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 #:** 1412 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Pre-School Vision Screening in the Medical Home
De.2 **Brief description of measure:** Percentage of pre-school aged children who receive vision screening in the medical home
1.1-2 **Type of Measure:** Process De.3 **If included in a composite or paired with another measure, please identify composite or paired measure**
De.4 **National Priority Partners Priority Area:** Population health De.5 **IOM Quality Domain:** Effectiveness 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*)**:** A.3 **Measure Steward Agreement:** Agreement will be signed and submitted prior to or at the time of measure submission A.4 **Measure Steward Agreement attached:**	**A** Y☐ N☐
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least	**B** Y☐

every 3 years. Yes, information provided in contact section	N☐
C. The intended use of the measure includes both public reporting and quality improvement. ►**Purpose:** Public Reporting, Quality Improvement (Internal to the specific organization)	C Y☐ N☐
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1**Testing:** No, testing will be completed within 12 months D.2 **Have NQF-endorsed measures been reviewed to identify if there are similar or related measures?** Yes	D Y☐ N☐
(for NQF staff use) **Have all conditions for consideration been met?** **Staff Notes to Steward** (*if submission returned*)**:**	Met Y☐ N☐
Staff Notes to Reviewers (*issues or questions regarding any criteria*)**:**	
Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. ***Measures must be judged to be important to measure and report*** *in order to be evaluated against the remaining criteria.* (evaluation criteria) **1a. High Impact**	**Eval Rating**
(for NQF staff use) **Specific NPP goal**:	
1a.1 **Demonstrated High Impact Aspect of Healthcare:** Affects large numbers, Patient/societal consequences of poor quality 1a.2 1a.3 **Summary of Evidence of High Impact:** Vision disorders are the fourth most prevalent class of disability in the United States and the most prevalent handicapping conditions in childhood. Early detection increases the likelihood of effective treatment and allows for actions to decrease the negative impact of the disorders. However, fewer than 15 percent of all preschool children receive an eye examination and less than 22 percent of preschool children receive some type of vision screening. Early screening can lead to the detection of amblyopia (2-5%), strabismus (3-4%), and significant refractive error (15-20%), the most prevalent and significant vision disorders of preschool children. 1a.4 **Citations for Evidence of High Impact:** Vision in Pre-Schoolers Study, National Eye Institute, http://www.nei.nih.gov/neitrials/static/study85.asp Rahi JS, Logan S, Timms C, Russell-Eggitt I, Taylor D (2002) Risk, causes, and outcomes of visual impairment after loss of vision in the non-amblyopic eye: a population-based study. Lancet 360:597–602 Chua B, Mitchell P (2004) Consequences of amblyopia on education, occupation, and long term vision loss. Br J Ophthalmol 88:1119–1121 Coats DK, Paysse EA, Towler AJ, Dipboy RL (2000) Impact of large angle horizontal strabismus on ability to obtain employment. Ophthalmology 107:402–405 Uretmen O, Egrilmez S, Kose S, Pamukcu K, Akkin C, Palamar M (2003) Negative social bias against children with strabismus. Acta Ophthalmol Scand 81:138–142	1a C☐ P☐ M☐ N☐
1b. Opportunity for Improvement	1b

1b.1 Benefits (improvements in quality) envisioned by use of this measure: Early vision screening can lead to the detection, treatment, and prevention of many eye diseases. For example, amblyopia is preventable and treatable. Prevention and treatment of amblyopia is contingent upon early detection of risk factors and amblyopia during the critical period for visual development. If all children receive vision screening at well-child visits in their medical home, permanent visual loss due to amblyopia will decrease significantly. Studies have demonstrated that screening and treating amblyopia is an excellent use of health care resources with a very low cost per quality of life-adjusted years gained.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
Demonstration of an existing deficiency: The Pediatric Research in Office Setting and other studies have demonstrated that a minority of children are receiving proper vision screening in their medical home.

1b.3 Citations for data on performance gap:
Pre-School Vision Screening in Pediatric Practice: A study from the Pediatric Research in Office Settings Network. Pediatr 9(5): 834-838.
Vision in Pre-Schoolers Study, National Eye Institute, http://www.nei.nih.gov/neitrials/static/study85.asp

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

1b.5 Citations for data on Disparities:

C☐ P☐ M☐ N☐

1c. Outcome or Evidence to Support Measure Focus

1c.1 Relationship to Outcomes (*For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population*)**:** Early detection of vision disorders leads to diagnosis and treatment of vision loss

1c.2-3. Type of Evidence: Observational study, Randomized controlled trial, 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*)**:**
Studies demonstrate that early detection can lead to diagnosis and treatment of vision loss

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

1c.6 Method for rating evidence:

1c.7 Summary of Controversy/Contradictory Evidence:

1c.8 Citations for Evidence (*other than guidelines*)**:** Screening for Visual Impairment in Children Younger than Age 5 Years, Topic Page. May 2004. U.S. Preventive Services Task Force.
http://www.uspreventiveservicestaskforce.org/uspstf/uspsvsch.htm
Eye Examination in Infants, Children, and Young Adults by Pediatricians. Pediatr 111(4):902-907.
A Joint Statement of the American Association for Pediatric Eye Exams for Children: Their Impact and Cost Effectiveness, http://www.abtassociates.com/reports/es_cost_effectiveness_of_eye_exams.pdf
Ophthalmology and Strabismus and the American Academy of Ophthalmology. Vision screening for infants and children (2007)
Carlton J, Karnon J, Czoski-Murray C, Smith KJ, Marr J(2008) The clinical effectiveness and cost-effectiveness of screening programmes for amblyopia and strabismus in children up to the age of 4–5 years: a systematic review and
economic evaluation. Health Technol Assess 12(25):iii-194
Williams C, Harrad RA, Harvey I, Sparrow JM, ALSPAC study group (2001) Screening for amblyopia in preschool children: results of a population-based randomised controlled trial. Ophthalmic Epidemiol 8:279-

