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)

(for NQF staff use) **NQF Review #:** 1350 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Emergency Room Visits
De.2 **Brief description of measure***:* Measures the number of times a child visited the emergency room in the past 12 months
1.1-2 **Type of Measure:** Outcome 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**: Efficiency 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:	**NQF Staff**
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:**	**A** **Y**☐ **N**☐
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	**B** **Y**☐

every 3 years. Yes, information provided in contact section	**N**☐
C. The intended use of the measure includes <u>both</u> public reporting <u>and</u> quality improvement. ►**Purpose:** Public reporting, Internal quality improvement	**C** **Y**☐ **N**☐
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	**D** **Y**☐ **N**☐
(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) **1a. High Impact**	Eval Rating
(for NQF staff use) Specific NPP goal:	
1a.1 **Demonstrated High Impact Aspect of Healthcare:** Patient/societal consequences of poor quality 1a.2 1a.3 **Summary of Evidence of High Impact:** 1a.4 **Citations for Evidence of High Impact:** Child and Adolescent Health Measurement Initiative. 2003 National Survey of Children´s Health, Data Resource Center for Child and Adolescent Health website. www.nschdata.org	**1a** **C**☐ **P**☐ **M**☐ **N**☐
1b. Opportunity for Improvement 1b.1 **Benefits (improvements in quality) envisioned by use of this measure:** 1b.2 **Summary of data demonstrating performance gap (variation or overall poor performance) across providers:** 1b.3 **Citations for data on performance gap:** 1b.4 **Summary of Data on disparities by population group:**	**1b** **C**☐ **P**☐ **M**☐ **N**☐

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*)**:** **1c.2-3. Type of Evidence:** Other Population-Based Research **1c.4 Summary of Evidence** (*as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome*)**:** **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:** **1c.8 Citations for Evidence (***other than guidelines***):** **1c.9 Quote the Specific guideline recommendation (***including guideline number and/or page number***):** **1c.10 Clinical Practice Guideline Citation:** **1c.11 National Guideline Clearinghouse or other URL:** **1c.12 Rating of strength of recommendation (***also provide narrative description of the rating and by whom***):** **1c.13 Method for rating strength of recommendation** (*If different from* USPSTF system*, also describe rating and how it relates to USPSTF)***:** **1c.14 Rationale for using this guideline over others:**	**1c** **C☐** **P☐** **M☐** **N☐**
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?*	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report***, met?** **Rationale:**	**1** **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)	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:** **2a. Precisely Specified**	**2a-specs** **C☐** **P☐**

2a.1 Numerator Statement (*Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome***):**
In development-- measures how many times the child visited the emergency room for his/her health during the past 12 months

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

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

2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured***):**
Children age 0-17 years

2a.5 Target population gender: Female, Male
2a.6 Target population age range: Children age 0-17 years

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

2a.8 Denominator Details (*All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions***):**
Children age 0-17 years

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

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***):**
No stratification is required.

When the Emergency Room Visits measure was administered in its most recent form, in the 2003 National Survey of Children´s Health, the survey included a number of child demographic variables that allow for stratification of the findings by possible vulnerability:
- Age
- Gender
- Geographic location- State, HRSA Region, National level Rural Urban Commuter Areas (RUCA)
- Race/ethnicity
- Health insurance- type, consistency
- Primary household language
- Household income
- Special Health Care Needs- status and type

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

M☐ N☐

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)*: The goal of the NSCH sample design was to generate samples representative of populations of children within each state. An additional goal of the NSCH was to obtain state-specific sample sizes that were sufficiently large to permit reasonably precise estimates of the health characteristics of children in each state. To achieve these goals, state samples were designed to obtain a minimum of 1,700 completed interviews. The number of children to be selected in each National Immunization Survey (NIS) estimation area was determined by allocating the total of 1,700 children in the state to each National Immunization Survey (NIS) estimation area within the state in proportion to the total estimated number of households with children in the NIS estimation area. Given this allocation, the number of households that needed to be screened in each NIS estimation area was calculated using the expected proportion of households with children under 18 years of age in the area. Then, the number of telephone numbers that needed to be called was computed using the expected working residential number rate, adjusted for expected nonresponse.	
2a.24 Data Source (*Check the source(s) for which the measure is specified and tested)* Survey: Patient **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.***):** 2003 National Survey of Children´s Health **2a.26-28 Data source/data collection instrument reference web page URL or attachment:** URL http://www.cdc.gov/nchs/data/slaits/NSCH_Questionnaire.pdf **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)* Population: national, Population: regional/network, Population: states **2a.36-37 Care Settings (***Check the setting(s) for which the measure is specified and tested)* Other Applies to any care setting in which child receives care. Can stratify by usual source of care. **2a.38-41 Clinical Services** (*Healthcare services being measured, check all that apply*) Other Patient Experience	
TESTING/ANALYSIS	
2b. Reliability testing **2b.1 Data/sample** *(description of data/sample and size)*: **2b.2 Analytic Method** *(type of reliability & rationale, method for testing)*: **2b.3 Testing Results** *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)*:	**2b** **C☐** **P☐** **M☐** **N☐**
2c. Validity testing **2c.1 Data/sample** *(description of data/sample and size)*:	**2c** **C☐** **P☐** **M☐**

2c.2 Analytic Method *(type of validity & rationale, method for testing)*: **2c.3 Testing Results** *(statistical results, assessment of adequacy in the context of norms for the test conducted)*:	**N**☐
2d. Exclusions Justified **2d.1 Summary of Evidence supporting exclusion(s):** **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)*:	**2d** **C**☐ **P**☐ **M**☐ **N**☐ **NA**☐
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:**	**2e** **C**☐ **P**☐ **M**☐ **N**☐ **NA**☐
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)*:	**2f** **C**☐ **P**☐ **M**☐ **N**☐
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)*:	**2g** **C**☐ **P**☐ **M**☐ **N**☐ **NA**☐
2h. Disparities in Care **2h.1 If measure is stratified, provide stratified results** *(scores by stratified categories/cohorts)*:	**2h** **C**☐ **P**☐

2h.2 **If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:**	**M☐ N☐ NA☐**
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Scientific Acceptability of Measure Properties?*	**2**
Steering Committee: Overall, to what extent was the criterion, *Scientific Acceptability of Measure Properties*, **met?** **Rationale:**	*2* **C☐ P☐ M☐ N☐**
3. USABILITY	
Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	Eval Rating
3a. Meaningful, Understandable, and Useful Information 3a.1 **Current Use:** Testing not yet 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*)**:** U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. The National Survey of Children´s Health Chartbook 2003. Rockville, Maryland: U.S. Department of Health and Human Services, 2005. http://www.mchb.hrsa.gov/ruralhealth/index.htm 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***):** The Data Resource Center websites have been accessed more than 18 million times since 2006. Thousands of state and national researchers, MCH providers and analysts use the data to report valid children's health data. Healthy People 2010 uses items from the national surveys, and several more are slated to be added into Healthy People 2020. **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)***:** Focus groups were held with numerous stakeholder groups—family advocates, clinicians, Title V leaders, researchers—to obtain feedback on report formats. The Child and Adolescent Health Measurement Initiative led the focus groups and developed reports in accordance with a general consumer information framework. Additional focus groups were held when preparing data and reports for display on the Data Resource Center website. The Data Resource Center executive committee also reviewed report formats for interpretability and applicability. 3a.5 **Methods** *(e.g., focus group, survey, QI project)***:** Focus groups 3a.6 **Results** *(qualitative and/or quantitative results and conclusions)***:**	**3a** **C☐ P☐ M☐ N☐**
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	**3b** **C☐**

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?**	P☐ M☐ N☐ NA☐
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:**	**3c** C☐ P☐ M☐ N☐ 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:**	**3** C☐ P☐ M☐ N☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
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?** Survey	**4a** C☐ P☐ M☐ N☐
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.** No- measure still in development. The questionnaire with the measure specifications isn't available yet due to potential final changes from MCHB, but we will provide the electronic version of the questionnaire once it is finalized.	**4b** C☐ P☐ M☐ N☐
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.**	**4c** C☐ P☐ M☐ N☐ NA☐
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.**	**4d** C☐ P☐ M☐ N☐
4e. Data Collection Strategy/Implementation 4e.1 **Describe what you have learned/modified as a result of testing and/or operational use of the**	**4e** C☐ P☐

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: Items are well understood and easy to implement. Items yield very low levels of missing values, don't know or refused answers. 4e.2 **Costs to implement the measure** (*costs of data collection, fees associated with proprietary measures*)**:** Item is public domain and there is no cost associated with its use. 4e.3 **Evidence for costs:** 4e.4 **Business case documentation:**	**M☐ N☐**
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Feasibility*?	**4**
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, **met?** **Rationale:**	**4** **C☐ P☐ M☐ N☐**
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? **Comments:**	**Y☐ N☐ A☐**
CONTACT INFORMATION	
Co.1 **Measure Steward (Intellectual Property Owner)** Co.1 **Organization** Child and Adolescent Health Measurement Initiative on behalf of the Maternal and Child Health Bureau, Oregon Health & Science University, 707 SW Gaines Street, Portland, Oregon, 97239 Co.2 **Point of Contact** Christina, Bethell, Ph.D., MPH, MBA, bethellc@ohsu.edu, 503-494-1892-	
Measure Developer If different from Measure Steward Co.3 **Organization** Maternal and Child Health Bureau, Parklawn Building Room 18-05, 5600 Fishers Lane, Rockville, Maryland, 20857 Co.4 **Point of Contact** Christina, Bethell, Ph.D., MPH, MBA, bethellc@ohsu.edu, 503-494-1892-	
Co.5 **Submitter If different from Measure Steward POC** Christina, Bethell, Ph.D., MPH, MBA, bethellc@ohsu.edu, 503-494-1892-, Child and Adolescent Health Measurement Initiative on behalf of the Maternal and Child Health Bureau	
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.** The Maternal and Child Health Bureau convenes a Technical Expert Panel (TEP) comprised of dozens of health	

services researchers, survey methodology experts, and clinical health experts on children´s health to develop items for the National Survey of Children´s Health. In addition, members of the National Center for Health Statistics are included in item construction and measure development. The TEP participates in all aspects of measure development.
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:** 2003 **Ad.7 Month and Year of most recent revision:** **Ad.8 What is your frequency for review/update of this measure?** Every 4 years-- the next NSCH will be in 2011 and the questionnaire is being finalized now **Ad.9 When is the next scheduled review/update for this measure?** 01, 2011
Ad.10 Copyright statement/disclaimers:
Ad.11 -13 Additional Information web page URL or attachment:
Date of Submission (*MM/DD/YY*)**:** 08/30/2010

NATIONAL QUALITY FORUM

Measure Evaluation 4.1
December 2009

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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
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(for NQF staff use) **NQF Review #:** 1388 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Annual Dental Visit
De.2 **Brief description of measure***:* The percentage of members 2-21 years of age who had at least one dental visit during the measurement year.
1.1-2 **Type of Measure:** Access De.3 **If included in a composite or paired with another measure, please identify composite or paired measure** None
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

CONDITIONS FOR CONSIDERATION BY NQF	
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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:**	**A** Y☐ N☐
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and	**B**

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	Y☐ N☐
C. The intended use of the measure includes both public reporting and quality improvement. ►**Purpose:** Public reporting, Internal quality improvement	C Y☐ N☐
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	D Y☐ N☐
(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) **1a. High Impact**	Eval Rating
(for NQF staff use) Specific NPP goal: Care coordination, population health	
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:** In the year 2000, only 66.2 percent of Americans 2 years of age and older reported having a dental visit within the last year. For those in poverty, the rate was 47 percent (CDC, 2002). The CDC estimates that in the United States approximately 40 percent of children have caries (tooth decay) by the time they enter kindergarten (AAP, 2003); more than 50 percent have caries by second grade and 80 percent have caries by the time they graduate high school. According to the recently released Surgeon General's Report on Oral Health, dental and oral disease are silent diseases that affect poor Americans—especially children and the elderly. Dental caries is the most common chronic childhood disease—five times more common than asthma. There are striking disparities in dental disease by income. According to a recent GAO report, poor children had five times more untreated dental caries than children in higher-income families. Professional care is necessary for maintaining oral health; 25 percent of oral diseases in children are substantial. More than 51 million school hours are lost each year to dental-related illness. Poor children suffer nearly 12 times more restricted-activity days than children from higher income families. Pain and	**1a** C☐ P☐ M☐ N☐

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).

suffering due to untreated diseases can lead to problems in eating, speaking and attending to learning. Additionally, because tooth decay and periodontal disease are progressive and cumulative, poor oral health and dental disease often continue from childhood into adulthood.

Expenditures for dental services made up 4.6 percent of the nation's health expenditures in 2001—$65.5 billion out of $1.4 trillion (Health Care Financing Administration). Of this spending, $3.1 billion was provided by Medicaid. In 2004, the national and Medicaid dental expenditures are projected to increase to $78.0 and $4.4 billion, respectively. The figures underestimate the true cost, since data on craniofacial health are not available. Total expenditures for dental services have been increasing 5–6 percent a year since 1995.

1a.4 **Citations for Evidence of High Impact:** CDC: Health, United States, 2002.

American Academy of Pediatrics—Section on Pediatric Dentistry; Policy Statement: Oral Health Risk Assessment Timing and Establishment of the Dental Home. Pediatrics 2003: 111(5).

American Cancer Society: Cancer Facts and Figures 2003. http://www.cancer.org/docroot/STT/ stt_0.asp

Dental Services Expenditures, Percent Distribution and Per Capita Amounts, by Source of Funds: Selected Calendar Years 1970-2008, Office of the Actuary, Health Care Financing Administration.

1b. Opportunity for Improvement

1b.1 **Benefits (improvements in quality) envisioned by use of this measure:** The disease burden of dental disease, particularly for children with low socioeconomic status, is high, and the damage caused by dental caries is irreversible. Receiving an annual visit would provide access to preventive care, anticipatory guidance and early treatment if necessary. This access, in turn, would greatly improve the oral health of poor children.

1b.2 **Summary of data demonstrating performance gap (variation or overall poor performance) across providers:**
Tooth decay is preventable, and early diagnosis is important for successful treatment of periodontal diseases. While the overall trend in oral health has improved over the last 30 years, there remains a significant proportion of the population who do not have optimal oral health care. In the year 2007, reports showed that only 77 percent of Americans age two years and older had a dental visit within the last year. For those in poverty, the rate was 47 percent (CDC, 2008). Other reports have estimated that about 75 percent of children aged three to four years have never seen their dentist (dela Cruz., 2004).
Medicaid's Early Periodic Screening Diagnosis and Treatment (EPSDT) program is intended to provide regular dental screenings and appropriate treatment. However, according to a report by the Office of the Inspector General of the Department of Health and Human Services, only 20 percent of children under 21 years of age who were enrolled in Medicaid and eligible for EPSDT actually received preventive dental services.
NCQA's HEDIS measure has shown that performance among health plans is low. The rate was 43.55% in 2007.

1b.3 **Citations for data on performance gap:**
CDC: Health, United States, 2008.

dela Cruz. G.G. MD, MPH, et al. Dental Screening and Referral of Young Children by Pediatric Primary Care Providers. Pediatrics November 2004. Vol. 114 No

1b.4 **Summary of Data on disparities by population group:**
The most advanced oral health disease is found primarily among children living in poverty, some racial/ethnic minority populations, disabled children, and children with HIV infection. (CDC, 2004) Low income children are twice as likely to have tooth decay untreated, (CDC, 2007) and have half the number of dental visits compared with higher income children.
Medicaid's Early Periodic Screening Diagnosis and Treatment (EPSDT) program is intended to provide regular dental screenings and appropriate treatment but has apparently played a limited role in improving access to dental care for poor children. According to a report by the Office of the Inspector General of the

1b
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N☐

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.

Department of Health and Human Services, only 20% of children under 21 years of age, who were enrolled in Medicaid and eligible for EPSDT, actually received preventive dental services.

1b.5 Citations for data on Disparities:
Centers for Disease Control and Prevention: Children's Oral Health. http://www.cdc.gov/OralHealth/publications/factsheets/sgr2000_fs3.htm. Updated October 2004.

Centers for Disease Control and Prevention: Children's Oral Health. http://www.cdc.gov/OralHealth/topics/child.htm. Updated Oct 2007.

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*)**:** The USPSTF found fair evidence that, in preschool children with low fluoride exposure, prescription of oral fluoride supplements by primary care clinicians leads to reduced dental caries. The USPSTF concluded that the benefits of caries prevention using oral fluoride supplementation outweigh the potential harms of dental fluorosis, which in the United States are primarily observed as a mild cosmetic discoloration of the teeth.

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*)**:**
Guidelines set by the AAPD, the ADA and the AAP recommend the first dental visit occur for children by age 1.
The AAPD's guidelines indicate that the first dental visit should be within 6 months of the eruption of the first primary tooth and no later than 12 months of age (AAPD, 2002).

In its May 2003 policy, the AAP (section on Pediatric Dentistry) stated that high-risk children should be identified at an early age. As such, every child should receive an oral health risk assessment by age 6 months by either a pediatrician or other qualified health provider. By age 1 year, children, especially those at risk (JADA, 2002) should have an established dental home (ADA 2002). These early visits can facilitate initiation of preventive care and anticipatory guidance.

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:

1c.8 Citations for Evidence (*other than guidelines***):** American Academy of Pediatric Dentistry. Guideline on infant oral health. Pediatr Dent. 2002:24(special issue):46.

Journal of the American Dental Association. Baby's First Teeth. February 2002: Vol 133.

1c.9 Quote the Specific guideline recommendation (*including guideline number and/or page number***):**
The AAFP strongly recommends ordering fluoride supplementation to prevent dental caries based on age and fluoride concentration of patient's water supply for patients residing in areas with inadequate fluoride in the water supply (less than 0.6 ppm).

The USPSTF recommends that primary care clinicians prescribe oral fluoride supplementation at currently recommended doses to preschool children older than 6 months of age whose primary water source is deficient in fluoride.
The ISCI encourage children age 2-18 years having regular dental visits, brushing teeth daily with fluoridated toothpaste and flossing, and having healthy eating habits to reduce the risk of dental caries

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

1c
C ☐
P ☐
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N ☐

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:
oIntermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
oProcess – 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).
oStructure – 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.
oPatient 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.
oAccess – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. ... [1]

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/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.

Guidelines for Health Supervision of Infants, Children, and Adolescents, Third Edition. Elk Grove, IL: American Academy of Pediatrics Institute for Clinical Systems Improvement. Preventive Services for Children and Adolescents Thirteenth Edition. October 2007 American Academy of Pediatric Dentistry. Clinical guideline on infant oral health care. Chicago (IL): American Academy of Pediatric Dentistry; 2004. American Academy of Pediatrics. Oral Health Risk Assessment Timing and Establishment of the Dental Home. Pediatrics. Vol. 111 No. 5 May 2003. ADA endorsed.http://www.guideline.gov/content.aspx?id=15251 **1c.11 National Guideline Clearinghouse or other URL:** Guideline on infant oral health care. http://www.guideline.gov/content.aspx?id=15251 **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 **1c.14 Rationale for using this guideline over others:** After evaluating the body of evidence and guidelines, the expert panel concluded this measure was important.	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report*?	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report***, met?** **Rationale:**	**1** **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)	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:** **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 dental visit during the measurement year **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***):** One or more dental visits with a dental practitioner during the measurement year. A member had a dental visit if a submitted claim/encounter contains any code in Table ADV-A: Codes to Identify Annual Dental Visits:	**2a-specs** **C☐** **P☐** **M☐** **N☐**
2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured***):** members 2-21 years of age	

Comment [k7]: USPSTF grading system **http://www.ahrq.gov/clinic/uspstf/grades.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** 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 the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** 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 [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.5 Target population gender: Female, Male
2a.6 Target population age range: 2-21 years of age

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***):**
70300, 70310, 70320, 70350, 70355
D0120-D0999, D1110-D2999, D3110-D3999, D4210-D4999, D5110-D5899, D6010-D6205, D7111-D7999, D8010-D8999, D9110-D9999
23, 24, 87.11, 87.12, 89.31, 93.55, 96.54, 97.22, 97.33-97.35, 99.97

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***):**
Stratified by age:
- 2–3-years
- 4–6-years
- 7–10-years
- 11–14-years
- 15–18-years
- 19–21-years

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
Step 2: Determine the numerator
Children who had documentation of the screening or service during 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)*:
No sampling

2a.24 Data Source (*Check the source(s) for which the measure is specified and tested)*
Electronic administrative data/claims, Electronic clinical data

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.***):**
Administrative data

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.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)*
Health Plan, Integrated delivery system, Population: national, Population: regional/network

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: Physicians (MD/DO)

TESTING/ANALYSIS

2b. Reliability testing

2b.1 Data/sample *(description of data/sample and size)*: We did not conduct reliability testing for this 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.

