NATIONAL QUALITY FORUM

TO: NQF Members & Public

FR: NQF Staff

RE: Voting draft for *National Voluntary Consensus Standards for Child Health Quality Measures, 2010: A Consensus Report*

DA: April 25, 2011

BACKGROUND

Comments and Revised Draft Report

The comment period for the draft report, *National Voluntary Consensus Standards for Child Health Quality Measures, 2010: A Consensus Report,* concluded on March 17, 2011. NQF received 360 comments from 47 organizations on the draft report. The distribution of comments by Member Council follows:

Consumers: 11	Health Professionals: 25
Purchasers: 0	Public Health/Community: 6
Health Plans: 36	Quality Measurement, Research, and Improvement: 22
Providers: 11	Supplier and Industry: 14
Non-members: 150	

All measure-specific comments were forwarded to the developers, who were invited to respond. A table of complete comments submitted during the comment period, with the responses to each comment and the actions taken by the Steering Committee, is posted to the NQF voting webpage. Revisions to the draft report and the accompanying measure specifications tables are identified as redlined changes.

COMMENTS AND THEIR DISPOSITION

General Comments

Overall, the comments were positive and supportive of the measures. The majority of concerns raised focused on details of the measure specifications. Commenters raised a number of issues regarding the overall set of measures, including questions about the lack of measures addressing disparities, questions about the inclusion of population health measures, questions about the appropriate level of analysis, and concerns about the burden of chart review measures. In addition, commenters proposed a number of suggestions for future measure development. These suggestions have been added to the gap areas at the end of the voting report.

Disparities

Several comments questioned the lack of information and measures addressing disparities. The Committee briefly reviewed the stratification specifications of the measures. Committee members noted two stratification approaches for these measures: many of the measures can be stratified for disparities and others can be categorized as measures that directly address disparities. Committee members noted that disparities have become a national priority and developers should address the disparities-related questions in the measure submissions. The Committee agreed that measures at the population, system, plan or large group level be specified for stratification to evaluate for disparities. Committee members noted that statistical issues and small numbers limit stratification at the individual clinician-level of analysis, and also noted that many clinicians cite the difficulty in asking for and recording ethnicity data in their practices. *Action taken:* The Steering Committee approved a draft paragraph on disparities for the voting report.

Population-level measurement

Several comments questioned the utility of population-level measures, particularly for providers. The Committee agreed that this set of measures addresses the needs of many potential users and

that the population-level measure support the population health priorities and goals of the National Priorities Partnership and the new National Quality Strategy (NQS) recently announced by the Department of Health and Human Services. *Action taken:* The Steering Committee approved a draft paragraph on population health for the voting report.

Data Collection

Several comments identified the burden of manual chart review for some of the measures. NQF staff advised the Steering Committee that NQF is moving toward requiring eMeasures for all applicable measures (i.e., those currently specified for paper medical records). A proposed process will be discussed by the NQF Board of Directors at the May 12 meeting. *Action taken:* The Committee decided to continue to recommend the measures, despite the burden of chart review.

Clinician-Level Reporting

Measures 1354, 1357, 1360, 1361, 1395, 1401, 1402, 1406, 1407, 1412, 1419, 1506, and 1507 received comments questioning the appropriateness of their clinician-level reporting status, and stating that these measures depend not only on clinicians, but also on other external factors and other healthcare professionals. The Committee noted that the measures were developed and tested for clinical-level measurement and agreed that topics such as immunizations, chlamydia screening, maternal depression screening, newborn hearing screening results documentation, vision screening and risky behavior screening are appropriate for clinician-level measurement *Action taken:* The Committee decided they were comfortable with the levels of analysis originally specified.

CAHMI/MCHB Stewardship of measures based on the National Survey of Children's Health

In response to comments, NQF Staff informed the Steering Committee that CAHMI submitted clarifying revisions to the stewardship of the measures based on the National Survey of

Children's Health. The draft report has been edited using this language to reflect all NSCH measures as stewarded by CAHMI/MCHB. *Action taken:* The voting report has been redlined and the measure specifications have been updated by the measure steward.

Measures without consensus recommendation in the review draft

Because the Committee did not reach a consensus recommendation for three measures included in the draft report, comments were sought on whether the measures should be recommended for endorsement. The Committee reviewed the comments on these measures and discussed the merits of the measures before voting again on a final recommendation.

1332: Children who receive preventive medical visits

The comments on this measure were mixed. One comment suggested that it is duplicative of the Early Periodic Screening, Diagnosis, and Treatment (EPSDT) (Medicaid) measure but Committee members noted that Medicaid patients represent only 30% of children and this measure would capture all children. In response to a comment that questioned the language used in the survey for this measure, the developer noted that the survey question language is similar to "Well Child" and "Check-Ups" for the parents to comprehend more easily. The developer also assured the Committee that the cognitive tests conducted on the survey question were positive for good understanding. *Action taken:* Clarifying language for the voting report has been written in conjunction with the developer. The Committee voted to recommend the measure for endorsement.

1365: Child and adolescent major depressive disorder: Suicide risk assessment

Four comments recommended endorsing this measure. In addition, the developer submitted a number of comments in support of the measure and provided additional evidence. The Committee members again noted that this measure does not specify specific tool(s) for the assessment, the need for sensitivity in making a suicide risk assessment, potential clinician liability, and that the USPSTF recommendation on this subject was inconclusive. However, the Committee agreed the measure was important. *Action taken:* The Committee voted to recommend the measure for endorsement.

1552: Blood pressure screening by age 13

Several comments referred to the Bright Futures guidelines and asked if screening should be measured annually. The Committee agreed that BP screening is important but that the need to use graphs to interpret the result in percentiles can be difficult, though this could be improved with automatic computation in an EHR. Another Committee member noted that the bar should be raised for clinicians by requiring them to record and interpret the screening results. *Action taken*: The Committee voted to recommend the measure.

Measure Specific Comments & Actions Taken

1348: Children age 6-17 who engage in weekly physical activity

1349: Child overweight or obesity status based on parental report of BMI

Concerns were raised regarding the accuracy of parental reporting, the level of measurement, and their similarity to NQF's currently endorsed measure, *0024: Body Mass Index (BMI) 2 through 18 years of age*. Several Committee members voiced their continued concern on the accuracy of parent reporting. The Committee noted that this measure would be useful at the population level to analyze trends over time and assist in monitoring changes in the population. It was noted that that the population-level measure would have a different denominator than a provider-level measure would, due to the fact that provider-level measures require visits and insurance coverage. *Action taken:* The Committee did not change the recommendation for endorsement on either of these measures.

1385: Developmental screening using a parent completed screening tool (0-5)

1399: Developmental screening by 2 years of age

1448: Developmental screening in the first three years of life

These measures received comments on the age ranges specified by the measure developers. The developers explained that measure 1399 is a clinician-level measure, and 1448 is a population- or plan- level measure, and the two are harmonized. The Committee echoed the previous comment

that clinician- and plan-level measures require an interaction with the health care system, whereas population measures do not. *Action taken:* The measures' developers revised the specifications to clarify these issues. The Committee did not change their recommendations on these measures and agreed to the specification changes. The voting report includes a table submitted by the developers depicting the alignment of these measures for more clarification.

1333: Children who receive family centered care
1330: Children with a usual source for care when sick

Comments noted a similarity to *0724: Measure of medical home for children and adolescents*, previously endorsed in NQF's Child Health Outcomes project. These measures are components of the endorsed Medical Home measure. The Committee discussed whether there is sufficient value in having these two measures also endorsed. Committee members suggested that the measures were perhaps overlapping, but not duplicative and that these measures would be useful in tracking progress of intermediate steps as a practice moves towards a comprehensive medical home. *Action taken:* The Committee did not change the original recommendation of these measures.

1337: Children with insufficient health coverage in the past 12 months

This measure received a comment stating that the Current Population Survey (CPS) collects this information on health coverage, and questioned the necessity of endorsing this measure as a second method of collecting such information. The measure developer stated that this measure allows for stratification that the CPS does not, and that this measure identifies gaps in coverage. *Action taken:* The Committee did not change the original recommendation of the measure.

1381: Asthma emergency department visits

Comments raised concerns about this measure's specification of only one ED visit to count in the measures since it would capture appropriate ED visits for first time asthma diagnosis. Committee members suggested that this measure would assist in learning what percentage of patients had more than two emergency department visits. *Action taken:* After consideration of the comments, the Committee again voted to recommend the measure for endorsement.

CHANGES TO SPECIFICATIONS IN RESPONSE TO COMMENTS

The Committee reviewed several measure specification changes that measure developers have proposed in response to issues raised during commenting. The Committee agreed to all the suggested changes. *Action taken:* The developers were notified and agreed to make the changes before the final specifications for the voting draft.

Change in Level of Analysis for Newborn Hearing Screening Measures

In response to comments, the measure developer has suggested removing clinician as a level of analysis for measures *1354: Hearing screening prior to hospital discharge*; *1357: Outpatient hearing screening of infants who did not complete screening before discharge*; *1360*: *Audiological evaluation no later than 3 months of age;* and *1361: Intervention no later than 6 months of age*. *Action taken:* The Committee agreed with this change and the measure developers updated the specifications.

NQF MEMBER VOTING

Information for electronic voting has been sent to NQF Member organization primary contacts. Accompanying comments must be submitted via the online voting tool.

Please note that voting concludes on Tuesday, May 24, 2011, at 6:00 pm ET—no exceptions.

NATIONAL VOLUNTARY CONSENSUS STANDARDS FOR CHILD HEALTH QUALITY MEASURES, 2010: A CONSENSUS REPORT

DRAFT REPORT FOR VOTING

APRIL 25, 2011

NATIONAL QUALITY FORUM

NATIONAL VOLUNTARY CONSENSUS STANDARDS FOR CHILD HEALTH QUALITY MEASURES, 2010: A CONSENSUS REPORT

TABLE OF CONTENTS

NATIONAL QUALITY FORUM

NATIONAL VOLUNTARY CONSENSUS STANDARDS FOR CHILD HEALTH QUALITY MEASURES, 2010

EXECUTIVE SUMMARY

Child health quality is an important, underemphasized area of measure development and endorsement. To achieve quality healthcare across a full continuum of conditions, settings, populations, and structures of care, there is a need for additional measures that specifically address child health. The recent release of an initial core set of measures for Medicaid and Children's Health Insurance Program (CHIP) voluntary use provides an important step in assessing child health quality by state programs. The Agency for Healthcare Research and Quality National Advisory Council Subcommittee on Children's Healthcare Quality Measures for Medicaid and CHIP Programs (AHRQ SNAC) recently identified measure gaps in a number of priority areas for children, including mental health and substance abuse services, other specialty services, and inpatient care. Measures in key gap areas such as quality of well child care, dental care, and acute care for children, were highlighted.

To date, NQF has endorsed more than 85 pediatric and perinatal measures. The set of NQF-endorsed® measures has risen steadily over the past several years, with emphasis in the areas of perinatal and neonatal care, chronic illness care, care for hospitalized children, and most recently, child health outcomes. Major gaps remain for measures focused on child function, health-related quality of life, patient and caregiver experience with care, pediatric inpatient care, promotion of healthful behaviors, and other areas.

The 2010 Child Health Quality Measures project was designed to enlarge NQF's portfolio of child health measures and to complement the AHRQ SNAC collaboration with the Center for Medicaid, CHIP, and Survey and Certification. While the initial core set of Children's Health Insurance Program Reauthorization Act (CHIPRA) measures will be prescribed (or specified) by the Secretary of Health and Human Services, other appropriate measures could be recommended that may enhance the portfolio of child health quality measures and could be used in the future for the pediatric quality measurement program as required by CHIPRA.

The following ~~41~~ 44 measures are recommended for endorsement. ~~Additionally, three measures without a consensus recommendation from the Steering Committee are presented for comment and feedback from the NQF membership and general public.~~

Recommended measures:

- 1391: Frequency of ongoing prenatal care (NCQA)
- 1517: Prenatal and postpartum care (NCQA)
- 1382: Percentage of low birthweight births (Division of Vital Statistics)
- 1397: Sudden Infant Death Syndrome counseling (NCQA)
- 1401: Maternal depression screening (NCQA)
- *1351: Proportion of infants covered by newborn bloodspot screening (HRSA)
- 1402: Newborn hearing screening (NCQA)
- 1354: Hearing screening prior to hospital discharge (EHDI-1a) (CDC)
- *1357: Outpatient hearing screening of infants who did not complete screening before hospital discharge (EHDI-1c) (CDC)
- 1360: Audiological evaluation no later than 3 months of age (EHDI-3) (CDC)
- 1361: Intervention no later than 6 months of age (EHDI-4a) (CDC)
- *1448: Developmental screening in the first three years of life (MCHB/CAHMI)
- 1399: Developmental screening by 2 years of age (NCQA)
- 1385: Developmental screening using a parent-completed screening tool (parent report, children 0-5) [from the National Survey of Children's Health, NSCH] (MCHB/CAHMI).
- *1412: Pre-school vision screening in the medical home (American Academy of Pediatrics)
- 1552: Blood pressure screening by age 13 (NCQA)
- 1553: Blood pressure screening by age 18 (NCQA)
- 1395: Chlamydia screening and follow up (NCQA)
- 1396: Healthy physical development by 6 years of age (NCQA)
- 1512: Healthy physical development by 13 years of age (NCQA)
- 1514: Healthy physical development by 18 years of age (NCQA)
- 1349: Child overweight or obesity status based on parental report of body mass index (BMI) [NSCH] (MCHB/CAHMI)
- 1348: Children age 6-17 years who engage in weekly physical activity [NSCH] (MCHB/CAHMI)
- 1407: Adolescent immunization by 13 years of age (NCQA)
- 1506: Immunizations by 18 years of age (NCQA)
- 1346: Children who are exposed to secondhand smoke inside home [NSCH] (MCHB/CAHMI)

- 1388: Annual dental visit (NCQA)
- 1334: Children who received preventive dental care [NSCH] (MCHB/CAHMI)
- 1335: Children who have dental decay or cavities [NSCH] (MCHB/CAHMI)
- *1419: Primary caries prevention intervention as part of well/ill child care as offered by primary care medical providers (University of Minnesota)
- 1394: Depression screening by 13 years of age (NCQA)
- 1515: Depression screening by 18 years of age (NCQA)
- *1364: Child and adolescent major depressive disorder: Diagnostic evaluation (AMA)
- 1406: Risky behavior assessment or counseling by age 13 years (NCQA)
- 1507: Risky behavior assessment or counseling by age 18 years (NCQA)
- *1365: Suicide risk assessment (AMA)
- 1392: Well child visits in the first 15 months of life (NCQA)
- 1516: The percentage of members 3–6 years of age who received one or more well-child visits with a PCP during the measurement year (NCQA)
- 1333: Children who receive family-centered care [NSCH] (MCHB/CAHMI)
- 1330: Children with a usual source for care when sick [NSCH] (MCHB/CAHMI)
- 1381: Asthma emergency department visits (AL Medicaid Agency)
- 1337: Children with inconsistent health insurance coverage in the past 12 months [NSCH] (MCHB/CAHMI)
- 1332: Children who receive preventive medical visits [NSCH] (MCHB/CAHMI)
- 1340: Children with special health care needs who receive services needed for transition to adult health care [from the National Survey of Children with Special Healthcare Needs, NSCSHCN] (MCHB/CAHMI).

~~**Measures without consensus recommendation:**~~

- ~~*1365: Suicide risk assessment (AMA)~~
- ~~1552: Blood pressure screening by age 13 (NCQA)~~
- ~~1332: Children who receive preventive medical visits [NSCH] (CAHMI)~~

*****Recommended for time-limited endorsement.

NATIONAL VOLUNTARY CONSENSUS STANDARDS FOR CHILD HEALTH QUALITY MEASURES, 2010

BACKGROUND

Child health quality is an important, underemphasized area of measure development and endorsement. To achieve quality healthcare across a full continuum of conditions, settings, populations, and structures of care, there is a need for additional measures that specifically address child health. The recent release of an initial core set of measures for Medicaid and Children's Health Insurance Program (CHIP) voluntary use provides an important step in assessing child health quality by state programs. The Agency for Healthcare Research and Quality National Advisory Council Subcommittee on Children's Healthcare Quality Measures for Medicaid and CHIP Programs (AHRQ SNAC) recently identified measure gaps in a number of priority areas for children, including mental health and substance abuse services, other specialty services, and inpatient care among other areas. Measures in key gap areas such as quality of well child care, dental care, and acute care for children, were highlighted.

To date, NQF has endorsed more than 85 pediatric and perinatal measures. The set of NQF-endorsed® measures has risen steadily over the past several years, with emphasis in the areas of perinatal and neonatal care, chronic illness care, care for hospitalized children, and most recently, child health outcomes. NQF's portfolio of child health measures in Appendix C is organized by child's age and by topic or condition and includes the level of measurement to assist users in identifying measures of interest. Major gaps remain for measures focused on child function, health-related quality of life, patient and caregiver experience with care, and promotion of healthful behaviors. To ensure quality of care across the continuum of a child's experience, it is necessary to develop and implement child health quality measures that promote health and well-being across all spectrums of care and influence (see additional recommendations).

SCOPE

The 2010 Child Health Quality Measures project was designed to enlarge NQF's portfolio of child health measures and to complement the AHRQ SNAC collaboration with the Center for Medicaid, CHIP, and Survey and Certification. While the initial core set of Children's Health

Insurance Program Reauthorization Act (CHIPRA) measures will be prescribed (or specified) by the Secretary of Health and Human Services, other appropriate measures could be recommended that may enhance the portfolio of child health quality measures and could be used in the future for the pediatric quality measurement program as required by CHIPRA.

For this project NQF solicited candidate measures suitable for public reporting at the population level (e.g., state) and for the following conditions or cross-cutting areas:

- respiratory issues such as asthma;
- overweight/obese;
- well child care;
- prevention and screening (e.g., immunizations, developmental delay);
- diabetes;
- prenatal/perinatal care;
- access to care (e.g., well-child care visits, access to primary care practitioners, emergency room utilization);
- oral health (e.g., access to services, dental caries);
- inpatient safety (e.g., pediatric catheter-associated blood stream infection rates);
- mental health (e.g., depression, behavior problems, anxiety, ADHD); and
- patient experience with care.

STRATEGIC DIRECTIONS FOR NQF

NQF's mission includes three parts: 1) building consensus on national priorities and goals for performance improvement and working in partnership to achieve them, 2) endorsing national consensus standards for measuring and publicly reporting on performance, and 3) promoting the attainment of national goals through education and outreach programs. As greater numbers of quality measures are developed and brought to NQF for consideration of endorsement, NQF must assist stakeholders in measuring "what makes a difference" and addressing what is important to achieve the best outcomes for patients and populations. For more information see www.qualityforum.org/Projects/c-

d/Child_Health_Quality_Measures_2010/Child_Health_Quality_Measures_2010.aspx.

Several strategic issues have been identified to guide consideration of candidate consensus standards:

DRIVE TOWARD HIGH PERFORMANCE. Over time, the bar of performance expectations should be raised to encourage achievement of higher levels of system performance.

EMPHASIZE COMPOSITES. Composite measures provide much-needed summary information pertaining to multiple dimensions of performance and are more comprehensible to patients and consumers.

MOVE TOWARD OUTCOME MEASUREMENT. Outcome measures provide information of keen interest to consumers and purchasers, and when coupled with healthcare process measures, they provide useful and actionable information to providers. Outcome measures also focus attention on much-needed system-level improvements because achieving the best patient outcomes often requires carefully designed care process, teamwork, and coordinated action on the part of many providers.

CONSIDER DISPARITIES IN ALL WE DO. Some of the greatest performance gaps relate to care of minority populations. Particular attention should be focused on identifying disparities-sensitive performance measures and on identifying the most relevant race/ethnicity/language/socioeconomic strata for reporting purposes.

NATIONAL PRIORITIES PARTNERSHIP

NQF seeks to endorse measures that address the National Priorities and Goals of the NQF-convened National Priorities Partnership (NPP).[1] NPP represents those who receive, pay for, provide, and evaluate healthcare. The National Priorities and Goals focus on these areas:

- patient and family engagement,
- safety,
- care coordination,
- palliative and end-of-life care,

- equitable access,
- elimination of overuse,
- population health, and
- infrastructure supports.

NQF'S CONSENSUS DEVELOPMENT PROCESS

Evaluating Potential Consensus Standards

This report presents the evaluation of an initial group of 75 child health measures. Candidate consensus standards were solicited through a Call for Measures in August 2010 and actively sought through searches of the National Quality Measures Clearinghouse and NQF Member websites and an environmental scan. NQF staff contacted potential measure developers to encourage them to submit measures for this project, including measures from the CHIPRA core list.

Seventy-five measures were evaluated for their suitability as voluntary consensus standards for accountability and public reporting using NQF's standard evaluation criteria.[2] Of these, ~~41~~ 44 were recommended for endorsement (including 7 recommended for time-limited endorsement)~~; 3 will move forward as measures without consensus~~. The multistakeholder Steering Committee evaluated the 75 measures on the 4 main NQF criteria: importance to measure and report, scientific acceptability of the measure properties, usability, and feasibility. The Steering Committee recommended for endorsement those measures that meet the NQF criteria, and for time-limited endorsement those measures that meet all criteria except for those related to field testing. A limited set of time-limited measures were included in this project due to the fact that the measures satisfied all criteria for time-limited endorsement: 1) gap area in the portfolio; 2) non-complex measure; 3) time-sensitive legislative mandate (e.g., measures for potential use in CHIPRA). Measure developers participated in Steering Committee discussions to respond to questions and clarify any issues or concerns.

Population Health

Population and community health are priorities identified by the National Priorities Partnership and the National Quality Strategy[3] that was recently announced by the Department of Health and Human Services. Population health seeks to foster health and wellness and to prevent (rather than simply treat) injury, illness, and disability. It does so by considering the context and circumstances of individuals, both as individuals and as members of a group with similar demographics or exposures, to improve outcomes. Taking a population health approach emphasizes that healthcare is just one of the five domains that influences health—the other four being genetics, social circumstances, environmental exposures, and behavioral patterns. It is estimated that at least two-fifths of deaths in the United States can be attributed to behavioral factors, with another one-fifth of deaths attributable to social circumstances and physical environmental factors. Population health is built around the belief that the health of individuals, as members of groups, can be measured and improved. To plan care accordingly, the healthcare delivery system needs to take this information into account.[4]

Population-Level Measures

Many of the candidate standards evaluate the quality of care at the population level (e.g., community or state) rather than at the provider level. NQF endorses all types of measures, including population-based measures that can be used at the community and state levels. Additionally, a good deal of attention is focused on measures that might be used by accountable care organizations (ACOs) and health systems, including measures of healthy behaviors for the populations they serve. As a priority of NPP, measures at the population level are needed to address the NPP Goals of effective preventive services, adoption of healthy lifestyle behaviors, and improvement in the health of American communities. NQF seeks to endorse measurers that are complementary with the public health community and ensure that measures at all levels are harmonized. Appendix D lists the population-level child health measures endorsed by NQF.

~~The Steering Committee evaluated a large group of population-level measures derived from the National Survey of Children's Health (2007) [NSCH] and the National Survey of Children With Special Healthcare Needs [NSCSHCN], which ask parents or guardians a variety of questions about their child's health. These surveys are administered every four years by the Child and~~

~~Adolescent Health Measurement Initiative (CAHMI), and the state-level results are published at www.cahmi.org (data resource center). These measures have been tested and developed as part of the National Surveys. Use of these measures apart from the NSCH or NSCSHCN requires further development and testing for use with other survey instruments or at provider levels of analysis.~~

Measures from the National Survey of Children's Health & National Survey of Children with Special Health Care Needs

The Steering Committee evaluated a large group of population-level measures derived from the National Survey of Children's Health (2007) [NSCH] and the National Survey of Children with Special Health Care Needs (2005/2006) [NS-CSHCN], which ask parents or guardians a variety of questions about their child's health. Each of these surveys is conducted every four years by the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS) with funding and direction from the Health Resources and Services Administration, Maternal and Child Health Bureau (MCHB). The Child and Adolescent Health Measurement Initiative (CAHMI) assists in measure submission to NQF and serves on an MCHB-led Technical Expert Panel, which guides the development and testing of survey items and measures. CAHMI also conducts more in-depth measure development, testing, and documentation activities in collaboration with MCHB and NCHS. These measures have been tested and developed as part of the national surveys and in many cases are drawn from methods previously developed and tested for other applications. Specification of these measures apart from the NSCH or NS-CSHCN requires further documentation and review, especially for use in the context of other survey instruments or at provider levels of analysis.

Age Harmonization

The Steering Committee discussed harmonization of age inclusions among the numerous measures evaluated and recommended in this project. The upper age limits vary from ages 17, 18, or 21 years. In discussions with the measure developers, the Committee learned that the age

inclusions are determined by a variety of factors, such as age 17 years 364 days for the measures from the National Survey of Children's Health, which surveys parents regarding children living in the home, or the upper age limit of 21 years for measures aligning with the Early and Periodic Screening, Diagnosis, and Treatment **(**EPSDT**)** program within Medicaid. The Committee determined that it was not appropriate to establish a harmonized upper age limit for all measures of child health but decided that the developer should explain the rationale for establishing the age specifications for each measure.

Disparities

Many of the topic areas addressed by measures in the child health portfolio are known to have differences in performance by subpopulations including low birthweight[5]; pregnancy care[6]; sudden infant death syndrome[7]; newborn screening follow-up[8]; developmental screening [9]; weight and physical activity[10]; oral health[11]; mental health[12]; and well-child care[13]. Clinicians and providers should be aware of the disparities in their local communities and use measurement to monitor change in disparities over time. Measures at the population, system, plan, facility and large group levels should be stratified by appropriate subpopulations to detect disparities. Many of the measures in the child health portfolio are specified for stratification and should be publicly reported with those stratifications.

Technical Advisory Panel for Vision and Hearing

A four-member technical advisory panel (TAP) of experts in hearing and vision care for children reviewed the hearing and vision screening measures and assessed the measure evaluation subcriteria to assist the Steering Committee in evaluating these measures.

RECOMMENDATIONS FOR ENDORSEMENT

Table 1 report presents ~~41~~ 44 measures recommended for endorsement as voluntary consensus standards suitable for public reporting and quality improvement. ~~Also included are three measures for which the Steering Committee did not agree on a consensus recommendation~~. For the purpose of organizing the report, the measures are broken out into several categories and then subcategories. The measures that were evaluated but not recommended are listed in a table following the discussion of all recommended ~~and no consensus~~ measures.

These 44 measures expand NQF's portfolio of child health measures (Appendix C), which provides a variety of measures for different uses such as population health and disparities monitoring by states or communities; monitoring CHIP and Medicaid programs; and providing comparison data for consumers and purchasers. Not all measures in the portfolio are appropriate for all purposes. Large systems and ACOs may use measures at multiple levels of analysis to evaluate the performance within their organization.

TABLE 1. RECOMMENDED CHILD HEALTH QUALITY MEASURES[1]

Measure Number and Title	Measure Description	Level of Analysis	Steward
1391: Frequency of ongoing prenatal care	Frequency of ongoing prenatal care: The percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received the following number of expected prenatal visits. •<21 percent of expected visits •21 percent–40 percent of expected visits •41 percent–60 percent of expected visits •61 percent–80 percent of expected visits •≥81 percent of expected visits	Health plan Integrated delivery system Population: national Population: regional/network	National Committee for Quality Assurance (NCQA)
1517: Prenatal and postpartum care	The percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year. For these women, the measure assesses the following facets of prenatal and postpartum care. • Rate 1: Timeliness of Prenatal Care. The percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester or within 42 days of enrollment in the organization. • Rate 2: Postpartum Care. The	Health plan Integrated delivery system Population: national Population: regional/network	NCQA

[1] All information in this table is provided by the measure developer.

