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 #:** 1348 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Children Age 6-17 Years who Engage in Weekly Physical Activity
De.2 **Brief description of measure:** Measures how many times per week child 6-17 years exercises vigorously (based on AAP and CDC recommendations)
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:** Effectiveness De.6 **Consumer Care Need:** Staying healthy

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *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:** Government entity and in the public domain - no agreement necessary 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:**	**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:** Physical activity is closely associated with BMI status and the overall health of children and has been recognized as an objective by the U.S. Department of Health and Human Services' Healthy people 2020 (PAF HP2020-3: increase the proportion of adolescents who participate in daily school physical education). 1a.4 **Citations for Evidence of High Impact:** Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children´s Health, Data Resource Center for Child and Adolescent Health website. www.nschdata.org U.S. Department of Health and Human Services. Healthy People 2020. http://www.healthypeople.gov/HP2020/.	**1a** C☐ P☐ M☐ N☐
1b. Opportunity for Improvement 1b.1 **Benefits (improvements in quality) envisioned by use of this measure:** Health care providers, public health professionals and population-based health analysts can all benefit from know whether or not children are getting physical activity. Use of this measure allows for comparison accross populations and demographic groups. 1b.2 **Summary of data demonstrating performance gap (variation or overall poor performance) across providers:**	**1b** C☐ P☐ M☐ N☐

Nationally, 64.3% of children age 6-17 years participate in at least 20 minutes of vigorous physical activity 4 or more times a week, with a broad range geographically. State range is 54.7% in the District of Columbia to 72.8% in Vermont and Minnesota.

1b.3 Citations for data on performance gap:
Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children´s Health, Data Resource Center for Child and Adolescent Health website. www.nschdata.org

1b.4 Summary of Data on disparities by population group:
Urban children are more likely to be physically inactive than rural children (29.1% vs. 25.2%).
Immigrant Hispanic children are more likely to be physically inactive than US-born white children with US-born parents (22.5% vs. 9.5%).
Physical activity also varies by income level. Children living at 400% FPL or above are less likely to be physically inactive than children living at 99% FPL or lower (5.8% vs. 20.8%).

1b.5 Citations for data on Disparities:
Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children´s Health, Data Resource Center for Child and Adolescent Health website. www.nschdata.org

Liu J, Bennett KJ, Harun N, Probst JC. Urban-rural differences in overweight status and physical inactivity among US children aged 10-17 years. J Rural Health. 2008;24(4):407-415.

Liu J, Probst JC, Harun N, Bennett KJ, Torres ME. Acculturation, physical activity, and obesity among Hispanic adolescents. Ethn Health. 2009;14(5):509-525.

McKay CM, Bell-Ellison BA, Wallace K, Ferron JM. A multilevel study of the associations between economic and social context, stage of adolescence, and physical activity and body mass index. Pediatrics. 2007;119 Suppl 1:S84-91.

Rimmer JA, Rowland JL. Physical activity for youth with disabilities: a critical need in an underserved population. Dev Neurorehabil. 2008;11(2):141-148.

Singh GK, Kogan MD, Siahpush M, van Dyck PC. Prevalence and correlates of state and regional disparities in vigorous physical activity levels among US children and adolescents. J Phys Act Health. 2009;6(1):73-87.

Singh GK, Yu SM, Siahpush M, Kogan MD. High levels of physical inactivity and sedentary behaviors among US immigrant children and adolescents. Arch Pediatr Adolesc Med. 2008;162(8):756-763.

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*)**:** Physical activity is inversely associated with BMI status. Increasing physical activity levels in children can help decrease childhood overweight and obesity and lead to improved health outcomes.

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*)**:**
Children who get at least 20 minutes of vigorous physical activity 4 or more times a week are more likely to be in very good or excellent overall health than children who get no days of vigorous physical activity (88.0% vs. 64.2%). Additionally, children who get at least 4 days of vigorous physical activity a week are less likely to be overweight or obese than children who get no days of vigorous physical activity a week (28.9% vs. 35.9%).