2b C☐ P☐ M☐ N☐

2c. Validity testing

2c.1 Data/sample *(description of data/sample and size)*: Expert panel and stakeholders

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.

2c C☐ P☐ M☐ N☐

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

2d C☐ P☐ M☐ N☐ NA☐

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 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.

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;
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 ... [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.

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.

2e
C☐
P☐
M☐
N☐
NA☐

2f. Identification of Meaningful Differences in Performance

2f.1 Data/sample from Testing or Current Use *(description of data/sample and size)*: Current HEDIS 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)*:
11-14 Years Old
HEDIS 2006 Data
National Mean: 46.64
10th %ile: 32.05
50th %ile: 46.43
90th %ile: 60.95
HEDIS 2007 Data
National Mean: 48.21
10th %ile: 34.07
50th %ile: 48.86
90th %ile: 66.79
15-18 Years Old
HEDIS 2006 Data
National Mean: 39.59
10th %ile: 28.31
50th %ile: 38.28
90th %ile: 52.76
HEDIS 2007 Data
Naional Mean: 40.76
10th %ile: 28.66
50th %ile: 41.4
90th %ile: 55.19
19-21 Years Old
HEDIS 2006 Data
National Mean: 30.4
10th %ile: 18.71
50th %ile: 30.62
90th %ile: 42.49
HEDIS 2007 Data
National Mean: 31.09
10th %ile: 15.11
50th %ile: 32.68
90th %ile: 41.56

2f
C☐
P☐
M☐
N☐

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;[Error! Bookmark not defined.] OR rationale/data support no risk adjustment.

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). 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 [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.

Total
HEDIS 2006 Data
National Mean: 42.48
10th %ile: 27.94
50th %ile: 42.84
90th %ile: 57.27
HEDIS 2007 Data
National Mean: 43.55
10th %ile: 27.5
50th %ile: 45.08
90th %ile: 61.26

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

2g
C☐ P☐ M☐ N☐ NA☐

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

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

2h
C☐ P☐ M☐ N☐ NA☐

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.

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

2

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

2
C☐ P☐ M☐ N☐

3. USABILITY

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)

Eval Rating

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 used in public reporting.

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 a measure in the Healthcare Effectiveness Data and Information Set (HEDIS)

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)*: General public and other stakeholder groups (i.e.

3a
C☐ P☐ M☐ N☐

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.

HEDIS users) **3a.5 Methods** *(e.g., focus group, survey, QI project)*: For the 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. **3a.6 Results** *(qualitative and/or quantitative results and conclusions)*: 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.	
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?**	**3b** C☐ P☐ M☐ N☐ NA☐
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	**3c** C☐ P☐ M☐ N☐ 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:**	**3** C☐ P☐ M☐ N☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
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)	**4a** C☐ P☐ M☐ N☐
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** C☐ P☐ M☐

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).

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.

No 4b.2 **If not, specify the near-term path to achieve electronic capture by most providers.** NCQA may eventually specify this measure for electronic health records.	N☐
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.**	**4c** C☐ P☐ M☐ N☐ NA☐
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.** All measures that are used in NCQA programs are audited.	**4d** C☐ P☐ M☐ N☐
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 data analysis over the years, we specified the measure to assess whether children received a dental care visits; we specify multiple age bands in order to enable assessment at various stages of a child´s development. HEDIS results show that these data elements are available in administrative data sources. 4e.2 **Costs to implement the measure** (*costs of data collection, fees associated with proprietary measures*)**:** This measure appears in HEDIS and is subject to HEDIS costs. 4e.3 **Evidence for costs:** Based on user feedback and other stakeholder input. 4e.4 **Business case documentation:**	**4e** C☐ P☐ M☐ N☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Feasibility*?	**4**
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, **met?** **Rationale:**	**4** C☐ P☐ M☐ N☐
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? **Comments:**	Y☐ N☐ A☐
CONTACT INFORMATION	
Co.1 **Measure Steward (Intellectual Property Owner)** Co.1 **Organization**	

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).

National Committee for Qualtiy 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 Qualtiy 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 Qualtiy 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
Shirley Girouard, PhD, RN
Southern Connecticut State University
Bill Heuston, MD
Medical University of South Carolina
Mary Kay Holleran
Highmark Caring Foundation
Charles Homer MD, MPH
National Initiative for Children's Healthcare Quality
Marilyn C. Jones, MD
Children's Hospital
Milton Kotelchuck, PhD, MPH
Boston University School of Public Health Mark Mandell, MD
Partners Community Health Care, Inc.
Dorothy Mann, PhD, MPH
Consultant
Robert H. Pantell, MD
University of California, San Francisco
Lee Partridge
Health Resources and Services Administration (HRSA)
Mark Pearlman, MD
University of Michigan Health Systems
Robin S. Richman, MD
Harvard Vanguard Medical Associates

Michael G. Ross, MD, MPH
University of California, Los Angeles
Medical Center
Maureen Shannon, CNM, FNP, MS
University of California, San Francisco
Jeff Susman, MD
University of Cincinnati
Lynne S. Wilcox, MD, MPH
Centers for Disease Control and Prevention (CDC)

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:** 1997
Ad.7 **Month and Year of most recent revision:** 07, 2010
Ad.8 **What is your frequency for review/update of this measure?** Annual
Ad.9 **When is the next scheduled review/update for this measure?** 07, 2011

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

Date of Submission (*MM/DD/YY*)**:** 09/02/2010

Page 4: [1] Comment [k4] **Karen Pace** **10/5/2009 8:59:00 AM**

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.

Page 7: [2] Comment [KP14] **Karen Pace** **10/5/2009 8:59:00 AM**

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).

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)

(for NQF staff use) **NQF Review #:** 1390 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Child and Adolescents´ Access to Primary Care Practitioners
De.2 **Brief description of measure***:* The percentage of members 12 months–19 years of age who had a visit with a PCP. The organization reports four separate percentages for each product line. -Children 12–24 months and 25 months–6 years who had a visit with a PCP during the measurement year -Children 7–11 years and adolescents 12–19 years who had a visit with a PCP during the measurement year or the year prior to the measurement year
1.1-2 **Type of Measure:** Access De.3 **If included in a composite or paired with another measure, please identify composite or paired measure** None
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	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	**NQF Staff**
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *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** **Y☐** **N☐**

A.4 Measure Steward Agreement attached:	
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section	**B** Y☐ N☐
C. The intended use of the measure includes both public reporting and quality improvement. ►**Purpose:** Public reporting, Internal quality improvement Accountability	**C** Y☐ N☐
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	**D** Y☐ N☐
(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) **1a. High Impact**	Eval Ratin g
(for NQF staff use) Specific NPP goal:	
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:** Primary care is defined as integrated and accessible care from physicians, nurse practitioners, or other qualified providers who are accountable for a wide range of personal health care needs, who have a relationship with patients, and practice in the context of the family and community (Agency for Healthcare Research and Quality, 2007). Despite the United States having the highest per capita health expenditures in the world, it ranks at the bottom or near bottom of a wide array of health measures, and one reason for this low ranking is a lack of emphasis on primary care services. Countries that emphasize primary care (namely Denmark, Finland, Netherlands, Spain, and the United Kingdom) have better health outcomes, such as reduced rates of low birthweight, neonatal mortality, child mortality, and injury-related deaths (Starfield, 2002). Countries with a stronger orientation towards primary care also have fewer years of life lost (a reduced rate of premature mortality); and a lower incidence of influenza, pneumonia, asthma, bronchitis, and heart disease (Macinko, 2003) The lowered rate of illness means lower healthcare expenditures. Even in the U.S., cities that have a higher-than-average proportion of primary care practices experience lower in- and out-patient care costs.	**1a** C☐ P☐ M☐ N☐

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.4 Citations for Evidence of High Impact: Agency for Healthcare Research and Quality. Primary Care: Where Research and Practice Meet: Fact Sheet. Available at: http://www.ahrq.gov/about/cpcr/practice.htm. Accessed on July 12, 2007.

Starfield B, Shi L. Policy relevant determinants of health: an international perspective.Health Policy. 2002;60(3):201-218.

Macinko J, Starfield B, Shi L. The contribution of primary care systems to health outcomes within organization for economic cooperation and development (OECD) countries, 1970-1998. Health Services Research. 2003;38(3):831-865.

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: This measure encourages access to primary care. Access to primary care has been shown to correlate with reduced hospital use while preserving quality (Bindham 1995, Bodenheimer 2005).

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
Numerous studies have demonstrated the value of primary care in improving health outcomes of various populations. (Macinko J, 2007) Despite this evidence, effective primary care physician (PCP) workforce distribution remains a problem in the United States. Although physician supply has been increasing in the United States, (Phillips RL, 2006) the PCP workforce for children varies by more than sixfold across primary care service areas, and nearly 1 million children live in areas without physicians. (Shipman S, 2006)

In addition, NCQA's HEDIS measure has shown that performance among health plans is low. The rate of Children and Adolescents´ access to PCP was 93.45% among children with 12-24 months old in 2007; the rate was 84.32% among children with 25 months-6 years old; the rate was 85.86 among children with 7-11 years old; and the rate was 82.66% among adolescents with 12-19 years old. (NCQA, 2009)

1b.3 Citations for data on performance gap:
Macinko J, Starfield B, Shi L. Quantifying the health benefits of primary care physician supply in the United States. Int J Health Serv. 2007;37(1):111–126

Phillips RL, Jr, Bazemore AW, Dodoo MS, Shipman SA, Green LA. Family physicians in the child health care workforce: opportunities for collaboration in improving the health of children. Pediatrics. 2006;118(3):1200–1206

Shipman S, Goodman D, Bethell C, Newton K. Pediatric workforce maldistribution: examining the scope of the problem [abstract]. Presented at Pediatric Academic Societies Meeting; April 29–May 2, 2006; San Francisco, CA.

1b.4 Summary of Data on disparities by population group:
Among children ages 0-17, having a usual primary care provider varies by income. Data for 2006 show that children in high-income families are more likely than children at other income levels to have a primary care provider (94 percent of high-income families versus 87 percent of poor families, 85 percent of near poor families and 90% of middle-income families). Children with private insurance are more likely to have a usual source of care than children with public insurance or children who are uninsured (94 percent compared with 88 percent and 68 percent, respectively) (AHRQ, 2010).

1b.5 Citations for data on Disparities:
Agency for Healthcare Research and Quality. Findings on Children's Health Care Quality and Disparities. June 2010. http://www.ahrq.gov/qual/nhqrdr09/nhqrdrchild09.pdf

1b
C☐
P☐
M☐
N☐

1c. Outcome or Evidence to Support Measure Focus

1c.1 Relationship to Outcomes (*For non-outcome measures, briefly describe the relationship to desired*

1c
C☐
P☐

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.

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:
oIntermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
oProcess – 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).
oStructure – 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.
oPatient 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.
oAccess – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
oEfficiency – 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.

outcome. For outcomes, describe why it is relevant to the target population): Numerous studies have demonstrated the value of primary care in improving health outcomes of various populations. Studies showed that those U.S. states with higher ratios of primary care physicians to population had better health outcomes, including lower rates of all causes of mortality. For state-level all-cause mortality, an increase in primary care supply is predicted to reduce mortality by 41 to 85 per 100,000, averaging about 68 per 100,000. One additional primary care physician per 10,000 population is estimated to result in a fourfold greater reduction in mortality for black populations than for white populations (Macinko, 2007).

Consistent with these findings for total and cause-specific mortality, the reduction in low birth weight at the state level was significantly associated with the supply of primary care physicians in the concurrent year as well as after one-, three-, and five-year lag periods (Shi et al. 2004). A greater supply of primary care physicians was associated with lower infant mortality as well and persisted after controlling for various socioeconomic characteristics and income inequality.

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*)**:**
It has been long documented that having a primary care provider serve as the first point-of-contact has many benefits. The primary care provider can serve two main functions. First, the patient benefits from obtaining care from the most appropriate source of care; second, to the extent that the gatekeeper either provides care him/herself or refers the patient to non-specialist providers, this practice is likely to result in lower costs of treatment, because specialist care is more expensive (Starfield, 1992).

A large number of studies have documented the benefit of facilitating access to care in general on morbidity and mortality. Few studies, however, investigate the separate impact of its various components. In general, studies find that while access to care for poor children improves when public policy is directed at achieving this goal, poor children still have inadequate access to care given their greater health needs. Access to care is better for poor children on Medicaid as compared with poor children without Medicaid, but Medicaid coverage does not ensure access to care similar to other children in terms of locations and continuity (Johansen, 1994)).

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

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

1c.8 Citations for Evidence (*other than guidelines***):** Starfield, B. (1992). Primary Care, Concept, Evaluation, and Policy. New York: Oxford University Press.

Anne S. Johansen, Barbara Starfield, Jennifer Harlow, Analysis of the Concept of Primary Care for Children and Adolescents. http://www.jhsph.edu/wchpc/publications/Analysis_Concept_Primary_Care.pdf

James Macinko, Barbara Starfield, and Leiyu Shi. QUANTIFYING THE HEALTH BENEFITS OF PRIMARY CARE PHYSICIAN SUPPLY IN THE UNITED STATES. International Journal of Health Services; 2007, Vol. 37 Issue 1, p111-126, 16p, 1 Chart, 4 Graphs

Starfield, B., and L. Shi. 2004. The Medical Home, Access to Care, and Insurance: A Review of Evidence. Pediatrics 113:1493–8.

1c.9 Quote the Specific guideline recommendation (*including guideline number and/or page number***):**
AAP/Bright Futures (2008)
AAP/Bright Futures recommends preventive care visits at the following periodicity for early childhood and adolescence stages of life:

M☐ N☐

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/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.

One visit at the following ages: 12 months 15 months 18 months 24 months 30 months Annual visits beginning at age 3 years and ending at age 21 years **1c.10 Clinical Practice Guideline Citation:** Hagan JF, Shaw JS, Duncan PM, eds. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2008. **1c.11 National Guideline Clearinghouse or other URL:** http://www.icsi.org/preventive_services_for_children__guideline_/preventive_services_for_children_and_adolescents_2531.html **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)***:** Expert Consensus **1c.14 Rationale for using this guideline over others:** These guidelines represent a consensus by the American Academy of Pediatrics (AAP) and Bright Futures. The AAP continues to emphasize the great importance of continuity of care in comprehensive health supervision and the need to avoid fragmentation of care.	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report*?	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report***, met?** **Rationale:**	**1** **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)	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:** **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***):** Members 12 months–19 years of age who had a visit with a PCP **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 12–24 months, 25 months–6 years: One or more visits with a PCP during the measurement year.	**2a-specs** **C☐** **P☐** **M☐** **N☐**

Comment [k7]: USPSTF grading system **http://www.ahrq.gov/clinic/uspstf/grades.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** 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 the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** 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 [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) .

For 7–11 years, 12–19 years: One or more visits with a PCP during the measurement year or the year prior to the measurement year.
The organization should count all members who had an ambulatory or preventive care visit to any PCP, as defined by the organization, with a CPT or ICD-9-CM code listed in Table CAP-A. Exclude specialist visits.

Codes to Identify Ambulatory or Preventive Care Visits
Office or other outpatient services: 99201-99205, 99211-99215, 99241-99245
Home services: 99341-99345, 99347-99350
Preventive medicine: 99381-99385, 99391-99395, 99401-99404, 99411-99412, 99420, 99429
General medical examination: 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***):**
12 months–19 years as of December 31 of the measurement year. Report four age stratifications.

2a.5 Target population gender: Female, Male
2a.6 Target population age range: 12 months–19 years of age

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***):**
Product lines: Commercial, Medicaid
Ages: 12 months–19 years as of December 31 of the measurement year. Report four age stratifications.
• 12–24 months as of December 31 of the measurement year. Include all children who are at least 12 months old but younger than 25 months old during the measurement year (i.e., born on or between December 31, 2009, and December 1, 2008).
• 25 months–6 years as of December 31 of the measurement year. Include all children who are at least 2 years and 31 days old but not older than 6 years during the measurement year (i.e., born on or between November 30, 2008, and January 1, 2004).
• 7–11 years as of December 31 of the measurement year.
• 12–19 years as of December 31 of the measurement year.
Continuous EnrollmentFor 12–24 months, 25 months–6 years: The measurement year.
For 7–11 years, 12–19 years: The measurement year and the year prior to the measurement year.
Allowable gap
For 12–24 months, 25 months–6 years: No more than one gap in enrollment of up to 45 days during the measurement year.
For 7–11 years, 12–19 years: No more than one gap in enrollment of up to 45 days during each year of continuous enrollment.
To determine continuous enrollment for a Medicaid beneficiary 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) during each year of continuous enrollment.
Anchor date: Dec 31 of measurement year
Benefit: medical

2a.9 Denominator Exclusions (*Brief text description of exclusions from the target population***):** No exclusions

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***):**
Measure is stratified by age group

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.

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
Step 2: Determine the numerator
Children who had a preventive care visit as determined by the codes listed above.

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)*:
NA

2a.24 Data Source (*Check the source(s) for which the measure is specified and tested)*
Electronic administrative data/claims

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.***):**
HEDIS

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)*
Health Plan, Integrated delivery system, Population: national, Population: regional/network

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: Physicians (MD/DO)

TESTING/ANALYSIS

2b. Reliability testing

2b.1 Data/sample *(description of data/sample and size)***:** We did not conduct reliability testing for this measure.

2b.2 Analytic Method *(type of reliability & rationale, method for testing)***:**
NA

2b.3 Testing Results *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)***:**
NA

2b
C☐
P☐
M☐
N☐

2c. Validity testing

2c.1 Data/sample *(description of data/sample and size)***:** expert panel

2c
C☐
P☐
M☐

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 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.

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.

N☐

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

2d
C☐
P☐
M☐
N☐
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.

2e
C☐
P☐
M☐
N☐
NA☐

2f. Identification of Meaningful Differences in Performance

2f.1 Data/sample from Testing or Current Use *(description of data/sample and size)*: national HEDIS data (not a sample)

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)*:
2a3
For 12–24 months, 25 months–6 years: One or more visits with a PCP during the measurement year.
For 7–11 years, 12–19 years: One or more visits with a PCP during the measurement year or the year prior to the measurement year.
The organization should count all members who had an ambulatory or preventive care visit to any PCP, as defined by the organization, with a CPT or ICD-9-CM code listed in Table CAP-A. Exclude specialist visits.

2f
C☐
P☐
M☐
N☐

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;
AND ... [1]

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 (but not disparities in care) and are present at start of care;Error! Bookmark not defined. OR ... [2]

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). It is preferable to stratify measures by ra ... [3]

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 ... [4]

Codes to Identify Ambulatory or Preventive Care Visits
Office or other outpatient services: 99201-99205, 99211-99215, 99241-99245
Home services: 99341-99345, 99347-99350
Preventive medicine: 99381-99385, 99391-99395, 99401-99404, 99411-99412, 99420, 99429
General medical examination: V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

2a4
12 months–19 years as of December 31 of the measurement year. Report four age stratifications.
2a8
Product lines: Commercial, Medicaid
Ages: 12 months–19 years as of December 31 of the measurement year. Report four age stratifications.
• 12–24 months as of December 31 of the measurement year. Include all children who are at least 12 months old but younger than 25 months old during the measurement year (i.e., born on or between December 31, 2009, and December 1, 2008).
• 25 months–6 years as of December 31 of the measurement year. Include all children who are at least 2 years and 31 days old but not older than 6 years during the measurement year (i.e., born on or between November 30, 2008, and January 1, 2004).
• 7–11 years as of December 31 of the measurement year.
• 12–19 years as of December 31 of the measurement year.
Continuous EnrollmentFor 12–24 months, 25 months–6 years: The measurement year.
For 7–11 years, 12–19 years: The measurement year and the year prior to the measurement year.
Allowable gap
For 12–24 months, 25 months–6 years: No more than one gap in enrollment of up to 45 days during the measurement year.
For 7–11 years, 12–19 years: No more than one gap in enrollment of up to 45 days during each year of continuous enrollment.
To determine continuous enrollment for a Medicaid beneficiary 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) during each year of continuous enrollment.
Anchor date: Dec 31 of measurement year
Benefit: medical

25 Months-6 Years Old
National Mean: 84.92
10th %ile: 77.85
50th %ile: 86.74
90th %ile: 91.36
National Mean: 84.32
10th %ile: 74.2
50th %ile: 86.55
90th %ile: 91.98
7-11 Years Old
National Mean: 85.95
10th %ile: 76.99
50th %ile: 87.23
90th %ile: 93.26
National Mean: 85.86
10th %ile: 75.46
50th %ile: 87.83
90th %ile: 94.05
12-19 Years Old
National Mean: 83.22
10th %ile: 73.88
50th %ile: 85.26
90th %ile: 91.35
National Mean: 82.66

10th %ile: 70.56
50th %ile: 84.71
90th %ile: 91.86

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

2g
C☐
P☐
M☐
N☐
NA☐

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

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

2h
C☐
P☐
M☐
N☐
NA☐

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.