Measure Number and Title	Measure Description	Level of Analysis	Steward
	percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery		
1382: Percentage of low birthweight births	The percentage of births with birthweight <2,500 grams	Population: national Population: regional/network Population: states Population: counties or cities	Division of Vital Statistics, National Center for Health Statistics, Centers for Disease Control and Prevention (CDC)
1397: Sudden infant death syndrome counseling	The percentage of children who turned 6 months old during the measurement year and who had sudden infant death syndrome (SIDS) counseling	Clinicians: individual Clinicians: group Population: national Population: regional/network	NCQA
1401: Maternal depression screening	The percentage of children who turned 6 months during the measurement year who had documentation of a maternal depression screening for the mother ~~and proper follow-up performed between 0 and 6 months of life~~	Clinicians: individual Clinicians: group Population: national Population: regional/network	NCQA
*1351: Proportion of infants covered by newborn bloodspot screening	What percentage of infants had bloodspot newborn screening performed as mandated by state of birth?	Facility/agency Population: states Program: other	Health Resources and Services Administration (HRSA)
1402: Newborn hearing screening	The percentage of children who turned 6 months old during the measurement year who had documentation in the medical record of a review of their newborn hearing screening results by their 3-month birthday	Clinicians: individual Clinicians: group Population: national Population: regional/network	NCQA
1354: Hearing screening prior to hospital	This measure assesses the proportion of births that have been screened for hearing loss before hospital discharge.	~~Clinicians: individual~~ Facility/agency Population: national	CDC Early Hearing Detection

Measure Number and Title	Measure Description	Level of Analysis	Steward
discharge (EHDI-1a)		Population: states	and Intervention (EHDI)
*1357: Outpatient hearing screening of infants who did not complete screening before hospital discharge (EHDI-1c)	This measure assesses the proportion of all newborn infants who did not complete a hearing screen prior to discharge, who went on to receive an outpatient screen before the child was 31 days of age.	~~Clinicians: individual~~ Facility/agency Population: national Population: states	CDC EHDI
1360: Audiological evaluation no later than 3 months of age (EHDI-3)	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.	~~Clinicians: individual~~ Facility/agency Population: national Population: states	CDC EHDI
1361: Intervention no later than 6 months of age (EHDI-4a)	This measure assesses the proportion of infants with permanent hearing loss who have been referred to intervention services no later than age 6 months of age.	~~Clinicians: individual~~ Facility/agency Population: national Population: states	CDC EHDI
*1448: Developmental screening in the first three years of life	The percentage of children screened for risk of developmental, behavioral, and social delays using a standardized screening tool in the first three years of life. This is a measure of screening in the first three years of life that includes 3 age-specific indicators assessing whether children are screened by 12 months of age, by 24 months of age, and by 36 months of age.	Population: states Program: QIO Program: other	Maternal and Child Health Bureau/Child and Adolescent Health Measurement Initiative (MCHB/CAHMI)
1399: Developmental screening by 2 years of age	The percentage of children who turned 2 years old during the measurement year who had a developmental screening and proper follow-up performed between ~~6 months and 2 years of age~~12 and 24 months of age	Clinicians: individual Clinicians: group Population: national Population: regional/network	NCQA

Measure Number and Title	Measure Description	Level of Analysis	Steward
1385: Developmental screening using a parent-completed screening tool (parent report, children 0-5)	The measure assesses whether the parent or caregiver completed a developmental screening tool meant to identify children at risk for developmental, behavioral, and social delays. The items are age-specific and anchored to parent-completed tools (a majority of healthcare providers implementing the Bright Futures recommendations for standardized screening for all children utilize parent-completed tools due to their validity and feasibility). The age-specific items assess whether children 10-71 months are screened. The items assessing developmental screening in the National Survey of Children's Health are meant to assess whether the parent or caregiver completed a standardized developmental screening tool ~~(for example, Parents Evaluation of Developmental Status)~~. Developmental screening is defined as a standardized tool that assesses the child's risk for developmental, behavioral, and social delays. The American Academy of Pediatrics recommends standardized screening using an approved screening tool as the best method of identifying children at risk for developmental, behavioral, and/or social delays.	Population: national Population: regional/network Population: states	MCHB/CAH MI
*1412: Pre-school vision screening in the medical home	Percentage of pre-school aged children who receive vision screening in the medical home	Clinicians: individual Clinicians: group Health plan Integrated delivery system Population: national	American Academy of Pediatrics (AAP)
1553: Blood pressure screening by age 18	The percentage of adolescents who turn 18 years of age in the measurement year who had a blood pressure screening with results at least once in the past two years	Clinicians: individual Clinicians: group Population: national Population:	NCQA

Measure Number and Title	Measure Description	Level of Analysis	Steward
		regional/network	
1552: Blood pressure screening by age 13	The percentage of adolescents who turn 13 years of age in the measurement year who had a blood pressure screening with results	Clinicians: individual Clinicians: group Population: national Population: regional/network	NCQA
1395: Chlamydia screening and follow-up	The percentage of female adolescents who turned 18 years old during the measurement year and who had a chlamydia screening and proper follow-up visit	Clinicians: individual Clinicians: group Population: national Population: regional/network	NCQA
1396: Healthy physical development by 6 years of age	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.	Clinicians: individual Clinicians: group Health plan Population: national Population: regional/network	NCQA
1512: Healthy physical development by 13 years of age	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.	Clinicians: individual Clinicians: group Health plan Population: national Population: regional/network	NCQA
1514: Healthy physical development by 18 years of age	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.	Clinicians: individual Clinicians: group Health plan Population: national Population: regional/network	NCQA
1349: Child overweight or obesity status based on parental report of body mass index (BMI)	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).	Population: national Population: regional/network Population: states	MCHB/CAHMI
1348: Children age 6-17 years	Measures how many times per week child 6-17 years exercises vigorously (based	Population: national Population:	MCHB/CAHMI

Measure Number and Title	Measure Description	Level of Analysis	Steward
who engage in weekly physical activity	on AAP and CDC recommendations)	regional/network Population: states	
1407: Immunizations by 13 years of age	The percentage of adolescents who turned 13 years during the measurement year who had proper immunizations by the time they turn 13 years of age	Clinicians: individual Clinicians: group Population: national Population: regional/network	NCQA
1506: Immunizations by 18 years of age	The percentage of adolescents who turned 18 years during the measurement year who had proper immunizations by the time they turn 18 years of age	Clinicians: individual; Clinicians: group Population: national Population: regional/network	NCQA
1346: Children who are exposed To secondhand smoke inside home	Determines the percentage of children who live with a smoker and if that smoker smokes inside the child´s house	Population: national Population: regional/network Population: states	MCHB/CAHMI
1388: Annual dental visit	The percentage of members 2-21 years of age who had at least one dental visit during the measurement year	Health plan Integrated delivery system Population: national Population: regional/network	NCQA
1334: Children who received preventive dental care	Assesses how many preventive dental visits occurred during the previous 12 months	Population: national Population: regional/network Population: states	MCHB/CAHMI
1335: Children who have dental decay or cavities	Assesses if children age 1-17 years have had tooth decay or cavities in the past 6 months	Population: national Population: regional/network Population: states	MCHB/CAHMI
*1419: Primary caries prevention intervention as part of well/ill child care as offered by	The measure will a) track the extent to which the PCMP or clinic (determined by the provider number used for billing) applies fluoride varnish (FV) as part of the Early Periodic Screening, Diagnosis, and Treatment (EPSDT) examination and b) track the degree to which each billing	Clinicians: individual Clinicians: group Facility/agency Health plan Population: national	University of Minnesota

Measure Number and Title	Measure Description	Level of Analysis	Steward
primary care medical providers	entity's use of the EPSDT with FV codes increases from year to year (more children varnished and more children receiving FV four times a year according to American Dental Association recommendations for high-risk children).		
1394: Depression screening by 13 years of age	The percentage of adolescents who turn 13 years of age in the measurement year who had a screening for depression using a standardized tool	Clinicians: individual Clinicians: group Population: national Population: regional/network	NCQA
1515: Depression screening by 18 years of age	The percentage of adolescents who turn 18 years of age in the measurement year who had a screening for depression using a standardized tool	Clinicians: individual Clinicians: group Population: national Population: regional/network	NCQA
*1364: Child and adolescent major depressive disorder: diagnostic evaluation	Percentage of patients aged 6 through 17 years with a diagnosis of major depressive disorder with documented evidence that they met the DSM-IV criteria [at least 5 elements with symptom duration of two weeks or longer, including 1) depressed mood (can be irritable mood in children and adolescents) or 2) loss of interest or pleasure] during the visit in which the new diagnosis or recurrent episode was identified	Clinicians: individual Clinicians: group	American Medical Association (AMA)
1406: Risky behavior assessment or counseling by age 13 years	Percentage of children with documentation of a risk assessment or counseling for risky behaviors by the age of 13 years. Four rates are reported: risk assessment or counseling for alcohol use, risk assessment or counseling for tobacco use, risk assessment or counseling for other substance abuse, risk assessment or counseling for sexual activity	Clinicians: individual Clinicians: group Population: national Population: regional/network	NCQA
1507: Risky behavior assessment or counseling by age 18 years	Percentage of children with documentation of assessment or counseling for risky behavior. Four rates are reported: assessment or counseling for alcohol use, tobacco use, other	Clinicians: individual Clinicians: group Population: national Population: regional/network	NCQA

Measure Number and Title	Measure Description	Level of Analysis	Steward
	substance use, and sexual activity.		
*1365: Child and adolescent major depressive disorder: suicide risk assessment	Percentage of patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder with an assessment for suicide risk	Clinicians: individual	AMA
1392: Well-child visits in the first 15 months of life	Well-child visits in the first 15 months of life: The percentage of members who turned 15 months old during the measurement year and who had the following number of well-child visits with a PCP during their first 15 months of life •No well-child visits •One well-child visit •Two well-child visits •Three well-child visits •Four well-child visits •Five well-child visits •Six or more well-child visits	Health plan Integrated delivery system Population: national Population: regional/network	NCQA
1516: Well-child visits in the third, fourth, fifth, and sixth years of life	The percentage of members 3–6 years of age who received one or more well-child visits with a PCP during the measurement year	Health plan Integrated delivery system Population: national Population: regional/network	NCQA
1333: Children who receive family-centered care	A composite measure designed to assess the family-centeredness of care delivery along several dimensions: whether doctor 1) partners with family in care, 2) listens to patient/parent carefully, 3) spends enough time with child, 4) is sensitive to family values/customs, 5) provides needed information, 6) whether family is able to access interpreter help, if needed	Population: national Population: regional/network Population: states	MCHB/CAHMI
1330: Children with a usual source for care when sick	Whether child has a source of care that is known and continuous (categorized as a doctor's office, hospital outpatient department, clinic or health center, school, friend or relative, some other	Population: national Population: regional/network Population: states	MCHB/CAHMI

Measure Number and Title	Measure Description	Level of Analysis	Steward
	place, or a telephone advice line)		
1381: Asthma emergency department visits	Percentage of patients with asthma who have greater than or equal to one visit to the emergency room for asthma during the measurement period	Population: counties or cities Program: other	Alabama Medicaid Agency
1337: Children with inconsistent health insurance coverage in the past 12 months	Measures whether children are uninsured at the time of the survey or if currently insured children experienced periods of no insurance during past 12 months	Population: national Population: regional/network Population: states	MCHB/CAH MI
1332: Children who receive preventive medical visits	Assesses how many medical preventive visits in a 12 month period, such as a physical exam or well-child check-up (does not include visits related to specific illnesses)	Population: national Population: regional/network Population: states	MCHB/CAH MI
1340: Children with special health care needs (CSHCN) who receive services needed for transition to adult health care	Whether children with special health care needs (CSHCN) ages 12-17 have doctors who usually/always encourage increasing responsibility for self-care AND (when needed) have discussed transitioning to adult health care, changing health care needs, and how to maintain insurance coverage	Population: national Population: regional/network Population: states	MCHB/CAH MI

316 *Recommended for time-limited endorsement

317

PERINATAL MEASURES

Measures Recommended

1391: Frequency of ongoing prenatal care (NCQA)

The percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received the following number of expected prenatal visits.

- *<21 percent of expected visits*
- *21 percent–40 percent of expected visits*
- *41 percent–60 percent of expected visits*
- *61 percent–80 percent of expected visits*
- *≥81 percent of expected visits*

Each year, about four million women give birth in the United States. Studies indicate that as many as half of all deaths from pregnancy complications could be prevented if women had better access to healthcare, had better quality of care, and changed their health and lifestyle habits.[14] Women who receive prenatal care late in their pregnancy or who do not receive any care are at increased risk of bearing infants who are low birth weight or stillborn, or who die within the first year of life.[15] [16]

The Committee generally agreed on the importance of prenatal care but questioned whether the timing and distribution of visits or the pure number of visits is more predictive of positive health outcomes. Committee members asked why the measure has five categories (numbers of visits) rather than a simple yes/no criteria where everyone has to meet the same threshold. The Committee was concerned about the variability in reimbursement as a determinant of visit frequency and how case mix in a particular practice influences how a provider would score on this measure and also questioned feasibility of data collection since bundled or global payments are changing billing practices. Some Committee members argued that this measure is a crude instrument for measuring the quality of care (since it measures number of visits rather than

timing of visits), and that there has been opportunity for better objective testing. This measure meets the National Priorities of population health and care coordination.

1517: Prenatal and postpartum care (NCQA)

The percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year. For these women, the measure assesses the following facets of prenatal and postpartum care:

- *Rate 1: Timeliness of prenatal care. The percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester or within 42 days of enrollment in the organization*
- *Rate 2: Postpartum care. The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery*

The developer clarified that this measure is intended to measure the timeliness of the prenatal visits and the postpartum visit separately, in two rates. Committee members recognized that the postpartum visit is underutilized, especially among Medicaid patients, most likely due to a combination of lack of education of why these visits are important and the logistical challenges of getting to a visit. In commercial insurance populations, there are greater rates of postpartum visits, but the visits may not be as thorough as they could be. Committee members raised concerns about the lack of specificity for services that should be provided at the visit, including family planning and contraceptive use counseling, maternal depression screening, or follow-up screening for gestational diabetes. NCQA explained that it is interested in moving away from visit-based measures and examining the content of visits, but feasibility considerations led it to develop the visit measure. It is encouraging health plans to collect data by race/ethnicity so that measures can be stratified. This measure meets the National Priorities of population health and care coordination.

1382: Percentage of low birthweight births (Division of Vital Statistics)

The percentage of births with birthweight <2,500 grams

Infants born at low birth weight (LBW)—conventionally defined as a birth weight less than 2,500 grams—may experience severe health and developmental difficulties that can impose substantial costs. The expected costs of delivery and initial care of a baby weighing 1,000 grams at birth can exceed $100,000 (in year 2000 dollars), and the risk of death within 1 year of birth is greater than 1 in 5. Even among babies weighing 2,000-2,100 grams, who have comparatively low mortality rates, an additional pound (454 grams) of weight is still associated with a $10,000 difference in hospital charges for inpatient services.[17]

This population-level indicator is analyzed at the state or regional level, includes all births within the region, and can be stratified by any data collected on the birth certificate. The Committee agreed that caring for low-birth-weight babies is a major cost issue in healthcare but pointed out that the measure captures two populations (growth restricted neonates and premature babies) that have different causes and outcomes. Additionally, since there are clear differences by race and ethnicity for this measure, they questioned whether it should be a stratified measure as per NQF policy to assess disparities. The Committee discussed the sociological implications of stratified data, and the complexity of unraveling the variables (ranging from health problems to social issues) as possible causes for higher rates of low birth weight among African American women. The Committee asked the developer about the accuracy of birth certificate data, and the developer reported that race/ethnicity information is self-reported by the mother, and there is strong evidence that the birth weights are accurate. The Committee members recommended that this measure be stratified by singletons and multiple births and by birthweights of <1,500 grams and 1,500-2,500 grams, in addition to stratification for disparities. This measure meets the National Priority of population health.

1397: Sudden Infant Death Syndrome counseling (NCQA)

The percentage of children who turned 6 months old during the measurement year and who had sudden infant death syndrome (SIDS) counseling and proper follow-up

Sudden infant death syndrome (SIDS) is the most common cause of deaths among infants age 1 month to 1 year old; in the U.S. alone, 2,500 infants die from SIDS each year.[18] [19] The accepted definition of SIDS is "the sudden death of an infant under 1 year of age, which remains

unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history." A SIDS death is rare in the first month of life; the occurrence peaks between 2 and 3 months of age and continues to decline until it is no longer a threat at age 1.

While the Committee agreed SIDS counseling is important, they were concerned about the time frame of six months specified in the original submission. Committee members agreed that ideally, this counseling should occur before hospital discharge, such as when breastfeeding counseling occurs, and that counseling by six months is too late. The developer explained that the six-month mark was related to the sampling methodology but that the timeframe could be changed to the first pediatric visit. The developer agreed to revise the timing to have documentation of the counseling by age 4 weeks or the first visit, whichever comes first. The Committee noted that the measure does not address disparities. While the measure provides guidelines for counseling, the Committee noted that there is no recommended tool or method to standardize the specifications for "counseling." In the final, revised measure, the developer defined "counseling" more clearly. Committee members were concerned also that there are a certain number of cases that do not respond to counseling and traditional methods of prevention. This measure meets the National Priorities of population health, safety, and patient and family engagement.

1401: Maternal depression screening (NCQA)

The percentage of children who turned 6 months during the measurement year who had documentation of a maternal depression screening for the mother ~~and proper follow-up performed between 0 and 6 months of life~~

Maternal depression is one of the most common perinatal complications; however, the disorder often remains unrecognized, undiagnosed, and untreated.[20] The various maternal depression disorders are defined by the severity of the depression and the timing and length of the episode. Studies report that 3 percent to 25 percent of women experience major depression during the year following childbirth.[21] [22] Maternal depression is distinguished from the "baby blues," which is much more common but lasts only a few days and has little effect on functioning.[23] The

incidence of depression may be higher in women who already have young children.[24 25] Maternal depression can greatly affect mothers, their babies, and their families' well-being.

The Committee agreed this is an important issue with long-term implications for the health and development of both mother and child. The Committee's main concern with this measure was the question of whether pediatricians, OB/GYNs, or primary care providers are responsible for screening mothers. The Committee was concerned that a lack of clarity may lead to a duplication of services, or worse, no screening because everyone assumes it is someone else's responsibility. In addition, providers require informed consent from patients to share information about psychological health problems between responsible parties. The developer informed the Committee that all providers are responsible for screening. The U.S. Preventive Task Force (USPSTF) has given the evidence a B rating for depression screening.

The Committee discussed the link between the process of screening and the outcome (treatment, etc) and expressed concern that there is no system in place to automatically treat women who are diagnosed with depression, and that mental health services are costly and difficult for many to access. The developer explained that this is why the measure is only about screening and does not include follow up. There was concern about "stressing the pediatric system" with this type of measure if there is not proper infrastructure for proper follow-up. Several Committee members strongly recommended the measure in part because it would provide a better understanding of how many women have maternal depression and could therefore push the health system to provide adequate services and develop more effective treatment and intervention programs. Due to the lack of mental health services, many pediatricians currently become de facto mental health providers. The Committee decided that as a child health measure, follow-up with the mother plays less of a role in health outcomes; the issue of importance here is how the child is affected by the diagnosis and that screening for depression should be part of an environmental screen that includes other problems, such as lead screening. In response to questions, the developer did not address instances when the caregiver is not the mother; they had discussed including this in the exclusion criteria but deemed it unnecessary. A Committee member asked if it was possible to perform this measure without chart review, but the developer explained it had been considered

that but overruled it since the codes available were not specific enough. This measure meets the National Priorities of population health and care coordination.

SCREENING MEASURES

Newborn Screening

Measures Recommended

1351: Proportion of infants covered by newborn bloodspot screening (HRSA)

What percentage of infants had bloodspot newborn screening performed as mandated by state of birth?

One in 800 infants born each year has a newborn screening-detectable disorder, all of which can cause death or morbidity unless treated shortly after birth. The USPSTF recommends screening for phenylketonuria (PKU), congenital hypothyroidism, and sickle cell disease in all newborn infants. Most states screen for at least 26 metabolic abnormalities. There is good evidence that newborn bloodspot testing is highly accurate, leads to earlier identification and treatment of infants with metabolic disorders, improves developmental and overall health outcomes.

This population-level measure aligns with the Healthy People 2020 goals for newborn screening, as well as with the Secretary's Advisory Committee on Heritable Disorders, Bright Futures, and the Affordable Health Care Act Prevention Guidelines. The measure also meets state screening requirements (including allowing a parental waiver to opt out) and includes a minimum of 26 disorders screened as established by the laws in each state. Data for this measure are collected from the National Newborn Screening Information System. While the Maternal and Child Health Bureau (MCHB) version of this measure has been used for 20 years, the submitted measure has not been tested in this format, nor has it previously been tied to birth certificates. The Committee members were concerned about the lack of testing for this measure and the potential health and

financial impacts of allowing opt-outs. In addition, one Committee member raised concerns about confidentiality and genetic discrimination; but as the collected information is covered under HIPPA, the group decided this was not a concern. This measure was recommended for time-limited endorsement. This measure meets the National Priority of population health.

Hearing Screening

Measures Recommended

1402: Newborn hearing screening (NCQA)

The percentage of children who turned 6 months old during the measurement year who had documentation of newborn hearing screening by 3 months of age

Approximately 12,000 infants are born with a hearing problem in the U.S. every year.[26] Newborn hearing screening is mandated in every state.

This provider-level measure assesses the transfer of the results of hearing screening from the hospital to the primary care physician (PCP). The Committee was concerned that this measure specifies results by 6 months of age; and believed that 3 months would be more appropriate. The developer explained that it had tested the measure at 3 and 6 months, and the hospital discharge summary records the screening results. It also explained it had worked with the CDC to ensure this measure is harmonized with other hearing screening measures. The developer agreed to use the 3-month timeframe. This measure meets the National Priority of population health.

CDC Hearing Measures

CDC submitted a series of measures on hearing screening for newborns and infants. Some of these measures are new and are specified for electronic health records (EHRs). Three of the measures are well-established population-level measures using traditional data collection. The USPSTF recommends screening for hearing loss in all newborn infants. There is good evidence that newborn hearing screening testing is highly accurate and leads to earlier identification and treatment of infants with hearing loss. Good-quality evidence shows that early detection

improves language outcomes. In response to comments, CDC removed clinician as a level of analysis on the hearing screening measures.

1354: Hearing screening prior to hospital discharge (EHDI-1a) (CDC)

This measure assesses the proportion of births that have been screened for hearing loss before hospital discharge.

This measure is presented in two forms—the population-level measure that has been collected and reported on for more than a decade by states and nationally by the CDC and new EHR specifications. The Committee agreed that early intervention improves developmental and social outcomes for children, that this measure has typically high performance, and that appropriate follow-up is the biggest concern. The developers advised that although current performance has reached a high level in the past decade, small and rural hospitals may have trouble with this measure due to lack of resources. This measure meets the National Priority of population health.

1357: Outpatient hearing screening of infants who did not complete screening before hospital discharge (EHDI-1c) (CDC)

This measure assesses the proportion of all newborn infants who did not complete a hearing screen prior to discharge, who went on to receive an outpatient screen before the child was 31 days of age.

This new measure is specified for use with EHRs. The developer advised that hearing screening within 30 days is CDC's national objective and that the rate of infants not screened varies by state and may be as high as 6 percent. Data are collected nationally, though the state-level data is governed locally. The denominator population includes all babies born within a practice. The Committee wanted to know who is responsible for ensuring that the screen is completed. The developer responded that the hospital is generally responsible for completing the screening but that this varies by state, and the PCP is usually involved. The developer clarified that the measure includes children who are born outside the hospital. This measure is recommended for time-limited endorsement. This measure meets the National Priority of population health.

1360: Audiological evaluation no later than 3 months of age (EHDI-3) (CDC)

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.

Similar to measure 1354, this is a population-level measure that has been reported nationally and by states for more than a decade. The measure specifications also include a new EHR version. The Committee strongly supported the measures that address timely follow-up after screening. This measure meets the National Priority of population health.

1361: Intervention no later than 6 months of age (EHDI-4a) (CDC)

This measure assesses the proportion of infants with permanent hearing loss who have been referred to intervention services no later than age 6 months of age.

The measure developer advised the Committee that this measure is intended to focus on children with permanent hearing loss. The ideal is that infants are screened within one month of birth, diagnosed by three months, and interventions are in place by six months. While the title states "intervention," it actually means referral to services. The Committee was interested in follow-up actually occurring rather than a referral being made. The developer explained that HIPPA legislation makes it difficult to get information about referrals. One Committee member was concerned about the burden of reporting on a large number of measures on a similar topic; the developer explained it is developing EHR specifications to minimize burden. This measure meets the National Priority of population health.

Developmental Screening

Measures Recommended

1448: Developmental screening in the first three years of life (MCHB/CAHMI)

The percentage of children screened for risk of developmental, behavioral, and social delays using a standardized screening tool in the first three years of life. This is a measure of screening in the first three years of life that includes three age-specific indicators assessing whether children are screened by 12 months of age, by 24 months of age, and by 36 months of age.

Approximately 12 to 18 percent of U.S. children may have a developmental and behavioral problem. However, only about 2 percent of children from birth to 2 years old receive the necessary early intervention services.[27] A child who is developmentally challenged may face many barriers throughout life; these barriers are even more severe if a delay in development is not detected early. Delayed or disordered development can lead to further health and behavior problems, including failure in school and social and emotional problems.[28] Studies have shown that developmental surveillance based on non-standardized clinical judgment and observation alone does not accurately identify children with delays. Therefore, the Bright Futures national recommendations call for routine, standardized screening of children 3 times in the first 3 years (at the 9-, 18-, and 24- or 30-month well visit).

This measure identifies those at risk for developmental delays and is intended for use at plan or population level. The numerator is specified for either claims or medical chart data. The developer collaborated with NCQA to harmonize this measure with its autism screen measure. Although developmental screening may include autism screening, there are specific tools to screen for autism, and the screening schedule is different, so the developer's expert panel recommended they be split out. Committee members agreed with this exclusion. The developer commented that this measure is important because early identification of children at risk for delays can lead to interventions that prevent later delays. This measure meets the National Priorities for population health and care coordination and was recommended for time-limited endorsement.

1399: Developmental screening by 2 years of age (NCQA)

The percentage of children who turned 2 years old during the measurement year who had a developmental screening and proper follow-up performed between ~~6 months and 2 years of age~~12 and 24 months of age.

This clinician-level measure addresses developmental screening and follow-up between 6 months, 12 months, and 2 years of age. It is harmonized with and complementary with CAHMI

measure 1448. This measure is based exclusively on chart review. The developer explained that the measure submission form did not clearly explain that care can be provided by mid-level providers (i.e., nurse practitioners) as well as physicians. One Committee member suggested that the measure be expanded to age 3, because age 2 is too young to pick up delays in some children, such as speech delays that can be difficult to discern in immigrant children who may be learning multiple languages. The Committee asked about excluding patients who are already enrolled in an early intervention program. The developer explained that it would be difficult to exclude patients in intervention programs because of challenges in capturing data or weak documentation but said they could be an "exception." The developer explained the meaning of exclusion versus exception: an exclusion would never be appropriate to fall in the denominator, but an exception may be appropriate to include on occasion. The developer further explained that the age ranges chosen were based on a comprehensive set of services that should be provided by age 2. This measure meets the National Priority of population health.

1385: Developmental screening using a parent-completed screening tool (parent report, children 0-5) [from the National Survey of Children's Health, NSCH] (MCHB/CAHMI)

The measure assesses whether the parent or caregiver completed a developmental screening tool meant to identify children at risk for developmental, behavioral, and social delays. The items are age specific and anchored to parent-completed tools (a majority of healthcare providers implementing the Bright Futures recommendations for standardized screening for all children utilize parent-completed tools due to their validity and feasibility). The age-specific items assess whether children 10-71 months are screened.

The American Academy of Pediatrics recommends standardized screening using an approved screening tool as the best method of identifying children at risk for developmental, behavioral, or social delays. Nationally, only 19.5 percent of children age 10-71 months received all of the content to indicate that their parent or caregiver had completed a standardized developmental screening instrument to identify children at risk for developmental, behavioral, and social delays in the past 12 months.[29]

This is a population-level measured derived from the NSCH. The Committee questioned the reliability and validity of the screening tools and noted the similarities between this measure and the similar HEDIS measure. Several Committee members also asked questions about which tools are commonly used. The difference between this measure and the HEDIS measure relates to the levels of population versus provider. The developer made sure that both screening measures were aligned and harmonized. This measure meets the National Priority of population health.

These three measures (1448, 1399, and 1385) received comments regarding the differing age ranges specified by the measure developers and questioned the rationale of having three similar measures. Measure 1399 is a clinician-level measure, and 1448 is a population- or plan- level measure, and they are harmonized. The Committee agreed that clinician- and plan-level measures require an interaction with the health care system, whereas population measures may not. The Committee agreed to the measures' developers proposed changes to the specifications to clarify these issues. The developers have provided the following table to illustrate the differences among the three measures:

Measure Title:	1385: Developmental screening using a parent completed screening tool (Parent report, Children 0-5)	1448: Developmental Screening in the First Three Years of Life	1399: Developmental Screening by Age 2
Steward:	MCHB/CAHMI	CAHMI & NCQA	NCQA
Data Source:	Parent Report- National Survey of Children's Health (NSCH)	Claims/Medical Chart	Medical Chart
Unit(s) of analysis:	Population (national, State)	State	Clinician-level
Age of Child	Children between the ages of **10 months and 5 years (71 months)** at the time of the survey.	This is a measure of screening in the first three years of life that includes three, age-specific indicators assessing whether children are screened by 12 months of age, by 24 months of age and by 36 months of age.	Children screened between 12 and 24 months of age. (*Note: This physician level measure is in harmony with the state-level measure co-submitted by CAHMI & NCQA).*
Unique Criteria for	Children who, in the last 12	Children who are	Children who had

Inclusion in the Denominator:	mo., saw a provider for prev. medical care/dental care; received any treatment/counseling from a mental health professional; and/or saw a specialist.	enrolled continuously for 12 months	documentation of a face-to-face visit between the clinician and the child that predates the child's birthday by at least 12 months.

Vision Screening

Measures Recommended

1412: Pre-school vision screening in the medical home (American Academy of Pediatrics)

Percentage of pre-school aged children who receive vision screening in the medical home

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 fewer than 22 percent of preschool children receive some type of vision screening. Early screening can lead to the detection of amblyopia (2 percent to 5 percent), strabismus (3 percent to 4 percent), and significant refractive error (15 percent to 20 percent), the most prevalent and significant vision disorders of preschool children.[30 31 32 33 34]

Both the Technical Advisory Panel (TAP) and the Committee were concerned that this measure uses standard screening tools, which have low sensitivity (a high false negative rate) and may miss children who need follow-up. A limitation to the measure is that there are no CPT codes to identify different types of vision screening, and it is not clear how to capture patient or parent refusal of screenings. This measure is not yet tested and is recommended for time-limited endorsement. This measure meets the National Priority of population health.

The Committee compared measures 1398 and 1412 as competing measures. The differences between the two measures were clarified, including different exclusion criteria, the placement in a medical home or not, the age specifications, and the inclusion or lack of follow up. Committee members felt that measure 1412 was based on the medical home and patients were less likely to be overlooked. In a best-in-class comparison, the Committee voted to recommend 1412 over 1398.

Blood Pressure Screening

Measure Recommended

1553: Blood pressure screening by age 18 (NCQA)

The percentage of children who had a blood pressure screening

High blood pressure (hypertension) is a growing concern for children in the United States, due mostly in part to a rapid increase in childhood obesity.[35] A recent study of National Health and Nutrition Examination Survey data showed that, during the period from 2003-2006, 2.6 percent of boys and 3.4 percent of girls age 8 to 17 years had hypertension. Moreover, 13.6 percent of boys and 5.7 percent of girls in this age group had pre-hypertension.[36]

The Committee felt that this age group overlaps with adults for which the USPSTF gives an A recommendation for screening for hypertension in adults aged 18 years and older. This measure meets the National Priorities of population health and care coordination.

~~*Measure Without Consensus Recommendation*~~

1552: Blood pressure screening by age 13 (NCQA)

The percentage of children who had a blood pressure screening

The Committee stated that interpretation of blood pressure results in children is not straightforward, and the real issue is how blood pressure levels are interpreted in children. The Committee was concerned about the fact that the screening does not specify the need for

evaluating the results as blood pressure percentile. A Committee member noted that this measure could result in giving credit to physicians for completing screening even if they do not correctly interpret the results and identify abnormalities. A major concern among the Committee members was whether this screening actually identifies cardiovascular disease risks. After commenting, the Committee considered comments supporting this measure. The measure developer included use of percentiles in the specifications. The Committee agreed that blood pressure screening is important but that the need to use graphs to interpret the result in percentiles can be difficult, though this could be improved with automatic computation in an EHR. The Committee recommended this measure for endorsement after discussion of the comments. This measure meets the National Priorities of population health and care coordination.

Additional Screening Measures

Recommended Measure

1395: Chlamydia screening and follow-up (NCQA)

The percentage of female adolescents who turned 18 years old during the measurement year and who had a chlamydia screening and proper follow-up visit

Chlamydia trachomatis is the most common sexually transmitted bacterial infection in the United States.[37] Among women with chlamydial infection, 20 percent to 40 percent will experience pelvic inflammatory disease, 50 percent to 75 percent will experience tubal factor infertility if untreated, and 65 percent will experience an ectopic pregnancy if untreated.[38] [39] It is the leading cause of preventable infertility and, among other adverse pregnancy-related problems, can cause preterm birth, miscarriages, infant mortality, and neonatal chlamydial infections.[40] More than 900,000 chlamydial infections were reported to the Centers for Disease Control and Prevention (CDC) from 50 states and the District of Columbia in 2004. Since many cases are not reported or even diagnosed, it is estimated that there are actually 2.8 million new cases of chlamydia each year.[41]

This is a clinician-level measure. Steering Committee members had several comments and concerns regarding the measure and thought it would be very labor intensive and burdensome; they suggested that it may become more useful as EHRs become more prevalent. A Committee member questioned whether the sample used in testing the measure was a representative group of physicians. Committee members noted that several definitions in the measure need clarification, including "proper" follow-up and treatment and "sexually active." They were concerned with the exclusion of males (the Committee thought males, as primary carriers of chlamydia, also needed testing and treatment), and the specified age inclusion. Additionally, a Committee member asked what value the measure adds beyond the similar NQF-endorsed Healthcare Effectiveness Data and Information Set (HEDIS) measure.