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
C ☐
P ☐
M ☐
N ☐

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**
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*): Number of days per week that child 6-17 years engages in vigorous physical activity **2a.2 Numerator Time Window (*The time period in which cases are eligible for inclusion in the numerator*):** Encounter or point in time; question is anchored to past week **2a.3 Numerator Details (*All information required to collect/calculate the numerator, including all codes, logic, and definitions*):** Number of days a week that child exercised, played a sport, or participated in a physical activity for at least 20 minutes that made [him/her] sweat and breathe hard -Child engaged in physical activity 0-7days (K7Q41=0 through 7)	
2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured*): Children age 6-17 years **2a.5 Target population gender:** Female, Male **2a.6 Target population age range:** Children age 6-17 years	

2a.7 Denominator Time Window (*The time period in which cases are eligible for inclusion in the denominator***):**
Denominator window is a fixed point in time anchored to within the "past week."

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 6-17 years

2a.9 Denominator Exclusions (*Brief text description of exclusions from the target population***):** Excluded from denominator if child does not fall in target population age range of 6-17 years.

2a.10 Denominator Exclusion Details (*All information required to collect exclusions to the denominator, including all codes, logic, and definitions***):**
If child is younger than 6 years of age, excluded from denominator.
If child is older than 17 years of age, excluded from denominator.

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 Child Physical Activity measure was administered in its most recent form, in the 2007 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 = Higher score
2a.21 Calculation Algorithm (*Describe the calculation of the measure as a flowchart or series of steps***):**
Number of days a week that child exercised, played a sport, or participated in a physical activity for at least 20 minutes that made [him/her] sweat and breathe hard
-Child engaged in physical activity 0-7 days (K7Q41=0 through 7)

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)*:
Best guideline to follow is the survey methodology used in the 2007 National Survey of Children´s Health.

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.

A total of 91,642 interviews were completed from April 2007 to July 2008 for the 2007 National Survey of Children´s Health. A random-digit-dialed sample of households with children less than 18 years of age was selected from each of the 50 states and the District of Columbia. One child was randomly selected from all children in each identified household to be the subject of the survey. The respondent was a parent or guardian who knew about the child's health and health care.

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

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.***):**
2007 National Survey of Children´s Health

2a.26-28 **Data source/data collection instrument reference web page URL or attachment:** URL
ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/slaits/nsch07/1a_Survey_Instrument_English/NSCH_Questionnaire_052109.pdf

2a.29-31 **Data dictionary/code table web page URL or attachment:** URL
http://nschdata.org/Viewdocument.aspx?item=519

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

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)***:** Qualitative testing of the entire 2007 National Survey of Children´s Health was conducted by the National Center for Health Statistics. They conducted cognitive interviews with the 2007 NSCH Computer-Assisted Telephone Interview (CATI) to make sure the entire survey instrument was functioning properly. N=640 interviews were completed over 3 days in December 2006. The questionnaire was then revised and finalized based on feedback from participants in these interviews.

2b.2 **Analytic Method** *(type of reliability & rationale, method for testing)***:**
Cognitive testing was conducted to test reliability and interpretability of questions across population.

2b.3 **Testing Results** *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)***:**
The Maternal and Child Health Bureau leads the development of the NSCH and NS-CSHCN survey and indicators, in collaboration with the National Center for Health Statistics (NCHS) and a national technical expert panel. The expert panel includes representatives from other federal agencies, state Title V leaders, family organizations, and child health researchers, and experts in all fields related to the surveys (adolescent health, family and neighborhoods, early childhood and development etc.). Previously validated questions and scales are used when available. Extensive literature reviewing and expert reviewing of items is conducted for all aspects of the survey. Respondents' cognitive understanding of the survey questions is assessed during the