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

2

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

2
C☐
P☐
M☐
N☐

3. USABILITY

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)

Eval Rating

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 used in public reporting.

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 a measure in the Healthcare Effectiveness Data and Information Set (HEDIS)

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)*: General public and other stakeholder groups (i.e. HEDIS users)

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

3a
C☐
P☐
M☐
N☐

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.

3a.6 **Results** *(qualitative and/or quantitative results and conclusions)*: 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.	
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?**	**3b** C☐ P☐ M☐ N☐ NA☐
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	**3c** C☐ P☐ M☐ N☐ 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:**	**3** C☐ P☐ M☐ N☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
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)	**4a** C☐ P☐ M☐ N☐
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.	**4b** C☐ P☐ M☐ N☐
4c. Exclusions	**4c** C☐

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).

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.

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.**	**P☐ M☐ N☐ NA☐**
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.** All measures that are used in NCQA programs are audited.	**4d** **C☐ P☐ M☐ N☐**
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 data analysis over the years, we specified the measure to assess whether children received preventive care visits; we assess two age bands that focus on early childhood and then school-age children and up. HEDIS results show that these data elements are available in administrative data sources. **4e.2 Costs to implement the measure** (*costs of data collection, fees associated with proprietary measures*)**:** This measure appears in HEDIS and is subject to HEDIS costs. **4e.3 Evidence for costs:** User feedback **4e.4 Business case documentation:**	**4e** **C☐ P☐ M☐ N☐**
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Feasibility*?	**4**
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, **met?** **Rationale:**	**4** **C☐ P☐ M☐ N☐**
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? **Comments:**	**Y☐ N☐ A☐**

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, 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,

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).

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

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.**
The following panel has contributed over the years to the various HEDIS measures that relate to Women and Children´s health:
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
Shirley Girouard, PhD, RN
Southern Connecticut State University
Bill Heuston, MD
Medical University of South Carolina
Mary Kay Holleran
Highmark Caring Foundation
Charles Homer MD, MPH
National Initiative for Children's Healthcare Quality
Marilyn C. Jones, MD
Children's Hospital
Milton Kotelchuck, PhD, MPH
Boston University School of Public Health Mark Mandell, MD
Partners Community Health Care, Inc.
Dorothy Mann, PhD, MPH
Consultant
Robert H. Pantell, MD
University of California, San Francisco
Lee Partridge
Health Resources and Services Administration (HRSA)
Mark Pearlman, MD
University of Michigan Health Systems
Robin S. Richman, MD
Harvard Vanguard Medical Associates
Michael G. Ross, MD, MPH
University of California, Los Angeles
Medical Center
Maureen Shannon, CNM, FNP, MS
University of California, San Francisco
Jeff Susman, MD
University of Cincinnati
Lynne S. Wilcox, MD, MPH
Centers for Disease Control and Prevention (CDC)

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:** Ad.8 **What is your frequency for review/update of this measure?** 07/2010 Ad.9 **When is the next scheduled review/update for this measure?** 07, 2011
Ad.10 **Copyright statement/disclaimers:**
Ad.11 -13 **Additional Information web page URL or attachment:**
Date of Submission (*MM/DD/YY*)**:** 09/02/2010

Page 8: [1] Comment [KP14] **Karen Pace** **10/5/2009 8:59:00 AM**

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).

Page 8: [2] Comment [KP16] **Karen Pace** **10/5/2009 8:59:00 AM**

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;[Error! Bookmark not defined.] OR

rationale/data support no risk adjustment.

Page 8: [3] Comment [k17] **Karen Pace** **10/5/2009 8:59:00 AM**

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.

Page 8: [4] Comment [k19] **Karen Pace** **10/5/2009 8:59:00 AM**

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)

(for NQF staff use) **NQF Review #:** 1392 **NQF Project:** Child Health Quality Measures 2010

MEASURE DESCRIPTIVE INFORMATION

De.1 **Measure Title:** Well Child Visits: Measure 1: Well-Child Visits in the First 15 Months of Life, Measure 2:Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life

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: Well-Child Visits in the First 15 Months of Life: The percentage of members who turned 15 months old during the measurement year and who had the following number of well-child visits with a PCP during their first 15 months of life.
•No well-child visits
•One well-child visit
•Two well-child visits
•Three well-child visits
•Four well-child visits
•Five well-child visits
•Six or more well-child visits

Measure 2: The percentage of members 3–6 years of age who received one or more well-child visits with a PCP during the measurement year.

1.1-2 **Type of Measure:** Use of services
De.3 **If included in a composite or paired with another measure, please identify composite or paired measure**
None

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

Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *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, Proprietary complex measure with fees 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:**	**A** Y☐ N☐
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. ►**Purpose:** Public reporting, Internal quality improvement	**C** Y☐ N☐
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	**D** Y☐ N☐
(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) **1a. High Impact**	Eval Rating
(for NQF staff use) Specific NPP goal:	
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:** Well-care child visits currently serve as the focal point of contact for the delivery of preventive services for children (Nevin, 2002). Investing in preventive care can	**1a** C☐ P☐ M☐ N☐

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).

reduce morbidity and mortality. In addition, these 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, 2007)

1a.4 Citations for Evidence of High Impact: Nevin, Janice E., MD, MPH., and Witt, Deborah K., MD. "Well child and preventive care" Prim Care Clin Office Pract 29 (2002): 543-555.

Edward L. Schor T, MD. The future pediatrician: promoting children's health and development. Partnership for prevention. Preventive Care: A national profile on use, disparities, and health Benefits. November 2007.

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: This measure encourages health care providers to champion well-care visits, which are an important opportunity for the provider to share information on health and safety issues, information on nutrition and physical fitness and information on how to manage emergencies and illness with the child's parents/guardian. Guidance may also be provided by the physician on issues such as behavioral problems, learning problems, emotional problems, family problems and socialization problems (Healthy Children: Investing in the Future).

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
NCQA's HEDIS measure has shown that performance among health plans is low. For well-child visits in their 15 months of life, the rate without visit was 5.68% in 2007; the rate for having 1 visit was 3.3%; the rate for having 3 visits was 6.2%; the rate for having 6 or more visits was 52.95. For well-child visits in their 3-6 years of life, the rate was 65.11% in general.

The quality of child health supervision varies greatly among physician practices. Among a Medicaid population, 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 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

NCQA State of Health Care Quality Report. 2009

1b.4 Summary of Data on disparities by population group:
Variables such as the age and education level of an infant's parent or caregiver may affect the likelihood that the parent or caregiver schedules and keeps a well-care visit (Grossman, 1996).
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 in fact 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-child care visits, and low-income families are less likely to receive referrals to community resources that may be helpful to them.

1b.5 Citations for data on Disparities:
Grossman LK, Humbert AL, Powell M. Continuity of care between obstetrical and pediatric preventive care: Indicators of nonattendance at the first well-child appointment. Clinical Pediatrics. 11/96;563-569.

Edward L. Schor T, MD. The future pediatrician: promoting children's health and development. Partnership

1b
C ☐
P ☐
M ☐
N ☐

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.

for prevention. Preventive Care: A national profile on use, disparities, and health Benefits. November 2007.

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*)**:** Well-care visits are routine visits to the child's physician for the purpose of physical examinations, immunization updates, tracking growth and development, and finding problems before they become serious. They provide an opportunity for primary prevention practices (e.g. immunizations), secondary prevention practices (e.g. developmental screenings), and anticipatory guidance. The benefits of primary and secondary prevention practices on health outcomes has been well established.

In general, the outcomes of well-child care include: the child´s physical health and development; emotional, social, and cognitive development; the family´s capacity and functioning. 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 can help prevent heart attacks during middle age. Positive parenting can avoid adult depression and substance abuse.

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*)**:**
Along with immunizations, anticipatory guidance and health monitoring are the cornerstones of well-child care for both healthy children and children with special health care needs (CSHCN). The American Academy of Pediatrics (AAP) provides recommendations for pediatric health supervision visits through their Guidelines for Health Supervision III.(AAP, 2008) In addition, the Maternal and Child HealthBureau (MCHB) launched a major initiative to improve the quality of health promotion and preventive services for infants, children, and adolescents through the sponsorship of Bright Futures.(Green M, 2002) These recommendations call for periodic monitoring, screening, and guidance for all children. Furthermore, preventive care is an essential part of the AAP´s Medical Home policy statement.(AAP, 2002) Specifically, the AAP states that primary care services should include "growth and developmental assessments, appropriate screening, health care supervision, and patient and parent counseling about health, nutrition, and safety." (AAP, 2002) Many recent studies have focused on access to and use of preventive health care and anticipatory guidance for children in general, and well-child care can affect the seemingly distant future for both child and family.

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

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

1c.8 Citations for Evidence (*other than guidelines*)**:** Hagan JF, Shaw JS, Duncan PM, eds. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2008.

Green M, Palfrey J, Clark E, Anastasi J, eds. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. 2nd ed., rev. Arlington, VA: Maternal and Child Health Bureau; 2002

Medical Home Initiatives for Children With Special Needs Project Advisory Committee. American Academy of Pediatrics. The medical home. Pediatrics. 2002;110 (pt 1):184 –186

1c.9 Quote the Specific guideline recommendation (*including guideline number and/or page number*)**:**
W15

1c
C☐
P☐
M☐
N☐

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:
oIntermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
oProcess – 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).
oStructure – 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.
oPatient 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.
oAccess – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. ... [1]

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/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.

American Academy of Pediatrics (2008), Bright Futures
The AAP recommends a total of eight well-care visits from the time the child is a newborn to the point he reaches 15 months old.

W34

American Academy of Pediatrics (2008), Bright Futures
The AAP recommends a total of four well-care visits for children ages three to six years of age.

1c.10 Clinical Practice Guideline Citation: Hagan JF, Shaw JS, Duncan PM, eds. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2008.
1c.11 National Guideline Clearinghouse or other URL: Routine preventive services for infants and children (birth - 24 months).
http://www.guideline.gov/content.aspx?id=15116&search=child+preventive+services

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

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

1c.14 Rationale for using this guideline over others:
NCQA convened a multistakeholder panel of experts to review evidence and guidelines for child health care. The Child Health Measurement Advisory Panel reviewed these guidelines together with the health importance and field test results of this measure. The MAP concluded that the health importance, evidence and feasibility supports this measure.

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?* — **1**

Steering Committee: Was the threshold criterion, *Importance to Measure and Report***, met?** — **1** **Y☐** **N☐**
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) — 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:

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 the following number of well-child visits with a PCP during their first 15 months of life.

- No well-child visits
- One well-child visit
- Two well-child visits
- Three well-child visits
- Four well-child visits
- Five well-child visits
- Six or more well-child visits

2a-specs **C☐** **P☐** **M☐** **N☐**

Comment [k7]: USPSTF grading system **http://www.ahrq.gov/clinic/uspstf/grades.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** 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 the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** 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 [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) .

Numerator 2: Received one or more well-child visits with a PCP during the measurement year.

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***):**
Numerator 1:
Seven separate numerators are calculated, corresponding to the number of members who received 0, 1, 2, 3, 4, 5, 6 or more well-child visits with a PCP during their first 15 months of life.
The well-child visit must occur with a PCP, but the PCP does not have to be the practitioner assigned to the child. A child who had a claim/encounter with a code listed in Table W15-A is considered to have received a well-child visit.
Table W15-A: Codes to Identify Well-Child Visits
99381, 99382, 99391, 99392, 99432, 99461
V20.2, V20.3, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

Numerator 2:
At least one well-child visit with a PCP during the measurement year.
The well-child visit must occur with a PCP, but the PCP does not have to be the practitioner assigned to the child. A child who had a claim/encounter with a code listed in Table W34-A is considered to have received a well-child visit.

Table W34-A: Codes to Identify Well-Child Visits
99382, 99383, 99392, 99393
V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

Medical record (non-Commercial plans only) for both measures:
Documentation must include a note indicating a visit to a PCP, the date when the well-child visit occurred and evidence of all of the following.
- A health and developmental history (physical and mental)
- A physical exam
- Health education/anticipatory guidance

Do not include services rendered during an inpatient or ED visit.
Preventive services may be rendered on visits other than well-child visits. Well-child preventive services count toward the measure, regardless of the primary intent of the visit, but services that are specific to an acute or chronic condition do not count toward the measure.
Visits to school-based clinics with practitioners whom the organization would consider PCPs may be counted if documentation of a well-child exam is available. The PCP does not have to be assigned to the member.
The organization may count services that occur over multiple visits, as long as all services occur in the time frame specified by the measure.

2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured***):**
Denominator 1:
members who turned 15 months old during the measurement year

Denominator 2:
Product lines Commercial, Medicaid (report each product line separately).
Ages 3–6 years as of December 31 of the measurement year.
Continuous enrollment The measurement year.
Allowable gap No more than one gap in enrollment of up to 45 days during the continuous enrollment period. 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.

Medical Record (non-Commercial plans) for both measures:
A systematic sample drawn from the eligible population for the Medicaid product line. The organization may reduce its sample size using the current year's administrative rate or the prior year's audited rate.

2a.5 Target population gender: Female, Male
2a.6 Target population age range: Measure 1: 0-15 months, Measure 2: 15 mo-6 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***):**
Denominator 1:
Product lines Commercial, Medicaid (report each product line separately).
Age 15 months old during the measurement year.
Continuous enrollment 31 days–15 months of age. Calculate 31 days of age by adding 31 days to the child's date of birth. Calculate the 15-month birthday as the child's first birthday plus 90 days. For example, a child born on January 9, 2009, and included in the rate of "six or more well-child visits" must have had six well-child visits by April 9, 2010.
Allowable gap No more than one gap in enrollment of up to 45 days during the continuous enrollment period. 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 Day the child turns 15 months old.
Benefit Medical.

Denominator 2:

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***):**
Stratified by age (see above)

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
Step 2: Determine the numerator
Children who had documentation of a visit during the measurement year using the information above

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.

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.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)*:
None for Commercial plans; for others, see above.

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

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.***):**
HEDIS

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)*
Health Plan, Integrated delivery system, Population: national, Population: regional/network

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: Physicians (MD/DO)

TESTING/ANALYSIS

2b. Reliability testing

2b.1 Data/sample *(description of data/sample and size)***:** We did not conduct reliability testing for this 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)***:**
NA

2b C☐ P☐ M☐ N☐

2c. Validity testing

2c.1 Data/sample *(description of data/sample and size)***:** expert panel and stakeholders

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.

2c C☐ P☐ M☐ N☐

2d. Exclusions Justified

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

2d C☐ P☐ M☐ N☐

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 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.

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;
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 ... [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.

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

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.

2e
C☐
P☐
M☐
N☐
NA☐

2f. Identification of Meaningful Differences in Performance

2f.1 Data/sample from Testing or Current Use *(description of data/sample and size)*: The measures are part of the Healthplan Effectiveness Data and Information Set (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)*:
Measure 1: Well-Child Visits - First 15 Months of Life

0 visits
HEDIS 2006 Data
National Mean: 3.79
10th %tile: 0.37
50th %tile: 1.43
90th %tile: 6.81
HEDIS 2007 Data
National Mean: 5.68
10th %tile: 0.57
50th %tile: 1.85
90th %tile: 7.79

1 visit
HEDIS 2006 Data
National Mean: 2.6
10th %tile: 0.25
50th %tile: 1.7
90th %tile: 5.11
HEDIS 2007 Data
National Mean: 3.3

2f
C☐
P☐
M☐
N☐

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;[Error! Bookmark not defined.] OR rationale/data support no risk adjustment.

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). 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 [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.

10th %tile: 0.46
50th %tile: 1.85
90th %tile: 6.38

2 visits
HEDIS 2006 Data
National Mean: 3.6
10th %tile: 1.05
50th %tile: 3.22
90th %tile: 6.46
HEDIS 2007 Data
National Mean: 3.92
10th %tile: 1.23
50th %tile: 3.1
90th %tile: 7.54

3 visits
HEDIS 2006 Data
National Mean: 6.09
10th %tile: 2.68
50th %tile: 5.81
90th %tile: 9.51
HEDIS 2007 Data
National Mean: 6.2
0th %tile: 2.92
0th %tile: 5.8
0th %tile: 9.87

4 visits
HEDIS 2006 Data
National Mean: 11
10th %tile: 5.09
50th %tile: 10.53
90th %tile: 16.3
HEDIS 2007 Data
National Mean: 10.84
10th %tile: 5.09
50th %tile: 10.42
90th %tile: 16.11

5 visits
HEDIS 2006 Data
National Mean: 17.3
10th %tile: 9.49
50th %tile: 17.43
90th %tile: 23.84
HEDIS 2007 Data
National Mean: 17.12
10th %tile: 10.46
50th %tile: 17.76
90th %tile: 23.44

6 or more visits
HEDIS 2006 Data
National Mean: 55.61
10th %tile: 38.01
50th %tile: 56.6
90th %tile: 75.18

HEDIS 2007 Data
National Mean: 52.95
10th %tile: 28.95
50th %tile: 57.18
90th %tile: 73.7

Measure 2: Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life
HEDIS 2006 Data
National Mean: 66.81
10th %ile: 55.7
50th %ile: 67.59
90th %ile: 79.87
HEDIS 2006 Data
National Mean: 65.11
10th %ile: 50.94
50th %ile: 67.92
90th %ile: 78.94

2g. Comparability of Multiple Data Sources/Methods

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

2g.2 **Analytic Method** *(type of analysis & rationale)*:
Comparison of means, percentiles and variances

2g.3 **Testing Results** *(e.g., correlation statistics, comparison of rankings)*:
Rate by Collection Method
Measure: Well Child Visits in 3-6 years

Coll Meth	N	Mean	Std Dev	Min	P25	P50	P75	P90	Max
Hybrid	253	67.8	12.2	28.0	59.2	68.6	75.8	83.2	96.2
Admin	253	66.3	12.2	28.0	57.4	67.5	74.7	82.4	90.6

Summary of difference between rates

N	Mean	Stdev	P10	P25	P50	P75	P90
253	1.46	2.88	0	0	0	2.08	3.87

2g
C☐
P☐
M☐
N☐
NA☐

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

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

2h
C☐
P☐
M☐
N☐
NA☐

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.

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

2

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

2
C☐
P☐
M☐
N☐

3. USABILITY

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)

Eval Rating

3a. Meaningful, Understandable, and Useful Information

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

3a
C☐
P☐

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.

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 used in public reporting. 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 a measure in the Healthcare Effectiveness Data and Information Set (HEDIS) **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)***:** General public and other stakeholder groups (i.e. HEDIS users) 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 HEDIS users and NCQA's Committee on Performance Measurement. For the 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. 3a.6 **Results** *(qualitative and/or quantitative results and conclusions)***:** 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.	M☐ N☐
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?**	**3b** C☐ P☐ M☐ N☐ NA☐
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	**3c** C☐ P☐ M☐ N☐ 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:**	**3** C☐ P☐

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

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).

	M☐ N☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
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)	**4a** C☐ P☐ M☐ N☐
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 may eventually adapt this measure for use in electronic health records.	**4b** C☐ P☐ M☐ N☐
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.**	**4c** C☐ P☐ M☐ N☐ NA☐
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.** All measures that are used in NCQA programs are audited.	**4d** C☐ P☐ M☐ N☐
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 data analysis over the years, we specified the measure to assess whether children received preventive care visits; we assess several age bands that focus on early childhood and then school-age children and up. HEDIS results show that these data elements are available in administrative data sources. 4e.2 **Costs to implement the measure** (*costs of data collection, fees associated with proprietary measures*)**:** This measure appears in HEDIS and is subject to HEDIS costs. 4e.3 **Evidence for costs:** Based on user feedback 4e.4 **Business case documentation:**	**4e** C☐ P☐ M☐ N☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Feasibility*?	**4**

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).

