule 2</td>
</tr>
<tr>
<td></td>
<td>Hep A-Hepatitis A vaccine</td>
</tr>
<tr>
<td></td>
<td>Rota-rotavirus vaccine</td>
</tr>
<tr>
<td></td>
<td>b) for adolescent patients, identify if they were on time with recommended immunizations: Hep B-Hepatitis B vaccine</td>
</tr>
<tr>
<td></td>
<td>HPV-human papillomavirus vaccine</td>
</tr>
<tr>
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<td>MMR-measles, mumps and rubella</td>
</tr>
<tr>
<td></td>
<td>MCV4-meningococcal</td>
</tr>
<tr>
<td></td>
<td>Tdap-tetanus, diphtheria toxoids and acellular pertussis vaccine</td>
</tr>
<tr>
<td></td>
<td>To persons without evidence of immunity: VZV-varicella vaccine</td>
</tr>
<tr>
<td></td>
<td>13 year olds specific: 1-dose of meningococcal conjugate vaccine</td>
</tr>
<tr>
<td></td>
<td>1-tetanus, diphtheria toxoids, and acellular pertussis vaccine (Tdap)</td>
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<tr>
<td></td>
<td>Or</td>
</tr>
<tr>
<td></td>
<td>1-tetanus, diphtheria toxoids vaccine (Td) by 13th birthday</td>
</tr>
<tr>
<td></td>
<td>c) for patients between age 6-59 months and older on time recommended influenza vaccine</td>
</tr>
<tr>
<td>2a.22</td>
<td>Describe the method for discriminating performance (e.g., significance testing): High rate of patients on time with recommended immunizations. Also target goal can be set to determine if the clinic is at the goal or performs higher than the goal for quality improvement purposes. For public reporting, standard goal can be set to determine whether clinic is performing optimally.</td>
</tr>
<tr>
<td>2a.23</td>
<td>Sampling (Survey) Methodology 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): Not applicable</td>
</tr>
<tr>
<td>2a.24</td>
<td>Data Source (Check the source(s) for which the measure is specified and tested) Paper medical record/flow-sheet, Electronic clinical data, Electronic Health/Medical Record, Registry data</td>
</tr>
<tr>
<td>2a.25</td>
<td>Data source/data collection instrument (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.): Immunization registry can be used to collect data.</td>
</tr>
<tr>
<td>2a.26-28</td>
<td>Data source/data collection instrument reference web page URL or attachment:</td>
</tr>
</tbody>
</table>
2a.29-31 Data dictionary/code table web page URL or attachment: None
2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested)
Clinicians: Individual, Clinicians: Group, Facility/Agency, Integrated delivery system
2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested)
Ambulatory Care: Office, Ambulatory Care: Clinic
2a.38-41 Clinical Services (Healthcare services being measured, check all that apply)
Clinicians: Nurses, Clinicians: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO)

<table>
<thead>
<tr>
<th>TEST/Q/ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2b. Reliability testing</td>
</tr>
<tr>
<td>2b.1 Data/sample (description of data/sample and size): None</td>
</tr>
<tr>
<td>2b.2 Analytic Method (type of reliability &amp; rationale, method for testing): None</td>
</tr>
<tr>
<td>2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted): None</td>
</tr>
<tr>
<td>2c. Validity testing</td>
</tr>
<tr>
<td>2c.1 Data/sample (description of data/sample and size): None</td>
</tr>
<tr>
<td>2c.2 Analytic Method (type of validity &amp; rationale, method for testing): None</td>
</tr>
<tr>
<td>2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted): None</td>
</tr>
<tr>
<td>2d. Exclusions Justified</td>
</tr>
<tr>
<td>2d.1 Summary of Evidence supporting exclusion(s): Not applicable</td>
</tr>
<tr>
<td>2d.2 Citations for Evidence: Not applicable</td>
</tr>
<tr>
<td>2d.3 Data/sample (description of data/sample and size): Not applicable</td>
</tr>
<tr>
<td>2d.4 Analytic Method (type analysis &amp; rationale): Not applicable</td>
</tr>
<tr>
<td>2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses): Not applicable</td>
</tr>
<tr>
<td>2e. Risk Adjustment for Outcomes/ Resource Use Measures</td>
</tr>
<tr>
<td>2e.1 Data/sample (description of data/sample and size): Not applicable</td>
</tr>
<tr>
<td>2e.2 Analytic Method (type of risk adjustment, analysis, &amp; rationale): Not applicable</td>
</tr>
</tbody>
</table>

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable

Comment [KP10]: 2b. Reliability testing demonstrates the measure results are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period.

Comment [K11]: 8 Examples of reliability testing include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing may address the data items or final measure score.

Comment [KP12]: 2c. Validity testing demonstrates that the quality of care provided, adequately distinguishes good and poor quality. If face validity is the only validity addressed, it is systematically assessed.

Comment [K13]: 9 Examples of validity testing include, but are not limited to: determining if measure scores adequately distinguish between providers known to have good or poor quality assessed by another valid method; correlation of measure scores with another valid indicator of quality for the specific topic; ability of measure scores to predict scores on some other related valid measure; content validity for multi-item scales/tests. Face validity is a subjective assessment by experts of whether the measure reflects the quality of care (e.g., whether the proportion of patients with BP < 140/90 is a marker of quality). If face validity is the only validity addressed, it is systematically assessed (e.g., ratings by relevant stakeholders) and the measure is judged to represent quality care for the specific topic and that the measure focus is the most important aspect of quality for the specific topic.

Comment [KP14]: 2d. Clinically necessary measure exclusions are identified and must be: supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion; AND a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus; ... [2]

Comment [K15]: 10 Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, sensitivity analyses with and without the exclusion, and variability of exclusions across providers.

Comment [KP16]: 2e. For outcome measures and other measures (e.g., resource use) when indicated: an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome. ... [3]

Comment [K17]: 13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women) ... [4]
2e.3 Testing Results (risk model performance metrics): Not applicable
2e.4 If outcome or resource use measure is not risk adjusted, provide rationale:

2f. Identification of Meaningful Differences in Performance

2f.1 Data/sample from Testing or Current Use (description of data/sample and size): None available
2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale):

2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance)

None available

2g. Comparability of Multiple Data Sources/Methods

2g.1 Data/sample (description of data/sample and size):
2g.2 Analytic Method (type of analysis & rationale):

2g.3 Testing Results (e.g., correlation statistics, comparison of rankings):

2h. Disparities in Care

2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts):
2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Scientific Acceptability of Measure Properties?

Steering Committee: Overall, to what extent was the criterion, Scientific Acceptability of Measure Properties, met? Rationale:

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)

3a. Meaningful, Understandable, and Useful Information

3a.1 Current Use: In use
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). If not publicly reported, state the plans to achieve public reporting within 3 years): This measure is not currently used in public reporting, but would be available to any organizations or agencies locally and nationally for public reporting use. It has been used in quality improvement initiatives by ICSI member organizations who found the measure useful for quality improvement purposes.

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). If not used for QI, state the plans to achieve use for QI)

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
same target population), Describe why it is a more valid or efficient way to measure quality:

3a.4 Data/sample (description of data/sample and size): None available

3a.5 Methods (e.g., focus group, survey, QI project): None available

3a.6 Results (qualitative and/or quantitative results and conclusions): None available

3b/3c. Relation to other NQF-endorsed measures

3b.1 NQF # and Title of similar or related measures:

(for NQF staff use) Notes on similar/related endorsed or submitted measures: NQF has endorsed measure #0038 Childhood Immunization Status (NCQA) - no comments made on harmonization.

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 or different topic but same target population):

3b.2 Are the measure specifications harmonized? If not, why?

3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:

5.1 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:

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?

Steering Committee: Overall, to what extent was the criterion, Usability, met?
Rationale:

4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)

4a. Data Generated as a Byproduct of Care Processes

4a.1-2 How are the data elements that are needed to compute measure scores generated?

Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition), Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)

4b. Electronic Sources

4b.1 Are all the data elements available electronically? (elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims)
### 4b. If not, specify the near-term path to achieve electronic capture by most providers.