The developer noted that this is a new measure that has just completed field testing. The developer stated that "sexually active" is based on the HEDIS definition. "Proper follow-up" refers to confirmatory testing and referral and treatment. The developer also noted that males are excluded from the measure because of the lack of evidence from the USPSTF. In differentiating the measure from endorsed measure 0033, the developer again noted the measure is part of an age 18 composite and adds a follow-up component that is not included in the endorsed measure. It was noted that the endorsed measure is already stratified between 2 age ranges (16-21 and 21-24), and this new measure captures ages 16-18 years. This measure meets the National Priorities of population health and care coordination.

GENERAL AND PREVENTIVE HEALTH

Weight/Body Mass Index (BMI)

Measures Recommended

1396: Healthy physical development by 6 years of age (NCQA)

1512: Healthy physical development by 13 years of age

1514: Healthy physical development by 18 years of age

The percentage of children who had a BMI assessment and counseling for physical activity, nutrition, and screen time

In the past 30 years, the prevalence of overweight and obesity has increased sharply for children. Among young people, the prevalence of overweight increased from 5 percent to 14 percent for those aged 2 to 5 years, 6.5 percent to 19 percent for those aged 6 to 11 years, and 5 percent to 17 percent for those aged 12 to 19 years.[42] The economic costs of obesity and related comorbidities have been estimated at over $70 billion, or 7 percent of the national healthcare budget.

The Committee agreed that every well-child visit should document BMI and that failing to talk to parents about abnormal weight is a problem. The Committee also agreed that providers are missing opportunities to address the growing obesity problem. However, Committee members were unsure whether counseling can affect the BMI outcome and were uncomfortable with the definition of counseling and the fact that counseling is notorious for poor documentation. Committee members thought starting at age 6 is too late and that the measure should start at age 2 or 3. They also expressed concern with the four-part numerator and thought it would be make measurement challenging. The developer explained that each measure includes four separate rates (BMI assessment, counseling for nutrition, physical activity, and screen times), and all children are intended to be included in the counseling, not just those who are overweight. The four rates are intended to be computed separately so that physicians could pass some parts of the measure but not fail if they did not complete all four sections. The Committee and the developer agreed that the testing of the measure was limited to a small group that is motivated to quality improvement. These measures meet the National Priorities of population health, patient and family engagement, and care coordination.

The Committee reviewed the NQF-endorsed measure 0024 "BMI screening for ages 2-18 years" that includes BMI screening for all ages but does not include counseling. The Committee noted that the counseling components of these candidate measures were not evidence based. The measure developer said that the USPSTF noted there was evidence for effectiveness of "intense" counseling and believed there was no harm in encouraging counseling.

1349: Child overweight or obesity status based on parental report of body mass index (BMI) [National Survey of Children's Health: NSCH] (MCHB/CAHMI)

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).

This population-level measure asks parents for the child's height and weight, and then BMI is calculated after data collection. The Committee noted that weight estimation issues will arise because of inaccurate reporting by parents of their child's weight. Evidence suggests that greater error in parental estimates of a child's weight occurs in the younger ages; therefore, the measure is limited to the age range within which parental reports are most accurate. A Committee member noted that there may be cultural influences on weight estimation. Additionally, a Committee member stated that younger children also should be reported on because intervention is easier to make in their early years. The developer also noted that reporting on obesity is underestimated by parents, not overestimated. Several comments were submitted questioning the accuracy of parental reporting. While Committee members agreed with this concern, others noted that this measure would be useful at the population level to analyze trends over time, and will assist in monitoring changes in the population. This measure meets the National Priority of population health.

1348: Children age 6-17 years who engage in weekly physical activity [NSCH] (MCHB/CAHMI)

Measures how many times per week child 6-17 years exercises vigorously (based on AAP and CDC recommendations)

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).

This population-level measure is related to obesity and general health status. A Committee member noted that parents are not with their school-aged children all day, and consequently their reports may be inaccurate. The measure developer advised the Committee that the age range reflects the range in the school-aged children section of the survey and does not include younger children. A Committee member asked if there were any seasonal effects on reporting and if the measure developer was taking into account that children may not exercise as much in the colder months. The developer stated that this effect is negligible. Similar to the previous measure, commenters raised concerned about the accuracy of parental report. This measure meets the National Priority of population health.

Immunization

Measures Recommended

1407: Adolescent immunization by age 13 (NCQA)

1506: Immunizations by 18 years of age (NCQA)

The percentage of adolescents who had proper immunizations

CDC's Advisory Committee on Immunization Practices (ACIP) currently recommends 3 vaccines for administration beginning with the 11-12-year-old checkup: Tdap, meningococcal vaccine, and HPV vaccine for both males and females. Older children should get the following vaccinations if they did not receive *all* recommended doses when younger: Hepatitis B series, Polio series, MMR series, and varicella series. The estimated vaccination rates (for at least 1 dose) for teens aged 13-17 years from the National Immunization Survey: 76 percent for Tdap or Td; 54 percent for meningococcal vaccine; and 44 percent for HPV.[43]

The Committee discussed these two similar measures together that assess immunization status at two ages. They are process measures to be reported at the provider level. The Committee asked questions about the sex and age range specifications for the HPV vaccination in the measures. Committee members also were concerned with the role of registries in data collection. One Committee member voiced concern that the measure specifies a Tdap vaccine rather than the more accurate Td vaccine. Additionally, Committee members questioned the extent to which the

usability and feasibility criteria have been met. Finally, the Committee asked the measure developer to differentiate this measure from the similar HEDIS immunization measure.

The developer explained that this measure is based on USPSTF specifications. In response to the Committee's question regarding the HPV age range and sex specifications, the developer stated that it would like to include parental consent for HPV for both age ranges (13 and 18), and that it has excluded males because of the lack of evidence from the USPSTF. The developer agreed to look into the issue of Tdap versus Td. Additionally, the developer noted that data should be easy to capture using registries. Finally, the developer stated that NCQA may consider including this measure in the HEDIS set. These measures meet the National Priorities of population health and care coordination.

Tobacco Exposure

Measure Recommended

1346: Children who are exposed to secondhand smoke inside home [NSCH] (MCHB/CAHMI)

Determines the percentage of children who live with a smoker and if that smoker smokes inside the child´s house

The effects of exposure to secondhand smoke can be nearly as damaging as chronic smoking. Additionally, use of tobacco products by household members has an adverse impact on the health of the children. Reducing the proportion of children exposed to secondhand smoke will drastically improve their short- and long-term health outcomes. Nationally, 7.6 percent of children aged 0-17 years are exposed to secondhand smoke inside their homes.[44]

This is a population-level measure from the NSCH. The Committee asked whether parents might be reluctant to answer the questions truthfully. A Committee member asked how this measure will account for differences in geographical location in relation to how parents answer the survey question. The measure developer added that socioeconomic, race, and ethnicity factors also will

influence the results. Because of these disparity factors, there must be a state-level as well as a federal-level focus on this topic. This measure meets the National Priority of population health.

Dental Health

In the year 2000, only 66.2 percent of Americans 2 years of age and older reported having a dental visit within the last year. For those in poverty, the rate was 47 percent.[45] The CDC estimates that in the United States approximately 40 percent of children have caries (tooth decay) by the time they enter kindergarten; more than 50 percent have caries by second grade, and 80 percent have caries by the time they graduate high school.[46] According to the recently released Surgeon General's Report on Oral Health, dental and oral disease are silent diseases that affect poor Americans—especially children and the elderly. Dental caries is the most common chronic childhood disease—five times more common than asthma. There are striking disparities in dental disease by income. According to a recent Government Accountability Office report, poor children had five times more untreated dental caries than children in higher-income families. More than 51 million school hours are lost each year to dental-related illness. Poor children suffer nearly 12 times more restricted-activity days than children from higher-income families. Pain and suffering due to untreated diseases can lead to problems in eating, speaking, and attending to learning. Additionally, because tooth decay and periodontal disease are progressive and cumulative, poor oral health and dental disease often continue from childhood into adulthood.

Measures Recommended

1388: Annual dental visit (NCQA)

The percentage of members 2-21 years of age who had at least one dental visit during the measurement year

This HEDIS health plan-level measure uses claims data. While the Committee saw this as an opportunity for health plans to work with dental providers, they were concerned about holding

health plans accountable, since plans cannot control whether a child sees a dentist; they can only make recommendations. The developer clarified that this measure only includes children with dental insurance coverage. This measure meets the National Priority of population health and care coordination.

1334: Children who received preventive dental care [NSCH] (MCHB/CAHMI)

Assesses how many preventive dental visits during the previous 12 months

This population-level measure is derived from the NSCH that asks parents about the dental care their child received. The measure developer confirmed that a respondent has the option to answer "I do not know." The measure developer confirmed that these data are being used nationwide, and the timeframe was changed to 12 months because of the national survey results. This measure meets the National Priority of population health and care coordination.

1335: Children who have dental decay or cavities [NSCH] (MCHB/CAHMI)

Assesses if children age 1-17 years have had tooth decay or cavities in the past 6 months

This is a population-level outcome measure from the NSCH. A Committee member asked if parents are expected to know if children have decay or cavities if they have not seen a dentist. The measure developer stated that there are numerous studies providing evidence for the benefits to children's health from assessing dental decay and cavities. This measure meets the National Priority of population health and care coordination.

1419: Primary caries prevention intervention as part of well/ill child care as offered by primary care medical providers (University of Minnesota)

The measure will a) track the extent to which the PCMP or clinic (determined by the provider number used for billing) applies FV as part of the EPSDT examination and b) track the degree to which each billing entity's use of the EPSDT with FV codes increases from year to year (more children varnished and more children receiving FV four times a year according to ADA recommendations for high-risk children).

One application of fluoride varnish (FV) will cut the caries rate by 50 percent, and a second application will cut it by another 50 percent.[47] Forty-three state Medicaid programs currently reimburse PCMP for FV as part of well- or ill-child care. The procedure takes little time – less than five minutes for a child with a full set of primary teeth—and is noninvasive. FV reverses demineralization and enhances remineralization of the enamel of the tooth. Both actions reduce caries.

This provider-level measure addresses how well primary care medical providers are providing preventive fluoride treatment for prevention of dental caries, at either the provider or health plan level. The Committee thought this measure would be both feasible and useful for encouraging more attention to dental care for CHIP and Medicaid patients. Because many dentists do not take Medicaid patients, this measure addresses the need for greater access to preventive dental care. In addition, some Committee members were concerned about holding a primary care provider accountable for dental care and about the long-term strategy for holding dentists accountable for this care. They also were concerned that the target age was too large; many states do not support funding for care through age 20. The developer confirmed that both AAP and the American Academy of Family Physicians (AAFP) support provision of FV to high-risk children by medical providers. This measure was recommended for time-limited endorsement and meets the National Priority of population health.

Mental Health

Measures Recommended

1394: Depression screening by 13 years of age (NCQA)

Children who had documentation in the medical record of depression screening by age 13 years

1515: Depression screening by 18 years of age

Children who had documentation in the medical record of depression screening by age 18 years

Major depressive disorder (MDD) affects more than 7 percent of adolescents in the United States. In 2006, about 2.3 million 12-17-year-old adolescents had had a major depressive episode in their life. Depression is much less common in children under the age of 11; MDD occurs in about 2.8 percent of children younger than 13 years old.[48 49] Children with MDD have higher medical expenditures, including general healthcare and mental health care, than children without.[50]

The AAP recently released a Mental Health Toolkit that supports primary care pediatricians treating adolescent depression, ADHD, and other mental health disorders. The Committee had originally voiced concern over the lack of specified, standardized tools for these measures. The developer presented revised specifications to include six standardized tools. NQF staff advised the Committee that should evidence change regarding the specified tools, an *ad hoc* review or revisions at the time of the three-year maintenance review could be made. The Committee noted that follow-up is very important but is not included in the measure. Another Committee member noted that although much more needs to be done, detection is the necessary first step. These measures meet the National Priority of population health.

1364: Child and adolescent major depressive disorder: diagnostic evaluation (AMA)

Percentage of patients aged 6 through 17 years with a diagnosis of major depressive disorder with documented evidence that they met the DSM-IV criteria [at least 5 elements with symptom duration of 2 weeks or longer, including 1) depressed mood (can be irritable mood in children and adolescents) or 2) loss of interest or pleasure] during the visit in which the new diagnosis or recurrent episode was identified

This practice-level measure assesses whether DSM-IV criteria are used to establish the diagnosis of MDD in children and adolescents. While the measure lacks a treatment step, it is the first step to diagnosis and referral for counseling or prescription medication. One Committee member mentioned that the DSM-V is due to be released in 2013 and asked what the implications for the measure are if there are changes. NQF staff explained that an *ad hoc* review could be undertaken if changes are made. The Committee was concerned that the current DSM does not specify symptoms for children clearly enough and that the levels of scientific evidence for DSM-IV

criteria vary. The developer disagreed with the criticisms of the DSM-IV and said the criteria for depression had been validated in young children. This measure was recommended for time-limited endorsement. This measure meets the National Priority of population health.

1406: Risky behavior assessment or counseling by age 13 years (NCQA)

Children who had documentation in the medical record of a risky behavior assessment or counseling by age 13 years

1507: Risky behavior assessment or counseling by age 18 years (NCQA)

Children who had documentation in the medical record of a risky behavior assessment or counseling by age 18 years

Adolescents are at risk for behaviors that include sexual activity and alcohol, tobacco, and substance use. Nationwide, 45 percent of students had at least 1 alcoholic beverage in the past month; 20 percent had used marijuana 1 or more times in the month; 7 percent had used some form of cocaine; 4 percent had used methamphetamine; 2 percent had used heroin; and 8 percent had used hallucinogenic drugs one or more times in their life.[51] The Youth Risk Behavior Surveillance national survey showed that, nationwide, 50 percent of teenagers have smoked at least 1 puff of a cigarette. Twenty percent of students in grades 9-12 are categorized as "currently smoking," and 10 percent smoked 10 or more cigarettes a day.[52]

The Committee questioned the extent of testing due to the small sample size and limited number of sites and whether the field test results are applicable to a broader population. They also expressed concerns that this measure requires adolescents to answer honestly, and thought that a paper screening tool may provide more honest results than a face to face questioning. The Committee noted while counseling for risky behaviors is very important and can be assessed in a larger questionnaire that covers multiple topics, there is limited evidence on relationship to outcomes, and there are privacy concerns. These measures meet the National Priorities of population health and care coordination.

~~***Measure Without Consensus Recommendation***~~

1365: Suicide risk assessment (AMA)

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

In 2006, suicide was the third leading cause of death for young people ages 15 to 24, accounting for 12 percent of all deaths annually in this age category. Of every 100,000 young people aged 10-14, 1.3 died by suicide. Of every 100,000 young people aged 15-19, 8.2 died by suicide. Among young adults ages 15 to 24 years old, there are approximately 100 to 200 attempts for every completed suicide. In 2007, 14.5 percent of U.S. high school students reported that they had seriously considered attempting suicide during the 12 months preceding the survey; 6.9 percent of students reported that they had actually attempted suicide one or more times during the same period.[53]

This process measure is intended to measure whether a suicide risk assessment was completed by providers. The Committee noted that the citations were based on adult studies, not adolescents, and found the links to better outcomes lacking. Evidence suggests that in most suicides, the individual has seen a mental health professional in the previous three weeks. Committee members expressed concerns about possible unintended consequences, such as the possible legal implications for a physician who documents suicide risk but does not follow up. Additionally, the assessment of suicide was not clearly specified. The Committee thought the measure needed clarification about screening tools for suicidal ideation and who is supposed to screen (i.e., mental health professional, ED physicians, PCPs, etc.), and wanted further information about how the measure should be used with EHRs. In response, the developer agreed the evidence was slim, explaining it had not specified a tool but instead intentionally left it broad so the provider could cater to the needs of the patient. The developer thought the best tool was discussion and conversation. Another Committee member stated that the USPSTF recommendation on this subject was inconclusive.[54] This measure meets the National Priority of population health. After review of the comments, the Committee voted to recommend this measure for time-limited endorsement by a narrow majority.

Care Visit Measures

Recommended Measures

1392: Well-child visits in the first 15 months of life (NCQA)

1516: The percentage of members 3–6 years of age who received one or more well-child visits with a PCP during the measurement year

Documentation must include a note indicating a visit to a PCP, the date when the well-child visit occurred, and evidence of all of the following.

- *a health and developmental history (physical and mental)*
- *a physical exam*
- *health education/anticipatory guidance*

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

Well-care child visits serve as the focal point for preventive services for children.[55] An analysis of the cost-effectiveness of recommended preventive services demonstrated that for a relatively small net cost, most preventive services produce valuable health benefits. Eighteen of the 25 preventive services evaluated cost $50,000 or less per quality-adjusted life year (QALY), and 10 of these cost less than $15,000 per QALY, all within the range of what is considered a favorable cost-effectiveness ratio.[56]

The Committee requested wording changed to include all licensed, independent practitioners, not just physicians. The developer explained that the measure is intended to include all types of primary care practitioners, including registered nurse practitioners (RNPs), physician assistants

(PAs) or MDs. The Committee also suggested the use of the term "medical home" to better harmonize with other measures. These measures are intended for use at the health plan level, for both commercial and Medicaid plans. They meet the National Priority of population health.

1333: Children who receive family-centered care [NSCH] (MCHB/CAHMI)

A composite measure designed to assess the family-centeredness of care delivery along several dimensions: whether doctor 1) partners with family in care, 2) listens to patient/parent carefully, 3) spends enough time with child, 4) is sensitive to family values/customs, 5) provides needed information, 6) whether family is able to access interpreter help, if needed.

Family-centered care (FCC) is a critical component in a child having a medical home, which has been recognized as an objective by the U.S. Department of Health and Human Services' Healthy people 2010. Additionally, medical home is one of the 18 national performance measures established for the state Title V programs HHS administers. Family-centered care recognizes that the family is a child´s main source of care and support and that the family´s needs and perspectives are important to clinical decision-making, which is associated with improved health outcomes for children.

This measure is formed from several survey questions. A Committee member was concerned with the varying perceptions that parents have of family-centered care. The Committee noted that a new "Medical Home CAHPS" survey is currently being field tested and contains similar questions. The measure developer advised the Committee that the CAHMI team is aware of the new CAHPS measure and offered comments during development. The CAHMI developers believe that their measure has distinct value at the population-level and are open to harmonization when the Medical Home CAPHS is finalized. Additionally, the population-level survey samples from the entire population while the CAPHS surveys require insurance coverage and a patient visit to be included in the survey. The measure developer also noted that this measure varies widely by race. This measure meets the National Priority of patient and family engagement.

1330: Children with a usual source for care when sick [NSCH] (MCHB/CAHMI)

Whether child has a source of care that is known and continuous (categorized as a doctor´s office, hospital outpatient department, clinic or health center, school, friend or relative, some other place, or a telephone advice line)

Nationally, 93.1 percent of children 0-17 years have a usual source for sick care. The importance of having a usual source of care has been recognized by the U.S. Department of Health and Human Services Healthy People 2020 (AHS HP 2020-6 Increase the proportion of persons who have a specific source of ongoing care). Having a usual source for care is also a critical component of the medical home.

A Committee member asked whether the measure counts school health centers or retail urgent care centers. The measure developer responded that this measure includes school nurse offices but not urgent care centers. Another Committee member suggested age stratification for this measure, noting that younger children often identify their usual sources of care as specific practitioners, whereas older children often identify school health centers. This measure meets the National Priority of population health.

Comments were submitted that noted that measures 1330 and1333 are similar to measure ***0724: Measure of medical home for children and adolescents*** recently endorsed in NQF's Child Health Outcomes project. The Steering Committee noted that these measures are actually components of the endorsed medical home measure and discussed whether there is sufficient value in having all three measures endorsed. Committee members suggested that the measures are perhaps overlapping, but not duplicative, and suggested that these measures would be useful in tracking changes over time as intermediate steps as a practice moves towards the medical home model.

1381: Asthma emergency department visits (Alabama Medicaid Agency)

Percentage of patients with asthma who have greater than or equal to one visit to the emergency room for asthma during the measurement period

Healthy People 2010 Objective 24-2 sets the following target rates for hospital ED visits for asthma in 2010: from an age-specific rate of 80 per 10,000 among children aged 0-4 years and from an age-standardized rate of 50 per 10,000 for children and adults 5-64 years. The California Breathing Initiative reports that ED visits for children from asthma varies by county from 25 to 164 per 10,000 residents in 2008.[57] The state of Rhode Island reports that the asthma ED visit rate for children under age 5 increased from 127.7 per 10,000 children aged 0-4 years in 2005 to 145.4 per 10,000 children under age 5 in 2008.[58]

This measure examines claims data at the population level (state and county), but the developer is interested in moving toward the provider level. A provider-level measure already has been used for quality improvement in Alabama. The Committee noted that the recent Child Health Outcomes project had recommended an asthma admission rate measure that was complimentary to this measure. The Committee liked that this measure looked at young children and that the measure can be stratified by age. However, members were concerned that it is possible to misdiagnose viral wheezing as asthma, particularly in children under 5 years old. The developer responded that this issue had been discussed in developing the measure and that the intent was to capture as many as asthma patients visiting the ER as possible. This measure was originally specified for ages 1-21, while the asthma admission measure specifies ages 2-17 years. The developer agreed to revise the denominator to start at age 2 years to harmonize the measure. This measure meets the National Priority of population health. In response to concerns raised during commenting, the Committee discussed that emergency room visits may be appropriate if a patient has not been diagnosed with asthma before. Committee members noted that this measure would assist in learning what percentage of patients had more than two emergency department visits and that this measure may be stronger if divided into two parts.

1337: Children with inconsistent health insurance coverage in the past 12 months [NSCH] (CAHMI)

Measures whether children are uninsured at the time of the survey or if currently insured children experienced periods of no insurance during past 12 months

Nationally, 15.1 percent of children did not have consistent health insurance coverage in the previous 12 months.[59] [60] Children with inconsistent health insurance coverage are more likely to have no usual source of care, fewer preventive medical visits, and unmet medical or prescription needs than children who are consistently insured. Inconsistent insurance coverage can have serious consequences for children with ongoing conditions.

This population-level measure combines two populations: 1) children with no health insurance coverage at all and 2) children with inconsistent health insurance coverage. A Committee member asked if the survey respondents are provided with a particular definition of insurance before answering the questions. Another Committee member asked if the survey included questions about insured parents affording cost sharing. The measure developer noted that the survey does not distinguish between public and private health plans, and this measure helps policymakers understand how damaging inconsistent coverage is to child health. The measure developer also stated that there is a significant amount of state-to-state variation for this measure, and that it is currently one measure. A comment was submitted stating that the Current Population Survey collects this information on health coverage, and questioned the necessity of endorsing this measure as a second method of collecting such information. The measure developer stated that this measure allows for stratification that the survey does not, and that this measure identifies gaps in coverage. This measure meets the National Priority of population health.

1332: Children who receive preventive medical visits [NSCH] (MCHB/CAHMI)

Assesses how many medical preventive visits in a 12-month period, such as a physical exam or well-child checkup (does not include visits related to specific illnesses)

A Committee member noted that problems arise because parents define preventive visits differently. The Committee stated that the data submitted with this measure are inadequate and expressed a wish to see more evidence-based data. Comments were submitted stating that the measure was duplicative of an Early Periodic Screening, Diagnosis, and Treatment (EPSDT) measure and that the language "preventive medical visits" is confusing. Committee members explained that the EPSDT measure is for Medicaid patients only (about 30% of children);

whereas this particular measure would encompass all children. The developer noted that the survey question language is actually similar to "Well Child" and "Check-Ups" to prevent parental confusion. The developer assured the Committee that the cognitive tests conducted on the survey question supported good understanding. This measure meets the National Priority of population health.

Measures from the National Survey of Children with Special Health Care Needs (NSCSHCN)

Measure Recommended

1340: Children with special healthcare needs who receive services needed for transition to adult healthcare [NSCSHCN] (MCHB/CAHMI)

Whether children with special healthcare needs (CSHCN) ages 12-17 have doctors who usually/always encourage increasing responsibility for self-care AND (when needed) have discussed transitioning to adult healthcare, changing healthcare needs, and how to maintain insurance coverage

According to the MCHB, all youth with special healthcare needs should receive the services necessary to make appropriate transitions to adult healthcare, work, and independence. Youth with special health care needs (YSHCN) who transition without specific transition services are more likely to have poor outcomes compared to their peers, including insurance inconsistency, higher rates of hospitalization and advanced care, and not achieving adult social roles. Two-thirds of YCSHCN experience at least one of the following adverse transition events: (1) no usual source of care, (2) unmet need for healthcare, (3) delay in care the last six months, (4) uninsured or inconsistency in insurance coverage. Therefore, this is a critical issue to address through transition to adulthood services to help YCSHCN successfully transfer into young adulthood.

This population-level measure from the NSCSHCN assesses whether an adolescent has discussed transitioning to adult healthcare, changing healthcare needs, and how to maintain insurance coverage. A Committee member emphasized the importance of the medical home as a transition planning indicator. This measure meets the National Priority of population health.

TABLE 2. MEASURES NOT RECOMMENDED

Measure	Reason for not recommending
1403: Newborn bloodspot screening (NCQA) *The percentage of children who turned 6 months old during the measurement year who had documentation of a newborn metabolic screening test results by 6 months of age*	The Committee noted that action on abnormal results must occur immediately to prevent severe mental deficiencies and that chart review 3 or 6 months after birth is only a documentation measure.
1417: Screening for hyperbilirubinemia in term and near term neonates (Hospital Corporation of America) *Percentage of newborn infants > 2500g birthweight who receive either serum or transcutaneous bilirubin screening prior to hospital discharge*	Did not meet importance criteria due to limited impact of an infrequent condition (kernicteris); USPSTF recommendation of "I" – insufficient evidence for serum screening for bilirubin; and lack of cost-benefit evidence.
1356: **Hearing screening refer rate at hospital discharge (EHDI-1b) (CDC)** *This measure assesses the proportion of all newborn infants who fail initial screening and fail any subsequent re-screening before hospital discharge.*	This untested measure is intended to identify problems with screening protocols or the machines. The Committee concluded that this was a quality control measure and not a performance metric.
1358: Infants identified with risk factors for hearing loss within the medical home (EHDI-2a) (CDC) *This measure assesses the percent of infants in a practice that have completed risk factor analysis for delayed onset or progressive hearing loss.*	This untested measure identifies children who originally passed a newborn screen who have progressive or late onset hearing loss in infancy.
1359: Infants identified with risk factors for hearing loss and have an audiological diagnosis (EHDI-2b) (CDC) *This measure assesses the proportion of young*	The developer withdrew this measure because it is the follow-up to the previous measure, 1358.

children in a practice that have an identified risk factor for delayed onset or progressive hearing loss and have an audiological diagnosis.	
1362: Referral to intervention within 48 hours (EHDI-4b) (CDC) *This measure assesses the proportion of infants and young children referred to intervention within 48 hours of the confirmation of permanent hearing loss.*	The Committee was concerned that 48 hours may not be a realistic amount of time for a referral to be completed. The Committee did not understand why diagnosis could take up to three months, but referral needed to happen so quickly; untested measure.
1341: Autism screening (NCQA) *The percentage of children who turned 2 years old during the measurement year who had an autism screening and proper follow-up performed between 6 months and 2 years of age*	The autism diagnostic criteria are not well established, and the existing evidence for screening is weak. The evidence for the measure was primarily drawn from the autism spectrum disorder literature because of the lack of autism specific evidence.
1398: Vision screening by 6 years of age (NCQA) *Vision Screening By 6 years of age*	In comparison of competing measures, the Committee preferred measure 1412 because of the age 5 years specification, and the administrative data source.
1511: Vision screening by 13 years of age (NCQA) *Percentage of children with documentation of vision screening*	The Committee felt that this measure was too late and that problems needed to be caught sooner to prevent learning difficulties.
1513: Vision screening by 18 years of age *Percentage of children with documentation of vision screening*	The Committee felt that this measure was too late and that problems needed to be caught sooner to prevent learning difficulties.
1393: Blood pressure screening by age 6 (NCQA) *The percentage of children who had a blood pressure screening*	The Committee noted significant concerns with accurately measuring blood pressure in young children and then properly interpreting the results.
1404: Lead screening (NCQA) *The percentage of children 2 years of age who had 1 or more venous blood tests for lead poisoning by their 2nd birthday*	The Committee noted that CDC recommendations for lead screening (August 2009) depend on local risk for lead exposure and are not universal.
1400: Environmental tobacco assessment and counseling (NCQA) *The percentage of children who had an environmental tobacco assessment and counseling and proper follow-up performed*	Comparison with endorsed measure 0026, the Committee noted this provider-level measure also is based on chart review; effective counseling is difficult to document; and it does not provide additional value to the portfolio.
1405: Oral health access (NCQA) *Children who had documentation in the medical record of oral health screening by age 2 years. Documentation must include a note indicating the*	The Committee thought the target population would be too difficult to define for a provider-level measure, and the developer agreed this was a challenge. The Committee was also

date and at least one of the following: *• a dental treatment performed by the primary care clinician* *• a risk assessment performed by the primary care clinician* *• patient referral to a dentist* *• parental statement or other documentation indicating a dental visit took place*	concerned about attribution and suggested that the measure needed to be either expanded or limited.
1411: Adolescent well care (NCQA) *The percentage of enrolled members 12–21 years of age who had at least 1 comprehensive well-care visit with a PCP or an OB/GYN practitioner during the measurement year*	The Committee noted that parents have less control over adolescents' behavior and compliance with healthcare. Ages 18-21 years are transitioning to adult care or care at college or other sites.
1390: Child and adolescents' access to primary care practitioners (NCQA) *The percentage of members 12 months–19 years of age who had a visit with a PCP. The organization reports four separate percentages for each product line:* • *children 12–24 months and 25 months–6 years who had a visit with a PCP during the measurement year* • *children 7–11 years and adolescents 12–19 years who had a visit with a PCP during the measurement year or the year prior to the measurement year* • *primary care is defined as integrated and accessible care from physicians, nurse practitioners, or other qualified providers who are accountable for a wide range of personal health care needs, who have a relationship with patients, and practice in the context of the family and community (Agency for Healthcare Research and Quality, 2007).*	The Committee concluded that this measure reflects utilization and not access. To assess access, patients must be questioned about whether they have any access difficulties.
1329: Children who have a personal doctor or nurse [NSCH] (MCHB/CAHMI) *Whether child has one or more doctors, nurses, or other healthcare providers who know the child well*	The Committee noted that this measure is only one component of the medical home. The measure for Medical Home was endorsed in the Child Health Outcomes project in 2010.
1344: Children who have problems accessing needed specialist care [NSCH] (MCHB/CAHMI) *Measures how many children needed to see a specialist but had problems receiving specialist care in the past 12 months*	The developer advised that this measure is not related to *OT3-036-10: Children who have problems obtaining referrals when needed*, that was previously endorsed by the Outcomes—Child Health project in 2010. Committee members noted that this measure

	has many dimensions and that what the measure assesses may be unclear. Committee members commented that this measure involves the subjective issue of "wanted" versus "needed" care.
1347: Children who needed and received mental health services [NSCH] (MCHB/CAHMI) *Assesses if children age 2-17 years old who have an emotional, developmental or behavioral problem requiring treatment or counseling actually received services from a mental health professional in the past 12 months*	The Committee agreed that certain definitions may be unclear, such as "treatment," "receiving counseling," and "mental health provider." Specifically, a Committee member noted that "receiving counseling" should specify whether or not depression was treated.
1350: Emergency room visits (MCHB/CAHMI) *Measures the number of times a child visited the emergency room in the past 12 months*	The Committee felt this was only a crude proxy for poor general medical care, as appropriateness of the ED visit was not assessed.
1343: Children whose family members had to cut back or stop working due to child´s health [from NSCSHCN] (MCHB/CAHMI) *Measure to assess whether a family member had to cut back or stop working due to child´s condition*	The Committee agreed that this is important; however, it seems to be more a societal issue that a quality-of-care problem.
1331: Community-based service systems are organized so that families of children with special healthcare needs can easily use them [NSCSHCN] (MCHB/CAHMI) *The measure describes the percentage of CSHCN who have families who have encountered difficulties or delays in accessing healthcare services for their children in the past 12 months*	The Committee noted that the affected numbers are small; community variation in availability of services is outside the healthcare system; and parents' interpretation of "easily" may reflect a variety of issues such as transportation, operating hours, etc.
1345: Children with special healthcare needs screener [NSCSHCN] (MCHB/CAHMI) *The CSHCN Screener is a validated tool for identifying children who have ongoing health conditions. It is a non-condition-specific screener that operationalizes the Maternal and Child Health Bureau definition of children with special healthcare needs. Specifically, children who currently experience one or more of five common health consequences: (1) need or use of prescription medications; (2) an above routine use of services; (3) need or use of specialized therapies or services; (4) need or use of mental health counseling; (5) a functional limitation; due to a physical, mental, behavioral, or other type of health condition lasting or*	The Committee agreed that this screener is well tested at the health plan and national levels and is used by many practices as a tool for identifying CSHCN, but does not assess quality of care.

expected to last at least 12 months are identified as having special healthcare needs.	
1338: Children with special healthcare needs who are screened early and continuously for emerging conditions [NSCSHCN] (MCHB/CAHMI) *Children with special healthcare needs (CSHCN) receiving both preventive medical and dental care during the past 12 months*	The Committee agreed that this measure lacks evidence of relationship to outcomes.
1373: Children with special healthcare needs whose parents report participating in shared decisionmaking in child´s care [NSCSHCN] (MCHB/CAHMI) *Measures whether parent is actively engaged as a partner by healthcare providers in CSHCN´s care*	The Committee was concerned whether parents understand what is meant by shared decisionmaking and how parent willingness to participate in decisionmaking affects the results. In addition, the measure has not completed testing.

