



## Measure Information

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

### Brief Measure Information

**NQF #: 1360**

**Corresponding Measures:**

**De.2. Measure Title:** Audiological Evaluation no later than 3 months of age

**Co.1.1. Measure Steward:** Centers for Disease Control and Prevention

**De.3. Brief Description of Measure:** This measure assesses the percentage of newborns who did not pass hearing screening and have an audiological evaluation no later than 3 months of age.

**1b.1. Developer Rationale:** From page 194 of the 2007 Joint Committee on Infant Hearing (JCIH) Year 2007 Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Program (<http://pediatrics.aappublications.org/cgi/content/full/120/4/898?ijkey=oj9BAleq21OIA&keytype=ref&siteid=aapjournals>) "The JCIH supports the concept of regular measurements of performance and recommends routine monitoring of these measures for interprogram comparison and continuous quality improvement. Performance benchmarks represent a consensus of expert opinion in the field of newborn hearing screening and intervention. The benchmarks are the minimal requirements that should be attained by high quality programs. Frequent measures of quality permit prompt recognition and correction of any unstable component of the EHDI process."

**S.4. Numerator Statement:** Numerator contains the number of infants born during the time window who have not passed ("Fail / Refer") hearing screening and whose age is less than 91 days at the time of audiological diagnosis.

**S.6. Denominator Statement:** Denominator contains the number of infants born during the time window who have not passed ("Fail / Refer") hearing screening.

**S.8. Denominator Exclusions:** Patient deceased: Patient has expired prior to 91 days of age.

**De.1. Measure Type:** Process

**S.17. Data Source:** Electronic Health Records, Other, Registry Data

**S.20. Level of Analysis:** Clinician : Group/Practice, Clinician : Individual, Facility, Other, Population : Regional and State

**IF Endorsement Maintenance – Original Endorsement Date:** Aug 15, 2011 **Most Recent Endorsement Date:** Nov 04, 2015

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

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

**De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results?** This measure is paired with other measures relevant to the monitoring and measurement of the early screening evaluation and intervention process.

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

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

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

[measure-submission-evidence\\_1360.docx](#)

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

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

**1b. Performance Gap**

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

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

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

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

From page 194 of the 2007 Joint Committee on Infant Hearing (JCIH) Year 2007 Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Program (<http://pediatrics.aappublications.org/cgi/content/full/120/4/898?ijkey=o9BAleq210IA&keytype=ref&siteid=aapjournals>) "The JCIH supports the concept of regular measurements of performance and recommends routine monitoring of these measures for interprogram comparison and continuous quality improvement.

Performance benchmarks represent a consensus of expert opinion in the field of newborn hearing screening and intervention. The benchmarks are the minimal requirements that should be attained by high quality programs. Frequent measures of quality permit prompt recognition and correction of any unstable component of the EHDI process."

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

Data from the CDC Hearing Screening Follow-up Survey (HSFS), 2007-2012, conducted on US state and territories. Number of respondents varies from year to year. <http://www.cdc.gov/ncbddd/hearingloss/ehdi-data.html>

Performance scores by year, at state and national levels:

2012: National average -69.1%

[http://www.cdc.gov/ncbddd/hearingloss/2012-data/diag\\_2012\\_3month\\_web\\_b.pdf](http://www.cdc.gov/ncbddd/hearingloss/2012-data/diag_2012_3month_web_b.pdf)

2011: 70.8%

[http://www.cdc.gov/ncbddd/hearingloss/2011-data/diag\\_2011\\_3month\\_web.pdf](http://www.cdc.gov/ncbddd/hearingloss/2011-data/diag_2011_3month_web.pdf)

2010: 71.8%

[http://www.cdc.gov/ncbddd/hearingloss/2010-data/diag\\_2010\\_3month\\_web.pdf](http://www.cdc.gov/ncbddd/hearingloss/2010-data/diag_2010_3month_web.pdf)

2009:68.4%

[http://www.cdc.gov/ncbddd/hearingloss/2009-data/diag\\_2009\\_3month\\_web\\_508.pdf](http://www.cdc.gov/ncbddd/hearingloss/2009-data/diag_2009_3month_web_508.pdf)

2008:68.1%

[http://www.cdc.gov/ncbddd/hearingloss/2008-data/2008\\_diag\\_3-months\\_web.pdf](http://www.cdc.gov/ncbddd/hearingloss/2008-data/2008_diag_3-months_web.pdf)

2007:66.4%

[http://www.cdc.gov/ncbddd/hearingloss/2007-data/diag\\_2007\\_age\\_web\\_rev.pdf](http://www.cdc.gov/ncbddd/hearingloss/2007-data/diag_2007_age_web_rev.pdf)

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

**1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity,**

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

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

no data available on disparities from the measure as specified. But disparity data is available on percentage of infants who received audiology diagnosis (regardless of age) by gender, maternal age, ethnicity, race and education level.