- **Yes**

### 4c. Exclusions

1. **Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?**

   - **Yes**

2. **If yes, provide justification.**

### 4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences

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.**

### 4e. Data Collection Strategy/Implementation

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:**

   - **Not available**

2. **Costs to implement the measure (costs of data collection, fees associated with proprietary measures):**

   - **Not available**

3. **Evidence for costs:**

   - **Not available**

4. **Business case documentation:**

   - **Not available**

### TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Feasibility?

- **Not available**

### Steering Committee: Overall, to what extent was the criterion, Feasibility, met?

- **Not available**

### Rationale:

### RECOMMENDATION

**(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.**

- **Time-limited**

### Steering Committee: Do you recommend for endorsement?

- **Yes**

### Comments:

### CONTACT INFORMATION

- **Co.1 Measure Steward (Intellectual Property Owner)**
  - Institute for Clinical Systems Improvement, 8009 34th Avenue South, Suite 1200, Bloomington, Minnesota, 55425

- **Co.2 Point of Contact**
### 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.

**Immunizations Guideline Roster**

Work Group Leader: James Nordin, MD, Health Partners Medical Group

Work Group Members:

- Adele Starr, RNC, ANP, North Point Health and Wellness Center
- Emma Carlin, MD, Park Nicollet Health Services
- Ken Kephart, MD, Fairview Health Services
- Barbara Yawn, MD, Olmsted Medical Center
- Abinash Virk, MD, Mayo Clinic
- Rosanne Anderson, RN, Family Practice Medical Center
- Barbara Ottis, RN, Park Nicollet Health Services
- Jeannine Terhaar, RN, University of Minnesota Physicians
- Renner Anderson, MD, Park Nicollet Health Services
- Robert Jacobson, MD, Mayo Clinic
- Sarah Rall, PharmD, Marshfield Clinic
- Gail Hunt, ICSI
- Melissa Marshall, MBA, ICSI
- Kari Retzer, RN, ICSI

Ad.2 If adapted, provide name of 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: 1994

Ad.7 Month and Year of most recent revision: 03, 2010

Ad.8 What is your frequency for review/update of this measure? 12 months

Ad.9 When is the next scheduled review/update for this measure? 03, 2011

Ad.10 Copyright statement/disclaimers:

Ad.11-13 Additional Information web page URL or attachment:

Date of Submission (MM/DD/YY): 08/26/2010
1c. The measure focus is:

- an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or-associated with, a national health goal/priority, the condition, population, and/or care being addressed;

OR

- if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
  - Intermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
  - Process - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
  - Structure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
  - Patient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
  - Access - evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
  - Efficiency - demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

2d. Clinically necessary measure exclusions are identified and must be:

- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion;

AND

- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus;

AND

- precisely defined and specified:
  - if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);

if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

2e. For outcome measures and other measures (e.g., resource use) when indicated:

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care;OR

rationale/data support no risk adjustment.

3 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.
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 subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. 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 subcriterion 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 subcriteria (yellow highlighted areas).

**Steering Committee:** Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, 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 subcriteria as indicated)

### MEASURE DESCRIPTIVE INFORMATION

**De.1** Measure Title: Child and Adolescent Major Depressive Disorder: Diagnostic Evaluation

**De.2** Brief description of measure: Percentage of patients aged 6 through 17 years with a diagnosis of major depressive disorder with documented evidence that they met the DSM-IV criteria [at least 5 elements with symptom duration of two weeks or longer, including 1) depressed mood (can be irritable mood in children and adolescents) or 2) loss of interest or pleasure] during the visit in which the new diagnosis or recurrent episode was identified

**De.3** 1.1-2 Type of Measure: Process

**De.4** National Priority Partners Priority Area: Population health

**De.5** IOM Quality Domain: Effectiveness, Patient-centered

**De.6** Consumer Care Need: Getting better

### CONDITIONS FOR CONSIDERATION BY NQF

Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:

<table>
<thead>
<tr>
<th>A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. 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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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)?</td>
</tr>
<tr>
<td>A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission</td>
</tr>
<tr>
<td>A.4 Measure Steward Agreement attached:</td>
</tr>
</tbody>
</table>

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
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 N |

C. The intended use of the measure includes both public reporting and quality improvement.

| C | Y N |

- **Purpose:** Public reporting, Internal quality improvement, Accountability

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 12 months of endorsement.

| D | Y N |

- **D.1 Testing:** No, testing will be completed within 12 months
- **D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures?** Yes

(for NQF staff use) Have all conditions for consideration been met?

**Staff Notes to Steward (if submission returned):**

**Staff Notes to Reviewers (issues or questions regarding any criteria):**

**Staff Reviewer Name(s):**

---

**TAP/Workgroup Reviewer Name:**

**Steering Committee Reviewer Name:**

1. IMPORTANCE TO MEASURE AND REPORT

| 1a | 1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Leading cause of morbidity/mortality, Severity of illness, Patient/societal consequences of poor quality |
| 1a.2 |

1a.3 **Summary of Evidence of High Impact:** “Major depressive disorder (MDD) is a debilitating condition that has been increasingly recognized among youth, particularly adolescents. The prevalence of current or recent depression among children is 3% and among adolescents is 6%.1 The lifetime prevalence of MDD among adolescents may be as high as 20%.2-4 Adolescent-onset MDD is associated with an increased risk of death by suicide, suicide attempts, and recurrence of major depression by young adulthood.5-7 MDD is also associated with early pregnancy, decreased school performance, and impaired work, social, and family functioning during young adulthood.6-8”


| 1a | C P M N |

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: Depression in children and adolescents is often underdiagnosed; one-quarter to one-half of all cases of major depressive disorders are estimated to be properly recognized by primary care and non-psychiatric practitioners. (1)(2)(3)Thorough assessment of depressive symptoms as enumerated by DSM-IV sets the basis for accurate diagnosis and treatment of major depressive disorder. Despite its importance, significant gaps in the knowledge or application of the DSM-IV criteria, even among psychiatrists exist and represent a tremendous opportunity for improvement.

(3) Katon WJ, Richardson L, Russo J, Lozano P, McCauley E. Quality of Mental Health Care for Youth With Asthma and Comorbid Anxiety and Depression. Medical Care 2006; 44:12, 1064-1072.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
A recent survey analyzed psychiatrists' reported use of the DSM-IV criteria for MDD to diagnose depression and compared their use to the use by nonpsychiatrist physicians. Nearly one quarter of the psychiatrists indicated that they usually did not use the DSM-IV criteria when diagnosing depression while nearly half of the nonpsychiatrist physicians indicated that they rarely used the DSM-IV MDD criteria to diagnose depression.(1) A 2003 study reviewed medical records to assess the degree to which providers adhered to depression guidelines in a VA primary care setting. Providers documented review of at least five DSM-IV criteria in 46% of the records.(2)

1b.3 Citations for data on performance gap:

1b.4 Summary of Data on disparities by population group:
We are not aware of any publications/evidence outlining disparities in this area.

1b.5 Citations for data on Disparities:

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): Thorough assessment of
depressive symptoms as enumerated by DSM-IV sets the basis for accurate diagnosis and treatment of major depressive disorder. A variety of treatment strategies have demonstrated efficacy leading to symptomatic remission.

1c.2-3. Type of Evidence: Evidence-based guideline

1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome): A diagnostic evaluation should be instituted for all patients with major depressive disorder to determine whether a diagnosis of depression is warranted and to reveal the presence of other conditions that may have an impact on treatment.