2b
C☐
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N☐

pretest phase and revisions made as required. All final data components are verified by NCHS and DRC/CAHMI staff prior to public release. Face validity is conducted in comparing results with prior years of the survey and/or results from other implementations of items. No specific reliability results are available for this measure. Please contact the CAHMI if quantitative measures are needed.	
2c. Validity testing 2c.1 **Data/sample** *(description of data/sample and size)*: 640 interviews were completed over 3 days in December 2006 2c.2 **Analytic Method** *(type of validity & rationale, method for testing)*: Cognitive testing was conducted with parents of children ages 0-17 years (interviews conducted over the phone with residential households). 2c.3 **Testing Results** *(statistical results, assessment of adequacy in the context of norms for the test conducted)*: Please see the references section for peer-reviewed articles which have used these items. Peer-reviewed papers generally undertake their own validity testing in order to meet strict peer review standards. See also Reliability Testing Results above.	**2c** C☐ P☐ M☐ 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.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*): U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. The Health and Well-Being of Children: A Portrait of States and the Nation 2007. Chartbook based on data from the 2007 National Survey of Children's Health. http://mchb.hrsa.gov/nsch07/index.html. **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** C☐ P☐ M☐ N☐

3a.5 Methods *(e.g., focus group, survey, QI project)*: Focus groups **3a.6 Results** *(qualitative and/or quantitative results and conclusions)*:	
3b/3c. Relation to other NQF-endorsed measures **3b.1 NQF # and Title of similar or related measures:**	
(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?** 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*) 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** C☐ P☐ M☐

No 4c.2 **If yes, provide justification.**	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 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:**	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** Maternal and Child Health Bureau, Health Resources & Services Administration, Parklawn Building Room 18-05, 5600 Fishers Lane, Rockville, Maryland, 20857 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** See Ad.1 below, -, -, -, Maryland, - 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-, Maternal and Child Health Bureau, Health Resources & Services Administration

Co.6 Additional organizations that sponsored/participated in measure development
See Ad.1 below

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 more than a dozen members. Members include other federal agencies, health services researchers, survey methodology experts, consumer organizations and clinical health experts on children´s health. The TEP consults in the identification and/or development of items for MCHB to consider for inclusion in the National Survey of Children's Health, including making recommendations for the scoring and reporting of measures resulting from the national survey. Members of the committee are drawn from the public and private sector, including members from national universities and national parenting and family groups, the Child and Adolescent Health Measurement Initiative (through the MCHB-sponsored Data Resource Center for Child and Adolescent Health) as well as members from the National Center for Health Statistics, the Centers for Disease Control and Prevention and other federal agencies. There is a range of activity performed by different members of the TEP depending on which measure is being developed, areas of expertise etc. The TEP process usually consists of 1 or 2 in person meetings, 6 or more conference calls, and numerous email exchanges. Subcommittees are formed based on areas of expertise. Because this is a collaborative activity, there is not a single developer of this measure.

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: 2007
Ad.7 Month and Year of most recent revision: 04, 2007
Ad.8 What is your frequency for review/update of this measure? Updated every 4 years when a new National Survey of Children´s Health is developed
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: Attachment NSCH TEP 2007-634384058926455496.doc

Date of Submission (*MM/DD/YY*)**:** 04/14/2011

NATIONAL QUALITY FORUM

Measure Evaluation 4.1
December 2009

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(for NQF staff use) **NQF Review #:** 1349 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Child Overweight or Obesity Status Based on Parental Report of Body-Mass-Index (BMI)
De.2 **Brief description of measure:** Age and gender specific calculation of BMI based on parent reported height and weight of child. The measure uses CDC BMI-for-age guidelines in attributing overweight status (85th percentile up to 94th percentile) and obesity status (95th percentile and above).
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:** 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:** Government entity and in the public domain - no agreement necessary 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 both public reporting and quality improvement. ►**Purpose:**	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:** Childhood overweight and obesity is closely related to adverse health outcomes and the prevalence of obesity is growing nationally. Childhood overweight and obesity has been recognized as an objective by the U.S. Department of Health and Human Services' Healthy People 2020 (NWS HP2020-5). Additionally, obesity prevalence increased by 10% for all U.S. children from 2003 to 2007. An estimated 10.58 million children age 10-17 years, were overweight or obese in 2007. Children who are overweight are more likely to have risk factors associated with cardiovascular disease and to be obese as adults. Children who are obesity are also at higher risk for developing chronic disease such as such as stroke; breast, colon, and kidney cancers; musculoskeletal disorders; and gall bladder disease. Obesity has also been linked to poorer school performance, depression, and social isolation. 1a.4 **Citations for Evidence of High Impact:** Bethell C, Simpson L, Stumbo S, Carle AC, Gombojav N. National, state, and local disparities in childhood obesity. Health Aff (Millwood). 2010;29(3):347-356. Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children´s Health, Data Resource Center for Child and Adolescent Health website. www.nschdata.org Curtin C, Anderson SE, Must A, Bandini L. The prevalence of obesity in children with autism: a secondary data analysis using nationally representative data from the National Survey of Children´s Health. BMC Pediatr.	1a C☐ P☐ M☐ N☐

2010;10(1):11.