Steering Committee: Overall, to what extent was the criterion, *Feasibility*, met? **Rationale:**	**4** **C☐** **P☐** **M☐** **N☐**
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? **Comments:**	**Y☐** **N☐** **A☐**

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, 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

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
Shirley Girouard, PhD, RN
Southern Connecticut State University
Bill Heuston, MD
Medical University of South Carolina
Mary Kay Holleran
Highmark Caring Foundation

Charles Homer MD, MPH National Initiative for Children's Healthcare Quality Marilyn C. Jones, MD Children's Hospital Milton Kotelchuck, PhD, MPH Boston University School of Public Health Mark Mandell, MD Partners Community Health Care, Inc. Dorothy Mann, PhD, MPH Consultant Robert H. Pantell, MD University of California, San Francisco Lee Partridge
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:** 1997 **Ad.7 Month and Year of most recent revision:** 07, 2010 **Ad.8 What is your frequency for review/update of this measure?** Annual **Ad.9 When is the next scheduled review/update for this measure?** 07, 2011
Ad.10 Copyright statement/disclaimers: © 1997 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

Page 4: [1] Comment [k4] **Karen Pace** **10/5/2009 8:59:00 AM**

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.

Page 8: [2] Comment [KP14] **Karen Pace** **10/5/2009 8:59:00 AM**

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).

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)

(for NQF staff use) **NQF Review #:** 1396 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Healthy Physical Development
De.2 **Brief description of measure***:* The percentage of chilren who had a BMI assessment and counseling for physical activity, nutrition and screen time. We are combining three measures into one form because measure features and evidence are the same or similar. Measure 1: Healthy Physical Activity by 6 years of age Measure 2: Healthy Physical Activity by 13 years of age Measure 3: Healthy Physical Activity by 18 years of age
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** This measure appears in three composite measures: Comprehensive Well Care by Age 6 Years, Comprehensive Well Care by Age 13 Years and Comprehensive Well Care by Age 18 Years.
De.4 **National Priority Partners Priority Area:** Patient and family engagement, Care coordination, Population health De.5 **IOM Quality Domain**: Effectiveness, Timeliness De.6 **Consumer Care Need:** Staying healthy

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	**NQF Staff**
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *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** **Y**☐ **N**☐

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 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. ►**Purpose:** Public reporting, Internal quality improvement Accountability	**C** Y☐ N☐
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.1Testing:** Yes, fully developed and tested **D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures?** Yes	**D** Y☐ N☐
(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) **1a. High Impact**	Eval Ratin g
(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:** One of the most challenging developments in pediatrics in the past two decades has been the emergence of a new chronic condition: overweight and obesity in childhood and adolescence. In the past 30 years, the prevalence of overweight and obesity has increased sharply for children. Overweight is defined as having a body mass index (BMI) greater than the 85th percentile but lower than the 95th percentile for age and sex. Obese is defined as BMI greater than the 95th percentile for age and sex (Benson et al, 2009) Among young people, the prevalence of overweight increased from five to 14 percent for those aged two to five years, six and a half to 19 percent for those aged six to 11 years, and five to 17 percent for those aged 12–19 years (Hagan et al, 2008). National Health and Nutrition Examination Survey (NHANES) data from Cycle II (1976–1980) and Cycle III (1988–1994) document an increase in the prevalence of obesity in all age,	**1a** C☐ P☐ M☐ N☐

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).

ethnic, and gender groups, and data collected from 1999–2000 revealed a continued increase in the number of obese children (Fox et al, 2006).

The prevalence of obesity in childhood is significant, as overweight children and adolescents are more likely to become obese as adolescents and as adults (CDC, 2007; Hagan et al, 2008). One study found that approximately 80 percent of children who were overweight at age ten to 15 years were obese adults at age 25 (Whitaker, 1997). Another study found that of the children studied, 12 percent of boys and 11 percent of girls in kindergarten were at risk of overweight (High, 2008). Recent studies indicate that a child's weight at five years old is more accurately predictive of their future weight than their gestational weight, as previously believed. Pre-school aged children who reached the 50th percentile for BMI anytime during preschool were six times more likely to be overweight later in childhood; those children in the top rung of BMI percentiles at age five become the heaviest nine-year olds (Gardner, et al, 2009). Another study found that if overweight begins before age eight, obesity in adulthood is likely to be more severe (Freedman, 2001).

The economic costs of obesity and related comorbidities have been estimated at over $70 billion, or seven percent of the national health care budget. One estimate suggests that obesity-associated inpatient or hospitalization costs have risen threefold, from $35 million (1979–1981) to $127 million (1997–1999). Furthermore, hospital utilization reflects only a portion of the burden of care for overweight and obese children (Dietz, 2002).

1a.4 Citations for Evidence of High Impact: American Academy of Pediatrics, Committee on Public Education. Children, Adolescents, and Television. PEDIATRICS Vol. 107 No. 2 February 2001

American Heart Association. Dietary Recommendations for Children and Adolescents: A Guide for Practitioners: Consensus Statement From the American Heart Association. Circulation; 112;2061-2075. 2005.

Benson L, Baer HJ, Kaelber DC. Trends in the Diagnosis of Overweight and Obesity in Children and Adolescents: 1999_2007. Pediatrics 2009;123;e153-e158

Centers for Disease Control and Prevention. Physical activity and good nutrition: essential elements to prevent chronic diseases and obesity. Atlanta (GA); National Center for Chronic Disease Prevention and Health Promotion; 2007 April. 1-4 pgs.

Dietz W.H., G. Wang. Economic burden of obesity in youths aged 6 to 17 years: 1979–1999. Pediatrics 2002; 109:e81.

Federal Trade Commission, Bureau of Economics State Report. Children´s Exposure to TV Advertising in 1977 and 2004 Information for the Obesity Debate. June 2001.
http://www.ftc.gov/os/2007/06/cabecolor.pdf

Fox, CS, et al. Trends in the Incidence of Type 2 Diabetes Mellitus From the 1970s to the 1990s. The Framingham Heart Study. Circulation. June 2006.

Freedman, D.S., L.K. Khan, W.H. Dietz, S.R. Srinivasan, G.S. Berenson. Relationship of childhood overweight to coronary heart disease risk factors in adulthood: The Bogalusa Heart Study. Pediatrics. 2001; 108:712–718.

Gardner, Daphne S. L., et al. Contribution of Early Weight Gain to Childhood Overweight and Metabolic Health: A Longitudinal Study (EarlyBird 36). Pediatrics 2009;123;e67-e73

Hagan, JF, Shaw JS, Duncan PM, eds. 2008. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, Third Edition. Elk Grove, IL: American Academy of Pediatrics.

High, Pamela C. and the Committee on Early Childhood, Adoption, and Dependent Care and Council on School Health. School Readiness. Pediatrics 2008;121;e1008-e1015

Kaplan, Jeffrey P, et al. Ed. In Preventing Childhood Obesity: Health in the Balance. Ed. Washington, DC:

National Academy of Sciences. 2005.

Perrin, EM, et al. Obesity prevention and the primary care pediatrician's office. Current Opinion in Pediatrics. 19:354–361. June 2007.

U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. 2nd ed. Washington, DC: US Government Printing Office, Nov 2000.

U.S. Preventive Services Task Force. Screening and interventions for overweight in children and adolescents: recommendation statement. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2005. 11 p.

Whitaker, R.C., J.A. Wright, M.S. Pepe, K.D. Seidel, W.H. Dietz. Predicting obesity in young adulthood from childhood and parental obesity. N Engl J Med. 1997. 37(13):869–873

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: Interventions to curb unhealthy habits can improve long-term health. For interventions to be effective, heath care providers should individualize advice to meet lifestyles and family life. The measure would encourage BMI assessment followed up by counseling for nutrition, physical activity and screen time as primary prevention practices for all children.

Counseling for Nutrition
Pediatricians may have the best opportunity to make dietary recommendations to parents regarding their child's health.
Age-specific dietary modification is considered to be the cornerstone of treatment. The major goals in dietary management are to provide appropriate calorie intake, provide optimum nutrition for the maintenance of health and normal growth, and to help the child develop and sustain healthful eating habits. Specific dietary guidance regarding fat, carbohydrate and protein intake in children exist.

Counseling for Physical Activity and Screen Time
In terms of counseling for physical activity and reducing sedentary lifestyle, recommendations should focus on engaging in regular physical activity. Guidance on the optimal intensity and duration of physical activity exist.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
There is significant opportunity for improvement in tracking BMI percentiles to determine the rates of diagnosis and treatment for overweight and obesity in children and adolescents. While studies indicate a high burden of overweight among the pediatric population, rates of diagnosis have come to a plateau, and some rates show a decline (Benson, Lacey, 2009). This conflicting information may be a result of missed diagnoses. One study revealed that routine screening with BMI was not documented and that few children received a formal diagnosis or treatment (Dorsey, 2005). Another study showed there was significant undercoding of the diagnosis of obesity; in this study sample, most children with BMIs in the 95th percentile or higher for gender and age did not have a diagnosis of obesity recorded in their medical records (Hampl, 2007).

Nutrition
Children now are consuming unhealthy and less health-beneficial foods. For children 19 to 24 months, French fries were the most common vegetable, 60 percent consumed baked deserts and candy on a given day, and one-third did not consume any fruit on a given day (AHA, 2005).

Physical Activity and Screen Time
About two-thirds of young people in grades nine to 12 do not achieve recommended levels of physical activity. Daily participation in physical education classes dropped from 42 to 33 percent in 1991 (CDC, 2001).

Regarding screen time, less than half of parents watch television with their children, which may lead to a

1b
C ☐
P ☐
M ☐
N ☐

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.

lack of knowledge from parents about the content of the shows and the amount of time spent in front of the television (AAP, 2001). Many parents may not realize the correlation of screen time and a child's excess weight. Physicians can use office visits as a time for intervention (Perrin et al,2007).

1b.3 Citations for data on performance gap:

American Heart Association. Dietary Recommendations for Children and Adolescents: A Guide for Practitioners: Consensus Statement From the American Heart Association. Circulation; 112;2061-2075. 2005.

American Academy of Pediatrics, Committee on Public Education. Children, Adolescents, and Television. PEDIATRICS Vol. 107 No. 2 February 2001

Benson, Lacey, Heather J. Baer and David C. Kaelber. Trends in the Diagnosis of Overweight and Obesity in Children and Adolescents: 1999-2007. Pediatrics 2009;123;e153-e158

Dorsey, K.B., C. Wells, H.M. Krumholz, J.C. Concato. Diagnosis, evaluation, and treatment of childhood obesity in pediatric practice. Arch Pediatr Adolesc Med. 2005. July; 159:632-638.

Hampl, S.E., C.A. Carroll, S.D. Simon, V. Sharma. Resource utilization and expenditures for overweight and obese children. Arch Pediatr Adolesc Med. 2007. Jan; 161:11-14.

Centers for Disease Control and Prevention (CDC). Physical activity and good nutrition: essential elements to prevent chronic diseases and obesity. Atlanta (GA); National Center for Chronic Disease Prevention and Health Promotion; 2007 April. 1-4 pgs.

Perrin, EM, et al. Obesity prevention and the primary care pediatrician's office. Current Opinion in Pediatrics. 19:354–361. June 2007.

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

While obesity and overweight are prevalent in children and adolescents of all ethnic groups, there is significant variation among these groups. Obesity is most disproportionately prevalent among Hispanic, African Americans, and Native-American children and adolescents. Among males, the highest prevalence is among Mexican Americans; among females, the highest is in African Americans. In a ten-year study investigating the development of obesity in a cohort of 2,379 girls during adolescence, the prevalence of obesity at age nine was twice as high among African American girls (18 percent), compared with white girls (8 percent) (Kimm, 2002). Other disparities are found in children whose parents are obese, children with a sibling who is obese, children from low-income families, and children with a chronic disease or disability that limits mobility (Hagan, 2008). Educational level and language spoken may also be correlated with obesity. A seminal study found that, of the children entering kindergarten, those whose mothers had not attained a bachelor's degree and those from homes where the primary language spoken was not English were at a higher risk for an increased BMI (High, 2008).

Nutrition

Food insecurity, where there is little money to pay for healthy food, can be one cause of poor diet. Food insecurity impacts different socio-economic classes and thus leads to worse health for children from poorer families (Hagan, 2008). Children that are fed through WIC are much more likely to have an unhealthy diet (National Academy of Sciences). The Department of Health and Human Services found that, in 2003, food insecurity among black non-Hispanic, Hispanic, and American Indian or Alaska Native households was nearly three times that of white non-Hispanic households. In addition, the proportion of lower-income households that experienced food insecurity was more than four times that of higher-income households (Daniels, 2005). The American Heart Association recommends pediatricians account for a child's culture and family situation when making dietary recommendations.

Physical Activity and Screen Time

Racial/ethnic disparities exist in the amount of participation in physical activities. Whites in grades 9-12 had the best rates for moderate and vigorous regular physical activity. Hispanics/Latinos and African Americans in grades 9-12 had the lowest amount of participation in moderate and vigorous regular physical activity. However Hispanics/Latinos had the highest rates of participation in physical activity in school and in physical education class. African Americans have a low rate of participation in physical activity in school,

and whites had a low rate of participation in physical education class. Boys in grades 9 through 12 had higher rates of physical activity, daily physical activity in school, and participation in physical education class compared to females.

In regards to television viewing among 9th through 12th graders, whites had the best (lowest) rate, Hispanics next, and African Americans with the highest (worst) rate of television viewing. Females in grades 9 through 12 had better rates of television viewing.

1b.5 Citations for data on Disparities:

American Heart Association. Dietary Recommendations for Children and Adolescents: A Guide for Practitioners: Consensus Statement From the American Heart Association. Circulation; 112;2061-2075. 2005.

Hagan, JF, Shaw JS, Duncan PM, eds. 2008. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, Third Edition. Elk Grove, IL: American Academy of Pediatrics.

High, Pamela C. and the Committee on Early Childhood, Adoption, and Dependent Care and Council on School Health. School Readiness. Pediatrics 2008;121;e1008-e1015

Kimm, S.Y.S., B.A. Barton, E. Obarzanek, et al. Obesity development during adolescence in a biracial cohort: the NHLBI growth and health study. Pediatrics 2002; 110(5). www.pediatrics.org/cgi/content/full/110/5/e54

Kaplan, Jeffrey P et al. In Preventing Childhood Obesity: Health in the Balance. Ed. Washington, DC: National Academy of Sciences. 2005.

U.S. Department of Health and Human Services. Healthy People 2010: Midcourse Review. 2nd ed. Washington, DC: U.S. Government Printing Office

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*)**:** Overweight and obesity have major, long-term health and social effects on an individual. The physical health consequences of obesity include glucose intolerance and insulin resistance; type 2 diabetes; hypertension; dyslipidemia; hepatic steatosis; cholelithiasis; sleep apnea; menstrual abnormalities; impaired balance; and orthopedic problems. The emotional and social health consequences include low self-esteem; negative body image; depression; stigma; negative stereotyping; discrimination; teasing and bullying; and social marginalization (Kaplan et al, 2005).

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 contributors to obesity and overweight in children are complex and multifactorial; they include biological, social and environmental factors. However, overall, both excess caloric intake and physical inactivity are strongly associated with obesity (AHA, 2005). A healthy and nutritious diet is key to a healthy lifestyle and to preventing overweight or obesity (Hagan, 2008). Caregivers should provide a conscious, well-balanced diet composition and a controlled caloric intake. Establishing the importance of a healthy diet at a young age will help children continue to eat well throughout their life (AHA, 2005). Regular physical activity is important for maintaining a healthy body and mind and has many long-term health effects. Physical activity increases muscle mass and strength, helps decrease body fat, aids in weight control and weight loss, enhances emotional well-being, and decreases symptoms of depression and anxiety. Children and adolescents need weight-bearing activities for normal skeletal development (DOH, 2000). A lack of physical activity has been linked strongly to the amount of time a child spends in front of a screen (television, computer, etc) (Perrin et al, 2007). One study found that girls aged seven, nine, and 11 who watched two hours or more of television per day were over 13 times as likely to be overweight at age 11. In addition, there is also a correlation between children with a television in their bedroom and risk for childhood overweight. Time in front of screens is not only sedentary but exposes children to advertisements and shows that can have a negative impact on other aspects of a child's development (Federal Trade

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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
•if an intermediate outcome, process, structure, etc., there is **evidence** that supports the specific measure focus as follows:
oIntermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
oProcess – 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).
oStructure – 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.
oPatient 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.
oAccess – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
oEfficiency – 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.

Commission, 2001).

BMI Assessment: Bright Futures recommends that health care providers perform a complete physical examination as part of every health supervision visit, paying attention to components specific to a child's age.

Physical Activity: ICSI encourages daily participation in 30-60 minutes of moderate to vigorous physical activity appropriate for age.

Screen Time: ICSI discourages television and video games and limits to one hour per day; US Department of Health and Human Services limits inactive forms of play such as television watching and computer games. The American Academy of Pediatrics (AAP) published guidelines (below) about the role a pediatrician should play in anticipatory guidance for children (AAP, 2001).

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

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

1c.8 Citations for Evidence (*other than guidelines***):** U.S. Preventive Services Task Force. Behavioral Interventions to Promote Breastfeeding Recommendations and Rationale. 2003.

Hagan, JF, Shaw JS, Duncan PM, eds. 2008. Bright Futures: Guidelines for Health Supervision of Infants, Children, and
Adolescents, Third Edition. Elk Grove, IL: American Academy of Pediatrics

Institute for Clinical Systems Improvement. Preventive Services for Children and Adolescents Thirteenth Edition. October 2007

US Department of Health and Human Services, US Department of Agriculture. Dietary Guidelines for Americans. 6th ed. Washington, DC: US Government Printing Office; 2005.

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

USPSTF (2010)
The USPSTF recommends that clinicians screen children aged 6 years and older for obesity and offer them or refer them to comprehensive, intensive behavioral interventions to promote improvement in weight status. Grade: B recommendation.

ICSI
The USPSTF found "no controlled trials of routine behavioral dietary counseling for children or adolescents in the primary care setting." However, the effectiveness of nutritional counseling in changing the dietary habits of patients has been demonstrated in a number of trials. Despite the lack of demonstrated effectiveness, intervention is encouraged, due to the numerous benefits associated with consumption of a healthy diet and prevention of obesity.
Counseling messages:
• Encourage consumption of fruits, vegetables, whole grains and low-fat dairy products
• Limit total fat, especially saturated fat, trans fats and cholesterol
• Discourage foods with added sugars and caloric carbonated beverages
• Encourage regular meals
Grade: Level III

U.S. Department of Health and Human Services (2005)
Choose:

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/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.

- healthful assortment of foods that includes vegetables; fruits; grains (especially whole grains);
- fat-free or low-fat milk products;
- Fish, lean meat, poultry, or beans.
- foods that are low in saturated fat and added sugars most of the time

Whatever the food, eating a sensible portion size.
Consensus & Guideline based; used Scientific literature and the food modeling exercises

American Heart Association

- Don´t over feed young children — they can usually self-regulate the amount of calories they need each day. Children shouldn´t be forced to finish meals if they aren´t hungry as they often vary caloric intake from meal to meal.

Introduce healthy foods and keep offering them if they´re initially refused.

- Don´t introduce foods without overall nutritional value simply to provide calories.
- Keep total fat intake between 30 to 35 percent of calories for children 2 to 3 years of age and between 25 to 35 percent of calories for children and adolescents 4 to 18 years of age, with most fats coming from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts and vegetable oils.
- Asses diet and physical activity at every visit
- Eat only enough calories to maintain a healthy weight for your height and build. Be physically active for at least 60 minutes a day.

Estimated calories needed by children range from 1,800 for a 14–18-year-old girl and 2,200 for a 14–18-year-old boy.
Grade: Consensus

Bright Futures (2008)
Bright Futures recommnends that health care providers counsel children ages 3-5 years old on the following topics:
Promote physical activity and placing limits on inactivity
Health child develop healthy personal habits and daily routines that promote health
Discuss healthy weight/BMI; approriate well-balanced diet, increased fuirt, vegetables and whole-grain consumption; adequate calcium intake; 60 minutes of exercise a day
Grade: Conensus and Guideline based

Bright Futures recommends that health care providers counsel adolescents and parents on the following topics:
Educate adolescent and parent on nutrition, especially calcium, at every visit
Ask parent and youth about the adolescents physician (in)activity
Physical Activity Counseling

The USPSTF recommends that clinicians screen children aged 6 years and older for obesity and offer them or refer them to comprehensive, intensive behavioral interventions to promote improvement in weight status.
Grade: B recommendation.