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

1c.6 Method for rating evidence:

1c.7 Summary of Controversy/Contradictory Evidence: None

1c.8 Citations for Evidence (other than guidelines):

1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number): If the screening indicates significant depressive symptomatology, the clinician should perform a thorough evaluation to determine the presence of depressive and other comorbid psychiatric and medical disorders [MS]. A comprehensive psychiatric diagnostic evaluation is the single most useful tool currently available to diagnose depressive disorders. (AACAP (1))

The criteria for a major depressive disorder episode include five (or more) of nine specific symptoms which have been present during the same two-week period and represent a change from previous functioning; at least one of the symptoms is either 1) depressed mood or 2) loss of interest or pleasure. In addition, these symptoms do not meet criteria for a mixed episode (e.g., criteria for both a manic episode and for major depressive order are exhibited nearly daily). The symptoms cause clinically significant distress or impairment in social, occupations, or other important areas of functioning. The symptoms are not due to the direct physiological effects of a substance or general medical condition. The symptoms are not due to bereavement and they persist longer than two months. The symptoms may be characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation. (DSM-IV (2))

In children and adolescents, an irritable or cranky mood may develop rather than a sad or dejected mood. (DSM-IV (2))


1c.11 National Guideline Clearinghouse or other URL: (1) http://www.guideline.gov/content.aspx?id=11404

1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom): (1) Minimal Standard (MS) [see below for narrative description of the rating] (2) Not available [see below for description of revision process]

1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe...
American Academy of Child and Adolescent Psychiatry (AACAP) Grades of Recommendations

- **Minimal Standard [MS]** is applied to recommendations that are based on rigorous empirical evidence (such as randomized, controlled trials) and/or overwhelming clinical consensus. Minimal standards apply more than 95% of the time; i.e., in almost all cases.
- **Clinical Guideline [CG]** is applied to recommendations that are based on strong empirical evidence (such as non-randomized control trials) and/or strong clinical consensus. Clinical guidelines apply approximately 75% of the time; i.e., in most cases.
- **Option [OP]** is applied to recommendations that are acceptable based on emerging empirical evidence (such as uncontrolled trials or reports) or clinical opinion, but lack strong empirical evidence and/or strong clinical consensus.
- **Not Endorsed [NE]** is applied to practices that are known to be ineffective or contraindicated.

### DSM-IV Revision Process:
The Task Force on DSM-IV and its Work Groups conducted a three-stage empirical process that included 1) comprehensive and systematic reviews of the published literature, 2) reanalyses of already-collected data sets and 3) extensive issue-focused field trials.

### 1c.14 Rationale for using this guideline over others:
It is the PCPI policy to use guidelines, which are evidence-based, applicable to physicians and other healthcare providers, and developed by a national specialty organization or government agency. In addition, the PCPI has now expanded what is acceptable as the evidence base for measures to included documented quality improvement (QI) initiatives or implementation projects that have demonstrated improvement in the quality of care.

### TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report?

<table>
<thead>
<tr>
<th>Rationale:</th>
<th>Eval Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

### 2. 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. (evaluation criteria)

### 2a. MEASURE SPECIFICATIONS

**S.1** Do you have a web page where current detailed measure specifications can be obtained?
**S.2** If yes, provide web page URL:

<table>
<thead>
<tr>
<th>2a. Precisely Specified</th>
<th></th>
</tr>
</thead>
</table>

**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):*
Patients with documented evidence that they met the DSM-IV criteria [at least 5 elements with symptom duration of two weeks or longer, including 1) depressed mood (can be irritable mood in children and adolescents) or 2) loss of interest or pleasure] during the visit in which the new diagnosis or recurrent episode was identified

**2a.2 Numerator Time Window** *(The time period in which cases are eligible for inclusion in the numerator):*
Once per episode (at initial evaluation) within a 12-month period

**2a.3 Numerator Details** *(All information required to collect/calculate the numerator, including all codes, logic, and definitions):*
The DSM-IV Criteria for a MDD episode includes five (or more) of nine specific symptoms:
- depressed mood (Note: in children and adolescents, can be irritable mood)
- marked diminished interest/pleasure;
- significant weight loss or gain; (Note: in children, consider failure to make expected weight gains)
- insomnia or hypersomnia;
- psychomotor agitation/retardation;
- fatigue or lost of energy;
- feelings of worthlessness;
- diminished ability to concentrate; and
- recurrent suicidal ideation

which have been present during the same two-weeks period and represent a change from previous functioning; at least one of the symptoms is either 1) depressed mood or 2) loss of interest or pleasure.

Note: The essential feature of a major depressive disorder is a period of at least two weeks during which there is either depressed mood or irritability or the loss of interest or pleasure in nearly all activities. In children and adolescents, can be irritable or cranky mood.

| 2a.4 Denominator Statement (Brief, text description of the denominator - target population being measured): |
| All patients aged 6 through 17 years with a diagnosis of major depressive disorder |

| 2a.5 Target population gender: | Female, Male |
| 2a.6 Target population age range: | 6 through 17 years |

| 2a.7 Denominator Time Window (The time period in which cases are eligible for inclusion in the denominator): |
| 12 months |

| 2a.8 Denominator Details (All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions): |
| See attached Level I EHR Specifications |

| 2a.9 Denominator Exclusions (Brief text description of exclusions from the target population): | None |

| 2a.10 Denominator Exclusion Details (All information required to collect exclusions to the denominator, including all codes, logic, and definitions): |

| 2a.11 Stratification Details/Variables (All information required to stratify the measure including the stratification variables, all codes, logic, and definitions): |
| Stratification by insurance coverage (commercial, Medicare and Medicaid) is recommended by some implementers |

| 2a.12-13 Risk Adjustment Type: | No risk adjustment necessary |

| 2a.14 Risk Adjustment Methodology/Variables (List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method): |

| 2a.15-17 Detailed risk model available Web page URL or attachment: |

| 2a.18-19 Type of Score: | Rate/proportion |
| 2a.20 Interpretation of Score: | Better quality = Higher score |

| 2a.21 Calculation Algorithm (Describe the calculation of the measure as a flowchart or series of steps): |
| See attached documents |

| 2a.22 Describe the method for discriminating performance (e.g., significance testing): |

| 2a.23 Sampling (Survey) Methodology 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): |

| 2a.24 Data Source (Check the source(s) for which the measure is specified and tested): |
Electronic Health/Medical Record

2a.25 Data source/data collection instrument (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):

2a.26-28 Data source/data collection instrument reference web page URL or attachment:

2a.29-31 Data dictionary/code table web page URL or attachment: Attachment MDD 2 Complete.pdf

2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested)
Clinicians: Individual, Clinicians: Group

2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested)
Ambulatory Care: Office, Ambulatory Care: Clinic, Ambulatory Care: Hospital Outpatient, Behavioral health/psychiatric unit

2a.38-41 Clinical Services (Healthcare services being measured, check all that apply)
Behavioral Health: Mental Health, Clinicians: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO), Clinicians: Psychologist/LCSW

TESTING/ANALYSIS

2b. Reliability testing


The Challenge of Measuring Quality of Care From the Electronic Health Record. Carol P. Roth, Yee-Wei Lim, Joshua M. Pevnick, Steven M. Asch and Elizabeth A. McGlynn. American Journal of Medical Quality 2009; 24; 385 originally published online May 29, 2009.


2b.2 Analytic Method (type of reliability & rationale, method for testing):
(Solberg, 2006) The objective of this study was to demonstrate a method to accurately identify patients with specific conditions from claims data for care improvement or performance measurement. Using an iterative process of trial case definitions followed by review of repeated random samples of 10 to 20 cases for newly treated depression, a final identification algorithm was created from claims files of health plan members. A final sample was used to calculate the positive predictive value (PPV).

(Roth 2009) The electronic health record (EHR) is seen by many as an ideal vehicle for measuring quality of health care and monitoring ongoing provider performance. It is anticipated that the availability of EHR-extracted data will allow quality assessment without the expensive and time-consuming process of medical record abstraction. Each quality measure was classified by the anticipated difficulty of satisfying eligibility and scoring statements using an EHR-enhanced data warehouse as the source of data. Measures were considered level 1 if all requisite data elements were accessible. Measures were considered level 2 if the denominator was accessible but the numerator was in some way inaccessible. Measures were considered level 3 if the denominator was difficult to access.

(Dobscha 2003) Researchers created one composite, measure, based on 3 national guidelines. The DSM-IV Major depression criteria corresponds with our Diagnostic Evaluation measure. The Evaluate level of safety/suicide history criteria corresponds with our Suicide Risk Assessment measure. Data was analyzed for internal consistency and inter-rater reliability.

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted):

(Solberg, 2006) MDD had an unacceptably low PPV (0.65) when cases were identified on the basis of only 1 International Classification of Diseases, ninth revision, code per year. Requiring 2 outpatient ICD-9 codes or 1 inpatient ICD-9 code within 12 months (plus consideration of extra criteria for depression) resulted in PPV of 0.95. This approach is feasible and necessary for those wanting to use administrative data for case identification for performance measurement or quality improvement. The PCPI measure utilizes this approach.

(Roth 2009) Accurately identifying eligible cases for quality assessment and validly scoring those cases with EHR extracted data will pose challenges but could potentially plummet the cost and therefore expand the use of quality assessment. A review of the data requirements for the depression related indicators in the Quality Assessment Tools system suggests that 41% of measures would be readily accessible from EHR data. Another 29% of the depression-related indicators have denominators that are readily accessible. Accessibility of data used to calculate the measure in an EHR reflects reliability of measure calculation.