1c
C☐ P☐ M☐ N☐

295 The vision in preschoolers study group (2005) Sensitivity of screening tests for detecting vision in preschoolers targeted vision disorders when specificity is 94%. Optom Vis Sci 82:432–438 Vision in preschoolers study group (2006) Random Dot E stereotest: testability and reliability in 3- to 5-year-old children. J AAPOS 10(6):507–514 The vision in preschoolers study group (2004) Comparison of preschool vision screening tests as administered by licensed eye care professionals in the vision in preschoolers study. Ophthalmology 111:637–650 Donahue SP., Baker JD., Scott, WE., Rychwalski P., Neely DE., Tong, P. Bergsma D., Lenahan D., Rush D., Heinlein K., Walkenbach R., Johnson TM. Lions Clubs International Foundation Core Four Photoscreening: Results from 17 Programs and 400,000 Preschool Children. J AAPOS. 2006; 10(1):44-8. **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.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 pre-school children under 5 years-old that receive visual acuity testing or photoscreening in the medical home **2a.2 Numerator Time Window (***The time period in which cases are eligible for inclusion in the numerator***):** **2a.3 Numerator Details (***All information required to collect/calculate the numerator, including all codes, logic, and definitions***):** 99173 Screening test of visual acuity 99174 Photoscreening	**2a-specs** **C☐** **P☐** **M☐** **N☐**

2a.4 **Denominator Statement (***Brief, text description of the denominator - target population being measured***):**
All children under 5 years-old who attend a routine well-child visit in their medical home

2a.5 **Target population gender:**
2a.6 **Target population age range:**

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

2a.8 **Denominator Details (***All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions***):**
99382 1 - 4 years of age (new patient)
99392 1 - 4 years of age (established patient)
99383

2a.9 **Denominator Exclusions (***Brief text description of exclusions from the target population***):**
Documentation of medical reason(s) for not performing vision screening
Documentation of patient reason(s) for not performing vision screening (ie, clinically unstable or uncooperative child; parents who refuse screening)

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

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

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:** Ratio
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***):**

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)*:
100% of all children who receive a routine well-child visit; total sample size should be no less than 10% of all routine well-child visits.

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

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

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

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

2a.32-35 Level of Measurement/Analysis (*Check the level(s) for which the measure is specified and tested)* Health Plan, Integrated Delivery System, Population : National **2a.36-37 Care Settings** (*Check the setting(s) for which the measure is specified and tested)* Ambulatory Care : Clinician Office **2a.38-41 Clinical Services** (*Healthcare services being measured, check all that apply*) Clinicians: Physicians (MD/DO)	
TESTING/ANALYSIS	
2b. Reliability testing **2b.1 Data/sample** *(description of data/sample and size)*: **2b.2 Analytic Method** *(type of reliability & rationale, method for testing)*: **2b.3 Testing Results** *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)*:	**2b** C☐ P☐ M☐ N☐
2c. Validity testing **2c.1 Data/sample** *(description of data/sample and size)*: **2c.2 Analytic Method** *(type of validity & rationale, method for testing)*: **2c.3 Testing Results** *(statistical results, assessment of adequacy in the context of norms for the test conducted)*:	**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** C☐ P☐ M☐ N☐ NA☐

2e.4 If outcome or resource use measure is not risk adjusted, provide rationale:	
2f. Identification of Meaningful Differences in Performance **2f.1 Data/sample from Testing or Current Use** *(description of data/sample and size)*: **2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance** *(type of analysis & rationale)*: **2f.3 Provide Measure Scores from Testing or Current Use** *(description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance)*:	**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:** Testing not yet completed **3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large)** (*If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years*): **3a.3 If used in other programs/initiatives (***If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years***):** **Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*)	**3a** C☐ P☐ M☐ N☐

3a.4 **Data/sample** *(description of data/sample and size)*: 3a.5 **Methods** *(e.g., focus group, survey, QI project)*: 3a.6 **Results** *(qualitative and/or quantitative results and conclusions)*:	
3b/3c. Relation to other NQF-endorsed measures 3b.1 **NQF # and Title of similar or related measures:**	
(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?** Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)	**4a** C☐ P☐ M☐ N☐
4b. Electronic Sources 4b.1 **Are all the data elements available electronically?** (*elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims*) Yes 4b.2 **If not, specify the near-term path to achieve electronic capture by most providers.**	**4b** C☐ P☐ M☐ N☐
4c. Exclusions 4c.1 **Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?**	**4c** 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.** Potential inaccuracies include physicians´ failure to do screening with a report of the CPT code for screening or physicians´ completion of the screening with failure to report the CPT code for screening	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:** **4e.2 Costs to implement the measure** (*costs of data collection, fees associated with proprietary measures*)**:** **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** American Academy of Pediatrics, 141 NW Point Blvd, Elk Grove Village, Illinois, 60007 **Co.2 Point of Contact** Junelle, Speller, jspeller@aap.org, 847-434-7650-	
Measure Developer If different from Measure Steward **Co.3 Organization** American Academy of Pediatrics, 141 NW Point Blvd, Elk Grove Village, Illinois, 60007 **Co.4 Point of Contact** James, Ruben, MD, james.ruben@gmail.com, 916-804-2701-	

Co.5 Submitter If different from Measure Steward POC Junelle, Speller, jspeller@aap.org, 847-434-7650-, American Academy of Pediatrics
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.**
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:** 2010 **Ad.7 Month and Year of most recent revision:** 08, 2010 **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*)**:** 04/21/2011