U.S. Department of Health and Human Services (2008)
HHS recommends children and adolescents be counseled on the following topics:
Aerobic: Most of the 60 or more minutes a day should be either moderate- or vigorous-intensity aerobic physical activity, and should include vigorous-intensity physical activity at least 3 days a week.
Muscle-strengthening: As part of their 60 or more minutes of daily physical activity, include muscle-strengthening physical activity on at least 3 days of the week.
Bone-strengthening: As part of their 60 or more minutes of daily physical activity, include bone-strengthening physical activity on at least 3 days of the week.
Consensus & Guideline based; used Scientific literature and the food modeling exercises

ICSI
ICSI recommends that children ages 2-18 years be encouraged to participate daily in 30-60 minutes of moderate to vigorous physical activity appropriate for their age.
Grade: Level II

American Heart Association
Assess diet and physical activity at every visit
Be physically active for at least 60 minutes a day
Grade: Consensus based

Bright Futures (2008)
Bright Futures recommends that health care providers counsel children ages 3-5 years to promote physical activity and place limits on inactivity, help chid develop healthy personal habits and daily routines that promote health; discuss 60n minutes of exercise a day
Consensus and Guideline Based

Screen Time Counseling

USPSTF
Not addressed

ICSI (2007)
ICSI recommends that children ages 2-18 years be counseled to discourage television and video games and encouraged to limit screen time to one hour per day.
Grade: Level II

U.S. Department of Health and Human Services (2005)
HHS recommends that children be counseled to limit inactive forms of play suchy as television watching and computer games
Consensus & Guideline based; used Scientific literature and the food modeling exercises

American Academy of Pediatrics (2004)
The AAP recommends that pediatricians counsel parents on the following topics for children:
Limit children's total media time (with entertainment media) to no more than 1-2 hrs of quality programming per day.
Remove television sets from children's bedrooms.
Monitor the shows children and adolescents are viewing. Most programs should be informational, educational, nonviolent.
View television programs along with children, and discuss the content.
Use controversial programming as a stepping-off point to initiate discussions about family values, violence, sex and sexuality, and drugs.
Use the videocassette recorder wisely to show or record high-quality, educational programming for children.
Support efforts to establish comprehensive media-education programs in schools.
Encourage alternative entertainment for children, including reading, athletics, hobbies, and creative play.
Grade: Consensus and Guideline Based

Bright Futures (2008)
Bright Futures states that health care providers should counsel that children over age 2 years have TV and video viewing limited to no more than 1-2 hours per day.
Consensus and Guideline Based

Body Mass Index (BMI) Assessment

USPSTF (2010)
The USPSTF recommends that clinicians screen children aged 6 years and older for obesity and offer them or refer them to comprehensive, intensive behavioral interventions to promote improvement in weight status.
Grade: B recommendation.

ICSI (2007)
ICSI recommends that children age 2 years and above have height, weight and BMI recorded annually beginning at age 2 as part of a normal visit schedule.
Grade: Level III

AAP
AAP recommends that BMI be calculated from the height and weight and BMI percentile should be calculated.
Consensus Based

AMA, HRSA and CDC
At minimum, a yearly assessment of weight status in all children.
Include calculation of height, weight (measured appropriately), and body mass index (BMI) for age and plotting of those measures on standard growth charts.
Consensus Based

American Academy of Pediatrics and American College of Clinical Endocrinology
Recommends that pediatric providers do the following:
Screen children for obesity using BMI
Examine overweight children for obesity-related diseases
Intiate weight management practices to improve diet and physical activity habits
Increase frequency of visits to reinforce behavior changes

Bright Futures (2008)
Bright Futures recommends that health care providers perform the following for children age 2.5 years and above:
Calculate and plot BMI, if standing height; otherwise, plot weight-for-length
Calcluate BMI at every visit
Grade: Consensus Based

1c.10 Clinical Practice Guideline Citation: American Academy of Pediatrics. Gartner LM, Morton J, Lawrence RA, Naylor AJ, O´Hare D, Schanler RJ, Eidelman AI. Breastfeeding and the use of human milk. Pediatrics 2005 Feb;115(2):496-506
American Academy of Pediatrics. Committee on Public Education. Children, Adolescents, and Television. PEDIATRICS Vol. 107 No. 2
American Academy of Pediatrics . National High Blood Pressure Education Program Working Group on High Blood Pressure in Children.The fourth report on the diagnosis, evaluation, and treatment of high blood pressure in children and adolescents. Pediatrics. 2004 Aug; 114(2 Suppl):555-76.
AMA/HRSA/CDC Expert Committee on the Assessment, Prevention and Treatment of Child and Adolescent Overweight and Obesity. Recommendations on the assessment, prevention and treatment of child and adolescent overweight and obesity. Chicago (IL): AMA. 2007 Jun. 1p
American Heart Association. Dietary Recommendations for Children and Adolescents: A Guide for Practitioners: Consensus Statement From the American Heart Association. Endorsed by the American Academy of Pediatrics. Circulation 2005;112;2061-2075
Baker, S., S. Barlow, W. Cochran, G. Fuchs, W. Klish, N. Krebs, R. Strauss, A. Tershakovec, J. Udall. Overweight children and adolescents: a clinical report of the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition. J Pediatr Gastroenterol Nutr. 2005. May; 40(5):533-43.
Dorsey, K.B., C. Wells, H.M. Krumholz, J.C. Concato. Diagnosis, evaluation, and treatment of childhood obesity in pediatric practice. Arch Pediatr Adolesc Med. 2005. July; 159:632-638.
Hagan, JF, Shaw JS, Duncan PM, eds. 2008. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, Third Edition. Elk Grove, IL: American Academy of Pediatrics
Institute for Clinical Systems Improvement. Preventive Services for Children and Adolescents Thirteenth Edition. October 2007
Physical Activity Guidelines Advisory Committee. Physical Activity Guidelines Advisory Committee Report, 2008. Washington, DC: U.S. Dept of Health and Human Services, 2008.
US Department of Health and Human Services, US Department of Agriculture. Dietary Guidelines for Americans. 6th ed. Washington, DC: US Government Printing Office; 2005.
U.S. Preventive Services Task Force. Counseling to Promote a Healthy Diet, Topic Page. January 2003. Agency for Healthcare Research and Quality, Rockville, MD.
U.S. Preventive Services Task Force (USPSTF). Screening and interventions for overweight in children and adolescents: recommendation statement. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2005. 11 p.
1c.11 National Guideline Clearinghouse or other URL: Dietary recommendations for children and

adolescents: a guideline for practitioners: consensus statement from the American Heart Association. http://www.guideline.gov/summary/summary.aspx?doc_id=8215&nbr=004585&string=Healthy+AND+physical+AND+development 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 1c.14 **Rationale for using this guideline over others:** The USPSTF is an independent group of experts in clinical preventive services who base recommendations on a comprehensive evidence review. There is fairly consistent guideline support for these measures.	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?*	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report***, met?** **Rationale:**	**1** **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)	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:** **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 healthy physical development services by age 6 years Numerator 2: Children who had documentation in the medical record of healthy physical development services by age 13 years Numerator 3: Children who had documentation in the medical record of healthy physical development services 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***):** The following 4 rates apply to each of the 3 measures: Rate 1. BMI Weight Assessment: Documentation must include a note indicating that BMI percentile was documented and evidence of either of the following. • BMI percentile, or • BMI percentile plotted on age-growth chart Rate 2. Weight Counseling: Documentation must include a note indicating at least one of the following. • Engagement in discussion of current nutrition behaviors (e.g., eating habits, dieting behaviors) • Checklist indicating that nutrition was addressed • Counseling or referral for nutrition education	**2a-specs** **C☐** **P☐** **M☐** **N☐**

Comment [k7]: USPSTF grading system **http://www.ahrq.gov/clinic/uspstf/grades.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** 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 the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** 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 [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) .

• Member received educational materials on nutrition
• Anticipatory guidance for nutrition
Rate 3. Physical Activity Counseling: Documentation must include a note indicating at least one of the following.
• Engagement in discussion of current physical activity behaviors (e.g. exercise routine, participation in sports activities, exam for sports participation)
• Checklist indicating that physical activity was addressed
• Counseling or referral for physical activity
• Member received educational materials on physical activity
• Anticipatory guidance for physical activity
Rate 4. Screen Time Counseling: Documentation must include a note indicating at least one of the following.
• Engagement in discussion of current screen-watching behaviors (e.g. type of screen activity, amount of time sitting inactive in front of computer or television, appropriate screen activity, supervision of screen activity)
• Checklist indicating that screen time was addressed
• Member received educational materials on screen time
• Anticipatory guidance for screen time

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

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***):**
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

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.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)*
Clinicians: Individual, Clinicians: Group, Health Plan, Population: national, Population: regional/network

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)

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.

2b.3 Testing Results *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)***:**
NA

2b
C☐
P☐
M☐
N☐

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

2c
C☐
P☐
M☐
N☐

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 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.

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.

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

2d
C☐
P☐
M☐
N☐
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.

2e
C☐
P☐
M☐
N☐
NA☐

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 are eligible population listed by Measure:
Elig Population:
Measure 1: By Age 6 years: 180
Measure 2: By Age 13 years: 179
Measure 3: By Age 18 years: 163

Below are performance rates for each of the 3 measures listed by rates:

2f
C☐
P☐
M☐
N☐

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;
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 … [1]

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 (but not disparities in care) and are present at start of care;[Error! Bookmark not defined.] OR rationale/data support no risk adjustment.

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). 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 [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 a … [2]

Rate 1: BMI Performance Rates: By Age 6 years: 88.3 By Age 13 years: 89.4 By Age 18 years: 85.9 Rate 2: Nutrition Counseling Performance Rates: By 6 years: 69.4 By 13 years: 76.0 By 18 years: 71.8 Rate 3: Physical Activity Counseling Performance Rates: By Age 6 years: 69.4 By Age 13 years: 77.7 By Age 18 years: 81.0 Rate 4: Screen Time Counseling Performance Rates: By Age 6 years: 53.3 By Age 13 years: 44.7 By Age 18 years: 36.8	
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	**2g** C☐ P☐ M☐ N☐ 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	**2h** C☐ P☐ M☐ N☐ NA☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Scientific Acceptability of Measure Properties?*	**2**
Steering Committee: Overall, to what extent was the criterion, *Scientific Acceptability of Measure Properties*, **met?** **Rationale:**	*2* C☐ P☐ M☐ N☐
3. USABILITY	
Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	Eval Ratin g

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.

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.

3a
C☐ P☐ M☐ N☐

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?**

3b
C☐ P☐ M☐ N☐ NA☐

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

3c
C☐ P☐ M☐ N☐ NA☐

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

3

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., 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).

Steering Committee: Overall, to what extent was the criterion, *Usability*, met? **Rationale:**	**3** **C☐** **P☐** **M☐** **N☐**
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
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)	**4a** **C☐** **P☐** **M☐** **N☐**
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.	**4b** **C☐** **P☐** **M☐** **N☐**
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.**	**4c** **C☐** **P☐** **M☐** **N☐** **NA☐**
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.	**4d** **C☐** **P☐** **M☐** **N☐**
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	**4e** **C☐** **P☐** **M☐** **N☐**

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).

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*?	**4**
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, met? **Rationale:**	**4** **C☐** **P☐** **M☐** **N☐**
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? **Comments:**	**Y☐** **N☐** **A☐**

CONTACT INFORMATION

Co.1 **Measure Steward (Intellectual Property Owner)**
Co.1 **Organization**
National Commitee 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 Commitee 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 Commitee 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: **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*)**:** 09/01/2010

Page 14: [1] Comment [KP14] **Karen Pace** **10/5/2009 8:59:00 AM**

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).

Page 14: [2] Comment [k19] **Karen Pace** **10/5/2009 8:59:00 AM**

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)

(for NQF staff use) **NQF Review #:** 1400 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Environmental Tobacco Assessment and Counseling
De.2 **Brief description of measure***:* The percentage of children who had an environmental tobacco assessment and counseling 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: Environmental Tobacco Assessment or Counseling By 6 months of age Measure 2: Environmental Tobacco Assessment or Counseling By 2 years of age Measure 3: Environmental Tobacco Assessment or Counseling By 6 years of age
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** This measure appears in the composite Comprehensive Well Care by Age 6 Months Comprehensive Well Care by Age 2 Years and Comprehensive Well Care by Age 6 Years.
De.4 **National Priority Partners Priority Area:** Patient and family engagement, Population health De.5 **IOM Quality Domain**: Effectiveness, Patient-centered, Timeliness De.6 **Consumer Care Need:** Staying healthy

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	**NQF Staff**
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *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** **Y**☐ **N**☐

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	**B** Y☐ N☐
C. The intended use of the measure includes both public reporting and quality improvement. ►**Purpose:** Public reporting, Internal quality improvement Accountability	**C** Y☐ N☐
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.1Testing:** Yes, fully developed and tested **D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures?** Yes	**D** Y☐ N☐
(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) **1a. High Impact**	Eval Rating
(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:** Tobacco exposure has been linked to a variety of ailments in children, including asthma, bronchitis, pneumonia and middle-ear infections. In the U.S., approximately 38 percent of children between 2 months and 5 years of age are exposed to environmental tobacco smoke in the home (Gergen, 1998). Even if a parent smokes outside the home, children could still face a high level of environmental tobacco exposure. In addition to health consequences, there are health care expenditure implications. One study on the pediatric disease attributable to parental smoking found that tobacco-related morbidity in children results in annual direct medical expenditures of $4.6 billion and loss of life costs of $8.2 billion. **1a.4 Citations for Evidence of High Impact:** Weitzman M, Byrd RS, Aligne CA, Moss M. The effects of tobacco exposure on children´s behavioral and cognitive functioning: implications for clinical and public	**1a** C☐ P☐ M☐ N☐

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).

health policy and future research. Neurotoxicol Teratol. 2002 May-Jun;24(3):397-406.

NIPO. Continuous research smoking habits in the Netherlands 2000-IV. Amsterdam: Defacto, 2000.

Gergen PJ, Fowler JA, Maurer KR, et al. The burden of environmental tobacco smoke exposure on the respiratory health of children 2 months through 5 years of age in the United States: Third National Health and Nutrition Examination Survey, 1988 to 1994. Pediatrics 1998;101:e8.

Research for International Tobacco Control. At What Cost? The Economic Impact of Tobacco Use on National Health Systems, societies and individuals: A Summary of Method and Findings. 2003. RITC Monograph Series No. 1:51:
http://books.google.com/books?id=Z3C8NzjCTVgC&pg=PA51&lpg=PA51&dq=financial+impact+of+tobacco+exposure+to+children&source=bl&ots=a58XfftlZc&sig=H-6sJUBFI8IYEx_DiBedl2dxOtw&hl=en&ei=m3phTMaUEcOB8gaC_5WACg&sa=X&oi=book_result&ct=result&resnum=7&ved=0CD4Q6AEwBg#v=onepage&q&f=false. Accessed August 27, 2010.

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: Healthcare providers who care for children, especially pediatricians, are in a unique position to assist with tobacco control. This measure requires that health care providers counsel parents and caregivers on the dangers of environmental tobacco exposure in children, which can be an important opportunity to improve care.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
Environmental tobacco smoke (ETS) exposure is still a leading health concern in the United States. Despite efforts to educate and counsel on the adverse health effects, 70 percent of smokers with children smoke inside their homes. Currently, between 35 and 80 percent of U.S. children are affected by ETS (Downs, Zhu, Anand, Biondich, Carroll, 2008).

Despite support from professional organizations and federal government groups, many pediatricians and family physicians do not routinely engage in intensive efforts to reduce children's environmental tobacco smoke exposure (Klerman, 2004). Physicians have reported a number of barriers to providing counseling on environmental tobacco smoke which could include: negative parental expectations, lack of time, lack of skills or confidence, and perceptions of professional norms (Victor, Brewster , Ferrence, Ashley, Cohen, Selby, 2010).

1b.3 Citations for data on performance gap:
Lorraine V. Klerman, Protecting children: Reducing their environmental tobacco smoke exposure. Nicotine & Tobacco Research Volume 6, Supplement 2 (April 2004) S239–S252.

Stead LF, Bergson G, Lancaster T. Physician advice for smoking cessation. Cochrane Database of Systematic Reviews 2008, Issue 2. Art. No.: CD000165. DOI: 10.1002/14651858.CD000165.pub3.

Downs SM, Zhu V, Anand V, Biondich PG, Carroll AE. The CHICA Smoking Cessation System. AMIA Annu Symp Proc. 2008; 2008: 166–170.

Can Fam Physician. J. Charles Victor MSc, Joan M. Brewster PhD , Roberta Ferrence PhD , Mary Jane Ashley MD, Joanna E. Cohen PhD, Peter Selby MB BS. Tobacco-related medical education and physician interventions with parents who smoke. Vol. 56, No. 2, February 2010, pp.157 – 163.

1b.4 Summary of Data on disparities by population group:
The use of cigarettes is most prevalent among adults living below the poverty line and who have not completed high school, resulting in environmental tobacco smoke disproportionately affecting children living in low-income households (Committee on Environmental Health, 2009). In addition, more asthma cases and high levels of ETS exposure are being reported in African American, inner-city children (Fagnano, Conn, Halterman, 2008).

1b.5 Citations for data on Disparities:

1b
C ☐
P ☐
M ☐
N ☐

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.

Flores G, Olson L, Tomany S. Does Disadvantage Start at Home? Racial and Ethnic Disparities in Early Childhood Home Routines, Safety, and Educational Practices/Resources. Abstr AcademyHealth Meet. 2004; 21

Tobacco Use: A Pediatric Disease. PEDIATRICS Vol. 124 No. 5 November 2009, pp. 1474-1487 (doi:10.1542/peds.2009-2114).

Fagnano M, BA, MPH, Conn KM, MPH, Halterman JS, MD, MPH. Environmental Tobacco Smoke and Behaviors of Inner-City Children With Asthma. Ambul Pediatr. 2008; 8(5): 288–293.

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*)**:** ETS exposure is directly responsible for numerous health conditions, especially in children, as they are still in their growth development stage of life. Studies suggest that infants exposed to secondhand smoke are more likely to die from sudden infant death syndrome (O'Keefe, 2009). Children exposed to secondhand smoke are more susceptible to respiratory ailments and other infections. Morbidity among children with asthma due to ETS is on the rise (Halterman et al, 2008). Evidence shows ETS exposure increases the prevalence of asthma, increases the severity of asthma and worsens asthma control in children who already have the disease (Dae Jin Song, 2010).

ETS can have far-reaching adverse effects. Children of parents who smoke are more apt to model their parents' behavior. Teenagers who experiment with tobacco are more prone to becoming addicted to tobacco (O'Keefe, 2009). Tobacco smoke can remain on one's lungs for decades, contributing to emphysema and chronic obstructive pulmonary disease's rise as one of the leading causes of death (Lovasi, 2010).

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*)**:**
Providing simple advice to parents on the health benefits of quitting smoking has helped some parents to quit. More intensive efforts and counseling results in slightly higher rates of quitting (Stead, Bergson, Lancaster, 2008). Counseling parents on the dangers of smoking and warning them about the many health complications a child could develop as a result of environmental tobacco smoke exposure is an important way pediatricians and other health care professionals aid in the fight against tobacco use, the most preventable cause of death in our society.

Among the many health complications that are directly contributable to tobacco use include: asthma in children, worsened and increased severity of asthma, emphysema, chronic obstructive pulmonary disease, numerous respiratory ailments and infections, and cancer. It is important for pediatricians and other primary health care professionals to counsel patients and families on these risks and to encourage them to make the extra efforts to quit smoking and ban smoking in homes.

Children are at very high risk of developing health complications through environmental tobacco smoking exposure because their bodies are still developing. Through initial ETS education and counseling, physicians can prevent further exposure and could make a difference in the health of a child and their family.

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

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

1c.8 Citations for Evidence (*other than guidelines*)**:** Michigan Quality Improvement Consortium. Routine preventive services for infants and children (birth-24 months). May 2007
Michigan Quality Improvement Consortium. Routine preventive services for infants and children (ages 2-18). May 2007
Stead LF, Bergson G, Lancaster T. Physician advice for smoking cessation. Cochrane Database of Systematic

1c
C☐
P☐
M☐
N☐

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:
oIntermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
oProcess – 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).
oStructure – 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.
oPatient 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.
oAccess – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. ... [1]

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/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.

Reviews 2008, Issue 2. Art. No.: CD000165. DOI: 10.1002/14651858.CD000165.pub3.

Dae Jin Song. (2010) Environmental tobacco smoke and childhood asthma. Korean Journal of Pediatrics 53:2, 121.

Columbia University´s Mailman School of Public Health (2009, December 29). Exposure to tobacco smoke in childhood home associated with early emphysema in adulthood. ScienceDaily. Retrieved August 24, 2010, from http://www.sciencedaily.com/releases/2009/12/091228114732.htm.