(Dobscha 2003) Inter-rater reliability was assessed, using the kappa coefficient. The Diagnosis measure (documentation of review of >= 5 DSM-IV criteria or of specific PHQ results) had a kappa = 0.83. The performance rate for this measure was 46.0% (37.0 - 55.2 95%CI).

2c. Validity testing

2c.1 Data/sample (description of data/sample and size):

2c.2 Analytic Method (type of validity & rationale, method for testing):

During measure development, the PCPI-convened expert work groups assess the face and content validity of each measure. The groups establish the measure’s ability to capture what it is designed to capture using a consensus process that consists of input from multiple stakeholders, including practicing physicians and experts with technical measure expertise, as well as a review of additional input received through a PCPI public comment period.

2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted):

2d. Exclusions Justified

2d.1 Summary of Evidence supporting exclusion(s):
No Exceptions are allowed for this measure.

2d.2 Citations for Evidence:

2d.3 Data/sample (description of data/sample and size):

2d.4 Analytic Method (type analysis & rationale):

2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses):

2e. Risk Adjustment for Outcomes/ Resource Use Measures

2e.1 Data/sample (description of data/sample and size):

2e.2 Analytic Method (type of risk adjustment, analysis, & rationale):

2e.3 Testing Results (risk model performance metrics):
### 2e.4 If outcome or resource use measure is not risk adjusted, provide rationale:

#### 2f. Identification of Meaningful Differences in Performance

- **2f.1 Data/sample from Testing or Current Use** *(description of data/sample and size):*
- **2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance** *(type of analysis & rationale):*
  - **2f.3 Provide Measure Scores from Testing or Current Use** *(description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):*

#### 2g. Comparability of Multiple Data Sources/Methods

- **2g.1 Data/sample** *(description of data/sample and size):*
- **2g.2 Analytic Method** *(type of analysis & rationale):*
- **2g.3 Testing Results** *(e.g., correlation statistics, comparison of rankings):*

#### 2h. Disparities in Care

- **2h.1 If measure is stratified, provide stratified results** *(scores by stratified categories/cohorts):*
  - The measure is not stratified by patient groups or cohorts that could potentially be affected by disparities in care, nor are we aware of any existing research identifying disparities in care that may be relevant to this measure.
- **2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:**
  - We are not aware of any relevant disparities that have been identified.

**TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Scientific Acceptability of Measure Properties?**

**Steering Committee: Overall, to what extent was the criterion, Scientific Acceptability of Measure Properties, met?**

**Rationale:**

#### 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)*

- **3a. Meaningful, Understandable, and Useful Information**
  - **3a.1 Current Use:** *In use*
  - **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). If not publicly reported, state the plans to achieve public reporting within 3 years):*
    - This measure in its adult form is currently utilized in the CMS PQRI Program.
  - **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). If not used for QI, state the plans to achieve use for QI):*
within 3 years):

**Testing of Interpretability**  *(Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)*

3a.4 Data/sample *(description of data/sample and size):*

3a.5 Methods *(e.g., focus group, survey, QI project):*

3a.6 Results *(qualitative and/or quantitative results and conclusions):*

<table>
<thead>
<tr>
<th>3b/3c. Relation to other NQF-endorsed measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>3b.1 NQF # and Title of similar or related measures:</td>
</tr>
<tr>
<td>103: Major Depressive Disorder: Diagnostic Evaluation</td>
</tr>
</tbody>
</table>

*(for NQF staff use)* **Notes on similar/related endorsed or submitted measures:**

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 or different topic but same target population):
3b.2 Are the measure specifications harmonized? If not, why?
Yes

<table>
<thead>
<tr>
<th>3c. Distinctive or Additive Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:</td>
</tr>
</tbody>
</table>

5.1 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:

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?

Steering Committee: Overall, to what extent was the criterion, Usability, met?
Rationale:

<table>
<thead>
<tr>
<th>4. FEASIBILITY</th>
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</table>

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. *(evaluation criteria)*

<table>
<thead>
<tr>
<th>4a. Data Generated as a Byproduct of Care Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4a.1-2 How are the data elements that are needed to compute measure scores generated?</td>
</tr>
<tr>
<td>Data generated as byproduct of care processes during care delivery <em>(Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition)</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4b. Electronic Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>4b.1 Are all the data elements available electronically? <em>(elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims)</em></td>
</tr>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

4b.2 If not, specify the near-term path to achieve electronic capture by most providers.
### 4c. Exclusions

4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?

No

4c.2 If yes, provide justification.

No additional data sources required.

### 4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences

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.

We are not aware of any unintended consequences related to this measurement.

### 4e. Data Collection Strategy/Implementation

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:

This pediatric MDD measure has a corresponding adult measure, which differs only in having an different age range. Therefore, implementation results for the adult measures are expected to be applicable to the pediatric measures.

Through a partnership with the American Medical Association (AMA) and Healthcare Information and Management Systems Society (HIMSS), the Alliance of Chicago Community Health Centers developed the AHRQ-funded 3-year Enhancing Quality in Patient Care (EQUIP) project to augment its EHR implementation. This project implemented all 5 AMA-PCPI Adult MDD measures in the EHR.

As part of the AHRQ-funded Effecting Change in Chronic Care: The Tipping Point project, 3 physicians implemented performance measures into existing electronic health record systems. One additional physician implemented a paper flow sheet documentation system where the flow sheet was placed in each chart at the time of the visit. This project found that the adult MDD measures were feasible to collect after the process changes were put into place.

Additionally, the adult MDD version of this measure was utilized in the CMS PQRI program, in 2008, 2009, and 2010. The average performance rate for the 2008 PQRI program for the Diagnostic Evaluation measure was 86% with n=1328.

4e.2 Costs to implement the measure (costs of data collection, fees associated with proprietary measures):

Costs to implement this specific measure have not been calculated.

4e.3 Evidence for costs:

4e.4 Business case documentation:

**TAP/Workgroup:** What are the strengths and weaknesses in relation to the subcriteria for Feasibility?

Steering Committee: Overall, to what extent was the criterion, Feasibility, met?

Rationale:

### RECOMMENDATION

(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
Steering Committee: Do you recommend for endorsement?
Comments: Y N A

<table>
<thead>
<tr>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Co.1 Measure Steward (Intellectual Property Owner)</strong></td>
</tr>
<tr>
<td><strong>Co.1 Organization</strong></td>
</tr>
<tr>
<td>American Medical Association, 515 N State St., Chicago, Illinois, 60654</td>
</tr>
<tr>
<td><strong>Co.2 Point of Contact</strong></td>
</tr>
<tr>
<td>Mark, Antman, DDS, MBA, <a href="mailto:mark.antman@ama-assn.org">mark.antman@ama-assn.org</a>, 312-464-5056-</td>
</tr>
<tr>
<td><strong>Measures Developer If different from Measure Steward</strong></td>
</tr>
<tr>
<td><strong>Co.3 Organization</strong></td>
</tr>
<tr>
<td>American Medical Association, 515 N State St., Chicago, Illinois, 60654</td>
</tr>
<tr>
<td><strong>Co.4 Point of Contact</strong></td>
</tr>
<tr>
<td>Mark, Antman, DDS, MBA, <a href="mailto:mark.antman@ama-assn.org">mark.antman@ama-assn.org</a>, 312-464-5056-</td>
</tr>
<tr>
<td><strong>Co.5 Submitter If different from Measure Steward POC</strong></td>
</tr>
<tr>
<td>Mark, Antman, DDS, MBA, <a href="mailto:mark.antman@ama-assn.org">mark.antman@ama-assn.org</a>, 312-464-5056-, American Medical Association</td>
</tr>
<tr>
<td><strong>Co.6 Additional organizations that sponsored/participated in measure development</strong></td>
</tr>
<tr>
<td>American Psychiatric Association, American Academy of Child and Adolescent Psychiatry</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>ADDITIONAL INFORMATION</th>
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<tbody>
<tr>
<td><strong>Workgroup/Expert Panel involved in measure development</strong></td>
</tr>
<tr>
<td><strong>Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations.</strong></td>
</tr>
<tr>
<td>Boris Birmaher, MD (child/adolescent psychiatry)</td>
</tr>
<tr>
<td>Mary Dobbins, MD, FAAP (pediatrics/psychiatry)</td>
</tr>
<tr>
<td>Scott Endsley, MD, MSc (family medicine)</td>
</tr>
<tr>
<td>William E. Golden, MD, FACP (internal medicine)</td>
</tr>
<tr>
<td>Margaret L. Keeler, MD, MS, FACEP (emergency medicine)</td>
</tr>
<tr>
<td>Louis J. Kraus, MD (child/adolescent psychiatry)</td>
</tr>
<tr>
<td>Laurent S. Lehmann, MD (psychiatry)</td>
</tr>
<tr>
<td>Karen Pierce, MD (child/adolescent psychiatry)</td>
</tr>
<tr>
<td>Reed E. Pyeritz, MD, PhD, FACP, FACMG (medical genetics)</td>
</tr>
<tr>
<td>Laura Richardson, MD, MPH (internal medicine/pediatrics)</td>
</tr>
<tr>
<td>Sam J.W. Romeo, MD, MBA (family medicine)</td>
</tr>
<tr>
<td>Carl A. Sirio, MD (critical care medicine)</td>
</tr>
<tr>
<td>Sharon Sweede, MD (family medicine)</td>
</tr>
<tr>
<td>Scott Williams, PsyD (The Joint Commission)</td>
</tr>
</tbody>
</table>