Daniels SR. Jacobson MS. McCrindle BW. Eckel RH. Sanner BM. (2009). American Heart Association childhood obesity research summit: Executive summary.

Liu J, Bennett KJ, Harun N, Probst JC. Urban-rural differences in overweight status and physical inactivity among US children aged 10-17 years. J Rural Health. 2008;24(4):407-415.

McKay CM, Bell-Ellison BA, Wallace K, Ferron JM. A multilevel study of the associations between economic and social context, stage of adolescence, and physical activity and body mass index. Pediatrics. 2007;119 Suppl 1:S84-91.

Singh GK, Kogan MD, Yu SM. Disparities in obesity and overweight prevalence among US immigrant children and adolescents by generational status. J Community Health. 2009;34(4):271-281.

Singh GK, Siahpush M, Kogan MD. Rising social inequalities in US childhood obesity, 2003-2007. Ann Epidemiol. 2010;20(1):40-52.

Strauss, RS, Pollack, HA. Social marginalization of overweight children. Arch Pediatr Adolesc Med. 2003;157:746-752.

U.S. Department of Health and Human Services. Healthy People 2020. http://www.healthypeople.gov/HP2020/.

Wieting JM. (2008). Cause and effect in childhood obesity: solutions for a national epidemic. Journal of the American Osteopathic Association. 108(10):545-52.

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: Because BMI status has such a large impact on health, health care providers, public health professionals and population-based health analysts can all benefit from this measure. This measure also has the benefit of comparing children across populations or demographic groups as to who is most at risk for being overweight or obese.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
Nationally, 31.7% of children age 10-17 are overweight or obese.

1b.3 Citations for data on performance gap:
Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children´s Health, Data Resource Center for Child and Adolescent Health website. www.nschdata.org

1b.4 Summary of Data on disparities by population group:
The prevalence of obesity is higher in children with autism than in children without autism (30.4% vs. 23.6%). Children living in rural areas are more likely to be overweight than children living in urban areas (16.5% vs. 14.3%).
There are large disparities in childhood overweight and obesity within and among states, associated with socioeconomic status, school outcomes, neighborhoods, type of health insurance, and quality of care. Children living in low-income and low-education households have 3.4-4.3 times higher odds of being obese than children from higher socioeconomic households.

1b.5 Citations for data on Disparities:
Bethell C, Simpson L, Stumbo S, Carle AC, Gombojav N. National, state, and local disparities in childhood obesity. Health Aff (Millwood). 2010;29(3):347-356.

Curtin C, Anderson SE, Must A, Bandini L. The prevalence of obesity in children with autism: a secondary data analysis using nationally representative data from the National Survey of Children´s Health. BMC Pediatr. 2010;10(1):11.

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Liu J, Bennett KJ, Harun N, Probst JC. Urban-rural differences in overweight status and physical inactivity among US children aged 10-17 years. J Rural Health. 2008;24(4):407-415.

Singh GK, Siahpush M, Kogan MD. Rising social inequalities in US childhood obesity, 2003-2007. Ann Epidemiol. 2010;20(1):40-52.

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*)**:** Measurement of childhood BMI status is important for identifying disparities and targeting prevention efforts in groups that are at high risk of being overweight or obese, leading to improved health outcomes.

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*)**:**
Children who are obese are less likely to be in very good or excellent overall health than children who are a healthy weight for their age (69.9% vs. 87.4%).

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.1 Numerator Statement (*Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome*)**:**
Percentage of children who are underweight, normal weight, overweight or obese.