ADDITIONAL RECOMMENDATIONS

Recommendations for Measure Development

In March 2011 the Secretary of Health and Human Services recently released the National Quality Strategy (NQS)[61] that will promote quality health care in which the needs of patients, families, and communities guide the actions of all those who deliver and pay for care. The child health measures recommended in this report generally support **NQS#5 Supporting Health in Communities** in which the goal is to support every community as it pursues its local health priorities. Needs remain for measures that address the other priorities, as well. The opportunities for success include increasing the provision of clinical preventive services for children and increasing the adoption of evidence-based interventions to improve health. Additionally, many of the population-level measures in this report provide communities with information about the health of their local population.

Harmonized measures at multiple levels of analysis

Harmonized measures at the provider, facility, and plan levels are needed to support the population-level measures and provide actionable information that will improve population health. Further development and testing of population-level measures for application at provider

levels of analysis could quickly create harmonized measures that can be used at multiple levels of analysis. A group of harmonized measures at multiple levels of analysis can work together to identify potential actions with the greatest likelihood of driving quality improvement and making overall gains in the health of populations.

Measures addressing the NQS and NPP priorities

Stakeholders have identified the need for additional child health measures that address other priorities from the NQS and NPP:

NQS Priority	Recommendations for Measure Development
#1 Safer Care	• Measures of patient safety such as medication reconciliation and adverse event reporting and health-care acquired infections should apply to all ages, including infants, children and adolescents.
#2 Effective Care Coordination	• Access to specialty care in their community (those with public, private or no insurance). • Access to mental health services in community (for children/youth with public, private or no insurance. • Measures of patient-provider interaction and care coordination measures including measures that reflect the interaction between families, their medical home, and hospital/specialty care. Such measures might include those related to capturing information regarding Emergency Department (ED) visits; ambulatory care sensitive admissions (ACSAs); hospital readmissions; duplication of services/testing; as well as measures of efficiency, such as lost parent work/child school time for health and health care.
#3 Person- and Family-Centered Care	• Measures that reflect the interaction between families, their medical home, and hospital/specialty care • Measures of family-centered care • Indirect measures of health such as measurement of school health and performance and the use of family intactness or structure and support for the consideration of the child mental health determinants. • Access to help with parenting skills/training for

	parents • Housing status of child and family (i.e. safety, stability • Measures of health literacy
#4 Prevention and Treatment of Leading Causes of Mortality [for children and adolescents] [62]**:** 0-1 years: • Developmental and genetic conditions that were present at birth • Sudden infant death syndrome (SIDS) • All conditions associated with prematurity and low birth weight 1-4 years: • Accidents • Developmental and genetic conditions that were present at birth • Cancer 5-14 years: • Accidents • Cancer • Homicide 15-24 years: • Accidents • Homicide • Suicide	• Injury prevention counseling provided to parents/ child e.g. life jacket, bike helmet, booster seat use. • Child maltreatment/personal safety concerns in family • Measures related to safety and injury prevention
#5 Supporting Better Health in Communities	• Measures that address the quality of care delivered within a well-child visit rather than just the visit count. • Screening for diabetes • Asthma care, including measures such as: o Percentage of patients with asthma admitted to the ED who received chronic severity assessment (or who had documentation of chronic severity assessment in the medical records. o Percentage of patients with poorly controlled asthma admitted to the ED who received appropriate controller medications. o Percentage of patients/parents with asthma admitted to the ED who participated in asthma education class. o Percentage of patients/parents with asthma admitted to the ED who received a scheduled follow-up appointment with a primary care provider or an asthma specialist at discharge. o Percentage of patients with asthma admitted to the ED who received a written

	asthma action with instructions regarding use of rescue medications, how to avoid asthma triggers, how to recognize and handle acute asthma exacerbations, and how and when to seek emergency care • Measure development related to school success, such as screening questions for school-age children or those children at high-risk of dropping-out of school, given the well-documented association between high risk health behaviors and school failure. • Measures that address disparities, particularly for children from abusive families or foster homes, undocumented children (several millions), and children living in inner-city and rural areas with insufficient resources and poor access to health care. • Nutritional issues before six years of age. Such measures include those pertaining to breastfeeding (beyond those already endorsed by the NQF, such as measure #0480 Exclusive Breastfeeding at Discharge), as well as measures that would serve to provide information on children over two years of age with Body Mass Index (BMI) of 95% or greater. • Measurements in mental health, outcomes and pediatric minority populations.
#6 Making Care More Affordable	

1319

Additional NPP Priorities	**Recommendations for Measure Development**
Palliative Care	• Palliative care for children and adolescents
Appropriate use/overuse	

1320

NOTES

1. National Quality Forum (NQF), *National Priorities Partnership*, Washington, DC: NQF. Available at www.nationalprioritiespartnership.org. Last accessed January 2011.

2. NQF, *Measure Evaluation Criteria*, Washington, DC: NQF; 2008. Available at www.qualityforum.org/docs/measure_evaluation_criteria.aspx. Last accessed January 2011

[3] Report to Congress: National Strategy for Quality Improvement in Health care, March 2011 http://www.healthcare.gov/center/reports/quality03212011a.html

[4] George Isham, MD, MS, medical director and chief health officer, HealthPartners, Bloomington, MN, and co-chair of the National Priorities Partnership Workgroup on Population Health.

[5] Martin JA, Hamilton BE, Sutton PD et al. Births: Final data for 2007. National vital statistics reports, vol 58 no 24, August 2010.

[6]Alexander GR, Kogan MD, Nabukera S. 2002. _Racial Differences in Prenatal Care Use in the United States: Are Disparities Decreasing? American Journal of Public Health 92 (12): 1970–5.

[7]American Academy of Pediatrics. Task Force on Sudden Infant Death Syndrome. The Changing Concept of Sudden Infant Death Syndrome: Diagnostic Coding Shifts, Controversies Regarding the Sleeping Environment, and New Variables to Consider in Reducing Risk. Pediatrics Vol. 116 No. 5 November 2005, pp. 1245-1255

[8] National Center for Hearing Assessment and Management. Loss to follow-up threatens success of newborn hearing screening programs. Available at: www.infanthearing.org/newsletter/backissues/si v5n3.pdf. Accessed April 12, 2006.

[9]Bethell C at al. Partnering with parents to promote the healthy development of young children enrolled in Medicaid. New York NY: The commonwealth Fund, 2002.

[10]Kaplan JP et al. In Preventing Childhood Obesity: Health in the Balance. Ed. Washington, DC: National Academy of Sciences. 2005.

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

[12] Holm-Hansen C. Racial and ethnic disparities in children's mental health. Available at http://www.wilder.org/reportsummary.0.html?tx_ttnews percent5Btt_news percent5D=1964. Updated 2006 Last accessed April 2011.

[13] Schor EL. The future pediatrician: promoting children's health and development. Partnership for prevention. Preventive Care: A national profile on use, disparities, and health Benefits. November 2007.

14. Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion. *Safe Motherhood: Promoting Health for Women Before, During, and After Pregnancy*, Atlanta, GA:CDC, 2008. Available at www.cdc.gov/NCCDPHP/publications/aag/pdf/drh.pdf. Last accessed January 2011.

15. Department of Health and Human Services, National Center for Health Statistics, Division of Vital Statistics, *Summary Health Statistic for U.S. Children: National Health Interview Survey, 2009*. Available at http://www.cdc.gov/nchs/data/series/sr_10/sr10_247.pdf. Last accessed January 2011.

16. Vintzileos A, Ananth CV, Smulian JC, et al. The impact of prenatal care on postneonatal deaths in the presence and absence of antenatal high-risk conditions, *Am J Obstet Gynecol*,2002; 1187(5):187(5):1258-1262.

17. Almond D, Chay KY, Lee DS. *The Costs of Low Birthweight*. Cambridge, MA:National Bureau of Economic Research, 2004. Available at www.nber.org/papers/w10552. Last accessed January 2011.

18. The Nemours Foundation. *Sudden Infant Death Syndrome (SIDS)*. Jacksonville, FL: Nemours Foundation, 2008. Available at http://kidshealth.org/parent/general/sleep/sids.html. Last accessed January 2011.

19. American Academy of Pediatrics, Task Force on Sudden Infant Death Syndrome, The changing concept of sudden infant death syndrome: diagnostic coding shifts, controversies regarding the sleeping environment, and new variables to consider in reducing risk, *Pediatrics,* 2005;116(5): 1245-1255.

20. VanLandeghem K, *Financing Strategies for Medicaid Reimbursement of Maternal Depression Screening by Pediatric Providers*. Portland, ME: National Academy for State Health Policy, 2006. Available at http://www.nashp.org/node/134. Last accessed January 2011.

21. Gaynes BN, Gavin N, Meltzer-Brody S, et al., *Perinatal Depression: Prevalence, Screening Accuracy, and Screening Outcomes*. Summary, Evidence Report/Technology Assessment No. 119, Rockville, MD: Agency for Healthcare Research and Quality; 2005. Available at http://www.ncbi.nlm.nih.gov/books/NBK37740/. Last accessed January 2011.

[22] Kessler RC, McGonagle KA, Zhao S, et al., Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. Results from the National Comorbidity Survey, *Arch Gen Psychiatry*; 1994;51(1):8-19.

23. Hagan Jr JF, Shaw JS, Duncan P, eds, *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*, 3rd ed, Elk Grove, IL: American Academy of Pediatrics;2008.

24. VanLandeghem, 2006.

25. Gaynes BN, 2005.

26. Center for Disease Control and Prevention (CDC). *Early Hearing Detection & Intervention (EHDI) Program*. Atlanta, GA:CDC; 2010. Available at http://www.cdc.gov/ncbddd/hearingloss/index.html. Last accessed January 2011.

27. Hix-Small H, Marks K, Squires J, et al., Impact of implementing developmental screening at 12 and 24 months in a pediatric practice, *Pediatrics*, 2007;120(2):381-389.

28. Council on Children With Disabilities; Section on Developmental Behavioral Pediatrics; Bright Futures Steering Committee; Medical Home Initiatives for Children With Special Needs Project Advisory Committee, Identifying infants and young children with developmental disorders in the medical home: an algorithm for developmental surveillance and screening, *Pediatrics*, 2006;118(1):405-420.

29. Bethell C, Reuland CH, Halfon N, et al., Measuring the quality of preventive and developmental services for young children: national estimates and patterns of clinicians' performance. *Pediatrics*, 2004;113(6 suppl):1973-1983.

30. National Institutes of Health, National Eye Institute (NEI), *Vision in Pre-Schoolers Study*,, Bethesda, MD: NEI, 2010. Available at http://www.nei.nih.gov/neitrials/static/study85.asp. Last accessed January 2011.

31. Rahi J, Logan S, Timms C, et al., Risk, causes, and outcomes of visual impairment after loss of vision in the non-amblyopic eye: a population-based study, *Lancet* , 2002;360(9333):597–602.

32. Chua B, Mitchell P, Consequences of amblyopia on education, occupation, and long term vision loss. *Br J Ophthalmol*, 2004;88(9):1119–1121.

33. Coats DK, Paysse EA, Towler AJ, et al., Impact of large angle horizontal strabismus on ability to obtain employment, *Ophthalmology*, 2000;107(2):402–405.

34. Uretmen O, Egrilmez S, Kose S, et al., Negative social bias against children with strabismus, *Acta Ophthalmol Scand*, 2003;81(2):138–142.

35. Luma GB, Spiotta RT, Hypertension in children and adolescents, *Am Fam Physician 2006;*78(9):1052-1058.,

36. Ostchega Y, Carroll M, Prineas RJ, et al., Trends of elevated blood pressure among children and adolescents: data from the National Health and Nutrition Examination Survey 1988-2006. *Am J Hypertens*, 2009;22(1): 59-67.

37. U.S. Preventive Services Task Force (USPTF), Screening for chlamydial infection: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med*, 2007;147(2):128-134.

38. Mangione-Smith R, O'Leary J, McGlynn EA, Health and cost-benefits of chlamydia screening in young women, *Sex Transm Dis*, 1999;26(6):309-316.

39. Sellors JW, Mahony JB, Chernesky MA, et al., Tubal factor infertility: an association with prior chlamydia infection and asymptomatic salpingitis, *Fertil Steril,* 1998;49(3):451-457.

40. USPSTF, 2007.

41. Weinstock H, Berman S, Cates W. Sexually transmitted diseases among American youth: incidence and prevalence estimates, 2000. *Perspect Sex Reprod Health,* 2004;36(1):6-10.

42. Hagan Jr JF, 2008.

43. Centers for Disease Control and Prevention (CDC). Recommendations and Guidelines: Vaccines Needed by Teens and College Students. Atlanta, GA:CDC;2010. Available at www.cdc.gov/vaccines/recs/schedules/teen-schedule.htm Last accessed January2011.

44. Child and Adolescent Health Measurement Initiative (CAHMI). *2007 National Survey of Children´s Health, Data Resource Center for Child and Adolescent Health*. Portland, OR:CAHMI. Available at www.cshcndata.org/Content/Default.aspx. Last accessed January 2011.

45. CDC: Health, United States, 2002. Atlanta, GA:CDC. Available at http://www.cdc.gov/nchs/hus.htm. Last accessed January 2011.

46. Hale KJ, American Academy of Pediatrics Section on Pediatric Dentistry, Oral health risk assessment timing and establishment of the dental home, *Pediatrics*, 2003: 111(5 pt 1):1113-1116.

47. Weintraub JA, Ramos-Gomez F, Jue B, et al., Fluoride varnish efficacy in prevention early childhood caries, *J Dent Res,* 2006; 85(2):172-176.

48. Williams SB, O'Connor, E, Eder M, et al., Screening for Child and Adolescent Depression in Primary Care Settings: A Systematic Evidence Review for the U.S. Preventive Services Task Force (USPSTF).*Pediatrics*, 2009;123(4):1223–1228.

49. U.S. Preventive Services Task Force, Screening and treatment for major depressive disorder in children and adolescents: U.S. Preventive Services Task Force Recommendation Statement, *Pediatrics*, 2009;123:1223–1228.

50. USPSTF, 2009.

51. Hagan Jr JF, 2008.

52. Ibid.

53. Centers for Disease Control and Prevention (CDC). Suicide: Facts at a Glance. Atlanta, GA:CDC;2009. Available at http://www.cdc.gov/ViolencePrevention/pdf/Suicide-DataSheet-a.pdf. Last accessed August 2010.

[54] US Preventive Services Task Force. Recommendation: Screening for suicide risk. Available at http://www.uspreventiveservicestaskforce.org/uspstf/uspssuic.htm. Last accessed April 2011.

55. Nevin JE, Witt DK, Well child and preventive care, *Prim Care, 2002;* 29(3): 543-555.

56. Schor EL. The future pediatrician: promoting children's health and development, J Pediatr, 2007;151(5 suppl):S11-S16.

57. California Breathing, *Asthma ED Visits, Children, 2008*. Richmond, CA: California Breathing, January 2011. Available at www.californiabreathing.org/asthma-data/county-comparisons/edvisits-children. Last accessed January 2011.

58. Everage NJ, Pearlman DN, Sutton N, Asthma hospitalization and emergency department visit rates: Rhode Island's progress in meeting Healthy People 2010 goals, *Med Hlth R.I.*, 93(6):184-186. Available at www.rimed.org/medhealthri/2010-06/2010-06-184.pdf. Last accessed January 2011.

59. Olson LM, Tang SF, Newacheck PW, Children in the United States with discontinuous health insurance coverage, *New Engl J Med*, 2005;353(4):382-391.

60. Child and Adolescent Health Measurement Initiative (CAHMI). *2007 National Survey of Children´s Health, Data Resource Center for Child and Adolescent Health*. Portland, OR:CAHMI. Available at www.cshcndata.org/Content/Default.aspx. Last accessed January 2011.

[61] Report to Congress: National Strategy for Quality Improvement in Healthcare, March 2011; http://www.healthcare.gov/center/reports/quality03212011a.html#sect2

[62] US National Library of Medicine, MedlinePlus: http://www.nlm.nih.gov/medlineplus/ency/article/001915.htm accessed March 31, 2011

NATIONAL QUALITY FORUM

NATIONAL VOLUNTARY CONSENSUS STANDARDS FOR CHILD HEALTH QUALITY MEASURES 2010

APPENDIX A: MEASURE SPECIFICATIONS

The following table presents the detailed specifications for the Nation Quality Forum (NQF)-endorsed® *National Voluntary Consensus Standards Child Health Quality Measures 2010.* All information presented has been derived directly from measure sources/developers without modification or alteration (except when the measure developed agreed to such modification during the NQF Consensus Development Process) and is current as of ~~January 14~~April 22, 2011. All NQF-endorsed voluntary consensus standards are open source, meaning they are fully accessible and disclosed. Measures stewards include the Alabama Medicaid Agency; American Academy of Pediatrics (AAP); American Medical Association (AMA); Centers for Disease Control and Prevention (CDC); the Maternal and Child Health Bureau/Child and Adolescent Health Measurement Initiative (MCHB/CAHMI); Division of Vital Statistics, National Center for Health Statistics; Health Resources and Services Administration (HRSA); Hospital Corporation of America (HCA); Institute for Clinical Systems Improvement (ICSI); National Committee for Quality Assurance (NCQA); and the University of Minnesota.

	1391: Frequency of ongoing prenatal care (NCQA)
Description	The percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received the following number of expected prenatal visits. •<21 percent of expected visits •21 percent–40 percent of expected visits •41 percent–60 percent of expected visits •61 percent–80 percent of expected visits •≥81 percent of expected visits
Numerator	Measure 1: FPC Received the following number of expected prenatal visits. • <21 percent of expected visits • 21 percent–40 percent of expected visits • 41 percent–60 percent of expected visits • 61 percent–80 percent of expected visits • ≥81 percent of expected visits
Numerator Details	Measure 1: FPC Administrative Specification Women who had an unduplicated count of <21 percent, 21 percent–40 percent, 41 percent–60 percent, 61 percent–80 percent or =81 percent of the number of expected visits, adjusted for the month of pregnancy at time of enrollment and gestational age. For each delivery, follow the steps below to calculate each woman's ratio of observed-to-expected prenatal care visits. Medical Record Specification: Women who had an unduplicated count of the number of expected visits that was <21 percent, 21 percent–40 percent, 41 percent–60 percent, 61 percent–80 percent or ≥81 percent of the number of expected visits, adjusted for the month of pregnancy at time of enrollment and gestational age. The visits may be identified through either administrative data or medical record review. The numerator is calculated retroactively from date of delivery or EDD.
Denominator	Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year
Denominator Details	Measure 1: FPC Product line Medicaid. Age None specified. Continuous enrollment 43 days prior to delivery through 56 days after delivery. Allowable gap No allowable gap during the continuous enrollment period. Anchor date Date of delivery. Benefit Medical. Event/diagnosis Delivered a live birth on or between November 6 of the year prior to the measurement year and November 5 of the measurement year. Women who delivered in a birthing center should be included in this measure. Refer to Table PPC-A and Table PPC-B. Multiple births. Women who had two separate deliveries (different dates of service) between November 6 of the year prior to the measurement year and November 5 of the measurement year should count twice. Women who have multiple live births during one pregnancy should be counted once in the measure. The organization must exclude members for whom a prenatal visit is not indicated. These exclusions are indicated by a dash (–) in Table FPC-A.

Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Access
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic administrative data/claims
Level	Health Plan; Integrated delivery system; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1517: Prenatal & postpartum care (NCQA)
Description	The percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year. For these women, the measure assesses the following facets of prenatal and postpartum care. • Rate 1: Timeliness of Prenatal Care. The percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester or within 42 days of enrollment in the organization. • Rate 2: Postpartum Care. The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.
Numerator	Deliveries of live births for which women receive the following facets of prenatal and postpartum care: Rate 1: Received a prenatal care visit as a member of the organization in the first trimester or within 42 days of enrollment in the organization. Rate 2: Had a postpartum visit on or between 21 and 56 days after delivery.
Numerator Details	PPC Administrative Specification Rate 1 A prenatal visit in the first trimester or within 42 days of enrollment, depending on the date of enrollment in the organization and the gaps in enrollment during the pregnancy. Include only visits that occur while the member was enrolled. Markers for Early Prenatal Care Obtainable From Administrative Data • CPT: 59400*, 59425*, 59426*, 59510*, 59610*, 59618* • CPT Category II: 0500F, 0501F, 0502F Rate 2: A postpartum visit (Table PPC-E) to an OB/GYN practitioner or midwife, family practitioner or other PCP for a pelvic exam or postpartum care on or between 21 and 56 days after delivery. Codes to Identify Postpartum Visits 57170, 58300, 59400*, 59410*, 59430, 59510*, 59515*, 59610*, 59614*, 59618*, 59622*, 88141-88143, 88147, 88148, 88150, 88152-88155, 88164-88167, 88174, 88175 , 99501 0503F G0101, G0123, G0124, G0141, G0143-G0145, G0147, G0148, P3000, P3001, Q0091 V24.1, V24.2, V25.1, V72.3, V76.2 89.26, 91.46 0923 10524-7, 18500-9, 19762-4, 19764-0, 19765-7, 19766-5, 19774-9, 33717-0, 47527-7, 47528-5 PPC Medical Record Specification Rate 1: Prenatal care visit to an OB/GYN practitioner or midwife, family practitioner or other PCP. For visits to a family practitioner or PCP, a diagnosis of pregnancy must be present. Documentation in the medical record must include a note indicating the date when the prenatal care visit occurred, and evidence of one of the following. • A basic physical obstetrical examination that includes auscultation for fetal heart tone, or pelvic exam with obstetric observations, or measurement of fundus height (a standardized prenatal flow sheet may be used) • Evidence that a prenatal care procedure was performed, such as: – Screening test in the form of an obstetric panel (e.g., hematocrit, differential WBC count, platelet count, hepatitis B surface antigen, rubella antibody, syphilis test, RBC antibody screen, Rh[D] and ABO blood typing), or – TORCH antibody panel alone or

	– A rubella antibody test/titer with an Rh incompatibility (ABO/Rh) blood typing, or – Echography of a pregnant uterus • Documentation of LMP or EDD in conjunction with either of the following. – Prenatal risk assessment and counseling/education, or – Complete obstetrical history Note: For members whose last enrollment segment was after 219 days prior to delivery (i.e., between 219 days prior to delivery and the day of delivery), count documentation of a visit to an OB/GYN, family practitioner or other PCP with a principal diagnosis of pregnancy. Rate 2: Postpartum visit to an OB/GYN practitioner or midwife, family practitioner or other PCP on or between 21 and 56 days after delivery. Documentation in the medical record must include a note indicating the date when a postpartum visit occurred and one of the following. • Pelvic exam, or • Evaluation of weight, BP, breasts and abdomen, or – Notation of "breastfeeding" is acceptable for the "evaluation of breasts" component • Notation of postpartum care, including but not limited to the following: – Notation of "postpartum care," "PP care," "PP check," "6-week check" – A preprinted "Postpartum Care" form in which information was documented during the visit.
Denominator	Deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year.
Denominator Details	Product lines Commercial, Medicaid (report each product line separately). Age None specified. Continuous enrollment 43 days prior to delivery through 56 days after delivery. Allowable gap No allowable gap during the continuous enrollment period. Anchor date Date of delivery. Benefit Medical. Event/ diagnosis Delivered a live birth on or between November 6 of the year prior to the measurement year and November 5 of the measurement year. Women who delivered in a birthing center should be included in this measure. Refer to Tables PPC-A and PPC-B for codes to identify live births. Multiple births. Women who had two separate deliveries (different dates of service) between November 6 of the year prior to the measurement year and November 5 of the measurement year should be counted twice. Women who had multiple live births during one pregnancy should be counted once in the measure.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Access
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic administrative data/claims
Level	Health Plan; Integrated delivery system; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1382: Percentage of low birthweight births (Division of Vital Statistics | National Center for Health Statistics, CDC)
Description	The percentage of births with birthweight <2,500 grams
Numerator	The number of babies born weighing <2,500 grams at birth in the United States
Numerator Details	Data are directly available from public-use data files of national birth certificate data produced by the National Center for Health Statistics.
Denominator	All births in the United States
Denominator Details	Data are directly available from public-use data files of national birth certificate data produced by the National Center for Health Statistics.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	- Stratify the measure by single vs. multiple births - Stratify the measure by birth weight of less than 1,500 grams (i.e. very low birthweight) vs. 1,500-2,499 grams (i.e. moderately low birthweight).
Time window	A calendar year (for example, 2010)
Type	Outcome
Type Score	Other
Data Source	Public health data/vital statistics
Level	Population: national; Population: regional/network; Population: states; Population: counties or cities
Setting	Other

	1397: Sudden infant death syndrome counseling (NCQA)
Description	The percentage of children who turned 6 months old during the measurement year and who had Sudden Infant Death Syndrome (SIDS) counseling.
Numerator	Children who had documentation in the medical record of SIDS counseling within 4 weeks of birth or by the first pediatric visit, whichever comes first.
Numerator Details	Documentation of counseling for Sudden Infant Death Syndrome (SIDS) by the child´s 4-week birthday or the first pediatric visit, whichever comes first. Counseling is any of the following: • Engagement in discussion about placing infants on their backs to sleep or the risks of Sudden Infant Death Syndrome (SIDS) • Checklist indicating that SIDS was addressed • Counseling or referral for SIDS education • Member received educational materials on SIDS • Anticipatory guidance for SIDS
Denominator	Children who turned 6 months of age
Denominator Details	Children who turned 6 months of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child's birthday by at least 6 months.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	6 months
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1401: Maternal depression screening (NCQA)
Description	The percentage of children who turned 6 months during the measurement year who had documentation of a maternal depression screening for the mother ~~and proper follow-up performed between 0 and 6 months of life.~~
Numerator	Children who had documentation in the medical record of a maternal depression screening for the mother at least once between 0 and ~~by age~~ 6 months of life
Numerator Details	Documentation must include a note indicating the date and evidence of screening the mother for maternal depression. or A note indicating evidence of at least one of the following – Mother currently in treatment for any behavioral condition – Mother currently on medication for depression Note: Evidence of maternal depression screening may come from the child's or mother's medical chart.
Denominator	Children who turned 6 months of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child's birthday by at least 12 months.
Denominator Details	See 2a4; chart review only
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Amb Surgery Center; Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient; Behavioral health/psychiatric unit

	1351: Proportion of infants covered by newborn bloodspot screening (HRSA)
Description	What percentage of infants had bloodspot newborn screening performed as mandated by state of birth?
Numerator	The number of infants born in a state who have a valid newborn screen performed- in accordance with the state of birth mandated program specifications
Numerator Details	Number of infants with newborn bloodspot screen performed as documented/collected by the state newborn screening program.
Denominator	Number of infants born in a state during the time period used in the numerator (same area used for numerator)
Denominator Details	This should be information gathered by the state public health department by birth certificates or hospital birth records for matching with the numerator.
Exclusions	Infants who die prior to normal time frame for collection of newborn screen or infants who have a formal waiver signed by the parents/guardians refusing the state newborn screen
Exclusion details	Joint Commission Discharge Disposition - Death Value Set (86986.v1) 1.3.6.1.4.1.33895.1.3.0.12. Patient Deceased: Patient has expired. LOINC# 54108-6 LA6644-4 C0580717;Parental refusal
Risk Adjustment	no risk adjustment necessary
Stratification	None because state mandates apply to all infants and do not stratify by NICU status, prematurity, geographic location, or insurance coverage. In the future we might explore health disparities, but current measures will be applied to all infants born in a state.
Time window	The time period varies upon needs of the particular user (e.g. calendar year, quarterly, monthly) but must be the same for both the numerator and denominator.
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic administrative data/claims; Public health data/vital statistics; Electronic Health/Medical Record; Lab data
Level	Facility/Agency; Population: states; Program: Other
Setting	Hospital; Ambulatory Care: Clinic