PCPI measures are developed through cross-specialty, multi-disciplinary work groups. All medical specialties and other health care professional disciplines participating in patient care for the clinical condition or topic under study must be equal contributors to the measure development process. In addition, the PCPI strives to include on its work groups individuals representing the perspectives of patients, consumers, private health plans, and employers. This broad-based approach to measure development ensures buy-in on the measures from all stakeholders and minimizes bias toward any individual specialty or stakeholder group. All work groups have at least two co-chairs who have relevant clinical and/or measure development expertise and who are responsible for ensuring that consensus is achieved and that all perspectives are voiced.

| **Ad.2 If adapted, provide name of 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:** 2008 |
| **Ad.7 Month and Year of most recent revision:** 09, 2008 |
| **Ad.8 What is your frequency for review/update of this measure?** Every 3 years or as new evidence becomes
When is the next scheduled review/update for this measure? 09, 2011

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Date of Submission (MM/DD/YY): 08/30/2010
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 subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. 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 subcriterion 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 subcriteria (yellow highlighted areas).

Steering Committee: Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, 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 subcriteria as indicated)

<table>
<thead>
<tr>
<th>Measure Title: Child and Adolescent Major Depressive Disorder: Diagnostic Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief description of measure: Percentage of patients aged 6 through 17 years with a diagnosis of major depressive disorder with documented evidence that they met the DSM-IV criteria [at least 5 elements with symptom duration of two weeks or longer, including 1) depressed mood (can be irritable mood in children and adolescents) or 2) loss of interest or pleasure] during the visit in which the new diagnosis or recurrent episode was identified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Measure: Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>If included in a composite or paired with another measure, please identify composite or paired measure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National Priority Partners Priority Area: Population health</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOM Quality Domain: Effectiveness, Patient-centered</td>
</tr>
<tr>
<td>Consumer Care Need: Getting better</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONDITIONS FOR CONSIDERATION BY NQF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:</td>
</tr>
</tbody>
</table>

A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. **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.**

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**

A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission **Y**

A.4 Measure Steward Agreement attached: **N**

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
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

C. The intended use of the measure includes both public reporting and quality improvement.
  - Purpose: Public reporting, Internal quality improvement
  - Accountability

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 12 months of endorsement.
  - D.1 Testing: No, testing will be completed within 12 months
  - D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures? Yes

(for NQF staff use) Have all conditions for consideration been met?
Staff Notes to Steward (If submission returned):

Staff Notes to Reviewers (Issues or questions regarding any criteria):

Staff Reviewer Name(s):

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:

<table>
<thead>
<tr>
<th>1a.1 Demonstrated High Impact Aspect of Healthcare:</th>
<th>Affects large numbers, Leading cause of morbidity/mortality, Severity of illness, Patient/societal consequences of poor quality</th>
</tr>
</thead>
</table>

1a.2

1a.3 Summary of Evidence of High Impact: "Major depressive disorder (MDD) is a debilitating condition that has been increasingly recognized among youth, particularly adolescents. The prevalence of current or recent depression among children is 3% and among adolescents is 6%. The lifetime prevalence of MDD among adolescents may be as high as 20%. Adolescent-onset MDD is associated with an increased risk of death by suicide, suicide attempts, and recurrence of major depression by young adulthood. MDD is also associated with early pregnancy, decreased school performance, and impaired work, social, and family functioning during young adulthood." [8]


Rating: C = Completely; P = Partially; M = Minimally; N = Not at all; NA = Not applicable
We are not aware of any publications/evidence outlining disparities in this area.

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): Thorough assessment of depression guidelines in a VA primary care setting. Providers documented review of at least five DSM-IV criteria in 46% of the records. (2) Dobscha SK, Gerrity MS, Corson K, Bahr A, Culpwik NM. Measuring adherence to depression treatment guidelines in a VA primary care setting. Gen Hosp Psychiatry. 2003;25:230-7.
In children and adolescents, an irritable or cranky mood may develop rather than a sad or dejected mood. Psychomotor retardation. (DSM-IV (2)) Functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or bereavement and they persist longer than two months. The symptoms may be characterized by marked psychomotor retardation. A comprehensive psychiatric diagnostic evaluation is the single most useful tool currently available to diagnose depressive disorders. (AACAP (1))

The criteria for a major depressive disorder episode include five (or more) of nine specific symptoms which have been present during the same two-week period and represent a change from previous functioning; at least one of the symptoms is either 1) depressed mood or 2) loss of interest or pleasure. In addition, these symptoms do not meet criteria for a mixed episode (e.g., criteria for both a manic episode and for major depressive disorder are exhibited nearly daily). The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning. The symptoms are not due to direct physiological effects of a substance or general medical condition. The symptoms are not due to bereavement and they persist longer than two months. The symptoms may be characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation. (DSM-IV (2))

In children and adolescents, an irritable or cranky mood may develop rather than a sad or dejected mood. (DSM-IV (2))


1c.11 National Guideline Clearinghouse or other URL: (1) http://www.guideline.gov/content.aspx?id=11404

1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom): (1) Minimal Standard (MS) [see below for narrative description of the rating] (2) Not available [see below for description of revision process]

1c.13 Method for rating strength of recommendation (if different from USPSTF system, also describe the approach):

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
### American Academy of Child and Adolescent Psychiatry (AACAP) Grades of Recommendations

- **Minimal Standard (MS)** is applied to recommendations that are based on rigorous empirical evidence (such as randomized, controlled trials) and/or overwhelming clinical consensus. Minimal standards apply more than 95% of the time; i.e., in almost all cases.
- **Clinical Guideline (CG)** is applied to recommendations that are based on strong empirical evidence (such as non-randomized control trials) and/or strong clinical consensus. Clinical guidelines apply approximately 75% of the time; i.e., in most cases.
- **Option (OP)** is applied to recommendations that are acceptable based on emerging empirical evidence (such as uncontrolled trials or reports) or clinical opinion, but lack strong empirical evidence and/or strong clinical consensus.
- **Not Endorsed (NE)** is applied to practices that are known to be ineffective or contraindicated.

### DSM-IV Revision Process:
The Task Force on DSM-IV and its Work Groups conducted a three-stage empirical process that included:
1. Comprehensive and systematic reviews of the published literature
2. Reanalyses of already-collected data sets
3. Extensive issue-focused field trials.

### Rationale for using this guideline over others:
It is the PCPI policy to use guidelines, which are evidence-based, applicable to physicians and other healthcare providers, and developed by a national specialty organization or government agency. In addition, the PCPI has now expanded what is acceptable as the evidence base for measures to included documented quality improvement (QI) initiatives or implementation projects that have demonstrated improvement in the quality of care.