Jill S. Halterman, MD, MPH; Belinda Borrelli, PhD; Paul Tremblay, RN; Kelly M. Conn, MPH; Maria Fagnano, BA; Guillermo Montes, PhD; Telva Hernandez, BA. Screening for Environmental Tobacco Smoke Exposure among Inner City Children with Asthma. Pediatrics. 2008 December; 122(6): 1277–1283.

Lori O'Keefe. (2009) Snuffing out tobacco use: AAP statements guide pediatricians. AAP News Vol. 30 No. 11 November 2009, p. 8.

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 clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products.
Grade: A recommendation.

ICSI (2007)
ICSI recommends that health care providers counsel patients on education topics that include cigarette smoking.
Grade: Level III

Michigan Quality Improvement Consortium (2007)
The Consortium recommends that parents of children age one month to six years be counseled about various topics, including tobacco smoke.
Grade: Level B evidence

1c.10 Clinical Practice Guideline Citation: U.S. Preventive Services Task Force. Counseling and Interventions to Prevent Tobacco Use and Tobacco-Caused Disease in Adults and Pregnant Women. Ann Intern Med 2009;150:551-55

Institute for Clinical Systems Improvement. Preventive Services for Children and Adolescents Thirteenth Edition. October 2007

Michigan Quality Improvement Consortium. Routine preventive services for infants and children (birth-24 months). May 2007

Michigan Quality Improvement Consortium. Routine preventive services for infants and children (ages 2-18). May 2007

1c.11 National Guideline Clearinghouse or other URL:
http://www.guideline.gov/syntheses/synthesis.aspx?id=16422&search=environmental+tobacco+assessment+and+counseling

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:
The USPSTF is an independent group of experts in clinical preventive services who base recommendations on

Comment [k7]: USPSTF grading system **http://www.ahrq.gov/clinic/uspstf/grades.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** 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 the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** 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.

a comprehensive evidence review. There is fairly consistent guideline support for these measures.	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?*	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report*, **met?** **Rationale:**	**1** **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)	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:** **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 an environmental tobacco assessment or counseling by age 6 months Numerator 2: Children who had documentation in the medical record of an environmental tobacco assessment or counseling by age 2 years Numerator 3: Children who had documentation in the medical record of an environmental tobacco assessment or counseling by age 6 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 at least one of the following. • A screening question result indicating whether the child is exposed to secondhand smoke or environmental tobacco • A note indicating at least one of the following. – Engagement in discussion of the harms of environmental tobacco (e.g., dangers of secondhand smoke) – Checklist indicating environmental tobacco or quitting smoking was addressed – Counseling on environmental tobacco or referral for quitting smoking – Member or patient received educational materials on the harms of environmental tobacco or quitting smoking – Anticipatory guidance on environmental tobacco or quitting smoking	
2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured***):** Denominator 1: Children who turned 6 months 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 2 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 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. **2a.5 Target population gender:** Female, Male	**2a-specs** **C☐** **P☐** **M☐** **N☐**

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.6 Target population age range: Measure 1: 0-6 months, Measure 2: 6 months-2 years, Measure 3: 2 years-6 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

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)*
Clinicians: Individual, Clinicians: Group, Population: national, Population: regional/network

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.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)

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.

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.

2b C☐ P☐ M☐ N☐

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

2c C☐ P☐ M☐ N☐

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

2d C☐ P☐ M☐ N☐ 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)*:

2e C☐ P☐ M☐ N☐

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 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.

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 outc ... [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 w ... [4]

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.	**NA** ☐
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: Environmental Tobacco Assessment and Counseling by Age 6 Mo Elig Population: 180 Documentation that the physician asked or counseled on ETS: 77.7 Measure 2: Environmental Tobacco Assessment and Counseling by Age 2 years Elig Population: 180 Documentation that the physician asked or counseled on ETS: 77.7 Measure 1: Environmental Tobacco Assessment and Counseling by Age 6 years Elig Population: 180 Documentation that the physician asked or counseled on ETS: 61.1	**2f** C☐ P☐ M☐ N☐
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	**2g** C☐ P☐ M☐ N☐ **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	**2h** C☐ P☐ M☐ N☐ **NA** ☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Scientific Acceptability of Measure Properties?*	**2**
Steering Committee: Overall, to what extent was the criterion, *Scientific Acceptability of Measure Properties*, **met?** **Rationale:**	*2* C☐ P☐ M☐ N☐
3. USABILITY	

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.

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	Eval Rating
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.	**3a** C☐ P☐ M☐ N☐
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?**	**3b** C☐ P☐ M☐ N☐ **NA** ☐
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**	**3c** C☐ P☐ M☐ N☐ **NA**

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., 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).

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:**	**3** **C**☐ **P**☐ **M**☐ **N**☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
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)	**4a** **C**☐ **P**☐ **M**☐ **N**☐
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.	**4b** **C**☐ **P**☐ **M**☐ **N**☐
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.**	**4c** **C**☐ **P**☐ **M**☐ **N**☐ **NA** ☐
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.	**4d** **C**☐ **P**☐ **M**☐ **N**☐
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** **C**☐ **P**☐ **M**☐ **N**☐

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).

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*?	**4**
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, **met?** **Rationale:**	**4** **C☐** **P☐** **M☐** **N☐**
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? **Comments:**	**Y☐** **N☐** **A☐**

CONTACT INFORMATION

Co.1 Measure Steward (Intellectual Property Owner)
Co.1 Organization
NCQA, 1100 13th St, 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
NCQA, 1100 13th St, 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-, NCQA

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:
Ad.11 -13 Additional Information web page URL or attachment:
Date of Submission (*MM/DD/YY*)**:** 08/30/2010

Page 4: [1] Comment [k4] **Karen Pace** **10/5/2009 8:59:00 AM**

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.

Page 8: [2] Comment [KP14] **Karen Pace** **10/5/2009 8:59:00 AM**

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).

Page 8: [3] Comment [KP16] **Karen Pace** **10/5/2009 8:59:00 AM**

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;**Error! Bookmark not defined.** OR

rationale/data support no risk adjustment.

Page 8: [4] Comment [k17] **Karen Pace** **10/5/2009 8:59:00 AM**

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.

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)

(for NQF staff use) **NQF Review #:** 1404 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Lead Screening
De.2 **Brief description of measure***:* The percentage of children 2 years of age who had one or more venous blood tests for lead poisoning by their 2nd birthday.
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** This measure appears in the composite Comprehensive Well Care by Age 2 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

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	**NQF Staff**
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *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:**	**A** Y☐ N☐
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and	**B**

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	Y☐ N☐
C. The intended use of the measure includes both public reporting and quality improvement. ►**Purpose:** Public reporting, Internal quality improvement Accountability	C Y☐ N☐
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	D Y☐ N☐
(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) **1a. High Impact**	Eval Rating
(for NQF staff use) Specific NPP goal:	
1a.1 **Demonstrated High Impact Aspect of Healthcare:** Severity of illness, Patient/societal consequences of poor quality 1a.2 1a.3 **Summary of Evidence of High Impact:** In 2001-2004, 250,000 children aged one to five years old had elevated levels of lead in their blood (EPA, 2008). Lead poisoning in children is most often caused from ingestion of contaminated lead paint chips or by consuming contaminated water (ATSDR, 2007). Approximately 24 million homes still contain lead paint that would be harmful if ingested. While there is no safe level of lead, a level of ten µg/dL is considered "elevated." However, studies have found that a decrease in IQ can result from blood lead levels that are below ten µg/dL (EPA, 2008). Elevated blood lead levels are not just important from a health standpoint; they also have significant financial impact. One study estimated the economic benefit of decreased lead exposure in a 3.8 million-person cohort of children aged two years in 2000. Based on the reduction in lead exposure since the 1970s, the estimated increase in earnings for the cohort of children was between $110 billion and $319 billion over their lifetimes (Grosse, 2002). Another study estimated the avoidable medical costs per child with an elevated blood lead level to be $1300. In addition, an elevated BLL was associated with avoidable special education costs of $3331 per child, and a 1 µg/dL increase in BLL resulted in decreased lifetime earnings of	**1a** C☐ P☐ M☐ N☐

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).

$1147 (DOH, 1998).

1a.4 Citations for Evidence of High Impact: Agency for Toxic Substances and Disease Registry (ATSDR). 2007. Toxicological Profile for Lead. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Services. October 2007.

Grosse, S.D., T.D. Matte, J. Schwartz, R.J. Jackson. Economic gains resulting from the reduction in children´s exposure to lead in the United States. Environ. Health Perspect. 2002;563-9.

U.S. Environmental Protection Agency. Fast Facts on Children's Environmental Health. http://yosemite.epa.gov/ochp/ochpweb.nsf/content/fastfacts.htm#lead. Updated 2008.

U.S. Department of Health and Human Services Public Health Service Agency for Toxic Substances and Disease Registry. Division of Toxicology and Environmental Medicine Applied Toxicology Branch ToxGuideTM for Lead Pb. October 2007.

U.S. Environmental Protection Agency. Fast Facts on Children's Environmental Health. http://yosemite.epa.gov/ochp/ochpweb.nsf/content/fastfacts.htm#lead. Updated 2008.

U.S. Dep. Health Human Services, Public Health Service/Center for Disease Control. 1991. Strategic plan for the elimination of childhood lead poisoning. Prepared for Risk Management Subcommittee of Department of Health & Human Services. As quoted in: Needleman HL. Childhood lead poisoning: the promise and abandonment of primary prevention. American Journal of Public Health. Volume 88(12), December 1998, pp 1871-1877.

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: This measure encourages screening for elevated blood lead levels in children. Detecting elevated blood lead levels before the development of clinical manifestations allows a clinician to recommend interventions to limit further exposure and, when necessary, begin medical treatment with chelating agents. Early detection may also result in interventions that prevent lead exposure in other children (the child with elevated blood lead level acting as a sentinel for a hazardous environment).

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
The National Health and Nutrition Examination Survey (NHANES), an ongoing series of cross-sectional surveys on the health and nutrition of the U.S. population, reports on the BLLs of children and adults in the U.S. Children one to five years of age have the highest prevalence of elevated blood levels of any age group in the U.S., although the prevalence has declined over the past several decades. From 1976–1980 to 1991–1994, the percentage of children one to five years with a BLL of >10 µg/dL decreased from 78 to four percent. The prevalence of increased BLLs in this same age group decreased further to less than two percent in the NHANES survey conducted during the 1999–2002 period. However, even with these decreases, an estimated 310,000 children remain at risk for exposure to harmful levels of lead (CDC 2005).

NCQA's HEDIS measure has shown that performance among health plans is low. The rate for lead screening in children was 66.7 percent.

1b.3 Citations for data on performance gap:
Centers for Disease Control and Prevention. Blood Lead Levels—United States, 1999–2002. MMWR Morbidity & Mortality Weekly Report. May 2005;54(20):513-516.

CDC MMWR: Blood Lead Levels in Young Children ---United States and Selected States, 1996—1999. http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4914a1.htm

NCQA State of Health Care Quality Report. 2009

1b.4 Summary of Data on disparities by population group:
High levels of lead in the blood are more common in children from lower-income families and from

1b
C☐
P☐
M☐
N☐

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.

minority families. As foreign-born children are five times more likely to have increased levels of lead in their blood, immigrant children also may have an increased risk of lead poisoning (EPA, 2008).

1b.5 Citations for data on Disparities:
U.S. Environmental Protection Agency. Fast Facts on Children's Environmental Health. http://yosemite.epa.gov/ochp/ochpweb.nsf/content/fastfacts.htm#lead. Updated 2008.

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*)**:** Lead poisoning can damage the kidneys, the nervous system, and the reproductive system and can lead to high blood pressure. In young children it can cause cerebral harm, anemia, renal alterations, colic, and impaired metabolism of vitamin D. Lead poisoning en utero or infancy can cause low weight and early birth, a retardation in neurological development, and lower IQ (HHS, 2007).

1c.2-3. Type of Evidence: 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 evaluated the evidence for lead screening and released a recommendation statement in 2006. The Task Force concluded that the evidence was insufficient to recommend for or against routine lead screening in young children at increased risk, and the Task Force recommended against screening children who are at average risk. The Task Force noted that there is no direct evidence that screening for elevated lead levels in asymptomatic children at increased risk for lead exposure will improve clinical outcomes.

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

1c.6 Method for rating evidence: USPSTF, CDC, state mandates

1c.7 Summary of Controversy/Contradictory Evidence: There are conflicting guidelines on universal versus selective screening of children for lead. In 1991, the Centers for Disease Control and Prevention (CDC) recommended the near-universal screening of all children at ages one and two years. These recommendations were revised in 1997 in part because of decreasing BLLs in the U.S. The new recommendations in 1997 were to screen all children where more than 12 percent of children aged one to three years have elevated blood levels. The CDC recommends targeted screening for other children based on an individual risk assessment. Children at high risk of having an elevated blood lead concentration include children participating in federal health care programs like Medicaid and Women-Infants-and-Children (WIC) (CDC, 1997). The U.S. Preventive Services Task Force (USPSTF), however, recommends against lead screening for asymptomatic children at average risk (D Rating), and the Task Force concluded the evidence was insufficient to recommend for or against lead screening for asymptomatic children at increased risk (U.S. Preventive Services Task Force, 2006).

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

American Academy of Pediatrics. Lead exposure in children: prevention, detection, and management. Pediatrics 2005 Oct;116(4):1036-46.

Centers for Disease Control and Prevention. Screening young children for lead poisoning: guidance for state and local health officials. Atlanta, GA: USDHHS, CDC, National Center for Environmental Health, 1997. Accessed Oct 10, 2005, at: http://www.cdc.gov/nceh/lead/guide/guide97.htm.

Centers for Disease Control and Prevention. Agency for toxic Substances and Disease Registry. Pediatric Environmental Health Appendix E: Lead Screening.1997.

1c
C☐
P☐
M☐
N☐

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:
oIntermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
oProcess – 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).
oStructure – 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.
oPatient 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.
oAccess – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. ... [1]

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/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.

http://www.atsdr.cdc.gov/csem/pediatric/appendixe.html#universal

U.S. Preventive Services Task Force. Agency for Healthcare Research and Quality, Rockville, MD. Screening for Lead Levels in Childhood and Pregnancy. December 2006.

1c.9 Quote the Specific guideline recommendation (*including guideline number and/or page number***):**
Since 1989, federal law has required states to screen children enrolled in Medicaid for elevated BLLs as part of prevention services provided through the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program (CDC MMWR). Federal Medicaid regulations were updated in 1998 to require that all children must receive a blood lead screening test at ages 12 and 24 months (CDC MMWR). All children aged 36-72 months who have not previously been screened must also receive a blood lead test (CDC MMWR). Twenty-two states also require some form lead screening, although the requirements vary by state. While some states require only selective screening for at-risk children, others, like Connecticut, require universal screening for all children.

U.S. Preventive Services Task Force (2006)
The USPSTF concludes that evidence is insufficient to recommend for or against routine screening for elevated blood lead levels in asymptomatic children aged 1 to 5 who are at increased risk. (Go to Clinical Considerations for a discussion of risk.)
Grade: I Statement.

The USPSTF recommends against routine screening for elevated blood lead levels in asymptomatic children aged 1 to 5 years who are at average risk.
Grade: D Recommendation.

CDC (2007)
Provide anticipatory guidance to parents of all young children regarding sources of lead and help them identify sources of lead in their child´s environment.
Obtain an environmental and family occupational history and educate parents
Perform a diagnostic blood lead test on all children suspected of having lead exposure or an elevated BLL and institute the recommended management guidelines if a child´s BLL increases to >10 micrograms/dL.
Assess all children for developmental and behavior status
Consider the potential influences of lead when conducting developmental screening.
For children with multiple developmental risk factors, which might include lead exposures, consider more frequent developmental surveillance or conduct more extensive developmental evaluations.
Discuss with parents the potential impact of lead on child development and promote strategies that foster optimum development
For all children from economically and socially low-resource families living in areas where exposure to lead is likely, promote participation in early enrichment programs regardless of the child´s BLL.
Whenever possible, utilize laboratories that can achieve routine performance of + 2 micrograms/dL for blood lead analysis. Evaluate laboratory performance by reviewing the laboratory´s quality control chart or statistical quality control summary.
Become informed about lead exposure prevention strategies of local or state health departments and partner with public health agencies, community groups, and parents to work toward establishing lead-safe environments in homes and schools for all children and the reduction of exposure to lead from all sources.
Advocate for the expansion of services that foster lead poisoning primary prevention.
Expert Consensus – Policy Statement

ICSI (2008)
The work group does not recommend blood lead screening for average-risk children 1-2 years of age. It does recognize federal requirements made on providers to screen patients who are covered by federally funded health programs.
Level III: Evidence Is Currently Incomplete: 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

AAFP (2007)
The AAFP recommends against routine screening for elevated blood levels in asymptomatic children aged 1

to 5 years who are at average risk.

The AAFP concludes that evidence is insufficient to recommend for or against routine screening for elevated blood lead levels in asymptomatic children aged 1 to 5 years who are at increased risk.

AAP (2005)
Parents of children 6 months to 3 years of age should be made aware of potential hazards to their toddler; anticipatory guidance.
Children should be tested at least once when they are 2 years of age or, ideally, twice, at 1 and 2 years of age, unless lead exposure can be confidently excluded.
A blood lead measurement. Hair lead concentration gives no useful information and should not be performed.
All Medicaid-eligible children must be screened
Children with concentrations less than 10 µg/dL are not currently considered to have excess lead exposure. Children with concentrations 10 µg/dL or greater should have their concentrations rechecked; if many children in a community have concentrations greater than 10 µg/dL, the situation requires investigation for some controllable source of lead exposure. Children who ever have a concentration greater than 20 µg/dL or persistently (for more than 3 months) have a concentration greater than 15 µg/dL require environmental and medical evaluation.
Expert Consensus

1c.10 Clinical Practice Guideline Citation: Hagan, JF, Shaw JS, Duncan PM, eds. 2008. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, Third Edition. Elk Grove, IL: American Academy of Pediatrics

U.S. Preventive Services Task Force. Agency for Healthcare Research and Quality, Rockville, MD. Screening for Lead Levels in Childhood and Pregnancy. December 2006.
Institute for Clinical Systems Improvement. Preventive Services for Children and Adolescents Thirteenth Edition. October 2007

American Academy of Pediatrics. Lead exposure in children: prevention, detection, and management. Pediatrics 2005 Oct;116(4):1036-46.

Center for Disease Control. Agency for toxic Substances and Disease Registry. Pediatric Environmental Health Appendix E: Lead Screening.1997.
http://www.atsdr.cdc.gov/csem/pediatric/appendixe.html#universal
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
1c.11 National Guideline Clearinghouse or other URL: Screening for elevated blood lead levels in children and pregnant women: recommendation statement.
http://www.guideline.gov/summary/summary.aspx?doc_id=10387&nbr=005433&string=lead+AND+screening

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

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:
The USPSTF found insufficient evidence to recommend for or against lead screening in a high-risk population. However, the CDC and others recommend screening high-risk children. NCQA created a health plan measure that applies only to the Medicaid product line. In this case, Medicaid enrollee serves as a proxy for "high-risk". In looking at the body of evidence in conjunction with the importance of the condition, several members of the expert panel concluded that the measure was important to include. Thus, NCQA also included the measure in the Comprehensive Well Care by Age 2 Years composite measure, and we specified the measure for the physician level.

Comment [k7]: USPSTF grading system **http://www.ahrq.gov/clinic/uspstf/grades.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** 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 the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** 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.

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?*	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report*, **met?** **Rationale:**	**1** **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)	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:** **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***):** At least one capillary or venous blood test on or before the child´s second birthday **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 Chart review: At least one capillary or venous blood test on or before the child's second birthday as documented through either administrative data or medical record review. For Administrative: CPT 83655 LOINC 5671-3, 5674-7, 10368-9, 10912-4, 14807-2, 17052-2, 25459-9, 27129-6, 32325-3	
2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured***):** Children who turn 2 years old during the measurement year. **2a.5 Target population gender:** Female, Male **2a.6 Target population age range:** 0-2 years **2a.7 Denominator Time Window (***The time period in which cases are eligible for inclusion in the denominator***):** 2 years **2a.8 Denominator Details (***All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions***):** For chart review: Children who turned 2 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. For health plan administrative: Product Line: Medicaid Continuous Enrollment: 12 months prior to the child´s second birthday Allowable gap: No more than one gap in enrollment of up to 45 days during the 12 months prior to the child's second	**2a-specs** **C☐** **P☐** **M☐** **N☐**

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) .

birthday. To determine continuous enrollment for a Medicaid beneficiary 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: Enrolled on the child´s second birthday
Benefit: Medical
Event/dx: None

2a.9 Denominator Exclusions (*Brief text description of exclusions from the target population***):** No exclusions

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***):**
NA

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***):**
For chart review:
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 the physician-level measurement:
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.