	1402: Newborn hearing screening (NCQA)
Description	The percentage of children who turned 6 months old during the measurement year who had documentation in the medical record of a review of their newborn hearing screening results by their 3-month birthday.
Numerator	Children who had documentation in the medical record of a review of their newborn hearing screening results by their 3-month birthday
Numerator Details	Documentation must include a note indicating the date and the following. • Evidence that newborn hearing screening results were reviewed by the practice by the child´s 3-month birthday
Denominator	Children with a visit who turned 6 months old in the measurement year
Denominator Details	Children who turned 6 months of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child's birthday by at least 6 months.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	6 months
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic administrative data/claims; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1354: Hearing screening prior to hospital discharge (EHDI-1a) (CDC)
Description	This measure assesses the proportion of births that have been screened for hearing loss before hospital discharge. *Numbering within the parentheses references the US national extension quality measure identifiers developed for the Use Cases published in the Integrating the Healthcare Enterprise (IHE) Quality, Research and Public Health (QRPH) EHDI Technical Framework Supplement available at www.ihe.net/Technical_Framework/index.cfm#quality
Numerator	Numerator contains all live births during the measurement time period born at a facility and screened for hearing loss prior to discharge.
Numerator Details	Total number with "Hearing Screening Performed": evidence of hearing screening performed. (LOINC# 54109-4: Newborn hearing screen – right = Pass LA10392-1 OR Refer LA10393-9 AND LOINC# 54108-6: Newborn hearing screen – left= Pass LA10392-1 OR Refer LA10393-9) before discharge
Denominator	All live births during the measurement time period born at a facility and discharged without being screened OR screened prior to discharge.
Denominator Details	Total number of newborns discharged. Joint Commission National Quality Core Measures - Discharge Status OR with "Hearing Screening Performed": evidence of hearing screening performed. (LOINC# 54109-4: Newborn hearing screen – right = Pass LA10392-1 OR Refer LA10393-9 AND LOINC# 54108-6: Newborn hearing screen – left= Pass LA10392-1 OR Refer LA10393-9)
Exclusions	Patient deceased prior to discharge and without being screened, parental refusal, or not performed due to medical exclusion.
Exclusion details	Joint Commission Discharge Disposition - Death Value Set (86986.v1) 1.3.6.1.4.1.33895.1.3.0.12. "Patient Deceased": Patient has expired. LOINC# 54109-4: Newborn hearing screen – right OR LOINC# 54108-6: Newborn hearing screen – left includes "Parental refusal" (LA6644-4) OR Not performed, medical exclusion - not indicated (LA12409-1)
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	The measurement time period varies upon needs of the particular user (e.g. calendar year, quarterly, monthly) but must be the same for both the numerator and denominator.
Type	Process
Type Score	Rate/proportion
Data Source	Public health data/vital statistics; Electronic Health/Medical Record; Registry data
Level	~~Clinicians: Individual;~~ Facility/Agency; Population: national; Population: states
Setting	Hospital

	1357: Outpatient hearing screening of infants who did not complete screening before hospital discharge (EHDI-1c) (CDC)
Description	This measure assesses the proportion of all newborn infants who did not complete a hearing screen prior to discharge, who went on to receive an outpatient screen before the child was 31 days of age. *Numbering within the parentheses references the US national extension quality measure identifiers developed for the Use Cases published in the Integrating the Healthcare Enterprise (IHE) Quality, Research and Public Health (QRPH) EHDI Technical Framework Supplement available at www.ihe.net/Technical_Framework/index.cfm#quality
Numerator	Numerator contains the number of infants born at a given facility during the time window with no documented hearing screening performed prior to patient discharge and who have been screened for hearing loss as an outpatient by 30 days of age.
Numerator Details	Total number with LOINC# 54109-4: Newborn hearing screen – right OR LOINC# 54108-6: Newborn hearing screen – left equals “Not performed” (LA7304-4) AND with "Hearing Screening Performed": evidence of hearing screening performed before the child was 31 days of age. (LOINC# 54109-4: Newborn hearing screen – right = Pass LA10392-1 OR Refer LA10393-9 AND LOINC# 54108-6: Newborn hearing screen – left= Pass LA10392-1 OR Refer LA10393-9).
Denominator	Denominator contains the number of infants born at a given facility during the time window with no documented hearing screening performed prior to patient discharge.
Denominator Details	Total number with LOINC# 54109-4: Newborn hearing screen – right OR LOINC# 54108-6: Newborn hearing screen – left equals “Not performed” (LA7304-4).
Exclusions	Patient deceased before the child was 31 days of age, parental refusal, or not performed due to medical exclusion.
Exclusion details	Joint Commission Discharge Disposition - Death Value Set (86986.v1) 1.3.6.1.4.1.33895.1.3.0.12. “Patient Deceased”: Patient has expired. LOINC# 54109-4: Newborn hearing screen – right OR LOINC# 54108-6: Newborn hearing screen – left includes “Parental refusal” (LA6644-4) OR Not performed, medical exclusion - not indicated (LA12409-1)
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	The time period varies upon needs of the particular user (e.g. calendar year, quarterly, monthly) but must be the same for both the numerator and denominator.
Type	Process
Type Score	Rate/proportion
Data Source	Electronic clinical data; Public health data/vital statistics; Electronic Health/Medical Record; Registry data
Level	~~Clinicians: Individual;~~ Facility/Agency; Population: national; Population: states
Setting	Hospital

	1360: Audiological evaluation no later than 3 months of age (EHDI-3) (CDC)
Description	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.
Numerator	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.
Numerator Details	Total number of infants whose hearing screening results indicate "Fail / Refer" (LOINC# 54109-4: Newborn hearing screen – right = Refer LA10393-9 OR LOINC# 54108-6: OR Newborn hearing screen – left= Refer LA10393-9) AND with "Audiological Diagnosis" (SNOMED-CT equals “Hearing Normal” 164059009, “Permanent Conductive” 44057004, “Sensorineural” 60700002, “Mixed” 77507001, OR “Auditory Neuropathy Spectrum Disorder” 443805006) AND age of diagnosis is less than 91 days at the time of diagnosis.
Denominator	Denominator contains the number of infants born during the time window who have not passed ("Fail / Refer") hearing screening.
Denominator Details	Total number of infants whose hearing screening results indicate "Fail / Refer" (LOINC# 54109-4: Newborn hearing screen – right = Refer LA10393-9 OR LOINC# 54108-6: OR Newborn hearing screen – left= Refer LA10393-9).
Exclusions	Patient deceased: Patient has expired prior to 91 days of age.
Exclusion details	Death Value Set.
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	The measurement time period varies upon needs of the particular user (e.g. calendar year, quarterly, monthly) but must be the same for both the numerator and denominator.
Type	Process
Type Score	Rate/proportion
Data Source	Electronic clinical data; Public health data/vital statistics; Electronic Health/Medical Record
Level	~~Clinicians: Individual;~~ Facility/Agency; Population: national; Population: states
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic

	1361: Intervention no later than 6 months of age (EHDI-4a) (CDC)
Description	This measure assesses the proportion of infants with permanent hearing loss who have been referred to intervention services no later than age 6 months of age.
Numerator	Numerator contains the number of infants born during the time window that have been diagnosed with permanent hearing loss, whose age is less than 6 months at the time of referral to intervention services.
Numerator Details	Total number of infants with "Audiological Diagnosis" (SNOMED-CT equals “Hearing Normal” 164059009, “Permanent Conductive” 44057004, “Sensorineural” 60700002, “Mixed” 77507001, “Auditory Neuropathy Spectrum Disorder” 443805006, “Transient Hearing Loss” 123123005) and date of EHDI referral to education service” (SNOMED-CT 415271004) is less than 181 days since birth.
Denominator	Denominator contains the number of infants born during the time window who that have been diagnosed with permanent hearing loss.
Denominator Details	Total number of infants with "Audiological Diagnosis" (SNOMED-CT equals “Hearing Normal” 164059009, “Permanent Conductive” 44057004, “Sensorineural” 60700002, “Mixed” 77507001, or “Auditory Neuropathy Spectrum Disorder” 443805006.
Exclusions	Patient deceased: Patient has expired prior to 181 days of age.
Exclusion details	Death Value Set.
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	The measurement time period varies upon needs of the particular user (e.g. calendar year, quarterly, monthly) but must be the same for both the numerator and denominator.
Type	Process
Type Score	Rate/proportion
Data Source	Electronic clinical data; Public health data/vital statistics; Electronic Health/Medical Record
Level	~~Clinicians: Individual;~~ Facility/Agency; Population: national; Population: states
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic

	1448: Developmental screening in the first three years of life (MCHB/CAHMI)
Description	The percentage of children screened for risk of developmental, behavioral and social delays using a standardized screening tool in the first three years of life. This is a measure of screening in the first three years of life that includes three, age-specific indicators assessing whether children are screened by 12 months of age, by 24 months of age and by 36 months of age.
Numerator	The numerator identifies children who were screened for risk of developmental, behavioral and social delays using a standardized tool. National recommendations call for children to be screened at the 9, 18, and 24- OR 30-month well visits to ensure periodic screening over the first three years. The measure is based on three, age-specific indicators. Indicator 1: Children who had screening for risk of developmental, behavioral and social delays using a standardized screening tool that was documented by 12 months of age Indicator 2: Children who had screening for risk of developmental, behavioral and social delays using a standardized screening tool that was documented by 24 months of age Indicator 3: Children who screening for risk of developmental, behavioral and social delays using a standardized screening tool that was documented by 36 months of age
Numerator Details	Claims data: CPT codes 96110 (Developmental testing, with interpretation and report) Claims NOT Included in This Measure: It is important to note that 96110 claims that include modifiers indicating standardized screening for a specific domain of development (e.g. social emotional screening via the ASQ-SE, autism screening) should not be included as this measure is anchored to recommendations focused on global developmental screening using tools that focus on identifying risk for developmental, behavioral and social delays. Medical Chart: Documentation in the medical record must include: • A note indicating the date on which the test was performed, *and* • The standardized tool used (see below), *and* • Evidence of a screening result or screening score. ~~Documentation must include a note indicating the date of screening, the standardized developmental screening tool used, and evidence that tool was completed and scored.~~ Tools must meet the following criteria: . 1) Developmental domains: The following domains must be included in the standardized developmental screening tool: motor, language, cognitive, and social-emotional. 2) Established Reliability: Reliability scores of approximately 0.70 or above. 3)Established Findings Regarding the Validity- Concurrent validity: This compares screening results with outcomes derived from a reliable and valid diagnostic assessment usually performed 7-10 days after the screening test. The validity coefficient reports the agreement between the two tests (Meisels & Atkins-Burnett, 2005). Predictive validity: This compares the screening results with measures of children's performance obtained 9-12 months later (Meisels & Atkins-Burnett, 2005). Validity scores for the tool must be approximately 0.70 or above. Measures of validity must be conducted on a significant number of children and using an appropriate standardized developmental or social-emotional assessment instrument(s). 4)Established Sensitivity/Specificity: Sensitivity and specificity scores of approximately 0.70 or above. Current recommended tools that meet these criteria: Ages and Stages Questionnaire (ASQ) - 2 months–5 years Battelle Developmental Inventory Screening Tool (BDI-ST) - Birth–95 months Bayley Infant Neuro-developmental Screen (BINS) - 3 months–2 years Brigance Screens-II - Birth–90 months Child Development Inventory (CDI) - 18 months–6 years

	Child Development Review-Parent Questionnaire (CDR-PQ) - 18 months–5 years Infant Development Inventory - Birth–18 months Parents' Evaluation of Developmental Status (PEDS) - Birth–8 years Tools NOT Included in This Measure: It is important to note that standardized tools specifically focused on one domain of development [e.g. child's socio-emotional development (ASQ-SE) or autism (M-CHAT)] are not included in the list above as this measure is anchored to recommendations focused on global developmental screening using tools that focus on identifying risk for developmental, behavioral and social delays.
Denominator	Indicator 1: Members who turn 12 months of age between January 1 of the measurement year and December 31 of the measurement year Indicator 2: Members who turn 24 months of age between January 1 of the measurement year and December 31 of the measurement year Indicator 3: Members who turn 36 months of age between January 1 of the measurement year and December 31 of the measurement year Claims data: CPT codes 96110 (Developmental testing, with interpretation and report) Important Note About Appropriate Use of Claims Data: This measure is anchored to standardized tools that meet four criterion specified above. States who have policies clarifying that standardized tools meeting this criterion must be used to bill for 96110 should be able to report using claims data. Claims NOT Included in This Measure: It is important to note that modified 96110 claims [e.g. modifiers added to claim indicating standardized screening for a specific domain of development (e.g. social emotional screening via the ASQ-SE, autism screening] should not be included as this measure is anchored to recommendations focused on global developmental screening using tools that focus on identifying risk for developmental, behavioral and social delays. Future efforts should be made to develop complimentary measures focused specifically on autism screening (for which national recommendations exist) and a measure on social-emotional screening (for which a large number of ABCD states have been focused , are implementing and for which growing evidence supports).
Denominator Details	See 2a4
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	The measure is stratified by the following ages: By 12 months (Indicator 1) By 24 months (Indicator 2) By 36 months (Indicator 3)
Time window	Twelve months – 1 year.
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic administrative data/claims; Electronic Health/Medical Record
Level	Population: states; Program: QIO; Program: Other
Setting	None Listed

	1399: Developmental screening by 2 years of age (NCQA)
Description	The percentage of children who turned 2 years old during the measurement year who had a developmental screening and proper follow-up performed between ~~6 months and 2 years of age~~12 and 24 months of age.
Numerator	Children who had documentation in the medical record of a developmental (screening for risk of developmental, behavioral and social delays) between 12 and 24 months of age. Screening must be conducted using a standardized tool.~~by 2 years of age.~~
Numerator Details	Documentation in the medical record must include all of the following: - A note indicating the date on which the test was performed - The standardized tool used - Evidence the tool was completed and scored The following tools meet criteria* for a standardize tool. Only the tools listed here will meet numerator compliance for this measure. Ages and Stages Questionnaire (ASQ) Ages and Stages Questionnaire - 3rd edition (ASQ-3) Battelle Developmental Inventory Screening Tool (BDI-ST) Bayley Infant Neuro-developmental Screen (BINS) Brigance Screens-II Child Development Inventory (CDI) Infant Development Inventory Parents' Evaluation of Developmental Status (PEDS) Parents' Evaluation of Developmental Status - Developmental Milestones (PEDS-DM) Tools NOT Included in This Measure: It is important to note that standardized tools specifically focused on one domain of development [e.g. child's socio-emotional development (ASQ-SE) or autism (M-CHAT)] are not included in the list above, as this measure is anchored to recommendations focused on global developmental screening using tools that focus on identifying risk for developmental, behavioral and social delays. * The following criteria were used to define a standardized tool for this measure 1) Developmental domains: The following domains must be included in the standardized developmental screening tool: motor, language, cognitive, and social-emotional. 2) Established Reliability: Reliability scores of 0.70 or above. 3) Established Findings Regarding the Validity: •Concurrent validity: This compares screening results with outcomes derived from a reliable and valid diagnostic assessment usually performed 7-10 days after the screening test. The validity coefficient reports the agreement between the two tests (Meisels & Atkins-Burnett, 2005). Predictive validity: This compares the screening results with measures of children's performance obtained 9-12 months later (Meisels & Atkins-Burnett, 2005). Validity scores for the tool must be 0.70 or above. Measures of validity must be conducted on a significant number of children and using an appropriate standardized developmental or social-emotional assessment instrument(s). 4) Established Sensitivity and Specificity: Sensitivity and specificity scores of 0.70 or above. ~~Documentation must include a note indicating the date of screening, the standardized developmental screening tool used, and evidence that tool was completed and scored.~~ ~~Tools must meet the following criteria: .~~ ~~1) Developmental domains: The following domains must be included in the standardized developmental screening tool: motor, language, cognitive, and social-emotional.~~ ~~2) Established Reliability: Reliability scores of approximately 0.70 or above.~~

	3)Established Findings Regarding the Validity: •Concurrent validity: This compares screening results with outcomes derived from a reliable and valid diagnostic assessment usually performed 7-10 days after the screening test. The validity coefficient reports the agreement between the two tests (Meisels & Atkins-Burnett, 2005). Predictive validity: This compares the screening results with measures of children's performance obtained 9-12 months later (Meisels & Atkins-Burnett, 2005). Validity scores for the tool must be approximately 0.70 or above. Measures of validity must be conducted on a significant number of children and using an appropriate standardized developmental or social-emotional assessment instrument(s). 4)Established Sensitivity/Specificity: Sensitivity and specificity scores of approximately 0.70 or above. Current recommended tools that meet these criteria: Ages and Stages Questionnaire (ASQ) - 2 months–5 years Battelle Developmental Inventory Screening Tool (BDI-ST) - Birth–95 months Bayley Infant Neuro developmental Screen (BINS) - 3 months–2 years Brigance Screens II - Birth–90 months Child Development Inventory (CDI) - 18 months–6 years Child Development Review-Parent Questionnaire (CDR-PQ) - 18 months–5 years Infant Development Inventory - Birth–18 months Parents' Evaluation of Developmental Status (PEDS) - Birth–8 years Tools NOT Included in This Measure: It is important to note that standardized tools specifically focused on one domain of development [e.g. child's socio-emotional development (ASQ-SE) or autism (M-CHAT)] are not included in the list above as this measure is anchored to recommendations focused on global developmental screening using tools that focus on identifying risk for developmental, behavioral and social delays.
Denominator	Children with a visit who turned 2 years of age between January 1 and December 31 of the measurement year.Children who turned 2 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child's birthday by at least 12 months.
Denominator Details	Children who turned 2 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child's birthday by at least 12 months.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1385: Developmental screening using a parent completed screening tool (Parent report, Children 0-5) (MCHB/CAHMI)
Description	The measure assesses whether the parent or caregiver completed a developmental screening tool meant to identify children at-risk for developmental, behavioral and social delays. The items are age-specific and anchored to parent-completed tools (a majority of health care providers implementing the Bright Futures recommendations for standardized screening for all children utilize parent-completed tools due to their validity and feasibility). The age-specific items assess whether children 10-71 months are screened. The items assessing developmental screening in the National Survey of Children´s Health are meant to assess whether the parent or caregiver completed a standardized developmental screening tool ~~(for example: Parents Evaluation of Developmental Status)~~. Developmental screening is defined as a standardized tool that assesses the child's risk for developmental, behavioral and social delays. The American Academy of Pediatrics recommends standardized screening using an approved screening tool as the best method of identifying children at risk for developmental, behavioral and/or social delays.
Numerator	Percentage of children whose parents completed a standardized developmental screening tool to identify children at risk for developmental, behavioral, and social delays at a health care visit during the previous 12 months
Numerator Details	The three items begin with a stem question asking whether or not the parent/guardian ever received a questionnaire asking about concerns with their child's development, communication or social behaviors (K6Q12) at a health care visit. Two age-specific questions follow: Parents of children age 10-23 months receive two questions to ascertain whether the questionnaire they received contained questions about concerns around child's speech/sounds (K6Q13A) and his/her interaction with respondent and others (K6Q13B). Parents of children age 24-71 months receive two questions (to ascertain whether the questionnaire they received contained questions about concerns around words/phrases that the child uses and understands (K6Q14A) and how the child gets along with respondent and others (K6Q14B). Parents must answer all three questions they receive in the affirmative to be coded as "received standardized developmental screening."
Denominator	Children age 10 months - 5 years (71 months) with a health care visit in the past 12 months (see 2a.8 below for further definition of "health care visit")
Denominator Details	Children age 10-71 months with at least one health care visit in the past 12 months. Health care visit is defined as 1 or more preventive health care visits and/or 1 or more preventive dental care visits and/or a visit with a mental health professional and/or a visit with a specialist.
Exclusions	Child excluded from denominator if age is less than 10 months or more than 5 years and did not have at least one health care visit in the past 12 months
Exclusion details	Children less than age 10 months or older than 71 months are excluded from the denominator. In addition, children in the target denominator age range of 10-71 months are excluded from the denominator if they did not have at least one "health care visit" in the past 12 months. Health care visit is defined as 1 or more preventive health care visits and/or 1 or more preventive dental care visits and/or a visit with a mental health professional and/or a visit with a specialist.
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	Encounter or point in time.
Type	Process
Type Score	Rate/proportion
Data Source	Survey: Patient

Level	Population: national; Population: regional/network; Population: states
Setting	Other

	1412: Pre-school vision screening in the medical home (AAP)
Description	Percentage of pre-school aged children who receive vision screening in the medical home
Numerator	Number of pre-school children under 5 years-old that receive visual acuity testing or photoscreening in the medical home
Numerator Details	Screening test of visual acuity (CPT Code 99173) Photoscreening (CPT Code 99174)
Denominator	All children under 5 years-old who attend a routine well-child visit in their medical home
Denominator Details	99382 1 - 4 years of age (new patient) 99392 1 - 4 years of age (established patient)
Exclusions	Documentation of medical reason(s) for not performing vision screening Documentation of patient reason(s) for not performing vision screening (i.e., clinically unstable or uncooperative child; parents who refuse screening)
Exclusion details	None
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	None Listed
Type	Process
Type Score	Ratio
Data Source	Electronic administrative data/claims
Level	Clinicians: Individual; Clinicians: Group; Health Plan; Integrated delivery system; Population: national
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic

	1553: Blood pressure screening by age 18 (NCQA)
Description	The percentage of adolescents who turn 18 years of age in the measurement year who had a blood pressure screening with results at least once in the past two years.
Numerator	Adolescents who had documentation in the medical record of blood pressure screening with results
Numerator Details	Documentation of the date of blood pressure screening, both diastolic and systolic results, and whether the results are abnormal (defined as >95th percentile for age/gender/height. Based on NHLBI published norms) during the measurement year or the year prior.
Denominator	Adolescents with a visit who turned 18 years in the measurement year
Denominator Details	Adolescents 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 adolescent that predates the adolescent's birthday by at least 12 months.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1552: Blood pressure screening by age 13 (NCQA)
Description	The percentage of adolescents who turn 13 years of age in the measurement year who had a blood pressure screening with results.
Numerator	Children who had documentation in the medical record of a blood pressure screening with results
Numerator Details	Documentation of the date of blood pressure screening, both diastolic and systolic results, and whether the results are abnormal (defined as >95th percentile for age/gender/height. Based on NHLBI published norms) during the measurement year or the year prior.
Denominator	Children with a visit who turned 13 years in the measurement year
Denominator Details	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.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1395: Chlamydia screening and follow up (NCQA)
Description	The percentage of female adolescents who turned 18 years old during the measurement year and who had a chlamydia screening and proper follow-up visit.
Numerator	Children who had documentation in the medical record of chlamydia screening By Age 18 Years
Numerator Details	"Documentation must include a note indicating the date and the following. • A chlamydia test result • For abnormal or indeterminate results, evidence of confirmatory testing, referral or treatment"
Denominator	"Children who turned 18 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the child that predates the child's birthday by at least 12 months. Additional denominator criterion: Only include women with evidence of sexual activity. Evidence of sexual activity can include the following: • Documentation of sexual activity • Prescription for contraception • Treatment or Screening for sexually transmitted disease • Pregnancy • Pelvic examination
Denominator Details	See above; chart review only
Exclusions	Exclude males
Exclusion details	See above; chart review only
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1396: Healthy physical development by 6 years of age (NCQA)
Description	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.
Numerator	Children who had documentation in the medical record of healthy physical development services by age 6 years
Numerator Details	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
Denominator	Children with a visit who turned 6 years old in the measurement year
Denominator Details	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.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Process
Type Score	Rate/proportion

Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Health Plan; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1512: Healthy physical development by 13 years of age (NCQA)
Description	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.
Numerator	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
Numerator Details	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
Denominator	Children with a visit who turned 13 years in the measurement year
Denominator Details	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.
Exclusions	None

Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Health Plan; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1514: Healthy physical development by 18 years of age (NCQA)
Description	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.
Numerator	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
Numerator Details	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
Denominator	Adolescents with a visit who turned 18 years old in the measurement year
Denominator Details	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.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Process
Type Score	Rate/proportion

Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Health Plan; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1349: Child overweight or obesity status based on parental report of body-mass-index (BMI) (MCHB/CAHMI)
Description	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).
Numerator	Percentage of children who are underweight, normal weight, overweight or obese.
Numerator Details	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)
Denominator	Children age 10-17 years
Denominator Details	Children age 10-17 years
Exclusions	Excluded from denominator if child does not fall in target population age range of 10-17 years
Exclusion details	If child is younger than 10 years of age, excluded from denominator. If child is older than 17 years of age, excluded from denominator.
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	Encounter or point in time.
Type	Outcome
Type Score	Rate/proportion
Data Source	Survey: Patient
Level	Population: national; Population: regional/network; Population: states
Setting	Other

	1348: Children age 6-17 years who engage in weekly physical activity (MCHB/CAHMI)
Description	Measures how many times per week child 6-17 years exercises vigorously (based on AAP and CDC recommendations)
Numerator	Number of days per week that child 6-17 years engages in vigorous physical activity
Numerator Details	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)
Denominator	Children age 6-17 years
Denominator Details	Children age 6-17 years
Exclusions	Excluded from denominator if child does not fall in target population age range of 6-17 years.
Exclusion details	If child is younger than 6 years of age, excluded from denominator. If child is older than 17 years of age, excluded from denominator.
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	Encounter or point in time; question is anchored to past week
Type	Outcome
Type Score	Rate/proportion
Data Source	Survey: Patient
Level	Population: national; Population: regional/network; Population: states
Setting	Other

	1407: Immunizations by 13 years of age (NCQA)
Description	Immunizations by 13 years of age
Numerator	Children who had documentation in the medical record of recommended immunizations by age 13 years
Numerator Details	"For immunization evidence obtained from the medical record, the organization may count members where there is evidence that the antigen was rendered from one of the following. • A note indicating the name of the specific antigen and the date of the immunization, or • A certificate of immunization prepared by an authorized health care provider or agency including the specific dates and types of immunizations administered One meningococcal conjugate or meningococcal polysaccharide vaccine on or between the 11th and 13th birthdays. One tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) or one tetanus, diphtheria toxoids vaccine (Td) on or between the 10th and 13th birthdays. One meningococcal vaccine on or between the 11th and 13th birthday and one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) or one tetanus, diphtheria toxoids vaccine (Td) on or between the 10th and 13th birthdays. Three HPV vaccinations, with different dates of service on or before the 13th birthday. For documented history of illness or a seropositive test result, the organization must find a note indicating the date of the event, which must have occurred by the member's 13th birthday. Notes in the medical record indicating that the member received the immunization "at delivery" or "in the hospital" may be counted toward the numerator. This applies only to immunizations that do not have minimum age restrictions (e.g., before 42 days after birth). A note that the "member is up to date" with all immunizations but which does not list the dates of all immunizations and the names of the immunization agents does not constitute sufficient evidence of immunization for HEDIS reporting. Immunizations documented using a generic header or "DTaP/DTP/DT" can be counted as evidence of DTaP. The burden on organizations to substantiate the DTaP antigen is excessive compared to any risk associated with data integrity."
Denominator	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 Details	See above; chart review only
Exclusions	HPV: Exclude males
Exclusion details	Exclude males
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1506: Immunizations by 18 years of age (NCQA)
Description	The percentage of adolescents who turned 18 years during the measurement year who had proper immunizations by 18 years.
Numerator	Adolescents who had documentation in the medical record of recommended immunizations by age 18 years.
Numerator Details	For immunization evidence obtained from the medical record, the organization may count members where there is evidence that the antigen was rendered from one of the following. • A note indicating the name of the specific antigen and the date of the immunization, or • A certificate of immunization prepared by an authorized health care provider or agency including the specific dates and types of immunizations administered One meningococcal conjugate or meningococcal polysaccharide vaccine on or between the 11th and 13th birthdays. One tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) or one tetanus, diphtheria toxoids vaccine (Td) on or between the 10th and 13th birthdays. One meningococcal vaccine on or between the 11th and 13th birthday and one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) or one tetanus, diphtheria toxoids vaccine (Td) on or between the 10th and 13th birthdays. Three HPV vaccinations, with different dates of service on or before the 13th birthday. For documented history of illness or a seropositive test result, the organization must find a note indicating the date of the event, which must have occurred by the member's 13th birthday. Notes in the medical record indicating that the member received the immunization "at delivery" or "in the hospital" may be counted toward the numerator. This applies only to immunizations that do not have minimum age restrictions (e.g., before 42 days after birth). A note that the "member is up to date" with all immunizations but which does not list the dates of all immunizations and the names of the immunization agents does not constitute sufficient evidence of immunization for HEDIS reporting. Immunizations documented using a generic header or "DTaP/DTP/DT" can be counted as evidence of DTaP. The burden on organizations to substantiate the DTaP antigen is excessive compared to any risk associated with data integrity."
Denominator	Females with a visit who turn 18 years in the measurement year
Denominator Details	Females 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 female that predates the female's birthday by at least 12 months.
Exclusions	HPV: Exclude males
Exclusion details	Exclude males
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1346: Children who are exposed to secondhand smoke inside home (MCHB/CAHMI)
Description	Determines the percentage of children who live with a smoker and if that smoker smokes inside the child´s house
Numerator	Percentage of children who live in a household with someone who smokes and smoking occurs inside home
Numerator Details	Children who live in a household with someone who smokes (K9Q40=Yes) and smoking occurs inside home (K9Q41=Yes)
Denominator	Children age 0-17 years
Denominator Details	Children age 0-17 years
Exclusions	Excluded from denominator if child does not fall in target population age range of 0-17 years.
Exclusion details	If child is older than 17 years of age, excluded from denominator.
Risk Adjustment	no risk adjustment necessary
Stratification	No stratification is required. When the Exposure to Secondhand Smoke in Home 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
Time window	Encounter or point in time.
Type	Outcome
Type Score	Rate/proportion
Data Source	Survey: Patient
Level	Population: national; Population: regional/network; Population: states
Setting	Other

	1388: Annual dental visit (NCQA)
Description	The percentage of members 2-21 years of age who had at least one dental visit during the measurement year.
Numerator	Had at least one dental visit during the measurement year
Numerator Details	One or more dental visits with a dental practitioner during the measurement year. A member had a dental visit if a submitted claim/encounter contains any code in Table ADV-A: Codes to Identify Annual Dental Visits:
Denominator	members 2–21 years of age
Denominator Details	70300, 70310, 70320, 70350, 70355 D0120-D0999, D1110-D2999, D3110-D3999, D4210-D4999, D5110-D5899, D6010-D6205, D7111-D7999, D8010-D8999, D9110-D9999 23, 24, 87.11, 87.12, 89.31, 93.55, 96.54, 97.22, 97.33-97.35, 99.97
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	Stratified by age: • 2–3-years • 4–6-years • 7–10-years • 11–14-years • 15–18-years • 19–21-years
Time window	1 year
Type	Access
Type Score	Rate/proportion
Data Source	Electronic administrative data/claims; Electronic clinical data
Level	Health Plan; Integrated delivery system; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1334: Children who received preventive dental care (MCHB/CAHMI)
Description	Assesses how many preventive dental visits during the previous 12 months
Numerator	Percentage of children who had one or more preventive dental visits in the past 12 months.
Numerator Details	For a child to be included in the numerator, they must have seen a dentist for preventive dental care at least once in the past 12 months.
Denominator	Children age 1-17 years
Denominator Details	Children age 1-17 years.
Exclusions	Excluded from denominator if child does not fall in target population age range of 1-17 years.
Exclusion details	If child is older than 17 years of age, excluded from denominator. If child is younger than 1 year of age, excluded from denominator.
Risk Adjustment	no risk adjustment necessary
Stratification	No stratification is required. When the Preventive Dental Visits 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
Time window	Encounter or point in time; anchored to past 12 months
Type	Outcome
Type Score	Rate/proportion
Data Source	Survey: Patient
Level	Population: national; Population: regional/network; Population: states
Setting	Other