<table>
<thead>
<tr>
<th>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <strong>Importance to Measure and Report</strong>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Steering Committee: Was the threshold criterion, <strong>Importance to Measure and Report</strong>, met?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale:</td>
</tr>
<tr>
<td>Y</td>
</tr>
</tbody>
</table>

### 2. 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. (evaluation criteria)

### 2a. MEASURE SPECIFICATIONS

**S.1** Do you have a web page where current detailed measure specifications can be obtained?
**S.2** If yes, provide web page URL:

2a. Precisely Specified

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):
Patients with documented evidence that they met the DSM-IV criteria [at least 5 elements with symptom duration of two weeks or longer, including 1) depressed mood (can be irritable mood in children and adolescents) or 2) loss of interest or pleasure] during the visit in which the new diagnosis or recurrent episode was identified

2a.2 **Numerator Time Window** (The time period in which cases are eligible for inclusion in the numerator):
Once per episode (at initial evaluation) within a 12-month period

2a.3 **Numerator Details** (All information required to collect/calculate the numerator, including all codes, logic, and definitions):
The DSM-IV Criteria for a MDD episode includes five (or more) of nine specific symptoms:
- depressed mood (Note: in children and adolescents, can be irritable mood)

**Comment [KP8]:** 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF's Health Information Technology Expert Panel (HITEP).
marked diminished interest/pleasure;
- significant weight loss or gain; (Note: in children, consider failure to make expected weight gains)
- insomnia or hypersomnia;
- psychomotor agitation/retardation;
- fatigue or loss of energy;
- feelings of worthlessness;
- diminished ability to concentrate; and
- recurrent suicidal ideation
which have been present during the same two-weeks period and represent a change from previous functioning; at least one of the symptoms is either 1) depressed mood or 2) loss of interest or pleasure.

Note: The essential feature of a major depressive disorder is a period of at least two weeks during which there is either depressed mood or irritability or the loss of interest or pleasure in nearly all activities. In children and adolescents, can be irritable or cranky mood.

2a.4 Denominator Statement (Brief, text description of the denominator - target population being measured):
All patients aged 6 through 17 years with a diagnosis of major depressive disorder

2a.5 Target population gender: Female, Male

2a.6 Target population age range: 6 through 17 years

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

2a.8 Denominator Details (All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions):
See attached Level I EHR Specifications

2a.9 Denominator Exclusions (Brief text description of exclusions from the target population): None

2a.10 Denominator Exclusion Details (All information required to collect exclusions to the denominator, including all codes, logic, and definitions):

2a.11 Stratification Details/Variables (All information required to stratify the measure including the stratification variables, all codes, logic, and definitions):
Stratification by insurance coverage (commercial, Medicare and Medicaid) is recommended by some implementers

2a.12-13 Risk Adjustment Type: No risk adjustment necessary

2a.14 Risk Adjustment Methodology/Variables (List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method):

2a.15-17 Detailed risk model available Web page URL or attachment:

2a.18-19 Type of Score: Rate/proportion
2a.20 Interpretation of Score: Better quality = Higher score
2a.21 Calculation Algorithm (Describe the calculation of the measure as a flowchart or series of steps):
See attached documents

2a.22 Describe the method for discriminating performance (e.g., significance testing):

2a.23 Sampling (Survey) Methodology 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):

2a.24 Data Source (Check the source(s) for which the measure is specified and tested)
### Electronic Health/Medical Record

2a.25 Data source/data collection instrument (identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):

2a.26-28 Data source/data collection instrument reference web page URL or attachment:

2a.29-31 Data dictionary/code table web page URL or attachment: Attachment MDD 2 Complete.pdf

2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested)

- Clinicians: Individual, Clinicians: Group

2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested)

- Ambulatory Care: Office, Ambulatory Care: Clinic, Ambulatory Care: Hospital Outpatient, Behavioral health/psychiatric unit

2a.38-41 Clinical Services (Healthcare services being measured, check all that apply)

- Behavioral Health: Mental Health, Clinicians: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO), Clinicians: Psychologist/LCSW

### TESTING/ANALYSIS

#### 2b. Reliability testing

2b.1 Data/sample (description of data/sample and size):


- The Challenge of Measuring Quality of Care From the Electronic Health Record. Carol P. Roth, Yee-Wei Lim, Joshua M. Pevnick, Steven M. Asch and Elizabeth A. McGlynn. American Journal of Medical Quality 2009; 24; 385 originally published online May 29, 2009.


2b.2 Analytic Method (type of reliability & rationale, method for testing):

- (Solberg, 2006) The objective of this study was to demonstrate a method to accurately identify patients with specific conditions from claims data for care improvement or performance measurement. Using an iterative process of trial case definitions followed by review of repeated random samples of 10 to 20 cases for newly treated depression, a final identification algorithm was created from claims files of health plan members. A final sample was used to calculate the positive predictive value (PPV).

- (Roth 2009) The electronic health record (EHR) is seen by many as an ideal vehicle for measuring quality of health care and monitoring ongoing provider performance. It is anticipated that the availability of EHR-extracted data will allow quality assessment without the expensive and time-consuming process of medical record abstraction. Each quality measure was classified by the anticipated difficulty of satisfying eligibility and scoring statements using an EHR-enhanced data warehouse as the source of data. Measures were considered level 1 if all requisite data elements were accessible. Measures were considered level 2 if the denominator was accessible but the numerator was in some way inaccessible. Measures were considered level 3 if the denominator was difficult to access.

- (Dobscha 2003) Researchers created one composite, measure, based on 3 national guidelines. The DSM-IV Major depression criteria corresponds with our Diagnostic Evaluation measure. The Evaluate level of safety/suicide history criteria corresponds with our Suicide Risk Assessment measure. Data was analyzed for internal consistency and inter-rater reliability.

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*Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable*
### 2b.3 Testing Results
( reliability statistics, assessment of adequacy in the context of norms for the test conducted;)

(Solberg, 2006) MDD had an unacceptably low PPV (0.65) when cases were identified on the basis of only 1 International Classification of Diseases, ninth revision, code per year. Requiring 2 outpatient ICD-9 codes or 1 inpatient ICD-9 code within 12 months (plus consideration of extra criteria for depression) resulted in PPV of 0.95. This approach is feasible and necessary for those wanting to use administrative data for case identification for performance measurement or quality improvement. The PCPI measure utilizes this approach.

(Roth 2009) Accurately identifying eligible cases for quality assessment and validly scoring those cases with EHR extracted data will pose challenges but could potentially plummet the cost and therefore expand the use of quality assessment. A review of the data requirements for the depression related indicators in the Quality Assessment Tools system suggests that 41% of measures would be readily accessible from EHR data. Another 29% of the depression-related indicators have denominators that are readily accessible. Accessibility of data used to calculate the measure in an EHR reflects reliability of measure calculation.

(Dobscha 2003) Inter-rater reliability was assessed, using the kappa coefficient. The Diagnosis measure (documentation of review of >= 5 DSM-IV criteria or of specific PHQ results) had a kappa = 0.83. The performance rate for this measure was 46.0% (37.0 - 55.2 95%CI).

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### 2c. Validity testing

#### 2c.1 Data/sample (description of data/sample and size):

#### 2c.2 Analytic Method (type of validity & rationale, method for testing):

During measure development, the PCPI-convened expert work groups assess the face and content validity of each measure. The groups establish the measure’s ability to capture what it is designed to capture using a consensus process that consists of input from multiple stakeholders, including practicing physicians and experts with technical measure expertise, as well as a review of additional input received through a PCPI public comment period.

#### 2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted):

#### 2d. Exclusions Justified

#### 2d.1 Summary of Evidence supporting exclusion(s):

No Exceptions are allowed for this measure.

#### 2d.2 Citations for Evidence:

#### 2d.3 Data/sample (description of data/sample and size):

#### 2d.4 Analytic Method (type analysis & rationale):

#### 2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses):

#### 2e. Risk Adjustment for Outcomes/ Resource Use Measures

#### 2e.1 Data/sample (description of data/sample and size):

#### 2e.2 Analytic Method (type of risk adjustment, analysis, & rationale):

#### 2e.3 Testing Results (risk model performance metrics):

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
2e.4 If outcome or resource use measure is not risk adjusted, provide rationale:

2f. Identification of Meaningful Differences in Performance

2f.1 Data/sample from Testing or Current Use (description of data/sample and size):

2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale):

2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):

2g. Comparability of Multiple Data Sources/Methods

2g.1 Data/sample (description of data/sample and size):

2g.2 Analytic Method (type of analysis & rationale):

2g.3 Testing Results (e.g., correlation statistics, comparison of rankings):

2h. Disparities in Care

2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): The measure is not stratified by patient groups or cohorts that could potentially be affected by disparities in care, nor are we aware of any existing research identifying disparities in care that may be relevant to this measure.