[http://www.cdc.gov/ncbddd/hearingloss/2012-data/2012-diagnosis\\_ehdi.pdf](http://www.cdc.gov/ncbddd/hearingloss/2012-data/2012-diagnosis_ehdi.pdf)

[http://www.cdc.gov/ncbddd/hearingloss/2011-data/2011-diagnosis\\_web.pdf](http://www.cdc.gov/ncbddd/hearingloss/2011-data/2011-diagnosis_web.pdf)

[http://www.cdc.gov/ncbddd/hearingloss/2010-data/2010-diagnosis\\_demog2.pdf](http://www.cdc.gov/ncbddd/hearingloss/2010-data/2010-diagnosis_demog2.pdf)

[http://www.cdc.gov/ncbddd/hearingloss/2009-data/2009-diagnosis\\_website.pdf](http://www.cdc.gov/ncbddd/hearingloss/2009-data/2009-diagnosis_website.pdf)

[http://www.cdc.gov/ncbddd/hearingloss/2008-data/2008\\_diagnosis\\_website.pdf](http://www.cdc.gov/ncbddd/hearingloss/2008-data/2008_diagnosis_website.pdf)

[http://www.cdc.gov/ncbddd/hearingloss/2007-data/2007-diag\\_demo\\_web\\_final.pdf](http://www.cdc.gov/ncbddd/hearingloss/2007-data/2007-diag_demo_web_final.pdf)

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

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

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

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

Ears, Nose, Throat (ENT) : Hearing

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

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

Children

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

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

**Attachment:**

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

**Attachment Attachment:** [1360Codes.xls](#)

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

**Attachment:**

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

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

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

Changed names of the value sets when they are referenced in the measure details to ensure consistency with their use in other standard products such as the IHE profiles. Added IHE OIDs to each value set.

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

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

Numerator contains the number of infants born during the time window who have not passed ("Fail / Refer") hearing screening and whose age is less than 91 days at the time of audiological diagnosis.

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

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

Numerator =

AND: "Audiological Diagnosis performed using "JCIH-EHDI Newborn Hearing Loss Diagnosis Value Set"

AND age of diagnosis is less than 91 days at the time of diagnosis.

JCIH-EHDI Newborn Hearing Loss Diagnosis

value set: please see code list attached in S.2b

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

Denominator contains the number of infants born during the time window who have not passed ("Fail / Refer") hearing screening.

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

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

Denominator =

AND:

!OR: "Diagnostic Study, Result: Hearing Examination (result: 'Refer' using 'JCIH-EHDI Newborn Hearing Loss Referrals value set ')" during "Encounter, Performed: Inpatient Encounter" using " JCIH-EHDI Newborn Hearing Procedure Value Sets.

!OR: "Diagnostic Study, Result not done: Medical Reasons Or Exclusions" using "Joint Commission Medical Reason Value Set" for " JCIH-EHDI Newborn Hearing Procedure Value Set" during "Encounter, Performed: Inpatient Encounter"

!OR: "Diagnostic Study, Result not done: Medical Reasons Or Exclusions" using "Joint Commission Medical Reason Value Set" for " JCIH-EHDI Hearing Screening Left Value Set" during "Encounter, Performed: Inpatient Encounter"

!OR: "Diagnostic Study, Result not done: Medical Reasons Or Exclusions" using "Medical Reasons Value Set" for " JCIH-EHDI Hearing Screen Right Value Set" during "Encounter, Performed: Inpatient Encounter"

!OR: "Diagnostic Study, Result: Newborn Hearing Screen Left (result: 'Refer' using 'JCIH-EHDI Newborn Hearing Loss Referrals value

set')" during "Encounter, Performed: Inpatient Encounter" using "JCIH-EHDI Hearing Screen Left Value Set"  
|OR: "Diagnostic Study, Result: Newborn Hearing Screen Right (result: 'Refer' using "JCIH-EHDI Newborn Hearing Loss Referrals value set')") during "Encounter, Performed: Inpatient Encounter" using "JCIH-EHDI Hearing Screen Right Value Set"

JCIH-EHDI Newborn Hearing Procedure value set: 170198007: child examination: hearing (procedure); 247299004: general appraisal of hearing (procedure); 252587007: performance test of hearing (procedure); 252957005: children's hearing test (procedure); 398171003: hearing examination (procedure); 417491009: neonatal hearing test (procedure); 427247008: hearing assessment (procedure)

JCIH-EHDI Hearing Screen Left value set: 53108-6: Newborn hearing screen left

JCIH-EHDI Hearing Screen Right value set: 53109-4: Newborn hearing screen right

Joint Commission Medical Reason Value Set: 397745006: medical contraindication (finding), 397773008: surgical contraindication (finding)

Please also see related value sets in S.2b

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

Patient deceased: Patient has expired prior to 91 days of age.