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

2a.3 Numerator Details (*All information required to collect/calculate the numerator, including all codes, logic, and definitions*)**:**
Body-Mass-Index (BMI) Status for children:
-Underweight (<5th percentile)
-Normal weight (5th to 84th percentile)
-Overweight (85th to 94th percentile)
-Obese (95th percentile or above)

2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured*)**:**
Children age 10-17 years

2a.5 Target population gender: Female, Male
2a.6 Target population age range: Children age 10-17 years

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

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 10-17 years

2a.9 Denominator Exclusions (*Brief text description of exclusions from the target population*)**:** Excluded from denominator if child does not fall in target population age range of 10-17 years

2a.10 Denominator Exclusion Details (*All information required to collect exclusions to the denominator, including all codes, logic, and definitions*)**:**
If child is younger than 10 years of age, excluded from denominator.
If child is older than 17 years of age, excluded from denominator.

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 Parent Report of BMI Status measure was administered in its most recent form, in the 2007 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-specs
C☐
P☐
M☐
N☐

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***):**

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)*:
Best guideline to follow is the survey methodology used in the 2007 National Survey of Children´s Health.

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.

A total of 91,642 interviews were completed from April 2007 to July 2008 for the 2007 National Survey of Children´s Health. A random-digit-dialed sample of households with children less than 18 years of age was selected from each of the 50 states and the District of Columbia. One child was randomly selected from all children in each identified household to be the subject of the survey. The respondent was a parent or guardian who knew about the child's health and health care.

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

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.***):**
2007 National Survey of Children´s Health

2a.26-28 Data source/data collection instrument reference web page URL or attachment: URL
ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/slaits/nsch07/1a_Survey_Instrument_English/NSCH_Questionnaire_052109.pdf

2a.29-31 Data dictionary/code table web page URL or attachment: URL
http://nschdata.org/Viewdocument.aspx?item=519

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

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)*: Qualitative testing of the entire 2007 National Survey of Children´s Health was conducted by the National Center for Health Statistics. They conducted cognitive interviews with the 2007 NSCH Computer-Assisted Telephone Interview (CATI) to make sure the entire survey instrument was functioning properly. N=640 interviews were completed over 3 days in December 2006. The questionnaire was then revised and finalized based on feedback from participants in these interviews. **2b.2 Analytic Method** *(type of reliability & rationale, method for testing)*: Cognitive testing was conducted to test reliability and interpretability of questions across population. **2b.3 Testing Results** *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)*: The Maternal and Child Health Bureau leads the development of the NSCH and NS-CSHCN survey and indicators, in collaboration with the National Center for Health Statistics (NCHS) and a national technical expert panel. The expert panel includes representatives from other federal agencies, state Title V leaders, family organizations, and child health researchers, and experts in all fields related to the surveys (adolescent health, family and neighborhoods, early childhood and development etc.). Previously validated questions and scales are used when available. Extensive literature reviewing and expert reviewing of items is conducted for all aspects of the survey. Respondents' cognitive understanding of the survey questions is assessed during the pretest phase and revisions made as required. All final data components are verified by NCHS and DRC/CAHMI staff prior to public release. Face validity is conducted in comparing results with prior years of the survey and/or results from other implementations of items. No specific reliability results are available for this measure. Please contact the CAHMI if quantitative measures are needed. In addition, a separate analyis showed that while parental report of height and weight is not perfect, it is highly correlated with clinical measures: Akinbami LJ, and Ogden CL. Childhood overweight prevalence in the United States: the impact of parent-reported height and weight. Obesity (Silver Spring). 2009;17(8): 1574-1580.	**2b** C☐ P☐ M☐ N☐
2c. Validity testing **2c.1 Data/sample** *(description of data/sample and size)*: 640 interviews were completed over 3 days in December 2006 **2c.2 Analytic Method** *(type of validity & rationale, method for testing)*: Cognitive testing was conducted with parents of children ages 0-17 years (interviews conducted over the phone with residential households). **2c.3 Testing Results** *(statistical results, assessment of adequacy in the context of norms for the test conducted)*: Please see the references section for peer-reviewed articles which have used these items. Peer-reviewed papers generally undertake their own validity testing in order to meet strict peer review standards. See also Reliability Testing Results above.	**2c** C☐ P☐ M☐ 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** C☐ P☐ M☐ N☐ NA☐