2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:

We are not aware of any relevant disparities that have been identified.

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Scientific Acceptability of Measure Properties?

Steering Committee: Overall, to what extent was the criterion, Scientific Acceptability of Measure Properties, met?

Rationale:

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)

3a. Meaningful, Understandable, and Useful Information

3a.1 Current Use: In use

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). If not publicly reported, state the plans to achieve public reporting within 3 years):

This measure in its adult form is currently utilized in the CMS PQRI Program.

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). If not used for QI, state the plans to achieve use for QI):

Comment [KP18]: 2f. Data analysis demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful differences in performance.

Comment [K19]: 14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of $25 in cost for an episode of care (e.g., $5,000 v. $5,025) is practically meaningful. Measures with overall poor performance may not demonstrate much variability across providers.

Comment [KP20]: 2g. If multiple data sources/methods are allowed, there is demonstration they produce comparable results.

Comment [KP21]: 2h. If disparities in care have been identified, measure specifications, scoring, and analysis allow for identification of disparities through stratification of results (e.g., by race, ethnicity, socioeconomic status, gender); OR rationale/data justifies why stratification is not necessary or not feasible.

Comment [KP22]: 3a. Demonstration that information produced by the measure is meaningful, understandable, and useful to the intended audiences for both public reporting (e.g., focus group, cognitive testing) and informing quality improvement (e.g., quality improvement initiatives). An important outcome that may not have an identified improvement strategy still can be useful for informing quality improvement by identifying the need for and stimulating new approaches to improvement.
Testing of Interpretability  
(Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)

3a.4 Data/sample (description of data/sample and size):

3a.5 Methods (e.g., focus group, survey, QI project):

3a.6 Results (qualitative and/or quantitative results and conclusions):

3b.3c. Relation to other NQF-endorsed measures

3b.1 NQF # and Title of similar or related measures:

103: Major Depressive Disorder: Diagnostic Evaluation

(for NQF staff use) Notes on similar/related endorsed or submitted measures:

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 or different topic but same target population):

3b.2 Are the measure specifications harmonized? If not, why?

Yes

3c. Distinctive or Additive Value
3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:

5.1 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:

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?

Steering Committee: Overall, to what extent was the criterion, Usability, met?

Rationale:

4. FEASIBILITY
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)

4a. Data Generated as a Byproduct of Care Processes

4a.1-2 How are the data elements that are needed to compute measure scores generated?
Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition)

4b. Electronic Sources

4b.1 Are all the data elements available electronically? (elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims)
Yes

4b.2 If not, specify the near-term path to achieve electronic capture by most providers.
### 4c. Exclusions

4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?

No

4c.2 If yes, provide justification.

### 4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences

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.

We are not aware of any unintended consequences related to this measurement.

### 4e. Data Collection Strategy/Implementation

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:

This pediatric MDD measure has a corresponding adult measure, which differs only in having an different age range. Therefore, implementation results for the adult measures are expected to be applicable to the pediatric measures.

Through a partnership with the American Medical Association (AMA) and Healthcare Information and Management Systems Society (HIMSS), the Alliance of Chicago Community Health Centers developed the AHRQ-funded 3-year Enhancing Quality in Patient Care (EQUIP) project to augment its EHR implementation. This project implemented all 5 AMA-PCPI Adult MDD measures in the EHR.

As part of the AHRQ-funded Effecting Change in Chronic Care: The Tipping Point project, 3 physicians implemented performance measures into existing electronic health record systems. One additional physician implemented a paper flow sheet documentation system where the flow sheet was placed in each chart at the time of the visit. This project found that the adult MDD measures were feasible to collect after the process changes were put into place.

Additionally, the adult MDD version of this measure was utilized in the CMS PQRI program, in 2008, 2009, and 2010. The average performance rate for the 2008 PQRI program for the Diagnostic Evaluation measure was 86% with n=1328.

4e.2 Costs to implement the measure (costs of data collection, fees associated with proprietary measures):

Costs to implement this specific measure have not been calculated.

4e.3 Evidence for costs:

4e.4 Business case documentation:

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Feasibility?

Steering Committee: Overall, to what extent was the criterion, Feasibility, met?

Rationale:

### RECOMMENDATION

(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.
<table>
<thead>
<tr>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co.1 Measure Steward (Intellectual Property Owner)</td>
</tr>
<tr>
<td>Co.1 Organization</td>
</tr>
<tr>
<td>American Medical Association, 515 N State St., Chicago, Illinois, 60654</td>
</tr>
<tr>
<td>Co.2 Point of Contact</td>
</tr>
<tr>
<td>Mark, Antman, DDS, MBA, <a href="mailto:mark.antman@ama-assn.org">mark.antman@ama-assn.org</a>, 312-464-5056-</td>
</tr>
<tr>
<td>Measure Developer if different from Measure Steward</td>
</tr>
<tr>
<td>Co.3 Organization</td>
</tr>
<tr>
<td>American Medical Association, 515 N State St., Chicago, Illinois, 60654</td>
</tr>
<tr>
<td>Co.4 Point of Contact</td>
</tr>
<tr>
<td>Mark, Antman, DDS, MBA, <a href="mailto:mark.antman@ama-assn.org">mark.antman@ama-assn.org</a>, 312-464-5056-</td>
</tr>
<tr>
<td>Co.5 Submitter if different from Measure Steward POC</td>
</tr>
<tr>
<td>Mark, Antman, DDS, MBA, <a href="mailto:mark.antman@ama-assn.org">mark.antman@ama-assn.org</a>, 312-464-5056-, American Medical Association</td>
</tr>
<tr>
<td>Co.6 Additional organizations that sponsored/participated in measure development</td>
</tr>
<tr>
<td>American Psychiatric Association, American Academy of Child and Adolescent Psychiatry</td>
</tr>
</tbody>
</table>

<table>
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<th>ADDITIONAL INFORMATION</th>
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<tr>
<td>Workgroup/Expert Panel involved in measure development</td>
</tr>
<tr>
<td>Provide a list of sponsoring organizations and workgroup/panel members’ names and organizations.</td>
</tr>
<tr>
<td>Describe the members’ role in measure development.</td>
</tr>
<tr>
<td>Boris Birmaher, MD (child/adolescent psychiatry)</td>
</tr>
<tr>
<td>Mary Dobbins, MD, FAAP (pediatrics/psychiatry)</td>
</tr>
<tr>
<td>Scott Endsley, MD, MSc (family medicine)</td>
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<tr>
<td>William E. Golden, MD, FACP (internal medicine)</td>
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<tr>
<td>Margaret L. Keeler, MD, MS, FACEP (emergency medicine)</td>
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<tr>
<td>Louis J. Kraus, MD (child/adolescent psychiatry)</td>
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<tr>
<td>Laurent S. Lehmann, MD (psychiatry)</td>
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<tr>
<td>Karen Pierce, MD (child/adolescent psychiatry)</td>
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<tr>
<td>Reed E. Pyeritz, MD, PhD, FACP, FACMG (medical genetics)</td>
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<tr>
<td>Laura Richardson, MD, MPH (internal medicine/pediatrics)</td>
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<td>Sam J.W. Romeo, MD, MBA (family medicine)</td>
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<td>Carl A. Sirio, MD (critical care medicine)</td>
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<td>Sharon Sweede, MD (family medicine)</td>
</tr>
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<td>Scott Williams, PsyD (The Joint Commission)</td>
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PCPI measures are developed through cross-specialty, multi-disciplinary work groups. All medical specialties and other health care professional disciplines participating in patient care for the clinical condition or topic under study must be equal contributors to the measure development process. In addition, the PCPI strives to include on its work groups individuals representing the perspectives of patients, consumers, private health plans, and employers. This broad-based approach to measure development ensures buy-in on the measures from all stakeholders and minimizes bias toward any individual specialty or stakeholder group. All work groups have at least two co-chairs who have relevant clinical and/or measure development expertise and who are responsible for ensuring that consensus is achieved and that all perspectives are voiced.

| Measure Developer/Steward Updates and Ongoing Maintenance |
| If adapted, provide name of original measure: |
| Ad.2 If adapted, provide original specifications URL or attachment |
| Year the measure was first released: 2008 |
| Month and Year of most recent revision: 09, 2008 |
| What is your frequency for review/update of this measure? Every 3 years or as new evidence becomes
| Ad.9 | When is the next scheduled review/update for this measure? | 09, 2011 |
| Ad.10 | Copyright statement/disclaimers: |  |

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Ad.11 -13 Additional Information web page URL or attachment: Attachment NQF Aug 2010 Submission Letter-63418784658122861.pdf

Date of Submission (MM/DD/YY): 08/30/2010
4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.