	1335: Children who have dental decay or cavities (MCHB/CAHMI)
Description	Assesses if children age 1-17 years have had tooth decay or cavities in the past 6 months
Numerator	Whether child had cavities or decayed teeth in past 6 months.
Numerator Details	If K2Q53=1, child had decayed teeth or cavities in last 6 months. If K2Q53=0, child did not have decayed teeth or cavities in last 6 months.
Denominator	Children and adolescents age 1-17 years
Denominator Details	Children 1-17 years of age
Exclusions	Children are excluded from denominator if they do not fall in target population age range (1-17 years)
Exclusion details	Children are excluded from denominator if --child does not fall in target population age range (1-17 years). If child is less than one year old, skip questions
Risk Adjustment	no risk adjustment necessary
Stratification	No stratification is required. When the Decay or Cavities 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
Time window	Encounter or point in time; question anchored to past 6 months
Type	Outcome
Type Score	Rate/proportion
Data Source	Survey: Patient
Level	Population: national; Population: regional/network; Population: states
Setting	Other

	1419: Primary caries prevention intervention as part of well/ill child care as offered by primary care medical providers (University of Minnesota)
Description	The measure will a) track the extent to which the PCMP or clinic (determined by the provider number used for billing) applies FV as part of the EPSDT examination and b) track the degree to which each billing entity's use of the EPSDT with FV codes increases from year to year (more children varnished and more children receiving FV four times a year according to ADA recommendations for high-risk children).
Numerator	The number of EPSDT examinations done with FV.
Numerator Details	Application of FV is identified by a discrete code. The measurement will be based on clinic data (the ICD-9 code for the EPSDT examination (99381, 99382, 99391, 99392) and D-1206, the code for FV); both are billed on the same CMS-1500 medical billing form. From these data it will be possible to know, by billing entity, the percent of EPSDT examinations that included FV and, by including the patient's discrete participant number, the number of FV applications (and the dates of those applications) provided to the high-risk child annually. If proven to be useful, the process will be promoted to the Medicaid programs of the 43 states that, as of 12/1/10, are reimbursing PCMP for applying FV to the teeth of high-risk (Medicaid/CHIP-enrolled) children as part of the EPSDT examination. Each of the 43 state Medicaid programs which are currently reimbursing PCMP for CPI has identified a specific code to reflect FV application. The code can be used as part of either an ESPDT examination or an episodic visit. All but three states (FL, TX, UT) use the dental CDT code, D-1206, or its predecessor, D-1203. The three use a recognized and approved medical CPT code (FL: 99499 with SC modifier, TX: 99429 with U5 modifier and ICD-9 EPSDT code, UT: EP modifier added to appropriate ICD-9 EPSDT code).
Denominator	All high-risk children (Medicaid/CHIP-eligible) who receive an EPSDT examination from a provider (PCMP or clinic).
Denominator Details	All but three states use the dental CDT code for FV application (2a.3 above). Payers have adjusted their computers to recognize the CDT dental code when billed on the CMS-1500 medical billing form. In Minnesota, DHS for the first time generated a report in 2008 which shows by provider (PCMP or clinic) (whichever holds the billing provider number) the number of duplicated and unduplicated EPSDT examinations done, and the number of FV applications performed (unduplicated and duplicated) as part of the EPSDT examination. The data are broken down by age group (0-5 years, 6-12 years, 13-20 years). Aggregate data for 2009 and the first six months of 2010 are shown above 1b.2.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	The data are broken down by age group (0-5 years; 6-12 years; 13-20 years)
Time window	Yearly
Type	Use of services
Type Score	None Listed
Data Source	Electronic administrative data/claims
Level	Clinicians: Individual; Clinicians: Group; Facility/Agency; Health Plan; Population: national
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1394: Depression screening by 13 years of age (NCQA)
Description	The percentage of adolescents who turn 13 years of age in the measurement year who had a screening for depression using a standardized tool.
Numerator	Children who had a screening for depression using a standardized tool by age 13 years
Numerator Details	Documentation of depression screening using a standardized tool. Any of the following qualifies as a standardized tool: • Patient Health Questionnaire for Adolescents (PHQ-A). • Beck Depression Inventory-Primary Care Version (BDI-PC). • PHQ-2—Patient Health Questionnaire-2 Item • PHQ-9—Patient Health Questionnaire-9 Item • Columbia Depression Scale - Teen Version • Kutcher Adolescent Depression Scale (KADS) 6-item
Denominator	Children with a visit who turned 13 years in the measurement year
Denominator Details	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.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient; Behavioral health/psychiatric unit

	1515: Depression screening by 18 years of age (NCQA)
Description	The percentage of adolescents who turn 18 years of age in the measurement year who had a screening for depression using a standardized tool.
Numerator	Adolescents who had a screening for depression using a standardized tool by age 18 years
Numerator Details	Documentation of depression screening using a standardized tool. Any of the following qualifies as a standardized tool: • Patient Health Questionnaire for Adolescents (PHQ-A). • Beck Depression Inventory-Primary Care Version (BDI-PC). • PHQ-2—Patient Health Questionnaire-2 Item • PHQ-9—Patient Health Questionnaire-9 Item • Columbia Depression Scale - Teen Version • Kutcher Adolescent Depression Scale (KADS) 6-item
Denominator	Adolescents with a visit who turned 18 years in the measurement year
Denominator Details	Adolescents 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 adolescent that predates the adolescent's birthday by at least 12 months.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	2 years
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient; Behavioral health/psychiatric unit

	1364: Child and adolescent major depressive disorder: diagnostic evaluation (AMA)
Description	Percentage of patients aged 6 through 17 years with a diagnosis of major depressive disorder with documented evidence that they met the DSM-IV criteria [at least 5 elements with symptom duration of two weeks or longer, including 1) depressed mood (can be irritable mood in children and adolescents) or 2) loss of interest or pleasure] during the visit in which the new diagnosis or recurrent episode was identified
Numerator	Patients with documented evidence that they met the DSM-IV criteria [at least 5 elements with symptom duration of two weeks or longer, including 1) depressed mood (can be irritable mood in children and adolescents) or 2) loss of interest or pleasure] during the visit in which the new diagnosis or recurrent episode was identified
Numerator Details	The DSM-IV Criteria for a MDD episode includes five (or more) of nine specific symptoms: - depressed mood (Note: in children and adolescents, can be irritable mood) - marked diminished interest/pleasure; - significant weight loss or gain; (Note: in children, consider failure to make expected weight gains) - insomnia or hypersomnia; - psychomotor agitation/ retardation; - fatigue or lost of energy; - feelings of worthlessness; - diminished ability to concentrate; and - recurrent suicidal ideation which have been present during the same two-weeks period and represent a change from previous functioning; at least one of the symptoms is either 1) depressed mood or 2) loss of interest or pleasure. Note: The essential feature of a major depressive disorder is a period of at least two weeks during which there is either depressed mood or irritability or the loss of interest or pleasure in nearly all activities. In children and adolescents, can be irritable or cranky mood.
Denominator	All patients aged 6 through 17 years with a diagnosis of major depressive disorder
Denominator Details	See attached Level I EHR Specifications
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	Stratification by insurance coverage (commercial, Medicare and Medicaid) is recommended by some implementers
Time window	Once per episode (at initial evaluation) within a 12-month period
Type	Process
Type Score	Rate/proportion
Data Source	Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient; Behavioral health/psychiatric unit

	1406: Risky behavior assessment or counseling by age 13 (NCQA)
Description	Percentage of children with documentation of a risk assessment or counseling for risky behaviors by the age of 13 Years. Four rates are reported: Risk Assessment or Counseling for Alcohol Use, Risk Assessment or Counseling for Tobacco Use, Risk Assessment or Counseling for Other Substance Abuse, Risk Assessment or Counseling for Sexual Activity
Numerator	Children with documentation of a risk assessment or counseling for risky behaviors by the age of 13 Years
Numerator Details	Documentation must include a note indicating the date and that the provider asked or counseled about the following. • Sexual activity • Substance use • Alcohol use • Tobacco use Counseling is any of the following. • Engagement in discussion of current risky behaviors (e.g., sexual activity or substance use) • Checklist indicating that risky behavior was addressed • Counseling or referral for risky behavior education • Member received educational materials on risky behavior • Anticipatory guidance for risky behavior
Denominator	Children with a visit who turned 13 years old in the measurement year
Denominator Details	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.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	The measure is not stratified
Time window	2 years
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Behavioral health/psychiatric unit

	1507: Risky behavior assessment or counseling by age 18 (NCQA)
Description	Percentage of children with documentation of assessment or counseling for risky behavior. Four rates are reported: assessment or counseling for alcohol use, tobacco use, other substance use, and sexual activity.
Numerator	Children who had documentation in the medical record of a Risky Behavior Assessment or Counseling By Age 18 Years
Numerator Details	Documentation must include a note indicating the date and that the provider asked or counseled about the following. Report each rate separately. • Sexual activity • Substance use • Alcohol use • Tobacco use Counseling is any of the following. • Engagement in discussion of current risky behaviors (e.g., sexual activity or substance use) • Checklist indicating that risky behavior was addressed • Counseling or referral for risky behavior education • Member received educational materials on risky behavior • Anticipatory guidance for risky behavior
Denominator	Children with a visit who turned 18 years of age in the measurement year
Denominator Details	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.
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	The measure is not stratified
Time window	2 years
Type	Process
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic clinical data; Electronic Health/Medical Record
Level	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Behavioral health/psychiatric unit

	1365: Child and adolescent major depressive disorder: suicide risk assessment (AMA)
Description	Percentage of patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder with an assessment for suicide risk
Numerator	Patient visits with an assessment for suicide risk
Numerator Details	None Listed
Denominator	All patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder
Denominator Details	See attached Level I EHR Specifications
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	Stratification by insurance coverage (commercial, Medicare and Medicaid) is recommended by some implementers
Time window	Each patient visit within a 12-month period
Type	Process
Type Score	Rate/proportion
Data Source	Electronic Health/Medical Record
Level	Clinicians: Individual
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient; Behavioral health/psychiatric unit

	1392: Well-child visits in the first 15 months of life: the percentage of members who turned 15 months old during the measurement year and who had the following number of well-child visits with a PCP during their first 15 months of life. (NCQA)
Description	The percentage of members who turned 15 months old during the measurement year and who had the following number of well-child visits with a PCP during their first 15 months of life. •No well-child visits •One well-child visit •Two well-child visits •Three well-child visits •Four well-child visits •Five well-child visits •Six or more well-child visits
Numerator	Had the following number of well-child visits with a PCP during their first 15 months of life. • No well-child visits • One well-child visit • Two well-child visits • Three well-child visits • Four well-child visits • Five well-child visits • Six or more well-child visits
Numerator Details	Seven separate numerators are calculated, corresponding to the number of members who received 0, 1, 2, 3, 4, 5, 6 or more well-child visits with a PCP during their first 15 months of life. The well-child visit must occur with a PCP, but the PCP does not have to be the practitioner assigned to the child. A child who had a claim/encounter with a code listed in Table W15-A is considered to have received a well-child visit. Table W15-A: Codes to Identify Well-Child Visits 99381, 99382, 99391, 99392, 99432, 99461 V20.2, V20.3, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
Denominator	Denominator 1: members who turned 15 months old during the measurement year
Denominator Details	Denominator 1: Product lines Commercial, Medicaid (report each product line separately). Age 15 months old during the measurement year. Continuous enrollment 31 days–15 months of age. Calculate 31 days of age by adding 31 days to the child's date of birth. Calculate the 15-month birthday as the child's first birthday plus 90 days. For example, a child born on January 9, 2009, and included in the rate of "six or more well-child visits" must have had six well-child visits by April 9, 2010. Allowable gap No more than one gap in enrollment of up to 45 days during the continuous enrollment period. To determine continuous enrollment for a Medicaid member for whom enrollment is verified monthly the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled). Anchor date Day the child turns 15 months old. Benefit Medical.
Exclusions	None
Exclusion details	N/A

Risk Adjustment	no risk adjustment necessary
Stratification	Stratified by age (see above)
Time window	1 year
Type	Use of services
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic administrative data/claims
Level	Health Plan; Integrated delivery system; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1516: Well-child visits in the third, fourth, fifth and sixth years of life (NCQA)
Description	The percentage of members 3–6 years of age who received one or more well-child visits with a PCP during the measurement year.
Numerator	Received one or more well-child visits with a PCP during the measurement year.
Numerator Details	Numerator 1: Seven separate numerators are calculated, corresponding to the number of members who received 0, 1, 2, 3, 4, 5, 6 or more well-child visits with a PCP during their first 15 months of life. The well-child visit must occur with a PCP, but the PCP does not have to be the practitioner assigned to the child. A child who had a claim/encounter with a code listed in Table W15-A is considered to have received a well-child visit. Table W15-A: Codes to Identify Well-Child Visits 99381, 99382, 99391, 99392, 99432, 99461 V20.2, V20.3, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9 Numerator 2: At least one well-child visit with a PCP during the measurement year. The well-child visit must occur with a PCP, but the PCP does not have to be the practitioner assigned to the child. A child who had a claim/encounter with a code listed in Table W34-A is considered to have received a well-child visit. Table W34-A: Codes to Identify Well-Child Visits 99382, 99383, 99392, 99393 V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9 Medical record (non-Commercial plans only) for both measures: Documentation must include a note indicating a visit to a PCP, the date when the well-child visit occurred and evidence of all of the following. • A health and developmental history (physical and mental) • A physical exam • Health education/anticipatory guidance Do not include services rendered during an inpatient or ED visit. Preventive services may be rendered on visits other than well-child visits. Well-child preventive services count toward the measure, regardless of the primary intent of the visit, but services that are specific to an acute or chronic condition do not count toward the measure. Visits to school-based clinics with practitioners whom the organization would consider PCPs may be counted if documentation of a well-child exam is available. The PCP does not have to be assigned to the member. The organization may count services that occur over multiple visits, as long as all services occur in the time frame specified by the measure.
Denominator	Product lines Commercial, Medicaid (report each product line separately). Ages 3–6 years as of December 31 of the measurement year. Continuous enrollment The measurement year. Allowable gap No more than one gap in enrollment of up to 45 days during the continuous enrollment period. To determine continuous enrollment for a Medicaid member for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled). Anchor date December 31 of the measurement year. Benefit Medical. Medical Record (non-Commercial plans) for both measures: A systematic sample drawn from the eligible population for the Medicaid product line. The organization may

	reduce its sample size using the current year's administrative rate or the prior year's audited rate.
Denominator Details	Product lines Commercial, Medicaid (report each product line separately). Age 3-6 years old during the measurement year. Continuous enrollment The measurement year Allowable gap No more than one gap in enrollment of up to 45 days during the continuous enrollment period. To determine continuous enrollment for a Medicaid member for whom enrollment is verified monthly the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled). Anchor date December 31 of the measurement year Benefit Medical. Event Diagnosis: None
Exclusions	None
Exclusion details	N/A
Risk Adjustment	no risk adjustment necessary
Stratification	None
Time window	1 year
Type	Use of services
Type Score	Rate/proportion
Data Source	Paper medical record/flow-sheet; Electronic administrative data/claims
Level	Health Plan; Integrated delivery system; Population: national; Population: regional/network
Setting	Ambulatory Care: Office; Ambulatory Care: Clinic; Ambulatory Care: Hospital Outpatient

	1333: Children who receive family-centered care (MCHB/CAHMI)
Description	A composite measure designed to assess the family-centeredness of care delivery along several dimensions: whether doctor 1) partners with family in care, 2) listens to patient/parent carefully, 3) spends enough time with child, 4)is sensitive to family values/customs, 5) provides needed information, 6)whether family is able to access interpreter help, if needed.
Numerator	Percentage of children receiving Family-Centered Care (FCC)
Numerator Details	For a child to be included in the numerator of having family-centered care, criteria from the following six questions must be met: -Parent reported that doctor usually or always spent enough time with child (K5Q40) -Parent reported that doctor usually or always listened carefully (K5Q41) -Parent reported that doctor usually or always provided care that is sensitive to the family's values and customs (K5Q42) -Parent reported that doctor usually or always provided specific needed information (K5Q43) -Parent reported that doctor usually or always helped the family feel like a partner in the child's care (K5Q44) -Parent reported that doctor usually or always provided interpreter services for parents when needed (K5Q45 AND K5Q46)
Denominator	Children age 0-17 years with visit to a health care provider in last 12 months
Denominator Details	Children age 0-17 years with visit to a health care provider in last 12 months
Exclusions	Excluded from denominator if child does not fall in target population age range of 0-17 years Excluded from denominator if child did not see any health care provider in the past 12 months— preventive medical care, preventive dental care, mental health treatment or counseling, saw a specialist, or needed to see a specialist (K4Q20, K4Q21, K4Q22, K4Q23, K4Q25)
Exclusion details	If child is older than 17 years of age, excluded from denominator. If child has not seen any health care provider in the past 12 months— preventive medical care, preventive dental care, mental health treatment or counseling, saw a specialist, or needed to see a specialist (K4Q20, K4Q21, K4Q22, K4Q23, K4Q25)
Risk Adjustment	no risk adjustment necessary
Stratification	No stratification is required. When the Family-Centered Care 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
Time window	Encounter or point in time.
Type	Process
Type Score	Rate/proportion
Data Source	Survey: Patient

Level	Population: national; Population: regional/network; Population: states
Setting	Other

	1330: Children with a usual source for care when sick (MCHB/CAHMI)
Description	Whether child has a source of care that is known and continuous (categorized as a doctor´s office, hospital outpatient department, clinic or health center, school, friend or relative, some other place, or a telephone advice line)
Numerator	Child has a usual source of care when child is sick or parent needs advice about child´s health
Numerator Details	Child has a usual source of care-- a doctor´s office, hospital outpatient department, clinic or health center, school, friend or relative, some other place, or a telephone advice line.
Denominator	Children age 0-17 years
Denominator Details	Children age 0-17 years
Exclusions	Children over 17 years of age are excluded from the denominator.
Exclusion details	If child is over 17 years of age, excluded from the denominator.
Risk Adjustment	no risk adjustment necessary
Stratification	No stratification is required. When the Usual Source of Sick Care measure was administered in its most recent form, in the 2007 NSCH, 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
Time window	Encounter or point in time
Type	Process
Type Score	Rate/proportion
Data Source	Survey: Patient
Level	Population: national; Population: regional/network; Population: states
Setting	Other

	1381: Asthma emergency department visits (Alabama Medicaid Agency)
Description	Percentage of patients with asthma who have greater than or equal to one visit to the emergency room for asthma during the measurement period.
Numerator	Measuring percentage of people with Asthma that have an emergency room visit during a 12 month measurement period.
Numerator Details	Emergency Department Visits Numerator is patients with = 1 asthma related ED visits as identified via ED visit codes (procedure codes 99281-99285) AND also has an asthma diagnosis code ICD-9-CM codes 493.00, 493.01, 493.02, 493.10,493.11, 493.12, 493.81, 493.82, 493.90, 493.91, and 493.92 as the primary diagnosis on the emergency room claim during the measurement period). Use table of denominator recipient IDs to pull all recipients that have received claims described above.
Denominator	Denominator is all patients age one and older, diagnosed with asthma or on at least two short acting beta adrenergic agents during the measurement period. The denominator will include recipients with any claims with ICD-9-CM codes 493.00, 493.01, 493.02, 493.10, 493.11, 493.12, 493.81, 493.82, 493.90, 493.91, and 493.92 (excludes 493.20, 493.21 and 493.22) OR have had a prescription for two or more short acting beta adrenergic agents (Generic Code Number Sequence Numbers (GSN) of 04963, 04964, 04966, 04967, 04968, 05032, 05033, 05034, 05037, 05039, 05040, 16033, 22230, 28090, 41848, 41849, 48698, 48699, 49871, 51197, 51198, 54687, 57879, and 58890) with the dates of service March 01, 2006-February 28,2007 with paid dates from March 01, 2006 through May 31, 2007. This is our baseline period. Subsequent 12 month measurement periods identified for the interventional strategies. Total period of pilot initiative was 24 months. A "Measurement period is 12 consecutive months".
Denominator Details	SQL for Asthma Denominator (SELECT DSS.T_CA_ICN.ID_MEDICAID, trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12), DSS.T_CA_RECIP_KEY.CDE_RECIP_COUNTY || ´ - ´ || DSS.T_CA_RECIP_KEY.DSC_RECIP_COUNTY, DSS.T_CA_RECIP_KEY.CDE_RACE || ´ - ´ || DSS.T_CA_RECIP_KEY.DSC_RACE, DSS.T_CA_RECIP_KEY.CDE_SEX || ´ - ´ || DSS.T_CA_RECIP_KEY.DSC_SEX FROM DSS.T_CA_ICN, DSS.T_RE_BASE_DN, DSS.T_CA_RECIP_KEY, DSS.T_CA_AID_GROUP WHERE (DSS.T_CA_ICN.RECIP_KEY=DSS.T_CA_RECIP_KEY.RECIP_KEY) AND (DSS.T_RE_BASE_DN.SAK_RECIP(+)=DSS.T_CA_ICN.SAK_RECIP) AND (DSS.T_CA_AID_GROUP.SAK_AID_GROUP=DSS.T_CA_ICN.SAK_AID_GROUP) AND ((DSS.T_CA_ICN.CDE_DIAG_PRIM IN (´49300´, ´49301´, ´49302´, ´49310´, ´49311´, ´49312´, ´49381´, ´49382´, ´49390´, ´49391´, ´49392´) OR DSS.T_CA_ICN.CDE_DIAG_2 IN (´49300´, ´49301´, ´49302´, ´49310´, ´49311´, ´49312´, ´49381´, ´49382´, ´49390´, ´49391´, ´49392´)) AND DSS.T_CA_ICN.DTE_FIRST_SVC BETWEEN ´03-01-2006 00:00:00´ AND ´02-28-2007 00:00:00´ AND DSS.T_CA_ICN.DTE_PTN BETWEEN ´03-01-2006 00:00:00´ AND ´05-31-2007 00:00:00´ AND trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12) != 0

	AND DSS.T_CA_ICN.CDE_DTL_STATUS != ´D´ AND DSS.T_CA_AID_GROUP.CDE_GROUP_D NOT IN (´D98´, ´D99´, ´D1 ´, ´D2 ´, ´D3 ´, ´D4 ´, ´D5 ´, ´D6 ´, ´D7 ´, ´D8 ´, ´D9 ´) AND DSS.T_CA_ICN.CDE_CLM_TYPE IN (´I´, ´A´, ´C´, ´M´, ´O´, ´B´)) GROUP BY DSS.T_CA_ICN.ID_MEDICAID, trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12), DSS.T_CA_RECIP_KEY.CDE_RECIP_COUNTY || ´ - ´ || DSS.T_CA_RECIP_KEY.DSC_RECIP_COUNTY, DSS.T_CA_RECIP_KEY.CDE_RACE || ´ - ´ || DSS.T_CA_RECIP_KEY.DSC_RACE, DSS.T_CA_RECIP_KEY.CDE_SEX || ´ - ´ || DSS.T_CA_RECIP_KEY.DSC_SEX HAVING (count(DISTINCT DSS.T_CA_ICN.NUM_ICN) >= 1) UNION SELECT DSS.T_CA_ICN.ID_MEDICAID, trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12), DSS.T_CA_RECIP_KEY.CDE_RECIP_COUNTY || ´ - ´ || DSS.T_CA_RECIP_KEY.DSC_RECIP_COUNTY, DSS.T_CA_RECIP_KEY.CDE_RACE || ´ - ´ || DSS.T_CA_RECIP_KEY.DSC_RACE, DSS.T_CA_RECIP_KEY.CDE_SEX || ´ - ´ || DSS.T_CA_RECIP_KEY.DSC_SEX FROM DSS.T_CA_ICN, DSS.T_RE_BASE_DN, DSS.T_CA_RECIP_KEY, DSS.T_CA_DRUG, DSS.T_CA_AID_GROUP WHERE (DSS.T_CA_ICN.RECIP_KEY=DSS.T_CA_RECIP_KEY.RECIP_KEY) AND (DSS.T_CA_DRUG.SAK_CLAIM(+)=DSS.T_CA_ICN.SAK_CLAIM and DSS.T_CA_DRUG.DTE_PTN(+)=DSS.T_CA_ICN.DTE_PTN) AND (DSS.T_RE_BASE_DN.SAK_RECIP(+)=DSS.T_CA_ICN.SAK_RECIP) AND (DSS.T_CA_AID_GROUP.SAK_AID_GROUP=DSS.T_CA_ICN.SAK_AID_GROUP) AND (DSS.T_CA_DRUG.NUM_DRUG_GCN_SEQ IN (05037, 04963, 04964, 04966, 04967, 04968, 05032, 05033, 05034, 05039, 05040, 16033, 22230, 28090, 41848, 41849, 48698, 48699, 49871, 51197, 51198, 54687, 57879, 58890) AND DSS.T_CA_ICN.DTE_FIRST_SVC BETWEEN ´03-01-2006 00:00:00´ AND ´02-28-2007 00:00:00´ AND DSS.T_CA_ICN.DTE_PTN BETWEEN ´03-01-2006 00:00:00´ AND ´05-31-2007 00:00:00´ AND trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12) != 0 AND DSS.T_CA_ICN.CDE_DTL_STATUS != ´D´ AND DSS.T_CA_AID_GROUP.CDE_GROUP_D NOT IN (´D98´, ´D99´, ´D1 ´, ´D2 ´, ´D3 ´, ´D4 ´, ´D5 ´, ´D6 ´, ´D7 ´, ´D8 ´, ´D9 ´) AND DSS.T_CA_ICN.CDE_CLM_TYPE IN (´P´, ´Q´)) GROUP BY DSS.T_CA_ICN.ID_MEDICAID, trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12),

	DSS.T_CA_RECIP_KEY.CDE_RECIP_COUNTY || ´ - ´ || DSS.T_CA_RECIP_KEY.DSC_RECIP_COUNTY, DSS.T_CA_RECIP_KEY.CDE_RACE || ´ - ´ || DSS.T_CA_RECIP_KEY.DSC_RACE, DSS.T_CA_RECIP_KEY.CDE_SEX || ´ - ´ || DSS.T_CA_RECIP_KEY.DSC_SEX HAVING (count(DISTINCT DSS.T_CA_ICN.NUM_ICN) >= 2)) Make a table of the recipient IDs retrieved from Asthma Denominator query.
Exclusions	Excludes children less than age one.
Exclusion details	Anyone under age two. Actually Query language states & Recipient Age FDOS - Calculated Between Age 2 and 20
Risk Adjustment	no risk adjustment necessary
Stratification	Recipient Gender & Description Recipient Race Code & Description Recipient County & Description
Time window	The measurement period is a 12 consecutive month period. This can be calendar year, fiscal year or as otherwise determined. For the Together for Quality Pilot a baseline period was determined and then two 12 month periods were defined as measurement periods during the pilot.
Type	Outcome
Type Score	None Listed
Data Source	Electronic administrative data/claims
Level	Population: counties or cities; Program: Other
Setting	Ambulatory Care: Emergency Dept

	1337: Children with inconsistent health insurance coverage in the past 12 months (MCHB/CAHMI)
Description	Measures whether children are uninsured at the time of the survey or if currently insured children experienced periods of no insurance during past 12 months
Numerator	Percentage of children who are uninsured at the time of the survey or currently insured children who experienced periods of no insurance during past 12 months
Numerator Details	For a child to be included in the numerator of having inconsistent insurance coverage: -Child is currently uninsured (K3Q01=no insurance), OR -Child experienced periods of no insurance during past 12 months (K3Q03=yes, currently insured but had a point in previous 12 months with no insurance)
Denominator	Children age 0-17 years
Denominator Details	Children age 0-17 years
Exclusions	Excluded from denominator if child does not fall in target population age range of 0-17 years
Exclusion details	If child is older than 17 years of age, excluded from denominator.
Risk Adjustment	no risk adjustment necessary
Stratification	No stratification is required. When the consistency of health insurance measure was administered in its most recent form, in the 2007 NSCH, 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
Time window	Encounter or point in time
Type	Process
Type Score	Rate/proportion
Data Source	Survey: Patient
Level	Population: national; Population: regional/network; Population: states
Setting	Other

	1332: Children who receive preventive medical visits (MCHB/CAHMI)
Description	Assesses how many medical preventive visits in a 12 month period, such as a physical exam or well-child check-up (does not include visits related to specific illnesses)
Numerator	Percentage of children with one or more preventive medical visits in the past 12 months.
Numerator Details	For a child to be included in the numerator of having preventive medical visit: -Child saw doctor, nurse or other health care provider for preventive medical care such as a physical exam or well-child checkup during the past 12 months (K4Q20)
Denominator	Children age 0-17 years
Denominator Details	Children age 0-17 years
Exclusions	Excluded from denominator if child does not fall in target population age range of 0-17 years.
Exclusion details	If child is older than 17 years of age, excluded from denominator.
Risk Adjustment	no risk adjustment necessary
Stratification	No stratification is required. When the Preventive Medical Visits 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
Time window	Encounter or point in time.
Type	Outcome
Type Score	Rate/proportion
Data Source	Survey: Patient
Level	Population: national; Population: regional/network; Population: states
Setting	Other

	1340: Children with special health care needs (CSHCN) who receive services needed for transition to adult health care (MCHB/CAHMI)
Description	Whether children with special health care needs (CSHCN) ages 12-17 have doctors who usually/always encourage increasing responsibility for self-care AND (when needed) have discussed transitioning to adult health care, changing health care needs, and how to maintain insurance coverage
Numerator	Percentage of youth with special health care needs who receive services needed for transition to adult health care services
Numerator Details	For a child to be included in the numerator of receiving services needed to transition to adulthood, criteria from the following must be met: -Child must qualify as having one or more special health care needs -Doctors usually/always encourage increasing responsibility for self-care (C6Q08) -If child's doctor only treats children, then doctor had conversation with child about eventually seeing other health care providers who treat adults (C6Q0A_B), if needed -Doctor discussed changing health care needs as youth becomes adult (C6Q0A), if needed -Doctor discussed insurance coverage as youth becomes adult (C6Q0A_E), if needed
Denominator	Children with special health care needs (CSHCN) age 12-17 years
Denominator Details	Children with special health care needs (CSHCN) age 12-17 years
Exclusions	Excluded from denominator if child does not fall in target population age range of 12-17 years and/or if child does not have one or more special health care needs (non-CSHCN).
Exclusion details	If child is older than 17 years of age, excluded from denominator. If child is younger than 12 years, excluded from denominator. CSHCN are defined by the standardized and validated CSHCN Screener. The screener is administered at the beginning of the survey and all remaining items in the survey are only asked regarding a child with special health care needs.
Risk Adjustment	no risk adjustment necessary
Stratification	No stratification is required. When the Transition to Adulthood measure was administered in its most recent form, in the 2005/06 National Survey of Children with Special Health Care Needs, 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 • Type of Special Health Care Need
Time window	Encounter or point in time.
Type	Outcome
Type Score	Rate/proportion
Data Source	Survey: Patient
Level	Population: national; Population: regional/network; Population: states