2d.5 **Testing Results** *(e.g., frequency, variability, sensitivity analyses)*:	
2e. Risk Adjustment for Outcomes/ Resource Use Measures 2e.1 **Data/sample** *(description of data/sample and size)*: 2e.2 **Analytic Method** *(type of risk adjustment, analysis, & rationale)*: 2e.3 **Testing Results** *(risk model performance metrics)*: 2e.4 **If outcome or resource use measure is not risk adjusted, provide rationale:**	**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.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**

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*)**:** U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. The Health and Well-Being of Children: A Portrait of States and the Nation 2007. Chartbook based on data from the 2007 National Survey of Children's Health. http://mchb.hrsa.gov/nsch07/index.html. **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)***:**	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:**	**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*) 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?** 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 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. Parental report of height and weight of children has been debated, but tends to align with clinical observed measures. Please see Akinbami LJ, and Ogden CL. Childhood overweight prevalence in the United States: the impact of parent-reported height and weight. Obesity (Silver Spring). 2009;17(8): 1574-1580. **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:**	**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
Maternal and Child Health Bureau, Health Resources & Services Administration., Parklawn Building Room 18-05, 5600 Fishers Lane, Rockville, Maryland, 20857

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
See Ad.1 below, -, -, -, Maryland, -

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-, Maternal and Child Health Bureau, Health Resources & Services Administration.

Co.6 Additional organizations that sponsored/participated in measure development
See Ad.1 below

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 more than a dozen members. Members include other federal agencies, health services researchers, survey methodology experts, consumer organizations and clinical health experts on children´s health. The TEP consults in the identification and/or development of items for MCHB to consider for inclusion in the National Survey of Children's Health, including making recommendations for the scoring and reporting of measures resulting from the national survey. Members of the committee are drawn from the public and private sector, including members from national universities and national parenting and family groups, the Child and Adolescent Health Measurement Initiative (through the MCHB-sponsored Data Resource Center for Child and Adolescent Health) as well as members from the National Center for Health Statistics, the Centers for Disease Control and Prevention and other federal agencies. There is a range of activity performed by different members of the TEP depending on which measure is being developed, areas of expertise etc. The TEP process usually consists of 1 or 2 in person meetings, 6 or more conference calls, and numerous email exchanges. Subcommittees are formed based on areas of expertise. Because this is a collaborative activity, there is not a single developer of this measure.

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:** 04, 2007 **Ad.8 What is your frequency for review/update of this measure?** Updated every 4 years when a new National Survey of Children´s Health is developed **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: Attachment NSCH TEP 2007-634384043863390343.doc
Date of Submission (*MM/DD/YY*)**:** 04/14/2011

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 by 6 years of age
De.2 **Brief description of measure***:* The percentage of children who turn 6 years of age in the measurement year who had healthy physical development services. The measure has four rates: BMI Assessment, Counseling for Physical Activity, Counseling for Nutrition and Counseling for Screen Time.
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 measures Comprehensive Well Care by Age 6 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.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:**	**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, 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, 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	**1a** C☐ P☐ M☐ N☐

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 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

1b
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N☐

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 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
C ☐
P ☐
M ☐
N ☐

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:
- 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

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***):**
Fair to Good

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

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***):** Children who had documentation in the medical record of healthy physical development services 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***):** 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 • 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***):** Children with a visit who turned 6 years old in the measurement year **2a.5 Target population gender:** Female, Male **2a.6 Target population age range:** 4 years-6 years **2a.7 Denominator Time Window (***The time period in which cases are eligible for inclusion in the denominator***):**	**2a-specs** C☐ P☐ M☐ N☐

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***):**
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.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)*
Electronic Clinical Data, Paper medical record/flow-sheet

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 : Group, Clinicians : Individual, 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 : Clinic, Ambulatory Care : Hospital Outpatient, Ambulatory Care : Office