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

|AND NOT: "JCIH-EHDI Newborn Hearing Loss Diagnosis value set" starts before start of "Patient Characteristic Expired: Patient Expired"

|AND: "Patient Characteristic Expired: Patient Expired" after "Encounter, Performed: Inpatient Encounter"

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

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

No risk adjustment or risk stratification

If other:

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

Rate/proportion

If other:

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

Better quality = Higher score

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

(1) The time period for births included in the estimate is specified

(2) All live births that occurred during the time period are selected.

(3) Result of step 2 is filtered to remove children who died prior to 91 days of age

The denominator is calculated using the following step:

(4) Result of step 3 is filtered to be limited to the subset who did not pass ("Fail / Refer") their hearing screening. This result is saved as the denominator.

The numerator is calculated using the following step:

(5) Result of step 4 is further filtered limited to the subset for whom an Audiological Diagnosis was made prior to 91 days of age (see

2a.3). This result is saved as the numerator

The measure is calculated using the following step:

(6) Dividing the numerator (result of step 5) by the denominator (result of step 4).

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

IF an instrument-based performance measure (e.g., PRO-PM), identify whether (and how) proxy responses are allowed.  
not applicable

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

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

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

If other, please describe in S.18.

Electronic Health Records, Other, Registry Data

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

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

Public health information system, Electronic Health Record System

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

URL

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

Clinician : Group/Practice, Clinician : Individual, Facility, Other, Population : Regional and State

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

Inpatient/Hospital, Outpatient Services

If other:

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

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

[measure\\_testing\\_attachment\\_1360.docx](#)

### 2.1 For maintenance of endorsement

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

### 2.2 For maintenance of endorsement

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

### 2.3 For maintenance of endorsement

Risk adjustment: For outcome, resource use, cost, and some process measures, risk-adjustment that includes social risk factors is not

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

### 3. Feasibility

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

#### 3a. Byproduct of Care Processes

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

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

generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition, Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims), Other  
If other: Survey

#### 3b. Electronic Sources

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

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

ALL data elements are in defined fields in a combination of electronic sources

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

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

Attachment:

#### 3c. Data Collection Strategy

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

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

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

Requires an accurate standardized denominator and numerator to successfully determine that all infants have been accounted for and received necessary care. The limitation has been that providers have only reported on a subset of infants seen.

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

## 4. Usability and Use

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

### 4a. Accountability and Transparency

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

#### 4.1. Current and Planned Use

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

| Specific Plan for Use                                       | Current Use (for current use provide URL) |
|-------------------------------------------------------------|-------------------------------------------|
| Public Reporting                                            |                                           |
| Quality Improvement (Internal to the specific organization) |                                           |

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

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

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

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

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

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

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

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

**Describe how feedback was obtained.**

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

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

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

#### **Improvement**

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

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

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

#### **4b2. Unintended Consequences**

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

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

The use of EHRs for this measure provide a number of strengths that facilitate data quality, including EHRs serving as the authoritative source of clinical information and legal record of care. Furthermore, the use of discrete, computer readable fields results in reduced measurement error that may emerge from manual abstraction, third party coding, or transcription errors. Nevertheless, potential sources of error exist and include incorrect measure, code, or logic specification, as well as incorrect programming, system structure, or data exporting code, or inconsistent field definitions across providers or users. These can be audited through quality control measures. For example, CDC EHDI provides states and territories with a summary of results of measures reported as part of the national population-based public health data collection. This allows them to identify and address potential discrepancies. Similarly, EHDI programs are encouraged to provide similar feedback to their reporting sources as a means of quality control and programmatic feedback. Furthermore, state EHDI programs are encouraged to conduct their own reliability/validity studies, and to encourage data quality studies on the part of their reporting sources.

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

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

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

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

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.

No

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

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

**5a. Harmonization of Related Measures**

The measure specifications are harmonized with related measures;

**OR**

The differences in specifications are justified

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

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

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

**5b. Competing Measures**

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

**OR**

Multiple measures are justified.

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

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

[Related Measures: no current NQF endorsed measure](#)

## Appendix

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

**Attachment:**

## Contact Information

**Co.1 Measure Steward (Intellectual Property Owner):** [Centers for Disease Control and Prevention](#)

**Co.2 Point of Contact:** [Xidong, Deng, xdeng@cdc.gov, 404-498-6746-](#)

**Co.3 Measure Developer if different from Measure Steward:** [Centers for Disease Control and Prevention](#)

**Co.4 Point of Contact:** [Xidong, Deng, xdeng@cdc.gov, 404-498-6746-](#)

## Additional Information

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

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

[CDC EHDI Data Committee and the Joint Committee on Infant Hearing \(JCIH\) both participated in the development of EHDI quality benchmarks on which this measure is based.](#)

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

**Ad.2 Year the measure was first released:** [2000](#)

**Ad.3 Month and Year of most recent revision:** [10, 2007](#)

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

|                                                                        |
|------------------------------------------------------------------------|
| <b>Ad.5 When is the next scheduled review/update for this measure?</b> |
| <b>Ad.6 Copyright statement:</b><br><b>Ad.7 Disclaimers:</b>           |
| <b>Ad.8 Additional Information/Comments:</b>                           |