For health-plan level measurement:
A systematic sample drawn from the eligible population.
Organizations that use the Hybrid Method to report the Childhood Immunization Status and Lead Screening in Children measures may use the same sample for both measures. If the organization applies optional exclusions to the CIS measure and uses the CIS systematic sample, the same children will be excluded from the LSC measure. Excluding these members will not create a statistically significant difference in the LSC eligible population. Organizations may reduce the sample size based on the current year's administrative rate or last year's audited, product line-specific rate for the lowest rate of all antigens, combinations and LSC rate.
If a separate sample from the Childhood Immunizations Status measure is used for Lead Screening in Children, the organization may reduce the sample based on the product line-specific current measurement year's administrative rate or the prior year's audited, product line-specific rate for Lead Screening in Children.

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

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.***):**
Administrative or 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)*
Clinicians: Individual, Clinicians: Group, Health Plan, Integrated delivery system, Population: national, Population: regional/network

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: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO), Laboratory

TESTING/ANALYSIS

2b. Reliability testing

2b.1 Data/sample *(description of data/sample and size)***:** We did not conduct reliability testing for this measure.

2b.2 Analytic Method *(type of reliability & rationale, method for testing)***:**
NA

2b.3 Testing Results *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)***:**
NA

2b
C☐ P☐ M☐ N☐

2c. Validity testing

2c.1 Data/sample *(description of data/sample and size)***:** For the physician-level field test, NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure).

For the health-plan-level field test, NCQA received data from 6 health plans who submitted 50 records per measure (total 300 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.

2c
C☐ P☐ M☐ N☐

2d. Exclusions Justified

2d
C☐

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 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.

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;
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).

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	P☐ M☐ N☐ 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.	**2e** C☐ P☐ M☐ N☐ NA☐
2f. Identification of Meaningful Differences in Performance **2f.1 Data/sample from Testing or Current Use** *(description of data/sample and size)*: For the physician-level field test, NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure). For the health-plan-level field test, NCQA received data from 6 health plans who submitted 50 records per measure (total 300 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)*: Physician-level test results Elig population: 180 Performance rate: 73% Health-plan test results: Elig population: 305 Performance Rate: 61% HEDIS 2008 performance rates Mean: 61.4 10th percentile: 32.3 50th percentile: 65.8 90th percentile: 84.0	**2f** C☐ P☐ M☐ N☐
2g. Comparability of Multiple Data Sources/Methods	**2g** C☐

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 (but not disparities in care) and are present at start of care;[Error! Bookmark not defined.] OR rationale/data support no risk adjustment.

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). 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 [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.

2g.1 Data/sample *(description of data/sample and size)*: For the physician-level field test, NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure). For the health-plan-level field test, NCQA received data from 6 health plans who submitted 50 records per measure (total 300 records per measure) **2g.2 Analytic Method** *(type of analysis & rationale)*: Comparison of means **2g.3 Testing Results** *(e.g., correlation statistics, comparison of rankings)*: Field test results indicated that, for the health plan level measure, using both administrative and medical record data is the optimal approach.	**P**☐ **M**☐ **N**☐ **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	**2h** **C**☐ **P**☐ **M**☐ **N**☐ **NA**☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Scientific Acceptability of Measure Properties?*	**2**
Steering Committee: Overall, to what extent was the criterion, *Scientific Acceptability of Measure Properties*, **met?** **Rationale:**	*2* **C**☐ **P**☐ **M**☐ **N**☐
3. USABILITY	
Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	Eval Rating
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)*: Physician Measure: 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. Current HEDIS Measure: This measure is used in public reporting. **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***):** Physician Measure: 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. Current HEDIS Measure: This measure is part of the Healthcare Effectiveness Data and Information Set (HEDIS)	**3a** **C**☐ **P**☐ **M**☐ **N**☐

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.

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 Health plan measure: general public and other stakeholder groups (i.e. HEDIS users) 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. For the 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. 3a.6 **Results** *(qualitative and/or quantitative results and conclusions)*: NCQA received feedback that the measure is understandable, feasible, important and valid. Health plan measure: 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.	
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?**	**3b** C☐ P☐ M☐ N☐ NA☐
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:**	**3c** C☐ P☐ M☐ N☐ 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:**	**3** C☐ P☐

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).

	M☐ N☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
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)	**4a** C☐ P☐ M☐ N☐
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.	**4b** C☐ P☐ M☐ N☐
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.**	**4c** C☐ P☐ M☐ N☐ NA☐
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.** Physician Measures: 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. Current HEDIS Measures: All measures that are used in NCQA programs are audited.	**4d** C☐ P☐ M☐ N☐
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*)**:**	**4e** C☐ P☐ M☐ N☐

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).

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*?	**4**
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, met? **Rationale:**	**4** **C☐** **P☐** **M☐** **N☐**
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? **Comments:**	**Y☐** **N☐** **A☐**

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: © 2007 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

Page 4: [1] Comment [k4] **Karen Pace** **10/5/2009 8:59:00 AM**

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.

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)

(for NQF staff use) **NQF Review #:** 1405 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Oral Health Access
De.2 **Brief description of measure***:* We are combining 4 measures into one form because measure features and evidence are the same or similar: Measure 1. Oral Health Access By 2 years of age Measure 2. Oral Health Access By 6 years of age Measure 3. Oral Health Access By 13 years of age Measure 4. Oral Health Access By 18 years of age
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** This measure appears in the composite Comprehensive Well Care by Age 2 Years, Comprehensive Well Care by Age 6 Years, 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

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	**NQF Staff**
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *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** **Y**☐ **N**☐

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	**B** Y☐ N☐
C. The intended use of the measure includes both public reporting and quality improvement. ►**Purpose:** Public reporting, Internal quality improvement Accountability	**C** Y☐ N☐
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	**D** Y☐ N☐
(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) **1a. High Impact**	Eval Rating
(for NQF staff use) Specific NPP goal:	
1a.1 **Demonstrated High Impact Aspect of Healthcare:** Affects large numbers, Leading cause of morbidity/mortality, Patient/societal consequences of poor quality 1a.2 1a.3 **Summary of Evidence of High Impact:** For children, tooth decay is one of the most chronic infectious diseases; the Centers for Disease Control and Prevention (CDC) estimates that in the U.S. approximately 40 percent of children have tooth decay by the time they enter kindergarten (AAP, 2003), more than 50 percent have tooth decay by second grade and 80 percent have it by the time they graduate high school. Undiagnosed oral health deficiencies can cause social and developmental delay (CDC, 2007), and overall poor oral health can cause high levels of pain and infection that often result in emergency department visits (AAP 2007). More than 51 million school hours are lost each year because of dental-related illness (CDC 2004). In 2009, nearly $102 billion dollars was spent on dental services alone in the United States. On average there are 500 million dental visits each year. Tooth decay, or dental caries, is the most common chronic disease in children. Nearly 53 million children and adults in the US currently have untreated tooth decay on one of their permanent teeth (CDC, 2010).	**1a** C☐ P☐ M☐ N☐

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

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.4 Citations for Evidence of High Impact: American Academy of Pediatrics—Section on Pediatric Dentistry; Policy Statement: Oral Health Risk Assessment Timing and Establishment of the Dental Home. Pediatrics 2003: 111(5).

Centers for Disease Control and Prevention: Children's Oral Health. http://www.cdc.gov/OralHealth/topics/child.htm. Updated Oct 2007.

American Academy of Pediatrics. Oral Health Risk Assessment Timing and Establishment of the Dental Home Policy Statement. Pediatrics May 2003 Vol. 111 No. 5

Centers for Disease Control and Prevention: Children's Oral Health. http://www.cdc.gov/OralHealth/publications/factsheets/sgr2000_fs3.htm. Updated October 2004.

Centers for Disease Control. Oral Health: Preventing Cavities, Gum Disease, Tooth Loss, and Oral Cancers: At A Glance 2010. http://www.cdc.gov/chronicdisease/resources/publications/AAG/doh.htm

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: This measure encourages proper access to oral health care. Tooth decay is preventable, and early diagnosis is important for successful treatment of periodontal diseases. Good oral health in childhood and adolescence can promote a sound foundation for adult oral health by preventing periodontal disease and dental decay.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
While the overall trend in oral health has improved over the last 30 years, there remains a significant proportion of the population who do not have optimal oral health care. In the year 2000, reports showed that only 66 percent of Americans age two years and older had a dental visit within the last year. For those in poverty, the rate was 47 percent (CDC, 2002). Other reports have estimated that about 75 percent of children aged three to four have never seen their dentist (dela Cruz, 2004).

Medicaid's Early Periodic Screening Diagnosis and Treatment (EPSDT) program is intended to provide regular dental screenings and appropriate treatment. However, according to a report by the Office of the Inspector General of the Department of Health and Human Services, only 20 percent of children under 21 years of age who were enrolled in Medicaid and eligible for EPSDT actually received preventive dental services.

1b.3 Citations for data on performance gap:
CDC: Health, United States, 2002.

dela Cruz. G.G. MD, MPH, et al. Dental Screening and Referral of Young Children by Pediatric Primary Care Providers. Pediatrics November 2004. Vol. 114 No. 5

1b.4 Summary of Data on disparities by population group:
The most advanced oral health disease is found primarily among children living in poverty, some racial/ethnic minority populations, disabled children, and children with HIV infection. Low-income children are twice as likely to have tooth decay untreated (CDC, 2007) and have half the number of dental visits compared with higher-income children. African American and Mexican American adults have twice the amount of untreated decay as non-Hispanic whites (CDC, 2010).

1b.5 Citations for data on Disparities:
Centers for Disease Control and Prevention: Children's Oral Health. http://www.cdc.gov/OralHealth/topics/child.htm. Updated Oct 2007.

Centers for Disease Control. Oral Health: Preventing Cavities, Gum Disease, Tooth Loss, and Oral Cancers: At A Glance 2010. http://www.cdc.gov/chronicdisease/resources/publications/AAG/doh.htm

1b
C☐ P☐ M☐ N☐

1c. Outcome or Evidence to Support Measure Focus

1c

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.

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:
oIntermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
oProcess – 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).
oStructure – 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.
oPatient 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.
oAccess – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
oEfficiency – 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.

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*)**:** Oral diseases range from cavities to oral cancer which causes pain and disabilities for millions each year. The most common oral problem is tooth decay, or cavities. Untreated cavities can cause a lot of pain, dysfunction, school absences, trouble concentrating and poor appearances in children, which can affect both their quality of life and their ability to succeed.

Most oral diseases are preventable; unfortunately many children and adults are missing out on how they can prevent oral issues and avoid costly trips to the dentists. By teacher parents and children how to properly brush and floss everyday and how simple and cost effective measures, such as using water fluoridation. Fluoride prevents tooth decay.

Unfortunately, both children and adults could be taking better care of their oral hygiene. It is important to develop healthy dental habits early. Approximately one-fourth of U.S. adults aged 65 and older have lost all of their teeth (CDC, 2010).

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*)**:**
In their work producing the 2004 recommendation statement on screening for dental caries, the U.S. Preventive Services Task Force found that the strength of the evidence regarding the effectiveness of screening by primary care clinicians to identify children with dental caries or who are at high risk for future dental caries was poor. In addition, the Task Force found that the evidence regarding the effectiveness of referrals by primary care clincians resulting in actual visits was poor. Two case studies found that primary care clinicians identified caries lesions with an accuracy approaching that of dentists after 4 to 5 hours of training. While the studies were consistent, there were issues with the studies' external validity. No evidence was available at the time to document the accuracy with which primary care clinicians can identify children at elevated risk for dental caries. The Task Force found one study that showed that referral by the primary care clinician is at best only partially effective. The strength of the evidence for the effectiveness of counseling provided by primary care clinicians for caries-preventive behaviors was also deemed poor. The studies found suggested that knowledge improvement is easily achieved but behavioral change is more difficult; the studies also suggested that caries reduction is likely only if behavioral change includes fluoride use.

The American Academy of Pediatrics (AAP) recommends that children should begin to see their dentist around six months of age, and a dental home should be established by twelve months of age (AAP, 2003). With 80 percent of children visiting their primary care physician (based on AAP guidelines), pediatricians may have the best opportunity to deliver anticipatory guidance and recommend dental care (AAP, 2003). One study found that the level of knowledge a physician has on oral health is not as important as their awareness of their role in referring children to a dentist (dela Cruz., 2004). Referral by the primary care physician or health provider has been recommended, based on risk assessment, as early as 6 months of age, 6 months after the first tooth erupts, and no later than 12 months of age (AAP, 2007). The American Academy of Pediatric Dentistry (AAPD) recommends that children be referred to the dentist by age one, and general anticipatory guidance should be given to the mother (or other caregiver), during the first six months on a variety of topics, including oral hygiene, diet, fluoride, and caries removal (AAP, 2009). Thereafter, general anticipatory guidance should continue to be given regularly up to three years of age on oral hygiene, diet and fluoride (AAP, 2009).

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

1c.7 Summary of Controversy/Contradictory Evidence: There is some disagreement over the care coordination responsibilities between pediatricians and dentists. The American Academy of Pediatric

C☐ P☐ M☐ N☐

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/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.

Dentistry (AAPD) recommends that children be referred to the dentist by age one, yet one study found that most pediatricians either were unaware of the recommendation or did not agree with it (Lewis CW, 2000). One survey of pediatric dentists found that less than half practiced the AAPD policy of performing the first oral evaluation at 12 months of age or younger (AAP, 2003). The American Academy of Pediatrics (AAP) concluded that pediatricians are capable of providing basic dental care for children under the age of three (Lewis, 2000). Thus, many pediatricians may believe a dental assessment and preventive education for very young children falls under their care, as opposed to a visit to the dentist.

1c.8 Citations for Evidence (*other than guidelines***):** American Academy of Pediatrics. Oral Health Risk Assessment Timing and Establishment of the Dental Home Policy Statement. Pediatrics May 2003 Vol. 111(5).

dela Cruz. G.G. MD, MPH, et al. Dental Screening and Referral of Young Children by Pediatric Primary Care Providers. Pediatrics November 2004. Vol. 114 No. 5

American Academy of Pediatric Dentistry: 2008-09 Definitions, Oral Health Policies, and Clinical Guidelines. Infant Oral Health Care. http://www.aapd.org/media/Policies_Guidelines/G_InfantOralHealthCare.pdf. Updated 2009.
Lewis CW, Grossman DC, Domoto PK, Deyo RA. The role of the pediatrician in the oral health of children: A national survey. Pediatrics. 2000 Dec;106(6):E84.

Lewis, Charlotte W. MD, MPH; David C. Grossman, MD, MPH; Peter K. Domoto, DDS, MPH; and Richard A. Deyo, MD, MPH. The Role of the Pediatrician in the Oral Health of Children: A National Survey. PEDIATRICS Vol. 106 No. 6 December 2000, p. e84

1c.9 Quote the Specific guideline recommendation (*including guideline number and/or page number***):**
United States Preventive Services Task Force (2004)
The USPSTF recommends that primary care clinicians prescribe oral fluoride supplementation at currently recommended doses to preschool children older than 6 months of age whose primary water source is deficient in fluoride.
Grade: B Recommendation.

The USPSTF concludes that the evidence is insufficient to recommend for or against routine risk assessment of preschool children by primary care clinicians for the prevention of dental disease.
Grade: I Statement.

- The USPSTF recommends that primary care clinicians prescribe oral fluoride supplementation at currently recommended doses to preschool children older than 6 months of age whose primary water source is deficient in fluoride.

The USPSTF found fair evidence that, in preschool children with low fluoride exposure, prescription of oral fluoride supplements by primary care clinicians leads to reduced dental caries. The USPSTF concluded that the benefits of caries prevention using oral fluoride supplementation outweigh the potential harms of dental fluorosis, which in the United States are primarily observed as a mild cosmetic discoloration of the teeth.
B Recommendation
American Academy of Family Physicians (2007)
For children 6 months through 16 years of age:
The AAFP strongly recommends ordering fluoride supplementation to prevent dental caries based on age and fluoride concentration of patient's water supply for patients residing in areas with inadequate fluoride in the water supply (less than 0.6 ppm).

Institute for Clinical Systems Improvement (2009)
ICSI recommends the following

Children up to 2 years:
- Discourage the practice of putting infants and children to bed with a bottle.
- Encourage women to breast-feed.
- Encourage healthy eating habits to reduce the risk of dental caries.

• Supplement with .25 mg/dl fluoride starting at six months if water source is less than .3ppm. Children at high risk for dental caries should be referred to the appropriate health care source. Children 2-18 years of age: • Encourage regular dental visits. • Encourage brushing teeth daily with fluoridated toothpaste and flossing. • Encourage healthy eating habits to reduce the risk of dental caries. Children at high risk for dental caries should be referred to the appropriate health care source. Level III: Preventive Services for Which the Evidence Is Currently Incomplete and/or High Burden of Disease and Low Cost of Delivering Care. Providing These Services Is Left to the Judgment of Individual Medical Groups, Clinicians and Their Patients American Academy of Pediatric Dentistry (2007) By 6 months Oral health risk assessment: • Assess patient´s risk of developing oral disease using CAT • Provide education on infant oral health • Evaluate and optimize fluoride exposure By 12 months • Establishment of dental home • Recording thorough medical (infant) and dental (mother or primary caregiver and infant) histories • Anticipatory guidance • Oral hygiene • High-risk diets and dietary practices • Regarding dental and oral development • Fluoride status • Nonnutritive sucking habits • Teething • injury prevention If patient diagnosed with oral disease or trauma: provide therapy or referral to an appropriately trained individual for treatment Adolescence Every six months, until a dental home is established - It is important to educate the patient and parent on the value of transitioning to a dentist who is knowledgeable in adult oral health care. At the time agreed upon by the patient, parent, and pediatric dentist, the patient should be referred to a specific practitioner in an environment sensitive to the adolescent's individual needs. - Until the new dental home is established, the patient should maintain a relationship with the current care provider (visit every 6 months) and have access to emergency services. Proper communication and records transfer allow for consistent and continuous care for the patient. - All oral health policies and clinical guidelines are based on 2 sources of evidence: (1) the scientific literature; and (2) experts in the field. Bright Futures (2008) 4 month old - Anticipatory guidance - Support the concept of the identification of a dental home 6 month old - Administer the oral health risk assessment - Anticipatory guidance - Maternal oral health care, use of clean pacifier, teething/drooling, avoidance of bottle in bed - Fluoride, oral hygiene/soft toothbrush, avoidance of bottle in bed Children 2-5 years of age	

- 2.5 yrs: For children that do not have a dental home, refer them to a dentist, if not available, oral health risk assessment. Also, if the primary source of water is deficient in fluoride, prescribe an oral fluoride supplementation - 3 yrs: Same as 2.5 years - 5 yrs: Regular visits with dentist, daily brushing and flossing, adequate fluoride. Children >6 years of age Adolescents should have regular visits with dentist, daily brushing and flossing, adequate fluoride Expert Consensus **1c.10 Clinical Practice Guideline Citation:** Hagan, JF, Shaw JS, Duncan PM, eds. 2008. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, Third Edition. Elk Grove, IL: American Academy of Pediatrics Institute for Clinical Systems Improvement. Preventive Services for Children and Adolescents 15th Edition. October 2009 American Academy of Pediatric Dentistry. Clinical guideline on infant oral health care. Chicago (IL): American Academy of Pediatric Dentistry; 2004. American Academy of Pediatrics. Oral Health Risk Assessment Timing and Establishment of the Dental Home. Pediatrics. Vol. 111 No. 5 May 2003. ADA endorsed. **1c.11 National Guideline Clearinghouse or other URL:** http://www.guideline.gov/content.aspx?id=15251 **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)*: Expert consensus with evidence review **1c.14 Rationale for using this guideline over others:** The measure is based on the guidelines and evidence body as a whole	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?*	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report***, met?** **Rationale:**	**1** **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)	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:** **2a. Precisely Specified**	**2a-specs** **C☐** **P☐** **M☐** **N☐**
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 oral health screening by age 2 years Numerator 2: Children who had documentation in the medical record of oral health screening by age 6	

Comment [k7]: USPSTF grading system **http://www.ahrq.gov/clinic/uspstf/grades.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** 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 the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** 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 [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) .

years
Numerator 3: Children who had documentation in the medical record of oral health screening by age 13 years
Numerator 4: Children who had documentation in the medical record of oral health 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 at least one of the following.
• A dental treatment performed by the primary care clinician
• A risk assessment performed by the primary care clinician
• Patient referral to a dentist
• Parental statement or other documentation indicating a dental visit took place

2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured***):**
Denominator 1: Children who turned 2 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 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 3: 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 4: 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 months-2 years; Measure 2: 2 years-6 years, Measure 3: 6 years-13 years, Measure 4: 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***):**
This 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

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)*
Clinicians: Individual, Clinicians: Group, Population: national, Population: regional/network

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

2b.3 Testing Results *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)***:**
NA

2b
C☐
P☐
M☐
N☐

2c. Validity testing

2c
C☐

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 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.