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 18 physician practices who submitted 10 records per measure (total 180 records per measure) **2b.2 Analytic Method** *(type of reliability & rationale, method for testing)*: We calculated 95% confidence intervals, which speak to the precision of the rates obtained from field testing. **2b.3 Testing Results** *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)*: Rate (Upper Confidence Interval, Lower Confidence Interval): Healthy Phys Dev: BMI Percentile by Age 6 Years: 0.883 (0.84, 0.93) Healthy Phys Dev: Counsel for Nutrition by Age 6 Years: 0.694 (0.63, 0.76) Healthy Phys Dev: Counsel for Physical Activity by Age 6 Years: 0.694 (0.63, 0.76) Healthy Phys Dev: Counsel for Screen Time by Age 6 Years: 0.533 (0.46, 0.61)	**2b** C☐ P☐ M☐ N☐
2c. Validity testing **2c.1 Data/sample** *(description of data/sample and size)*: NCQA received data from 18 physician practices who submitted 10 records per measure (total 180 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.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** C☐ P☐

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.	**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 18 physician practices who submitted 10 records per measure (total 180 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)*: Elig Population: 180 Performance listed by rates: Rate 1: BMI By Age 6 years: 88.3 Rate 2: Nutrition Counseling By 6 years: 69.4 Rate 3: Physical Activity Counseling By Age 6 years: 69.4 Rate 4: Screen Time Counseling By Age 6 years: 53.3	**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 18 physician practices who submitted 10 records per measure (total 180 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*	**2**

Acceptability of Measure Properties?	
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. **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**
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**	**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: 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:**	**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 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:
Ad.11 -13 Additional Information web page URL or attachment:
Date of Submission (*MM/DD/YY*)**:** 01/06/2011

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 #:** 1512 **NQF Project:** Child Health Quality Measures 2010

MEASURE DESCRIPTIVE INFORMATION

De.1 **Measure Title:** Healthy Physical Development by 13 years of age

De.2 **Brief description of measure***:* The percentage of children who turn 13 years of age in the measurement year who had healthy physical development services. The measure has four rates: BMI Assessment, Counseling for Physical Activity, Counseling for Nutrition and Counseling for Screen Time.

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 measures Comprehensive Well Care by Age 13 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.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:**	**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, 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, 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	**1a** C☐ P☐ M☐ N☐

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 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

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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 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).

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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:
- 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

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***):** Children who had healthy physical development services. The measure has four rates: BMI Assessment, Counseling for Physical Activity, Counseling for Nutrition and Counseling for Screen Time 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***):** 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 • 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***):** Children with a visit who turned 13 years in the measurement year **2a.5 Target population gender:** Female, Male **2a.6 Target population age range:** 11 years-13 years	**2a-specs** C☐ P☐ M☐ N☐

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: 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.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)*
Electronic Clinical Data, Paper medical record/flow-sheet

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 : Group, Clinicians : Individual, 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 : Clinic, Ambulatory Care : Hospital Outpatient, Ambulatory Care : Office

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 18 physician practices who submitted 10 records per measure (total 180 records per measure)

2b.2 Analytic Method *(type of reliability & rationale, method for testing)*:
We calculated 95% confidence intervals, which speak to the precision of the rates obtained from field testing.

2b.3 Testing Results *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)*:
Rate (Upper Confidence Interval, Lower Confidence Interval):
Healthy Phys Dev: BMI Percentile by Age 13 Years: 0.894 (0.85, 0.94)
Healthy Phys Dev: Counsel for Nutrition by Age 13 Years: 0.760 (0.70, 0.82)
Healthy Phys Dev: Counsel for Physical Activity by Age 13 Years: 0.777 (0.72, 0.84)
Healthy Phys Dev: Counsel for Screen Time by Age 13 Years: 0.447 (0.37, 0.52)

2b C☐ P☐ M☐ N☐

2c. Validity testing

2c.1 Data/sample *(description of data/sample and size)*: NCQA received data from 18 physician practices who submitted 10 records per measure (total 180 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.