Setting	Other

NATIONAL QUALITY FORUM

APPENDIX B: NATIONAL VOLUNTARY CONSENSUS STANDARDS FOR CHILD HEALTH QUALITY MEASURES 2010

STEERING COMMITTEE, TECHNICAL ADVISORY PANEL, AND NQF STAFF

Steering Committee

Thomas McInerny, MD (Co-Chair)
University of Rochester, Rochester, NY

Marina Weiss, PhD (Co-Chair)
March of Dimes, Washington, DC

Martha Bergren, RN, DNS, NCSN
National Association of School Nurses, Silver Spring, MD

Sarah Brown, MSPH
The National Campaign to Prevent Teen and Unplanned Pregnancy, Washington, DC

Carroll Carlson, RN, BSN
Group Health Cooperative of Eau Claire, Eau Claire, WI

Alex Chen, MD, MS
Keck School of Medicine, Los Angeles, CA

David Clarke, MD
The Children's Hospital, Aurora, CO

Sharron Docherty, PhD, CPNP (AC/PC)
National Association of Pediatric Nurse Practitioners, Durham, NC

Nancy Fisher, MD, MPH
Washington State Health Care Authority, Olympia, WA

Faye Gary, EdD, RN, FAAN
Bolton Nursing School of Case Western Reserve University, Cleveland, OH

James Glauber, MD, MPH
Neighborhood Health Plan, Boston, MA

Margarita Hurtado, PhD, MHS
American Institutes for Research, Silver Spring, MD

Kathy Jenkins, MD, MPH

Children's Hospital Boston, Boston, MA

Phillip Kibort, MD, MBA
Children's Hospitals and Clinics of Minnesota, Minneapolis, MN

Allan Lieberthal, MD, FAAP
Keck School of Medicine, Los Angeles, CA

Marlene Miller, MD, MSc
Johns Hopkins Health System, Baltimore, MD

Donna Persaud, MD
Parkland Health and Hospital System, Dallas, TX

James Quirk, MD, PhD
Stony Brook University Medical Center, East Setauket, NY

Fred Rachman, MD
Alliance of Chicago Community Health Services, Chicago, IL

Goutham Rao, MD
University of Pittsburgh School of Medicine, Pittsburgh, PA

Ellen Schwalenstocker, PhD, MBA
National Association of Children's Hospitals and Related Institutions, Alexandria, VA

Bonnie Zima, MD, MPH
UCLA Dept of Psychiatry, Health Services Research Center, Los Angeles, CA

Hearing and Vision Technical Advisory Panel

Allan Lieberthal, MD, FAAP (Chair)
Keck School of Medicine, Los Angeles, CA

Cheryl DeConde Johnson, EdD
The ADVantage-Audiology Deaf Education Vantage, Leadville, CO

Michael Earley, OD, FAAO
Ohio State University, College of Optometry, Columbus, OH

Michael Repka, MD
Johns Hopkins Health System, Baltimore, MD

Rahul Shah, MD, FACS, FAAP
Children's National Medical Center, Washington, DC

National Quality Forum Staff

Helen Burstin, MD, MPH
Senior Vice President, Performance Measures

Reva Winkler, MD, MPH
Senior Program Director, Performance Measures

Heidi Bossley, MSN, MBA
Managing Director, Consensus Development Process, Performance Measures

Suzanne C. Theberge, MPH
Project Manager, Performance Measures

Hawa Camara, MPH
Research Analyst, Performance Measures

Gene Cunningham, MS
Research Analyst, Performance Measures

Emma Nochomovitz, MPH
Research Analyst, Performance Measures

APPENDIX C:
NQF-endorsed© consensus standards for Child Health

Title	Measure Number	Description	Level of Measurement	Steward Organization	Target Population Age
PREGNANCY					
Frequency of Ongoing Prenatal Care (FPC): The percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received the following number of expected prenatal visits.	1391	Frequency of Ongoing Prenatal Care (FPC): The percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received the following number of expected prenatal visits. •<21 percent of expected visits •21 percent–40 percent of expected visits •41 percent–60 percent of expected visits •61 percent–80 percent of expected visits •=81 percent of expected visits This measure uses the same denominator as the Prenatal and Postpartum Care measure.	Health Plan; Integrated delivery system; Population: national; Population: regional/network	NCQA	Women of childbearing years
Proportion of infants 22 to 29 weeks gestation treated with surfactant who are treated within 2 hours of birth.	0484	Number of infants 22 to 29 weeks gestation treated with surfactant within 2 hours of birth	Facility/Agency	Vermont Oxford Network	Pregnancy
Proportion of infants 22 to 29 weeks gestation screened for retinopathy of prematurity.	0483	Proportion of infants 22 to 29 weeks screened for retinopathy of prematurity using the guidelines from the American Academy of Pediatrics	Facility/Agency	Vermont Oxford Network	Pregnancy

*proposed Child Health Quality Measures 2010 are highlighted in yellow

Prenatal and Postpartum Care	1517	Measure 2: Prenatal & Postpartum Care (PPC): The percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year. For these women, the measure assesses the following facets of prenatal and postpartum care. • Rate 1: Timeliness of Prenatal Care. The percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester or within 42 days of enrollment in the organization. • Rate 2: Postpartum Care. The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.	Health Plan; Integrated delivery system; Population: national; Population: regional/network	NCQA	Women of childbearing years
Diabetes and Pregnancy: Avoidance of Oral Hypoglycemic Agents	0582	This measure identifies pregnant women with diabetes who are not taking an oral hypoglycemic agent.	Clinicians: Individual; Population: counties or cities; Health Plan; Clinicians: Group; Integrated delivery system	Resolution Health, Inc.	Women of childbearing years
Pregnant women that had HBsAg testing.	0608	This measure identifies pregnant women who had a HBsAg (hepatitis B) test during their pregnancy.	Clinicians: Individual; Population: counties or cities; Health Plan; Clinicians: Group; Integrated delivery system	Ingenix	Women of childbearing years
Pregnant women that had HIV testing.	0606	This measure identifies pregnant women who had an HIV test during their pregnancy.	Clinicians: Individual; Population: counties or cities; Health Plan; Clinicians: Group; Integrated delivery system	Ingenix	Women of childbearing years
Pregnant women that had syphilis screening.	0607	This measure identifies pregnant women who had a syphilis test during their pregnancy.	Clinicians: Individual; Population: counties or cities; Health Plan; Clinicians: Group; Integrated delivery system	Ingenix	Women of childbearing years

Prenatal Anti-D Immune Globulin	0014	Percentage of D-negative, unsensitized patients who gave birth during a 12-month period who received anti-D immune globulin at 26-30 weeks gestation.	Clinicians: Individual	AMA-PCPI	Pregancy
Prenatal Blood Group Antibody Testing	0016	Percentage of patients who gave birth during a 12-month period who were screened for blood group antibodies during the first or second prenatal care visit.	Clinicians: Individual	AMA-PCPI	Pregancy
Prenatal Blood Groups (ABO), D (Rh) Type	0015	Percentage of patients who gave birth during a 12-month period who had a determination of blood group (ABO) and D (Rh) type by the second prenatal care visit.	Clinicians: Individual	AMA-PCPI	Pregancy
Central line catheter-associated blood stream infection rate for ICU and high-risk nursery (HRN) patients	0139	Percentage of ICU and high-risk nursery patients, who over a certain amount of days acquired a central line catheter-associated blood stream infections over a specified amount of line-days	Facility/Agency	CDC	Pregnancy
Ventilator-associated pneumonia for ICU and high-risk nursery (HRN) patients	0140	Percentage of ICU and HRN patients who over a certain amoint of days have ventilator-associated pneumonia	Facility/Agency	CDC	Pregnancy
Prenatal Screening for Human Immunodeficiency Virus (HIV)	0012	Percentage of patients who gave birth during a 12-month period who were screened for HIV infection during the first or second prenatal care visit.	Clinicians: Individual	AMA-PCPI	Pregancy
Appropriate Use of Antenatal Steroids	476	Mothers receiving antenatal steroids during pregnancy at any time prior to delivery of a preterm infant	Facilty	Providence St. Vincent Medical Center	Pregnancy
Cesarean Rate for low-risk first birth women (aka NTSV CS rate)	471	Percentage of low-risk first birth women (aka NTSV CS rate: nulliparous, term, singleton, vertex)	Facility, group, integrated system or community	California Maternal Quality Care Collaborative	Pregnancy
NEWBORN/NEONATAL					
Healthy Term Newborn	OT3-031-10	Percent of term singleton livebirths (excluding those with diagnoses originating in the fetal period) who DO NOT have significant complications during birth or the nursery care.	Clinicians: Group; Facility/Agency; Multi-site/corporate chain; Can be measured at all levels	California Maternal Quality Care Collaborative	Newborns

Birth Trauma Rate: Injury to Neonates (PSI #17)	474	Percentage of neonates with specific birth trauma per 1000 births. Exclude infants with injury to skeleton and osteogenesis imperfecta, subdural or cerebral hemorrhage in preterm infant.	Facilty	AHRQ	Neonates
Elective delivery prior to 39 completed weeks gestation	469	Percentage of babies electively delivered prior to 39 completed weeks gestation	Facilty	Hospital Corporation of America	NEWBORN
Nosocomial Blood Stream Infections in Neonates (NQI #3)	478	Percentage of qualifying neonates with selected bacterial blood stream infections	Facilty	AHRQ	Neonates
Low birth weight (PQI 9)	0278	This measure is used to assess the number of low birth weight infants per 100 births.	Population: counties or cities	AHRQ	Newborns
Percentage of low birthweight births	1382	The percentage of births with birthweight <2,500 grams	Population: national; Population: regional/network; Population: states; Population: counties or	CDC	Newborns
Under 1500g infant Not Delivered at Appropriate Level of Care	477	The number per 1,000 livebirths of <1500g infants delivered at hospitals not appropriate for that size infant.	Facility, integrated system or community	California Maternal Quality Care Collaborative	Newborns
First NICU Temperature < 36 degrees C	0482	Percent of all NICU admissions with a birth weight of 501-1500g whose first temperature was measured within one hour of admission to the NICU and was below 36 degrees Centigrade.	Facility/Agency	Vermont Oxford Network	Neonates
First temperature measured within one hour of admission to the NICU.	0481	Percent of NICU admissions with a birth weight of 501-1500g with a first temperature taken within 1 hour of NICU admission.	Facility/Agency	Vermont Oxford Network	Neonates
Late sepsis or meningitis in neonates (risk-adjusted)	0303	Percentage of infants born at the hospital, whose birth weight is between 401 and 1500 grams OR whose gestational age is between 22 weeks 0 days and 29 weeks 6 days with late sepsis or meningitis with one or more of the following criteria: Bacterial Pathogen, Coagulase Negative Staphylococcus, Fungal Infection	Facility/Agency	Vermont Oxford Network	Newborns

Late sepsis or meningitis in Very Low Birth Weight (VLBW) neonates (risk-adjusted)	0304	Percentage of infants born at the hospital, whose birth weight is between 401 and 1500 grams OR whose gestational age is between 22 weeks 0 days and 29 weeks 6 days, who have late sepsis or meningitis, with one or more of the following criteria: Bacterial Pathogen, Coagulase Negative Staphylococcus, Fungal Infection	Facility/Agency	Vermont Oxford Network	Newborns
Neonate immunization administration	0145	Percentage of patient refined diagnostic-related groups (APR-DRG) who received neonate immunization administration	Facility/Agency	Child Health Corporation of America	Neonates
Neonate immunization	485	Percent of neonates with a length of stay greater than 60 days receiving DPT, Hepatitis B, Polio, Hib, and PCV immunizations in adherence with current guidelines.	Facility	Child Health Corporation of America	Neonates
Birth dose of hepatitis B vaccine and hepatitis immune globulin for newborns of mothers with chronic hepatitis B	479	Percentage of newborns to hepatitis B surface antigen (HBsAg)-positive mothers who receive a birth dose of hepatitis B virus (HBV) vaccine and hepatitis B immune globulin (HBIG)	Facility	Asian Liver Center at Stanford University	Newborns
Hearing screening prior to hospital discharge (EHDI-1a)	1354	This measure assesses the proportion of births that have been screened for hearing loss before hospital discharge. *Numbering within the parentheses references the US national extension quality measure identifiers developed for the Use Cases published in the Integrating the Healthcare Enterprise (IHE) Quality, Research and Public Health (QRPH) EHDI Technical Framework Supplement available at www.ihe.net/Technical_Framework/index.cfm#quality	Clinicians: Individual; Facility/Agency; Population: national; Population: states	CDC	Newborn period

Outpatient hearing screening of infants who did not complete screening before hospital discharge (EHDI-1c)	1357	This measure assesses the proportion of all newborn infants who did not complete a hearing screen prior to discharge, who went on to receive an outpatient screen before the child was 31 days of age. *Numbering within the parentheses references the US national extension quality measure identifiers developed for the Use Cases published in the Integrating the Healthcare Enterprise (IHE) Quality, Research and Public Health (QRPH) EHDI Technical Framework Supplement available at www.ihe.net/Technical_Framework/index.cfm#quality	Clinicians: Individual; Facility/Agency; Population: national; Population: states	CDC	Newborn
Newborn Hearing Screening	1402	The percentage of children who turned 6 months old during the measurement year who had documentation of newborn hearing screening by 6 months of age.	Clinicians: Individual; Clinicians: Group; Population: national; Population:	NCQA	0 – 6 months
Proportion of infants covered by Newborn Bloodspot Screening (NBS)	1351	What percentage of infants had bloodspot newborn screening performed as mandated by state of birth?	Facility/Agency; Population: states; Program: Other	HRSA- MCHB	birth to 2 weeks
Standardized mortality ratio for neonates undergoing non-cardiac surgery	OT3-028-10	Ratio of observed to expected rate of in-hospital mortality following non-cardiac surgery among infants <= 30 days of age, risk-adjusted.	Facility/Agency	Children's Hospital Boston - Program for Patient Safety & Quality	Neonates
Exclusive Breastfeeding at Hospital Discharge	0480	Exclusive Breastfeeding (BF) for the first 6 mos of neonatal life has long been the expressed goal of WHO, DHHS, APA, and ACOG.	Facility/Agency	Association of Women's Health, Obstetric and Neonatal Nurses	Neonates
INFANCY					
Sudden Infant Death Syndrome Counseling	1397	The percentage of children who tured 6 months old during the measurement year and who had Suddent Infant Death Syndrome (SIDS) counseling and proper follow-up.	Clinicians: Individual; Clinicians: Group; Population: national; Population:	NCQA	0-6 months

Maternal Depression Screening	1401	The percentage of children who turned 6 months during the measurement year who had documentation of a maternal depression screening and proper follow-up performed between 0 and 6 months of life.	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	0-6 months
Audiological Evaluation no later than 3 months of age (EHDI-3)	1360	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.	Clinicians: Individual; Facility/Agency; Population: national; Population: states	CDC	Infancy
Intervention no later than 6 months of age (EHDI-4a)	1361	This measure assesses the proportion of infants with permanent hearing loss who have been referred to intervention services no later than age 6 months of age.	Clinicians: Individual; Facility/Agency; Population: national; Population: states	CDC	Infancy
CHILD - ACCESS TO CARE and the MEDICAL HOME					
Children Who Have Inadequate Insurance Coverage For Optimal Health	OT3-044-10	The measure is designed to ascertain whether or not current insurance program coverage is adequate for the child's health needs--whether the out of pocket expenses are reasonable; whether the child is limited or not in choice of doctors; and whether the benefits meet child's healthcare needs.	Population: national; Population: states; Population: regional/network	CAHMI	Children age 0-17 years
Children Who Have No Problems Obtaining Referrals When Needed	OT3-036-10	The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.	Population: states; Population: national; Population:	CAHMI	Children age 0-17 years
Children Who Receive Effective Care Coordination of Healthcare Services When Needed	OT3-038-10	This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).	Population: states; Population: national; Population: regional/network	CAHMI	Children age 0-17 years

Children Who Receive Family-Centered Care	1333	A composite measure designed to assess the family-centeredness of care delivery along several dimensions: whether doctor 1) partners with family in care, 2) listens to patient/parent carefully, 3) spends enough time with child, 4)is sensitive to family values/customs, 5) provides needed information, 6)whether family is able to access interpreter help, if needed.	Population: national; Population: regional/network; Population: states	CAHMI	Children age 0-17 years
Children With a Usual Source for Care When Sick	1330	Whether child has a source of care that is known and continuous (categorized as a doctor´s office, hospital outpatient department, clinic or health center, school, friend or relative, some other place, or a telephone advice line)	Population: national; Population: regional/network; Population: states	CAHMI	Children age 0-17 years
Children With Inconsistent Health Insurance Coverage in the Past 12 Months	1337	Measures whether children are uninsured at the time of the survey or if currently insured children experienced periods of no insurance during past 12 months	Population: national; Population: regional/network; Population: states	CAHMI	Children age 0-17 years

Measure of Medical Home for Children and Adolescents	OT3-045-10	This composite measure assesses whether or not children and adolescents (age 0-17 years) receive health care within a medical home according to the survey respondent (almost always the child's parent). The medical home measure is based on six of the seven components of care first proposed by the American Academy of Pediatrics (AAP)—health care that is accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally effective. (Note: "accessible" is the one component of medical home that is not directly addressed in this composite measure. This will be explained in a later section) The AAP policy statement emphasizes that a medical home is "not a building, house, or hospital, but rather an approach to providing continuous and comprehensive primary pediatric care from infancy through young adulthood, with availability 24 hours a day, 7 days a week, from a pediatrician or physician whom families trust," and this composite measure of medical home is designed to assess the receipt of quality health care using the AAP's recommended care guidelines.	Population: states; Population: national; Population: regional/network	CAHMI	Children and adolescents 0-17 years
Medical Home System Survey	494	Percentage of practices functioning as a patient-centered medical home by providing ongoing, coordinated patient care. Meeting Medical Home System Survey standards demonstrates that practices have physician-led teams that provide patients with: a. Improved access and communication b. Care management using evidence-based guidelines c. Patient tracking and registry functions d. Support for patient self-management e. Test and referral tracking f. Practice performance and improvement functions	Clinician; group	NCQA	?

Validated family-centered survey questionnaire for parents' and patients' experiences during inpatient pediatric hospital stay	OT3-046-10	This family-centered survey questionnaire consists of 62 questions that assess various aspects of care experiences during inpatient pediatric hospital stays. The dimensions that are included are overall impressions, interactions with nurses, interactions with doctors, the admission and discharge process, home care preparation, medications, pain management, parent involvement, hospital environment, support staff and food. Demographic questions are included at the end of the survey. The majority of the survey questions are categorical in nature. Ordinal measures enable the rating of experiences, dichotomous measures are used to assess if subsequent questions apply to the experiences of parents and the patient but a small number of questions are open-ended to allow any additional or more detailed comments. Survey will be collected for a given time period, e.g. monthly. The target population is one of the parents, 18 years or older, of a child that stayed for at least one day in an inpatient unit at the hospital and was discharged during the previous time period, e.g. the last month. A random sample will be drawn of all discharged parent-patient units and receive the survey. The instrument is currently validated for mail and phone administration and is in English. All questions are asking about experiences during their last	Facility/Agency	Children's Hospital Boston - Program for Patient Safety & Quality	18 years or older
CHILD - WELL CHILD CARE and DEVELOPMENTAL SCREENING					
Well-Child Visits in the First 15 Months of Life	1392	The percentage of members who turned 15 months old during the measurement year and who had the following number of well-child visits with a PCP during their first 15 months of life.	Health Plan; Integrated delivery system; Population: national; Population:	NCQA	Measure 1: 0-15 months,
The percentage of members 3–6 years of age who received one or more well-child visits with a PCP during the measurement year.	1516	The percentage of members 3–6 years of age who received one or more well-child visits with a PCP during the measurement year.	Health Plan; Integrated delivery system; Population: national; Population: regional/network	NCQA	3-6 years
Children Who Receive Preventive Medical Visits	1332	Assesses how many medical preventive visits in a 12 month period, such as a physical exam or well-child check-up (does not include visits related to specific illnesses)	Population: national; Population: regional/network; Population: states	CAHMI	Children age 0-17 years

Developmental Screening by 2 Years of Age	1399	The percentage of children who turned 2 years old during the measurement year who had a developmental screening and proper follow-up performed between 6 months and 2 years of age.	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	6 months to 2 years old
Developmental Screening in the First Three Years of Life	1448	The percentage of children screened for risk of developmental, behavioral and social delays using a standardized screening tool in the first three years of life. This is a measure of screening in the first three years of life that includes three, age-specific indicators assessing whether children are screened by 12 months of age, by 24 months of age and by 36 months of age.	Population: states; Program: QIO; Program: Other	CAHMI	First three years of life.
Developmental screening using a parent completed screening tool (Parent report, Children 0-5)	1385	The measure assesses whether the parent or caregiver completed a developmental screening tool meant to identify children at-risk for developmental, behavioral and social delays. The items are age-specific and anchored to parent-completed tools (a majority of health care providers implementing the Bright Futures recommendations for standardized screening for all children utilize parent-completed tools due to their validity and feasibility). The age-specific items assess whether children 10-71 months are screened.	Population: national; Population: regional/network; Population: states	CAHMI	Children age 10 months - 5 years (71 months)
		The items assessing developmental screening in the National Survey of Children´s Health are meant to assess whether the parent or caregiver completed a standardized developmental screening tool (for example: Parents Evaluation of Developmental Status). Developmental screening is defined as a standardized tool that assesses the child's risk for developmental, behavioral and social delays. The American Academy of Pediatrics recommends standardized screening using an approved screening tool as the best method of identifying children at risk for developmental, behavioral and/or social delays.			

Promoting Healthy Development Survey (PHDS)	0011	43-item survey given to parents of children ages 3 to 48 months that assesses parent's experience with care for the provision of preventive and developmental services consistent with American Academy of Pediatrics and Bright futures practice guidelines. Level of analysis: Physician, office, medical group, health plan, community, state, national and by child and parent health and social economic characteristics	Clinicians: Individual; Population: counties or cities; Health Plan; Facility/Agency	CAHMI	ages 3-48 months
Pediatric Symptom Checklist (PSC)	OT3-043-10	The Pediatric Symptom Checklist (PSC)is a brief parent report questionnaire that is used to measure overall psychosocial functioning in children from 4 to 16 years of age.	Clinicians: Group; Population: national; Population: regional/network; Population: states; Population: counties or cities; Program: Disease management; Program: QIO; Can be measured at all levels	MGH	ages 4-16 years
Blood Pressure Screening by age 13	1552	The percentage of children who had a blood pressure screening and proper follow-up performed. Blood Pressure Screening By age 13 years.	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	6-13 years
CHILD - IMMUNIZATIONS					
Childhood Immunization Status	0038	Percentage of children 2 years of age who had four DtaP/DT, three IPV, one MMR, three H influenza type B, three hepatitis B, one chicken pox vaccine (VZV) and four pneumococcal conjugate vaccines by their second birthday. The measure calculates a rate for each vaccine and two separate combination rates	Clinicians: Individual	NCQA	1-2 years old

Immunizations by 13 years of age	1407	The percentage of adolescents who had proper immunizations. Two measures are reported. We are combining the measures into one form because measure features and evidence are the same or similar. 1. Immunizations by 13 years of age 2. Immunizations by 18 years of age	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	Measure 1: 6 years-13 years; Measure 2: 13-18 years
High Risk for Pneumococcal Disease - Pneumococcal Vaccination	0617	Percentage of patients age 5-64 with a high risk condition or age 65 years and older who received the pneumococcal vaccine	Can be measured at all levels	ActiveHealth Management	5+
CHILD - BMI and PHYSICAL ACTIVITY					
Child Overweight or Obesity Status Based on Parental Report of Body-Mass-Index (BMI)	1349	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).	Population: national; Population: regional/network; Population: states	CAHMI	Children age 10-17 years
Children Age 6-17 Years who Engage in Weekly Physical Activity	1348	Measures how many times per week child 6-17 years exercises vigorously (based on AAP and CDC recommendations)	Population: national; Population: regional/network; Population: states	CAHMI	Children age 6-17 years
Healthy Physical Activity by 6 years of age	1396	The percentage of chilren who had a BMI assessment and counseling for physical activity, nutrition and screen time. Measure: Healthy Physical Activity by 6 years of age	Clinicians: Individual; Clinicians: Group; Health Plan; Population: national; Population: regional/network	NCQA	2-6 years
Healthy Physical Activity by 13 years of age	1512	The percentage of chilren who had a BMI assessment and counseling for physical activity, nutrition and screen time. Measure: Healthy Physical Activity by 13 years of age	Clinicians: Individual; Clinicians: Group; Health Plan; Population: national; Population: regional/network	NCQA	Measure 1: 2 years-6 years, Measure 2: 6 years-13 years, Measure 3: 13 years-18 years
CHILD - VISION SCREENING					

Pre-School Vision Screening in the Medical Home	1412	Percentage of pre-school aged children who receive vision screening in the medical home	Clinicians: Individual; Clinicians: Group; Health Plan; Integrated delivery system; Population:	AAP	<5years old

CHILD - DENTAL CARE

Annual Dental Visit	1388	The percentage of members 2-21 years of age who had at least one dental visit during the measurement year.	Health Plan; Integrated delivery system; Population: national;	NCQA	2–21 years of age
Children Who Received Preventive Dental Care	1334	Assesses how many preventive dental visits during the previous 12 months	Population: national; Population: regional/network;	CAHMI	Children age 1-17 years
Children Who Have Dental Decay or Cavities	1335	Assesses if children age 1-17 years have had tooth decay or cavities in the past 6 months	Population: national; Population: regional/network;	CAHMI	Children age 1-17 years
Primary Caries Prevention Intervention as Part of Well/Ill Child Care as Offered by Primary Care Medical Providers	1419	The thrust of the initiative is to document the extent to which individual primary care medical providers (PCMP) (MD, NP, PA) and primary care medical clinics (whichever provider number is used for billing) provide fluoride varnish (FV) as part of the EPSDT examination of Medicaid or CHIP–enrolled children.	Clinicians: Individual; Clinicians: Group; Facility/Agency; Health Plan; Population: national	U of Minnesota	0-20 (upper end varies by state) see attachment.