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.

P☐ M☐ N☐

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

2d C☐ P☐ M☐ N☐ 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.

2e C☐ P☐ M☐ N☐ NA☐

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)*:
The following are eligible population for each measure:
Measure 1: Oral Health Access by age 2 years: 180

2f C☐ P☐ M☐ N☐

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;
AND ... [1]

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 (but not disparities in care) and are present at start of care;[Error! Bookmark not defined.] OR ... [2]

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). It is preferable to stratify measures by ra ... [3]

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 ... [4]

Measure 2: Oral Health Access by age 6 years: 180 Measure 3: Oral Health Access by age 13 years: 179 Measure 4: Oral Health Access by age 18 years: 163 The following are performance rates for each measure: Measure 1: Oral Health Access by age 2 years: 74.4 Measure 2: Oral Health Access by age 6 years: 86.7 Measure 3: Oral Health Access by age 13 years: 80.4 Measure 4: Oral Health Access by age 18 years: 72.4	
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	**2g** C☐ P☐ M☐ N☐ 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	**2h** C☐ P☐ M☐ N☐ NA☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Scientific Acceptability of Measure Properties?*	**2**
Steering Committee: Overall, to what extent was the criterion, *Scientific Acceptability of Measure Properties*, **met?** **Rationale:**	*2* C☐ P☐ M☐ N☐
3. USABILITY	
Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	Eval Rating
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.	**3a** C☐ P☐ M☐ N☐

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.

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?**

3b
C☐ P☐ M☐ N☐ NA☐

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

3c
C☐ P☐ M☐ N☐ 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:

3
C☐ P☐ M☐ N☐

4. FEASIBILITY

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

Eval Rating

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),

4a
C☐ P☐ M☐ N☐

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).

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.	**4b** C☐ P☐ M☐ N☐
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.**	**4c** C☐ P☐ M☐ N☐ NA☐
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.	**4d** C☐ P☐ M☐ N☐
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:**	**4e** C☐ P☐ M☐ N☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Feasibility*?	**4**
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, **met?** **Rationale:**	**4** C☐ P☐ M☐ N☐
RECOMMENDATION	

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).

(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? **Comments:**	**Y**☐ **N**☐ **A**☐

CONTACT INFORMATION

Co.1 Measure Steward (Intellectual Property Owner)
Co.1 Organization
National Committee for Quality Assurance, 1100 13th St, 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 St, 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

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:
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:

Washington, DC 20005
Ad.11 -13 Additional Information web page URL or attachment:
Date of Submission (*MM/DD/YY*)**:** 09/01/2010

Page 10: [1] Comment [KP14] **Karen Pace** **10/5/2009 8:59:00 AM**

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).

Page 10: [2] Comment [KP16] **Karen Pace** **10/5/2009 8:59:00 AM**

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;[Error! Bookmark not defined.] OR

rationale/data support no risk adjustment.

Page 10: [3] Comment [k17] **Karen Pace** **10/5/2009 8:59:00 AM**

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.

Page 10: [4] Comment [k19] **Karen Pace** **10/5/2009 8:59:00 AM**

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)

(for NQF staff use) **NQF Review #:** 1419 **NQF Project:** Child Health Quality Measures 2010

MEASURE DESCRIPTIVE INFORMATION

De.1 **Measure Title:** Primary Caries Prevention Intervention as Part of Well/Ill Child Care as Offered by Primary Care Medical Providers

De.2 **Brief description of measure***:* The thrust of the initiative is to document in Minnesota the extent to which individual primary care medical providers (MD, NP, PA) and primary care medical clinics (whichever provider number is used for billing) provide fluoride varnish (FV)as part of the Child and Teen Checkup (C&TC) examination (Minnesota's name for the EPSDT examination) of Medicaid or MNCare (Minnesota's version of CHIP) –enrolled children. The measurement will be based on clinic data (ICD-9, the code for the EPSDT examination (99381, 99382, 99391, 99392) and D-1206, the code for fluoride varnish; both billed on the same CMS-1500 Medical Care billing form. From these data it will be possible not only to know by billing entity the percent of C&TC examinations that included FV but, by including the patient's discrete participant number, the number of FV applications (and the dates of those applications) provided to the high-risk child annually. If proven to be useful, the process will be promoted to the Medicaid programs of the 39 other states that as of 9/1/10 are reimbursing primary care medical providers for applying fluoride varnish to the teeth of high-risk (Medicaid/CHIP-enrolled) children as part of the EPSDT examination. Each of the 40 state Medicaid programs which are currently reimbursing primary care medical providers (hereafter PCMP) for caries prevention intervention (CPI) has identified a specific code to reflect application of FV to the teeth of a high-risk child primarily as part of the EPSDT well-child examination (but FV can also be applied at an ill-child visit). All but three states (FL, TX, UT) use the dental CDT code D-1206 or its predecessor D-1203. The three use a recognized and approved medical CPT code (FL: 99499 with SC modifier, TX: 99429 with U5 modifier and ICD-9 EPSDT code, UT: EP modifier added to appropriate ICD-9 EPSDT code). The proposed measure will a) track the extent to which the PCMP (physician (pediatrician, family medicine physician), nurse practitioner, physician assistant) or clinic (determined by the provider number used for billing) applies FV as part of a C&TC examination and b) track the degree to which each billing entity's use of the C&TC with FV codes increases from year to year (more children varnished and more children receiving FV four times a year according to the recommendations of the American Dental Association (ADA) for high-risk children).

1.1-2 **Type of Measure:** Use of services
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
De.6 **Consumer Care Need:** Getting better, Staying healthy

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *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:**	**A** Y☐ N☐
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. ►**Purpose:** Public reporting, Internal quality improvement Other Data will be collected by provider (practitioner or clinic) and will be reported to the public. The results will hopefully stimulate providers to do more so ultimately all high-risk children will receive the service quarterly	**C** Y☐ N☐
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	**D** Y☐ N☐
(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*)**:**	**Met** Y☐ N☐
Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. *Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria.* (evaluation criteria) **1a. High Impact**	Eval Rating

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).

(for NQF staff use) Specific NPP goal:	
1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Leading cause of morbidity/mortality **1a.2** **1a.3 Summary of Evidence of High Impact:** The literature reflects that fluoride varnish when applied to the teeth of high-risk children, reduces, in conjunction with anticipatory guidance provided to the caregiver, the risk of the child developing caries. **1a.4 Citations for Evidence of High Impact:** See reference page.	**1a** C☐ P☐ M☐ N☐
1b. Opportunity for Improvement **1b.1 Benefits (improvements in quality) envisioned by use of this measure:** Caries (the process of which the end result is the cavity) is the most common chronic disease of childhood (five times more common than asthma and seven times more common than hay fever). Dental care is the most common health need of high-risk children yet according to the GAO, only about one third of the 20 million children covered by Medicaid/CHIP received any dental care in 2007. Children are 2.6 times more likely to have medical coverage than dental coverage. Only 20-30% of Medicaid-eligible children receive preventive healthcare. Based on 2005 enrollment, the Medicaid GAO estimated that 6.5 million Medicaid-eligible children 2-18 years of age had untreated tooth decay and more than five percent had urgent conditions. 1.1 million children 2-18 years of age had conditions that warranted seeing a dentist within two weeks. The sad reality is that 50% of tooth decay in low-income children goes untreated. One in eight children never sees a dentist, while more than half of children with private insurance received dental care in the preceding year. The GAO has estimated that in 2005, 724,000 children 2-18 years of age could not get needed dental care. Starting several decades ago, the Scandinavian countries began to use topically applied fluoride as a way of preventing caries. Wentraub recently showed that one application of fluoride varnish will cut the caries rate by 50% and a second application will cut it by another 50%. 35 state Medicaid programs are currently reimbursing PCMP for offering PCPI as part of well/ill child care. Reimbursement rates range from $9.00 to close to $62.00. The procedure takes little time – less than five minutes for a child with a full set of primary teeth, and is noninvasive. Fluoride varnish reverses demineralization and enhances remineralization of the enamel of the tooth. Both actions will lead to the reduction of caries. **1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:** Minnesota's DHS can create a report that shows by PCMP the number of C&TC (Minnesota's version of EPSDT) examinations done on unduplicated and duplicated patients, with or without FV. **1b.3 Citations for data on performance gap:** JA. Wentraub, F. Ramos-Gomez, B. Jue, S. Shain, CI. Hoover, JDB. Featherstone, and SA. Gansky. Fluoride Varnish Efficacy in Prevention ECC. J Dent Res 85(2): 172-176, 2006. **1b.4 Summary of Data on disparities by population group:** **1b.5 Citations for data on Disparities:**	**1b** C☐ P☐ M☐ N☐
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*)**:** Caries is an infectious disease and is thus theoretically preventable. Fluoride interferes with the metabolism of the microflora (particularly Streptococcus mutans) which reside in plaque. Caries can only occur if there is a tooth, sugars, and bacteria. For their own metabolic purposes, the bacteria digest the sugars in the foods and liquids which the child consumes, creating an acidic excrement which etches the enamel of the tooth, starting the caries process, the end result of which is the cavity (hole). Fluoride can not only slow down the demineralization of the enamel but can also remineralize it. The first stage of the caries process is the white spot which can be found at the juncture of the tooth and the gum line of the lateral and central	**1c** C☐ P☐ M☐ N☐

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

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.

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:
oIntermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
oProcess – 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).
oStructure – 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.
oPatient 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.
oAccess – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
oEfficiency – 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., … [1]

lateral maxillary primary incisors. The white spot can be reversed and remineralized if exposed to fluoride varnish, thus obviating the need to either pull the tooth or drill and fill it. The described outcome of this measurement project is that the provider (PCMP or clinic) of primary care to children will offer CPI as part of the C&TC examination. That intervention includes: a gross oral examination with referral to a dentist if there is a suggestion of pathology, a paper-and-pencil risk assessment to separate the high-risk from the low-risk (a child who is on Medicaid with no dental home is high-risk with no need to ask other questions), anticipatory guidance to the caregiver about caries etiology and the caregiver's role in prevention, application of fluoride varnish according to ADA recommendations, and advising the caregiver that a dental home should be found for the child by the child's first birthday.

Fluoride (fluoridated water) has been shown to reduce the caries rate by 70% across the entire population. Today the caries burden is borne primarily by high-risk Medicaid/CHIP-eligible children who cannot gain access to dental care. In a state such as Minnesota, where the water supply is 98.6% fluoridated, both the Medicaid/MNCare-eligible children who represent 30% of the population carry 80% of the disease burden. Presumptively, the dental office not only provides fluoride to the child but also provides anticipatory guidance to the caregiver. PCMPs traditionally have not been trained to address oral health issues because, until the mid-nineties, dentists across the country were seeing all children. It has only been in the last 15 years that dentists nation-wide have generally declined to take Medicaid/CHIP-eligible children. The ultimate outcome of this measurement project is reduction of caries. That, however, is a long-term consequence of CPI. The more immediate outcome is to show that across all practices in Minnesota which serve children, all high-risk children are, as part of the C&TC examination, getting fluoride varnish applied quarterly pursuant to the ADA's recommendations starting from the age of the eruption of the first tooth, or by age one.

1c.2-3. Type of Evidence: Other Number of EPSDT examinations done without FV as part of well-child care (claims data)

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

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:

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

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

1c.10 Clinical Practice Guideline Citation:
1c.11 National Guideline Clearinghouse or other URL:

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

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

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

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?*	**1**

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/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.

Comment [k7]: USPSTF grading system **http://www.ahrq.gov/clinic/uspstf/grades.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** 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 the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** 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.

Steering Committee: Was the threshold criterion, *Importance to Measure and Report*, **met?** **Rationale:**	**1** **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)	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:** **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***):** Application of FV is identified by a discrete code (see De.2 above) when applied by a provider (PCMP or clinic) on the teeth of high-risk children (Medicaid/CHIP-eligible). The numerator, obtained from claims data, will be the number of C&TC examinations done with FV. **2a.2 Numerator Time Window (***The time period in which cases are eligible for inclusion in the numerator***):** Yearly **2a.3 Numerator Details (***All information required to collect/calculate the numerator, including all codes, logic, and definitions***):** D-1206 is used in MN (see De.2 regarding the rest of the country).	
2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured***):** All high-risk children (Medicaid/MNCare-eligible) who receive a C&TC examination from a provider (PCMP or clinic). The high-risk child will be identified by a paper-and-pencil caries risk-assessment tool. If the child is covered by Medicaid/CHIP but does not have a dental home (i.e., a dentist who will see the child whenever the child has a problem and for whatever problem the child may have), the child is high-risk. If a child is on Medicaid/CHIP but does have a dental home, other risk factors will be considered, e.g. caregiver's oral health status, older siblings' oral health status, presence of caries, use of a toothbrush, continually exposure of the teeth to sugared liquids, etc. In Minnesota, DHS for the first time generated a report in 2008 which shows by provider (PCMP or clinic) (whichever holds the billing provider number) the number of duplicated and unduplicated C&TC examinations done, and the number of fluoride varnish applications performed (unduplicated and duplicated). The data are broken down by age group (0-5, 6-12, 13-20). A similar report will be generated in 2010 (for 2009 claims data) which will allow a comparison with 2008, 2009, and 2010 reports. **2a.5 Target population gender:** Female, Male **2a.6 Target population age range:** 0-20 (upper end varies by state) see attachment. **2a.7 Denominator Time Window (***The time period in which cases are eligible for inclusion in the denominator***):** Yearly **2a.8 Denominator Details (***All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions***):** All but three states use the dental CDT code for FV application (see De.2). MN uses D-1206. Payers have adjusted their computers to recognize the CDT dental code when billed on the CMS-1500 medical billing form. The codes are separate - one for the C&TC examination; the other for FV.	**2a-specs** **C☐** **P☐** **M☐** **N☐**
2a.9 Denominator Exclusions (*Brief text description of exclusions from the target population***):** None	

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.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***):**
NA

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:
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***):**
NA

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

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)*:
NA

2a.24 Data Source (*Check the source(s) for which the measure is specified and tested)*
Electronic administrative data/claims

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.***):**
Claims data reflecting the C&TC examination and FV application in every state as are reported from provider to payer to each state´s Department of Human Services. Payers have adjusted their computers to recognize the CDT dental code when billed on the CMS-1500 medical billing form. Minnesota's use of the claims data are described above (2a.4) as is the use to which those data will be used for this project.

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)*
Clinicians: Individual, Clinicians: Group, Facility/Agency, Health Plan, Population: national

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: Pharmacist, Clinicians: Physicians (MD/DO)

TESTING/ANALYSIS

2b. Reliability testing

2b
C☐
P☐
M☐
N☐

2b.1 Data/sample *(description of data/sample and size)***:** All children (0-20 years of age) in the state of Minnesota who, according to DHS claims data, had, during the course of the preceding year, a C&TC examination and whether that examination included FV. In all 40 states that are reimbursing, the FV

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.

reimbursement is over and above the reimbursement for the EPSDT examination. All data will be claims data. To date, only the 2008 and 2009 reports allow a view of what each provider/clinic that bills for a C&TC examination has done in the way of FV application as part of the C&TC examination. The 2011 report will allow comparisons to 2008, 2009, and 2010 to see if providers are doing a better job, or not, in offering CPI as part of the C&TC examination. 2b.2 **Analytic Method** *(type of reliability & rationale, method for testing)*: 2b.3 **Testing Results** *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)*: NA	
2c. Validity testing 2c.1 **Data/sample** *(description of data/sample and size)*: See 2b.1 above 2c.2 **Analytic Method** *(type of validity & rationale, method for testing)*: NA 2c.3 **Testing Results** *(statistical results, assessment of adequacy in the context of norms for the test conducted)*: NA	**2c** C☐ P☐ M☐ N☐
2d. Exclusions Justified 2d.1 **Summary of Evidence supporting exclusion(s):** NA 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)*:	**2d** C☐ P☐ M☐ N☐ NA☐
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:**	**2e** C☐ P☐ M☐ N☐ NA☐
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** C☐ P☐ M☐ N☐

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 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.

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) a ... [2]

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 ... [3]

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 outc ... [4]

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 trea ... [5]

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 ... [6]

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)*:	**2g** C☐ P☐ M☐ N☐ NA☐
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:**	**2h** C☐ P☐ M☐ N☐ NA☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Scientific Acceptability of Measure Properties?*	**2**
Steering Committee: Overall, to what extent was the criterion, *Scientific Acceptability of Measure Properties*, **met?** **Rationale:**	*2* C☐ P☐ M☐ N☐
3. USABILITY	
Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	Eval Rating
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)*: 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)*:	**3a** C☐ P☐ M☐ N☐
3b/3c. Relation to other NQF-endorsed measures	

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.

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?**	**3b** C☐ P☐ M☐ N☐ NA☐
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:**	**3c** C☐ P☐ M☐ N☐ 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:**	**3** C☐ P☐ M☐ N☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
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)	**4a** C☐ P☐ M☐ N☐
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.**	**4b** C☐ P☐ M☐ N☐
4c. Exclusions 4c.1 **Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?** 4c.2 **If yes, provide justification.**	**4c** C☐ P☐ M☐ N☐ NA☐
4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences 4d.1 **Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and**	**4d** C☐ P☐

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).

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.

describe how these potential problems could be audited. If audited, provide results. Claims data are only as accurate as 1) the PCMP is in recording on the billing form the services provided to the patient; 2) the data entry person is in entering the billing form information into the electronic process that creates the bill to the payor; 3) the payor is in bundling patient-specific information in an electronic report to DHS and; 4) the DHS staff person is in compiling the DHS report from payor reports. Because clinics today are highly focused on maximizing revenue, most have staff whose sole responsibility it is to capture on the bill all the services provided and to make sure that what is recorded on the billing form accurately reflects the services provided as noted in the medical record.	**M**☐ **N**☐
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:** **4e.2 Costs to implement the measure** (*costs of data collection, fees associated with proprietary measures*)**:** None. Data will be entirely based on claims data. **4e.3 Evidence for costs:** NA **4e.4 Business case documentation:** NA	**4e** **C**☐ **P**☐ **M**☐ **N**☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Feasibility*?	**4**
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, **met?** **Rationale:**	**4** **C**☐ **P**☐ **M**☐ **N**☐
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? **Comments:**	**Y**☐ **N**☐ **A**☐

CONTACT INFORMATION

Co.1 Measure Steward (Intellectual Property Owner)
Co.1 Organization
University of Minnesota, 1729 Morgan Ave S, Minneapolis, Minnesota, 55405

Co.2 Point of Contact
Amos , Deinard, MD, MPH, dein001@umn.edu, 612-377-1020-

Measure Developer If different from Measure Steward
Co.3 Organization
University of Minnesota, 1729 Morgan Ave S, Minneapolis, Minnesota, 55405

Co.4 Point of Contact
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Co.5 Submitter If different from Measure Steward POC

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).

Amos , Deinard, MD, MPH, dein001@umn.edu, 612-377-1020-, University of Minnesota
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.** NA
Ad.2 **If adapted, provide name of original measure:** Application of FV as part of the C&TC examination in Minnesota to prevent caries in high-risk children 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:**
Ad.11 -13 **Additional Information web page URL or attachment:** URL http://www.meded.umn.edu/apps/pediatrics/FluorideVarnish/index.cfm
Date of Submission (*MM/DD/YY*)**:** 09/09/2010

Page 3: [1] Comment [k5] **Karen Pace** **10/5/2009 8:59:00 AM**

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.

Page 7: [2] Comment [k13] **Karen Pace** **10/5/2009 8:59:00 AM**

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.

Page 7: [3] Comment [KP14] **Karen Pace** **10/5/2009 8:59:00 AM**

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).

Page 7: [4] Comment [KP16] **Karen Pace** **10/5/2009 8:59:00 AM**

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;[Error! Bookmark not defined.] OR

rationale/data support no risk adjustment.

Page 7: [5] Comment [k17] **Karen Pace** **10/5/2009 8:59:00 AM**

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.

Page 7: [6] Comment [k19] **Karen Pace** **10/5/2009 8:59:00 AM**

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.