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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 C☐ P☐ M☐ N☐ NA☐

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

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

2e. Risk Adjustment for Outcomes/ Resource Use Measures

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

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

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

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

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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 18 physician practices who submitted 10 records per measure (total 180 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: 179

Performance listed by rates:

Rate 1: BMI
By Age 13 years: 89.4

Rate 2: Nutrition Counseling
By 13 years: 76.0

Rate 3: Physical Activity Counseling
By Age 13 years: 77.7

Rate 4: Screen Time Counseling
By Age 13 years: 44.7

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2g. Comparability of Multiple Data Sources/Methods

2g.1 Data/sample *(description of data/sample and size)*: NCQA received data from 18 physician practices who submitted 10 records per measure (total 180 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

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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. **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**
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**	**4d** C☐ P☐

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.	**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	
(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*)**:** 01/06/2011

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 #:** 1514 **NQF Project:** Child Health Quality Measures 2010

MEASURE DESCRIPTIVE INFORMATION

De.1 **Measure Title:** Healthy Physical Development by 18 years of age

De.2 **Brief description of measure***:* The percentage of children who turn 18 years of age in the measurement year who had healthy physical development services. The measure has four rates: BMI Assessment, Counseling for Physical Activity, Counseling for Nutrition and Counseling for Screen Time.

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 measure 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.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:**	**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, 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, 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	**1a** C☐ P☐ M☐ N☐

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 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

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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 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).

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N☐

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:
- 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 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)

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.

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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***):**
Children who had documentation of a BMI assessment and counseling for physical activity, nutrition and screen time by the time they turn 18 years of age

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***):**
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
• 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***):**
Adolescents with a visit who turned 18 years old in the measurement year

2a.5 Target population gender: Female, Male
2a.6 Target population age range: 16 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***):**
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

2a-specs
C☐
P☐
M☐
N☐

that predates the child's birthday by at least 12 months.

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)*
Electronic Clinical Data, Paper medical record/flow-sheet

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 : Group, Clinicians : Individual, 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 : Clinic, Ambulatory Care : Hospital Outpatient, Ambulatory Care : Office

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 18 physician practices who submitted 10 records per measure (total 180 records per measure)

2b.2 Analytic Method *(type of reliability & rationale, method for testing)*:
We calculated 95% confidence intervals, which speak to the precision of the rates obtained from field testing.

2b.3 Testing Results *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)*:
Rate (Upper Confidence Interval, Lower Confidence Interval):
Rate: BMI percentile by Age 18 Years: 0.859 (0.81, 0.91)
Rate: Counsel for Nutrition by Age 18 Years: 0.718 (0.65, 0.79)
Rate: Counsel for Physical Activity by Age 18 Years 0.810 (0.75, 0.87)
Rate: Counsel for Screen by Age 18 Years: 0.368 (0.29, 0.44)

2b
C☐
P☐
M☐
N☐

2c. Validity testing

2c.1 Data/sample *(description of data/sample and size)*: NCQA received data from 18 physician practices who submitted 10 records per measure (total 180 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
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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
C☐
P☐
M☐
N☐
NA☐

2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: The measure assesses prevention and wellness in a general population; risk adjustment is not indicated.	
2f. Identification of Meaningful Differences in Performance **2f.1 Data/sample from Testing or Current Use** *(description of data/sample and size)*: NCQA received data from 18 physician practices who submitted 10 records per measure (total 180 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: Turned Age 18 years: 163 Performance listed by rates: Rate 1: BMI By Age 18 years: 85.9 Rate 2: Nutrition Counseling By 18 years: 71.8 Rate 3: Physical Activity Counseling By Age 18 years: 81.0 Rate 4: Screen Time Counseling By Age 18 years: 36.8	**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 18 physician practices who submitted 10 records per measure (total 180 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. **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-**	3c C☐

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	**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 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	**4e C☐ P☐ M☐ N☐**

are available in the medical record. In addition, our field test participants noted that many were able to program these requirements into their electronic health record systems, and several implemented point-of-service physician reminders for this measure. 4e.2 **Costs to implement the measure** (*costs of data collection, fees associated with proprietary measures*)**:** Collecting measures from medical charts is time-consuming and can be burdensome. Adapting this measure in electronic health records may relieve some of this burden. 4e.3 **Evidence for costs:** Based on field test participant feedback and other stakeholder input 4e.4 **Business case documentation:**	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Feasibility?*	**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:
Ad.11 -13 Additional Information web page URL or attachment:
Date of Submission (*MM/DD/YY*)**:** 01/06/2011