CHILD - ENVIRONMENT

Children Who Are Exposed To Secondhand Smoke Inside Home	1346	Determines the perentage of children who live with a smoker and if that smoker smokes inside the child´s house	Population: national; Population: regional/network;	CAHMI	Children age 0-17 years
Measure pair - a. Tobacco use prevention for infants, children and adolescents, b. Tobacco use cessation for infants, children and adolescents	0026	Percentage of patients' charts showing either that there is no tobacco use/exposure or (if a user) that the current use was documented at the most recent clinic visit Percentage of patients with documented tobacco use or exposure at the latest visit who also have documentation that their cessation interest was assessed or that they received advice to quit	Clinicians: Individual	ICSI	Children
Children Who Attend Schools Perceived as Safe	OT3-041-10	This measure ascertains the perceived safety of child's school.	Population: states; Population: national; Population:	CAHMI	Children age 6-17 years

Children Who Live in Communities Perceived as Safe	OT3-039-10	This measure ascertains the parents' perceived safety of child's community or neighborhood.	Population: states; Population: national; Population:	CAHMI	Children age 0-17 years
CHILD - ILLNESS (CROSS-CUTTING)					
Number of School Days Children Miss Due to Illness	OT3-032-10	Measures the quantitative number of days of school missed due to illness or condition among children and adolescents age 6-17 years.	Population: national; Population: regional/network;	CAHMI	Children and adolescents age 6-17 years
Children Who Attend Schools Perceived as Safe	OT3-041-10	This measure ascertains the perceived safety of child's school.	Population: states; Population: national; Population:	CAHMI	6-17 years
Pediatric Weight Documented in Kilograms	504	Percent of emergency department patients < 18 years of age with a current weight in kilograms documented in the ED record	Facility/Agency	AAP	<18 years old
CHILD - PICU					
PICU Pain Assessment on Admission	341	Percentage of PICU patients receiving: a. Pain assessment on admission, b. Periodic pain assessment.	Facility/Agency	NACHRI	<18
PICU Periodic Pain Assessment	342	Percentage of PICU patients receiving: a. Pain assessment on admission, b. Periodic pain assessment.	Facility/Agency	NACHRI	<18
PICU Severity-adjusted Length of Stay	334	The number of days between PICU admission and PICU discharge for PICU patients.	Facility/Agency	NACHRI	<18
PICU Unplanned Readmission Rate	335	The total number of patients requiring unscheduled readmission to the ICU within 24 hours of discharge or transfer.	Facility/Agency	NACHRI	<18
PICU Standardized Mortality Ratio	0343	The ratio of actual deaths over predicted deaths for PICU patients.	Facility/Agency	NACHRI	<18
CHILD - PATIENT SAFETY					
Pediatric Patient Safety for Selected Indicators	0532	A composite measure of potentially preventable adverse events for selected pediatric indicators	Facility/Agency	AHRQ	not listed
Decubitus Ulcer (PDI 2)	0337	Percent of surgical and medical discharges under 18 years with ICD-9-CM code for decubitus ulcer in secondary diagnosis field.	Facility/Agency	VAMC	<18
Iatrogenic Pneumothorax in Non-Neonates (PDI 5) (risk adjusted)	0348	Percent of medical and surgical discharges, age under 18 years, with ICD-9-CM code of iatrogenic pneumothorax in any secondary diagnosis field.	Facility/Agency	VAMC	<18

Transfusion Reaction (PDI 13)	0350	Percent of medical and surgical discharges, under 18 years of age, with an ICD-9-CM code for transfusion reaction in any secondary diagnosis field.	Facility/Agency	VAMC	<18
National Healthcare Safety Network (NHSN) Central line-associated Bloodstream Infection (CLABSI) Outcome Measure	PSM-001-10	Standardized Infection Ratio (SIR) of healthcare-associated, central line-associated bloodstream infections (CLABSI) among patients in intensive care units (ICUs) and Neonatal Intensive Care Units (NICUs)	Population: states; Facility/Agency; Population: national	CDC	all ages
Ventriculoperitoneal (VP) shunt malfunction rate in children	OT3-027-10	This measure is a 30-day malfunction rate for hospitals that perform cerebrospinal ventriculoperitoneal shunt operations in children between the ages of 0 and 18 years.	Facility/Agency	Children's Hospital Boston - Program for Patient Safety & Quality	Children between the ages of 0 and 18 years
CHILD - Condition-specific: Asthma/URI					
Asthma assessment	1	Percentage of patients who were evaluated during at least one office visit for the frequency (numeric) of daytime and nocturnal asthma symptoms	Clinicians; Group	AMA-PCPI	5+
Management plan for people with asthma	25	Percentage of patients for whom there is documentation that a written asthma management plan was provided either to the patient or the patientâ€™s caregiver OR, at a minimum, specific written instructions on under what conditions the patientâ€™s doctor should be contacted or the patient should go to the emergency room	Clinicians; Group	IPRO	not listed
Use of appropriate medications for people with asthma	36	Percentage of patients who were identified as having persistent asthma during the measurement year and the year prior to the measurement year and who were dispensed a prescription for either an inhaled corticosteroid or acceptable alternative medication during the measurement year	Clinicians; Individual	NCQA	5+
Asthma: pharmacologic therapy	47	Percentage of all patients with mild,moderate, or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment	Clinicians; Group	AMA-PCPI	5+

Asthma Emergency Department Visits	1381	Percentage of patients with asthma who have greater than or equal to one visit to the emergency room for asthma during the measurement period.	Population: counties or cities; Program: Other	Alabama Medicaid Agency	2-21 years
Asthma Admission Rate (pediatric)	OT3-057-10	Admission rate for asthma in children ages 2-17, per 100,000 population (area level rate)	Population: states; Population: counties or cities; Population: national; Population:	Agency for Healthcare Research and Quality	ages 2 to 17 years
Use of relievers for inpatient asthma	0143	Percentage of pediatric asthma inpatients, age 2-17, who were discharged with a principal diagnosis of asthma who received relievers for inpatient asthma	Facility/Agency	The Joint Commission	ages 2 to 17 years
Use of systemic corticosteroids for inpatient asthma	0144	Percentage of pediatric asthma inpatients (age 2 – 17 years) who were discharged with principal diagnosis of asthma who received systemic corticosteroids for inpatient asthma	Facility/Agency	The Joint Commission	ages 2 to 17 years
Appropriate testing for children with pharyngitis	0002	Percentage of patients who were diagnosed with pharyngitis, prescribed an antibiotic, and who received a group A streptococcus test for the episode.	Clinicians: Individual; Clinicians: Group	NCQA	2-18 years
Appropriate treatment for children with upper respiratory infection (URI)	0069	Percentage of children who were given a diagnosis of URI and were not dispensed an antibiotic prescription on or three days after the episode date	Clinicians: Individual	NCQA	3 months-18 years
Tympanostomy Tube Hearing Test	0587	This measure identifies the percentage of patients age 2 through 12 years with OME who received tympanostomy tube(s) insertion during the measurement year and had a hearing test performed within 6 months prior to the initial tube placement.	Clinicians: Individual; Clinicians: Group	Resolution Health, Inc.	2-12 years
CHILD - Condition-specific: Behavioral/Mental Health					

Child and Adolescent Major Depressive Disorder: Diagnostic Evaluation	1364	Percentage of patients aged 6 through 17 years with a diagnosis of major depressive disorder with documented evidence that they met the DSM-IV criteria [at least 5 elements with symptom duration of two weeks or longer, including 1) depressed mood (can be irritable mood in children and adolescents) or 2) loss of interest or pleasure] during the visit in which the new diagnosis or recurrent episode was identified	Clinicians: Individual	AMA-PCPI	Aged 6 through 17 years
Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment	1365	Percentage of patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder with an assessment for suicide risk	Clinicians: Individual	AMA-PCPI	Aged 6 through 17 years
ADHD: Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication.	0108	a. Initiation Phase: Percentage of children 6 – 12 years of age with an ambulatory prescription dispensed for and ADHD medication and who had one follow-up visit with a practitioner during the 30-Day Initiation Phase. b. Continuation and Maintenance (C&M) Phase: Percentage of children 6 – 12 years of age with an ambulatory prescription dispensed for ADHD medication who remained on the medication for at least 210 days and who in addition to the visit in the Initiation Phase had at least two additional follow-up visits with a practitioner within 270 days (9 months) after the Initiation Phase ends.	Clinicians: Individual	NCQA	6-12 years
Diagnosis of attention deficit hyperactivity disorder (ADHD) in primary care for school age children and adolescents	0106	Percentage of patients newly diagnosed with attention deficit hyperactivity disorder (ADHD) whose medical record contains documentation of Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) or Diagnostic and Statistical Manual for Primary Care (DSM-PC) criteria being addressed.	Clinicians: Individual	ICSI	not listed--school age
Management of attention deficit hyperactivity disorder (ADHD) in primary care for school age children and adolescents	0107	Percentage of patients treated with psycho-stimulant medication for the diagnosis of attention deficit hyperactivity disorder (ADHD) whose medical record contains documentation of a follow-up visit at least twice a year.	Clinicians: Individual	ICSI	not listed--school age

Depression Screening By 13 years of age	1394	Depression Screening By 13 years of age	Clinicians: Individual; Clinicians: Group; Population: national;	NCQA	Measure 1: 6 years-13 years,
Depression Screening By 18 years of age	1515	Depression Screening By 18 years of age	Clinicians: Individual; Clinicians: Group; Population: national;	NCQA	Measure 2: 13 years-18 years
Risky Behavior Assessment or Counseling by Age 13 Years	1406	We are combining 2 measures into one form because measure features and evidence are the same or similar. Measure 1: Risky Behavior Assessment or Counseling by Age 13 Years Measure 2: Risky Behavior Assessment or Counseling by Age 18 Years	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	Measure 1: 6 years-13 years, Measure 2: 13 years-18 years
CHILD - Condition specific: Heart disease					
Standardized adverse event ratio for children and adults undergoing cardiac catheterization for congenital heart disease	OT3-029-10	Ratio of observed to expected clinically important preventable and possibly preventable adverse events, risk-adjusted	Facility/Agency	Children's Hospital Boston - Program for Patient Safety & Quality	Cannot locate
Pediatric Heart Surgery Mortality (PDI 6) (risk adjusted)	339	Number of in-hospital deaths in patients undergoing surgery for congenital heart disease per 1000 patients.	Population: states; Population: counties or cities; Population: national; Population: regional/network	AHRQ	Cannot locate
Pediatric Heart Surgery Volume (PDI 7)	340	Raw volume compared to annual thresholds (100 procedures)	Population: states; Population: counties or cities; Population: national; Population: regional/network	AHRQ	Cannot locate
CHILD - Condition-specific: Other					
Gastroenteritis Admission Rate (pediatric)	OT3-055-10	Admission rate for gastroenteritis in children ages 3 months - 17 years, per 100,000 population (area level rate)	Population: states; Population: counties or cities; Population: national; Population:	AHRQ	ages 3 mo. to 17 years

Hemoglobin A1c test for pediatric patients	0060	Percentage of pediatric patients with diabetes with a HBA1c test in a 12-month measurement period	Clinicians: Individual	NCQA	5-17 years
Perforated appendicitis (PQI 2)	273	This measure is used to assess the number of admissions for perforated appendix per 100 admissions for appendicitis within Metro Area or county. See Notes.	Population: states; Population: counties or cities; Population: national; Population: regional/network	AHRQ	Cannot locate
STD - Syphilis Screening	410	Percentage of patients aged 13 years and older with a diagnosis of HIV/AIDS for whom syphilis screening was performed in the last 12 months	Clinician-Level	NCQA	>13 years
Adolescent and adult clients with AIDS who are prescribed potent ART	406	Percentage of patients who were prescribed potent antiretroviral therapy	Clinician-Level	NCQA	>13 years
CHILDREN WITH SPECIAL HEALTHCARE NEEDS					
Children with Special Health Care Needs (CSHCN) who Receive Services Needed for Transition to Adult Health Care	1340	Whether children with special health care needs (CSHCN) ages 12-17 have doctors who usually/always encourage increasing responsibility for self-care AND (when needed) have discussed transitioning to adult health care, changing health care needs, and how to maintain insurance coverage	Population: national; Population: regional/network; Population: states	CAHMI	Children with Special Health Care Needs age 12-17 years
ADOLESCENT HEALTH					
Blood Pressure Screening by Age 18	1553	The percentage of children who had a blood pressure screening and proper follow-up performed. Blood Pressure Screening By age 18 years	Clinicians: Individual; Clinicians: Group; Population: national; Population:	NCQA	13 years-18 years
Healthy Physical Activity by 18 years of age	1514	The percentage of chilren who had a BMI assessment and counseling for physical activity, nutrition and screen time. Measure: Healthy Physical Activity by 18 years of age	Clinicians: Individual; Clinicians: Group; Health Plan; Population: national; Population: regional/network	NCQA	13 years-18 years
Immunizations by 18 years of age	1506	The percentage of adolescents who had proper immunizations. Immunizations by 18 years of age	Clinicians: Individual; Clinicians: Group; Population: national; Population:	NCQA	13-18 years

Risky Behavior Assessment or Counseling by Age 18 Years	1507	Risky Behavior Assessment or Counseling by Age 18 Years	Clinicians: Individual; Clinicians: Group; Population: national; Population:	NCQA	13 years-18 years
Chlamydia Screening and Follow Up	1395	The percentage of female adolescents who turned 18 years old during the measurement year and who had a chlamydia screening and proper follow-up visit.	Clinicians: Individual; Clinicians: Group; Population: national; Population:	NCQA	13 years-18 years
Young Adult Health Care Survey (YAHCS)	10	54-item survey given to teenagers that assesses whether young adults (age 14 and older) are receiving nationally-recommended preventive services.	health, state, national	CAHMI	14+
CHILD HEALTH - PATIENT EXPERIENCE WITH CARE					
CAHPS Clinician/Group Surveys - (Adult Primary Care, Pediatric Care, and Specialist Care Surveys)	0005	•Pediatric Care Survey: 36 core and 16 supplemental question survey of outpatient pediatric care patients.	Clinicians: Individual	AHRQ	not listed
CAHPS Health Plan Survey v 3.0 children with chronic conditions supplement	0009	31- questions that supplement the CAHPS Child Survey v 3.0 Medicaid and Commercial Core Surveys, that enables health plans to identify children who have chronic conditions and assess their experience with the health care system. Level of analysis: health plan – HMO, PPO, Medicare, Medicaid, commercial	Health Plan	AHRQ	not listed
Inpatient Consumer Survey (ICS)	OT3-047-10	Survey developed to gather client's evaluation of their inpatient care. Each domain is scored as the percentage of adolescent clients aged 13-17 years and adult clients at time of discharge or at annual review who respond positively to the domain on the survey for a given month.	Facility/Agency; Population: national; Other	NRI	Adolescent age 13-17 years and adults age 18 and older

APPENDIX D: NQF-endorsed© Population-Level Consensus Standards for Child Health

***proposed Child Health Quality Measures 2010 are highlighted in yellow**

Title	Measure Number	Description	Level of Measurement	Steward Organization	Target Population Age
PREGNANCY					
Frequency of Ongoing Prenatal Care (FPC): The percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received the following number of expected prenatal visits.	1391	Frequency of Ongoing Prenatal Care (FPC): The percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received the following number of expected prenatal visits. •<21 percent of expected visits •21 percent–40 percent of expected visits •41 percent–60 percent of expected visits •61 percent–80 percent of expected visits •=81 percent of expected visits This measure uses the same denominator as the Prenatal and Postpartum Care measure.	Health Plan; Integrated delivery system; Population: national; Population: regional/network	NCQA	Women of childbearing years
Prenatal and Postpartum Care	1517	Measure 2: Prenatal & Postpartum Care (PPC): The percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year. For these women, the measure assesses the following facets of prenatal and postpartum care. • Rate 1: Timeliness of Prenatal Care. The percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester or within 42 days of enrollment in the organization. • Rate 2: Postpartum Care. The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.	Health Plan; Integrated delivery system; Population: national; Population: regional/network	NCQA	Women of childbearing years

Diabetes and Pregnancy: Avoidance of Oral Hypoglycemic Agents	0582	This measure identifies pregnant women with diabetes who are not taking an oral hypoglycemic agent.	Clinicians: Individual; Population: counties or cities; Health Plan; Clinicians: Group; Integrated delivery system	Resolution Health, Inc.	Women of childbearing years
Pregnant women that had HBsAg testing.	0608	This measure identifies pregnant women who had a HBsAg (hepatitis B) test during their pregnancy.	Clinicians: Individual; Population: counties or cities; Health Plan; Clinicians: Group; Integrated delivery system	Ingenix	Women of childbearing years
Pregnant women that had HIV testing.	0606	This measure identifies pregnant women who had an HIV test during their pregnancy.	Clinicians: Individual; Population: counties or cities; Health Plan; Clinicians: Group; Integrated delivery system	Ingenix	Women of childbearing years
Pregnant women that had syphilis screening.	0607	This measure identifies pregnant women who had a syphilis test during their pregnancy.	Clinicians: Individual; Population: counties or cities; Health Plan; Clinicians: Group; Integrated delivery system	Ingenix	Women of childbearing years
Healthy Term Newborn	OT3-031-10	Percent of term singleton livebirths (excluding those with diagnoses originating in the fetal period) who DO NOT have significant complications during birth or the nursery care.	Clinicians: Group; Facility/Agency; Multi-site/corporate chain; Can be measured at all levels	California Maternal Quality Care Collaborative	Newborns

Percentage of low birthweight births	1382	The percentage of births with birthweight <2,500 grams	Population: national; Population: regional/network; Population: states; Population: counties or cities	CDC	Newborns
Hearing screening prior to hospital discharge (EHDI-1a)	1354	This measure assesses the proportion of births that have been screened for hearing loss before hospital discharge. *Numbering within the parentheses references the US national extension quality measure identifiers developed for the Use Cases published in the Integrating the Healthcare Enterprise (IHE) Quality, Research and Public Health (QRPH) EHDI Technical Framework Supplement available at www.ihe.net/Technical_Framework/index.cfm#quality	Clinicians: Individual; Facility/Agency; Population: national; Population: states	CDC	Newborn period
Outpatient hearing screening of infants who did not complete screening before hospital discharge (EHDI-1c)	1357	This measure assesses the proportion of all newborn infants who did not complete a hearing screen prior to discharge, who went on to receive an outpatient screen before the child was 31 days of age. *Numbering within the parentheses references the US national extension quality measure identifiers developed for the Use Cases published in the Integrating the Healthcare Enterprise (IHE) Quality, Research and Public Health (QRPH) EHDI Technical Framework Supplement available at www.ihe.net/Technical_Framework/index.cfm#quality	Clinicians: Individual; Facility/Agency; Population: national; Population: states	CDC	Newborn
Newborn Hearing Screening	1402	The percentage of children who turned 6 months old during the measurement year who had documentation of newborn hearing screening by 6 months of age.	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	0 – 6 months
Proportion of infants covered by Newborn Bloodspot Screening (NBS)	1351	What percentage of infants had bloodspot newborn screening performed as mandated by state of birth?	Facility/Agency; Population: states; Program: Other	HRSA- MCHB	birth to 2 weeks
INFANCY					

Sudden Infant Death Syndrome Counseling	1397	The percentage of children who tured 6 months old during the measurement year and who had Suddent Infant Death Syndrome (SIDS) counseling and proper follow-up.	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	0-6 months
Maternal Depression Screening	1401	The percentage of children who turned 6 months during the measurement year who had documentation of a maternal depression screening and proper follow-up performed between 0 and 6 months of life.	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	0-6 months
Audiological Evaluation no later than 3 months of age (EHDI-3)	1360	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.	Clinicians: Individual; Facility/Agency; Population: national; Population: states	CDC	Infancy
Intervention no later than 6 months of age (EHDI-4a)	1361	This measure assesses the proportion of infants with permanent hearing loss who have been referred to intervention services no later than age 6 months of age.	Clinicians: Individual; Facility/Agency; Population: national; Population: states	CDC	Infancy
CHILD - ACCESS TO CARE and the MEDICAL HOME					
Children Who Have Inadequate Insurance Coverage For Optimal Health	OT3-044-10	The measure is designed to ascertain whether or not current insurance program coverage is adequate for the child's health needs--whether the out of pocket expenses are reasonable; whether the child is limited or not in choice of doctors; and whether the benefits meet child's healthcare needs.	Population: national; Population: states; Population: regional/network	CAHMI	Children age 0-17 years
Children Who Have No Problems Obtaining Referrals When Needed	OT3-036-10	The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.	Population: states; Population: national; Population: regional/network	CAHMI	Children age 0-17 years
Children Who Receive Effective Care Coordination of Healthcare Services When Needed	OT3-038-10	This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).	Population: states; Population: national; Population: regional/network	CAHMI	Children age 0-17 years

Children Who Receive Family-Centered Care	1333	A composite measure designed to assess the family-centeredness of care delivery along several dimensions: whether doctor 1) partners with family in care, 2) listens to patient/parent carefully, 3) spends enough time with child, 4)is sensitive to family values/customs, 5) provides needed information, 6)whether family is able to access interpreter help, if needed.	Population: national; Population: regional/network; Population: states	CAHMI	Children age 0-17 years
Children With a Usual Source for Care When Sick	1330	Whether child has a source of care that is known and continuous (categorized as a doctor´s office, hospital outpatient department, clinic or health center, school, friend or relative, some other place, or a telephone advice line)	Population: national; Population: regional/network; Population: states	CAHMI	Children age 0-17 years
Children With Inconsistent Health Insurance Coverage in the Past 12 Months	1337	Measures whether children are uninsured at the time of the survey or if currently insured children experienced periods of no insurance during past 12 months	Population: national; Population: regional/network; Population: states	CAHMI	Children age 0-17 years
Measure of Medical Home for Children and Adolescents	OT3-045-10	This composite measure assesses whether or not children and adolescents (age 0-17 years) receive health care within a medical home according to the survey respondent (almost always the child's parent). The medical home measure is based on six of the seven components of care first proposed by the American Academy of Pediatrics (AAP)—health care that is accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally effective. (Note: "accessible" is the one component of medical home that is not directly addressed in this composite measure. This will be explained in a later section) The AAP policy statement emphasizes that a medical home is "not a building, house, or hospital, but rather an approach to providing continuous and comprehensive primary pediatric care from infancy through young adulthood, with availability 24 hours a day, 7 days a week, from a pediatrician or physician whom families trust," and this composite measure of medical home is designed to assess the receipt of quality health care using the AAP's recommended care guidelines.	Population: states; Population: national; Population: regional/network	CAHMI	Children and adolescents 0-17 years

CHILD - WELL CHILD CARE and DEVELOPMENTAL SCREENING

Well-Child Visits in the First 15 Months of Life	1392	The percentage of members who turned 15 months old during the measurement year and who had the following number of well-child visits with a PCP during their first 15 months of life.	Health Plan; Integrated delivery system; Population: national; Population: regional/network	NCQA	Measure 1: 0-15 months,
The percentage of members 3–6 years of age who received one or more well-child visits with a PCP during the measurement year.	1516	The percentage of members 3–6 years of age who received one or more well-child visits with a PCP during the measurement year.	Health Plan; Integrated delivery system; Population: national; Population: regional/network	NCQA	3-6 years
Children Who Receive Preventive Medical Visits	1332	Assesses how many medical preventive visits in a 12 month period, such as a physical exam or well-child check-up (does not include visits related to specific illnesses)	Population: national; Population: regional/network; Population: states	CAHMI	Children age 0-17 years
Developmental Screening by 2 Years of Age	1399	The percentage of children who turned 2 years old during the measurement year who had a developmental screening and proper follow-up performed between 6 months and 2 years of age.	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	6 months to 2 years old
Developmental Screening in the First Three Years of Life	1448	The percentage of children screened for risk of developmental, behavioral and social delays using a standardized screening tool in the first three years of life. This is a measure of screening in the first three years of life that includes three, age-specific indicators assessing whether children are screened by 12 months of age, by 24 months of age and by 36 months of age.	Population: states; Program: QIO; Program: Other	CAHMI	First three years of life.

Developmental screening using a parent completed screening tool (Parent report, Children 0-5)	1385	The measure assesses whether the parent or caregiver completed a developmental screening tool meant to identify children at-risk for developmental, behavioral and social delays. The items are age-specific and anchored to parent-completed tools (a majority of health care providers implementing the Bright Futures recommendations for standardized screening for all children utilize parent-completed tools due to their validity and feasibility). The age-specific items assess whether children 10-71 months are screened. The items assessing developmental screening in the National Survey of Children´s Health are meant to assess whether the parent or caregiver completed a standardized developmental screening tool (for example: Parents Evaluation of Developmental Status). Developmental screening is defined as a standardized tool that assesses the child's risk for developmental, behavioral and social delays. The American Academy of Pediatrics recommends standardized screening using an approved screening tool as the best method of identifying children at risk for developmental, behavioral and/or social delays.	Population: national; Population: regional/network; Population: states	CAHMI	Children age 10 months - 5 years (71 months)
Promoting Healthy Development Survey (PHDS)	0011	43-item survey given to parents of children ages 3 to 48 months that assesses parent's experience with care for the provision of preventive and developmental services consistent with American Academy of Pediatrics and Bright futures practice guidelines. Level of analysis: Physician, office, medical group, health plan, community, state, national and by child and parent health and social economic characteristics	Clinicians: Individual; Population: counties or cities; Health Plan; Facility/Agency	CAHMI	ages 3-48 months

Pediatric Symptom Checklist (PSC)	OT3-043-10	The Pediatric Symptom Checklist (PSC)is a brief parent report questionnaire that is used to measure overall psychosocial functioning in children from 4 to 16 years of age.	Clinicians: Group; Population: national; Population: regional/network; Population: states; Population: counties or cities; Program: Disease management; Program: QIO; Can be measured at all levels	MGH	ages 4-16 years
Blood Pressure Screening by age 13	1552	The percentage of children who had a blood pressure screening and proper follow-up performed. Blood Pressure Screening By age 13 years.	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	6-13 years
CHILD - IMMUNIZATIONS					
Immunizations by 13 years of age	1407	The percentage of adolescents who had proper immunizations. Two measures are reported. We are combining the measures into one form because measure features and evidence are the same or similar. 1. Immunizations by 13 years of age 2. Immunizations by 18 years of age	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	Measure 1: 6 years-13 years; Measure 2: 13-18 years
High Risk for Pneumococcal Disease - Pneumococcal Vaccination	0617	Percentage of patients age 5-64 with a high risk condition or age 65 years and older who received the pneumococcal vaccine	Can be measured at all levels	ActiveHealth Management	5+
CHILD - BMI and PHYSICAL ACTIVITY					
Child Overweight or Obesity Status Based on Parental Report of Body-Mass-Index (BMI)	1349	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).	Population: national; Population: regional/network; Population: states	CAHMI	Children age 10-17 years
Children Age 6-17 Years who Engage in Weekly Physical Activity	1348	Measures how many times per week child 6-17 years exercises vigorously (based on AAP and CDC recommendations)	Population: national; Population: regional/network; Population: states	CAHMI	Children age 6-17 years

Healthy Physical Activity by 6 years of age	1396	The percentage of chilren who had a BMI assessment and counseling for physical activity, nutrition and screen time. Measure: Healthy Physical Activity by 6 years of age	Clinicians: Individual; Clinicians: Group; Health Plan; Population: national; Population: regional/network	NCQA	2-6 years
Healthy Physical Activity by 13 years of age	1512	The percentage of chilren who had a BMI assessment and counseling for physical activity, nutrition and screen time. Measure: Healthy Physical Activity by 13 years of age	Clinicians: Individual; Clinicians: Group; Health Plan; Population: national; Population: regional/network	NCQA	Measure 1: 2 years-6 years, Measure 2: 6 years-13 years, Measure 3: 13 years-18 years
CHILD - VISION SCREENING					
Pre-School Vision Screening in the Medical Home	1412	Percentage of pre-school aged children who receive vision screening in the medical home	Clinicians: Individual; Clinicians: Group; Health Plan; Integrated delivery system; Population: national	AAP	<5years old
CHILD - DENTAL CARE					
Annual Dental Visit	1388	The percentage of members 2-21 years of age who had at least one dental visit during the measurement year.	Health Plan; Integrated delivery system; Population: national; Population: regional/network	NCQA	2–21 years of age
Children Who Received Preventive Dental Care	1334	Assesses how many preventive dental visits during the previous 12 months	Population: national; Population: regional/network; Population: states	CAHMI	Children age 1-17 years
Children Who Have Dental Decay or Cavities	1335	Assesses if children age 1-17 years have had tooth decay or cavities in the past 6 months	Population: national; Population: regional/network; Population: states	CAHMI	Children age 1-17 years

Primary Caries Prevention Intervention as Part of Well/Ill Child Care as Offered by Primary Care Medical Providers	1419	The thrust of the initiative is to document the extent to which individual primary care medical providers (PCMP) (MD, NP, PA) and primary care medical clinics (whichever provider number is used for billing) provide fluoride varnish (FV) as part of the EPSDT examination of Medicaid or CHIP–enrolled children.	Clinicians: Individual; Clinicians: Group; Facility/Agency; Health Plan; Population: national	U of Minnesota	0-20 (upper end varies by state) see attachment.
CHILD - ENVIRONMENT					
Children Who Are Exposed To Secondhand Smoke Inside Home	1346	Determines the perentage of children who live with a smoker and if that smoker smokes inside the child´s house	Population: national; Population: regional/network; Population: states	CAHMI	Children age 0-17 years
Children Who Attend Schools Perceived as Safe	OT3-041-10	This measure ascertains the perceived safety of child's school.	Population: states; Population: national; Population: regional/network	CAHMI	Children age 6-17 years
Children Who Live in Communities Perceived as Safe	OT3-039-10	This measure ascertains the parents' perceived safety of child's community or neighborhood.	Population: states; Population: national; Population: regional/network	CAHMI	Children age 0-17 years
CHILD - ILLNESS (CROSS-CUTTING)					
Number of School Days Children Miss Due to Illness	OT3-032-10	Measures the quantitative number of days of school missed due to illness or condition among children and adolescents age 6-17 years.	Population: national; Population: regional/network; Population: states	CAHMI	Children and adolescents age 6-17 years
Children Who Attend Schools Perceived as Safe	OT3-041-10	This measure ascertains the perceived safety of child's school.	Population: states; Population: national; Population: regional/network	CAHMI	6-17 years
CHILD - PICU					
CHILD - PATIENT SAFETY					

National Healthcare Safety Network (NHSN) Central line-associated Bloodstream Infection (CLABSI) Outcome Measure	PSM-001-10	Standardized Infection Ratio (SIR) of healthcare-associated, central line-associated bloodstream infections (CLABSI) among patients in intensive care units (ICUs) and Neonatal Intensive Care Units (NICUs)	Population: states; Facility/Agency; Population: national	CDC	all ages
CHILD - Condition-specific: Asthma/URI					
Asthma Emergency Department Visits	1381	Percentage of patients with asthma who have greater than or equal to one visit to the emergency room for asthma during the measurement period.	Population: counties or cities; Program: Other	Alabama Medicaid Agency	2-21 years
Asthma Admission Rate (pediatric)	OT3-057-10	Admission rate for asthma in children ages 2-17, per 100,000 population (area level rate)	Population: states; Population: counties or cities; Population: national; Population: regional/network	Agency for Healthcare Research and Quality	ages 2 to 17 years
CHILD - Condition-specific: Behavioral/Mental Health					
Depression Screening By 13 years of age	1394	Depression Screening By 13 years of age	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	Measure 1: 6 years-13 years,
Depression Screening By 18 years of age	1515	Depression Screening By 18 years of age	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	Measure 2: 13 years-18 years
Risky Behavior Assessment or Counseling by Age 13 Years	1406	We are combining 2 measures into one form because measure features and evidence are the same or similar. Measure 1: Risky Behavior Assessment or Counseling by Age 13 Years Measure 2: Risky Behavior Assessment or Counseling by Age 18 Years	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	Measure 1: 6 years-13 years, Measure 2: 13 years-18 years
CHILD - Condition specific: Heart disease					

Pediatric Heart Surgery Mortality (PDI 6) (risk adjusted)	339	Number of in-hospital deaths in patients undergoing surgery for congenital heart disease per 1000 patients.	Population: states; Population: counties or cities; Population: national; Population: regional/network	AHRQ	Cannot locate
Pediatric Heart Surgery Volume (PDI 7)	340	Raw volume compared to annual thresholds (100 procedures)	Population: states; Population: counties or cities; Population: national; Population: regional/network	AHRQ	Cannot locate
CHILD - Condition-specific: Other					
Gastroenteritis Admission Rate (pediatric)	OT3-055-10	Admission rate for gastroenteritis in children ages 3 months - 17 years, per 100,000 population (area level rate)	Population: states; Population: counties or cities; Population: national; Population: regional/network	AHRQ	ages 3 mo. to 17 years
Perforated appendicitis (PQI 2)	273	This measure is used to assess the number of admissions for perforated appendix per 100 admissions for appendicitis within Metro Area or county. See Notes.	Population: states; Population: counties or cities; Population: national; Population: regional/network	AHRQ	Cannot locate
CHILDREN WITH SPECIAL HEALTHCARE NEEDS					
Children with Special Health Care Needs (CSHCN) who Receive Services Needed for Transition to Adult Health Care	1340	Whether children with special health care needs (CSHCN) ages 12-17 have doctors who usually/always encourage increasing responsibility for self-care AND (when needed) have discussed transitioning to adult health care, changing health care needs, and how to maintain insurance coverage	Population: national; Population: regional/network; Population: states	CAHMI	Children with Special Health Care Needs age 12-17 years
ADOLESCENT HEALTH					

Blood Pressure Screening by Age 18	1553	The percentage of children who had a blood pressure screening and proper follow-up performed. Blood Pressure Screening By age 18 years	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	13 years-18 years
Healthy Physical Activity by 18 years of age	1514	The percentage of chilren who had a BMI assessment and counseling for physical activity, nutrition and screen time. Measure: Healthy Physical Activity by 18 years of age	Clinicians: Individual; Clinicians: Group; Health Plan; Population: national; Population: regional/network	NCQA	13 years-18 years
Immunizations by 18 years of age	1506	The percentage of adolescents who had proper immunizations. Immunizations by 18 years of age	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	13-18 years
Risky Behavior Assessment or Counseling by Age 18 Years	1507	Risky Behavior Assessment or Counseling by Age 18 Years	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	13 years-18 years
Chlamydia Screening and Follow Up	1395	The percentage of female adolescents who turned 18 years old during the measurement year and who had a chlamydia screening and proper follow-up visit.	Clinicians: Individual; Clinicians: Group; Population: national; Population: regional/network	NCQA	13 years-18 years
Young Adult Health Care Survey (YAHCS)	10	54-item survey given to teenagers that assesses whether young adults (age 14 and older) are receiving nationally-recommended preventive services.	health, state, national	CAHMI	14+
CHILD HEALTH - PATIENT EXPERIENCE WITH CARE					
Inpatient Consumer Survey (ICS)	OT3-047-10	Survey developed to gather client's evaluation of their inpatient care. Each domain is scored as the percentage of adolescent clients aged 13-17 years and adult clients at time of discharge or at annual review who respond positively to the domain on the survey for a given month.	Facility/Agency; Population: national; Other	NRI	Adolescent age 13-17 years and adults age 18 and older