2d. Clinically necessary measure exclusions are identified and must be:
• supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion; AND
• a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus; AND
• precisely defined and specified:
  – if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).
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<tr>
<th>Clinical Topic</th>
<th>Child Adolescent Major Depressive Disorder (CA-MDD)</th>
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<tr>
<td>Measure Title</td>
<td>Child Adolescent Major Depressive Disorder (CA-MDD): Diagnostic Evaluation</td>
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<td>Measure #</td>
<td>PCPI CA-MDD # 2</td>
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<td>Measure Statement</td>
<td>Percentage of patients aged 6 through 17 years with a diagnosis of major depressive disorder with documented evidence that they met the DSM-IV criteria [at least 5 elements with symptom duration of two weeks or longer, including 1) depressed mood (can be irritable mood in children and adolescents) or 2) loss of interest or pleasure] during the visit in which the new diagnosis or recurrent episode was identified.</td>
</tr>
<tr>
<td>Measurement Period</td>
<td>Twelve consecutive months</td>
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</table>
| Initial Patient Population | Patient Age:  6 through 17 years old  
Diagnosis Active:  Major Depressive Disorder New or Recurrent Episode  
Encounter:  At least two visits with the physician, physician's assistant, or nurse practitioner during the measurement period |
| Denominator Statement | All patients aged 6 through 17 years with a diagnosis of major depressive disorder |
| Numerator Statement | Patients with documented evidence that they met the DSM-IV criteria [at least 5 elements with symptom duration of two weeks or longer, including 1) depressed mood (can be irritable mood in children and adolescents) or 2) loss of interest or pleasure] during the visit in which the new diagnosis or recurrent episode was identified. |
| Denominator Exceptions | None |
### Measure Logic for Child Adolescent Major Depressive Disorder: Diagnostic Evaluation

**Measure Statement:** Percentage of patients aged 6 through 17 years with a diagnosis of major depressive disorder with documented evidence that they met the DSM-IV criteria [at least 5 elements with symptom duration of two weeks or longer, including 1) depressed mood (can be irritable mood in children and adolescents) 2) loss of interest or pleasure] during the visit in which the new diagnosis or recurrent episode was identified.

**Measurement Period = Twelve Consecutive Months**

**PCPI Measure:** CA-MDD-2

<table>
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<tr>
<th>Identify Patients in Initial Patient Population (IPP)</th>
<th>Identify Patients in Denominator (D)</th>
<th>Identify Patients in Numerator (N)</th>
<th>Identify Patients who have valid Denominator Exceptions (E)</th>
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<tbody>
<tr>
<td>Patient Age¹ 6 through 17 years</td>
<td>All Patients identified within the Initial Patient Population</td>
<td>All Patients identified within the Denominator</td>
<td>There are no denominator exceptions for this measure</td>
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<td>Encounter³ Value Set 000040 OR 000144</td>
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**Parameter Specifications:**

IPP. ¹Patient age: before the beginning of the measurement period; ²Diagnosis-active: before or simultaneously to encounter date; ³Encounter: > or = 2 visits: occurs during measurement period, and first visit for a new diagnosis or a recurrent episode of Major Depressive Disorder.

N. ⁴Symptom Active: DSM-IV criteria for Major Depressive Disorder; including 1) depressed mood and 2) 4 additional DSM IV Criteria 1 from value set 000146 totaling 5 distinct DSM IV criteria, OR ⁵Symptom Active: DSM IV Criteria for Major Depressive Disorder: including 1) loss of interest and 2) 4 additional DSM IV criteria 2 from Value Set 000147, totaling 5 distinct DSM IV criteria. Note: Depressed Mood is included in Value Set 000145 and 000147; Loss of Interest is included in Value Set 000122 and 000146.
### Basic Measure Calculation:
\[
\frac{(N)}{(D) - (E)} = \%
\]

The PCPI strongly recommends that exception rates also be computed and reported alongside performance rates as follows:

### Exception Calculation:
\[
\frac{(E)}{(D)} = \%
\]

### Exception Types:
\[E = E_1 \text{ (Medical Exceptions)} + E_2 \text{ (Patient Exceptions)} + E_3 \text{ (System Exceptions)}\]

For patients who have more than one valid exception, only one exception should be counted when calculating the exception rate.

<table>
<thead>
<tr>
<th>Initial Patient Population (IPP)</th>
<th>Denominator (D)</th>
<th>Numerator (N)</th>
<th>Denominator Exceptions (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition:</strong> The initial patient population identifies the general group of patients that the performance measures designed to address; usually focused on a specific clinical condition (e.g., coronary artery disease, asthma). For example, a patient aged 18 years and older with a diagnosis of CAD who has at least 2 visits during the measurement period.</td>
<td><strong>Definition:</strong> The denominator defines the specific group of patients for inclusion in a specific performance measure based on specific criteria (e.g., patient's age, diagnosis, prior MI). In some cases, the denominator may be identical to the initial patient population.</td>
<td><strong>Definition:</strong> The numerator defines the group of patients in the denominator for whom a process or outcome of care occurs (e.g., flu vaccine received).</td>
<td><strong>Definition:</strong> Denominator exceptions are the valid reasons why patients who are included in the denominator population did not receive a process or outcome of care (described in the numerator). Patients may have Denominator Exceptions for medical reasons (e.g., patient has an egg allergy so they did not receive flu vaccine); patient reasons (e.g., patient declined flu vaccine); or system reasons (e.g., patient did not receive flu vaccine due to vaccine shortage). These cases are removed from the denominator population for the performance calculation, however the number of patients with valid exceptions should be calculated and reported. This group of patients constitutes the Denominator Exception reporting population – patients for whom the numerator was not achieved and a there is a valid Denominator Exception.</td>
</tr>
</tbody>
</table>

Find the patients who meet the Initial Patient Population criteria (IPP) | Find the patients who qualify for the denominator (D):  
- From the patients within the Patient Population criteria (IPP) select those people who meet Denominator selection criteria.  
- (In some cases the IPP and D are identical). | Find the patients who qualify for the Numerator (N):  
- From the patients within the Denominator (D) criteria, select those people who meet Numerator selection criteria.  
- Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator. | From the patients who did not meet the Numerator criteria, determine if the patient meets any criteria for the Denominator Exception (E1 + E2+E3). If they meet any criteria, they should be removed from the Denominator for performance calculation. As a point of reference, these cases are removed from the denominator population for the performance calculation, however the number of patients with valid exceptions should be calculated and reported. |
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### PCPI CA-MDD 2
Child Adolescent
Major Depressive Disorder Diagnostic Evaluation

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August 30, 2010

Helen Burstin, MD, MPH
Senior Vice President for Performance Measures
National Quality Forum
601 13th Street NW
Suite 500 North
Washington, DC 20005

Dear Dr. Burstin:

On behalf of the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI), we are pleased to submit two measures for consideration for the Child Health Quality Measures 2010 call for measures.

The two measures, Diagnostic Evaluation and Suicide Risk Assessment, are part of a larger, more comprehensive set of measures that were developed by the AMA-PCPI to improve outcomes for children and adolescents with major depressive disorder (MDD). Of the measures in the set, these two measures are closely aligned with NQF-endorsed AMA-PCPI measures for adults with MDD and consequently have fully developed electronic health record (EHR) specifications completed.

We ask that NQF note our intention to submit a full set of measures for children and adolescents with MDD when we have additional EHR specifications and testing information and when NQF issues a call for such measures.

If you have questions or concerns with our submission of these measures, please let us know.

Thank you for your consideration.

Sincerely,

Karen Kmetik, PhD

cc: Bernard Rosof, MD, MACP
Mark Antman, DDS, MBA
Samantha Tierney, MPH