NATIONAL QUALITY FORUM

Measure Evaluation 4.1
December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized)**:** Complete all yellow highlighted areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

Steering Committee: Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met
C = Completely (unquestionably demonstrated to meet the criterion)
P = Partially (demonstrated to partially meet the criterion)
M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) **NQF Review #:** 1391 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Frequency of Ongoing Prenatal Care
De.2 **Brief description of measure:** 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.
1.1-2 **Type of Measure:** Access De.3 **If included in a composite or paired with another measure, please identify composite or paired measure** None
De.4 **National Priority Partners Priority Area:** Care coordination, Population health De.5 **IOM Quality Domain:** Effectiveness, Timeliness De.6 **Consumer Care Need:** Staying healthy

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.* A.1 **Do you attest that the measure steward holds intellectual property rights to the measure and the**	**A** Y☐ N☐

right to use aspects of the measure owned by another entity (e.g., risk model, code set)? Yes A.2 **Indicate if Proprietary Measure** (*as defined in measure steward agreement*)**:** Proprietary measure, Proprietary complex measure with fees A.3 **Measure Steward Agreement:** Agreement will be signed and submitted prior to or at the time of measure submission A.4 **Measure Steward Agreement attached:**	
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section	**B** Y☐ N☐
C. The intended use of the measure includes both public reporting and quality improvement. ►**Purpose:** Public reporting, Internal quality improvement	**C** Y☐ N☐
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1**Testing:** Yes, fully developed and tested D.2 **Have NQF-endorsed measures been reviewed to identify if there are similar or related measures?** Yes	**D** Y☐ N☐
(for NQF staff use) **Have all conditions for consideration been met?** **Staff Notes to Steward** (*if submission returned*)**:**	**Met** Y☐ N☐
Staff Notes to Reviewers (*issues or questions regarding any criteria*)**:**	
Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. ***Measures must be judged to be important to measure and report*** *in order to be evaluated against the remaining criteria.* (evaluation criteria) **1a. High Impact**	**Eval Rating**
(for NQF staff use) **Specific NPP goal**:	
1a.1 **Demonstrated High Impact Aspect of Healthcare:** Affects large numbers, Frequently performed procedure, Leading cause of morbidity/mortality, High resource use, Severity of illness, Patient/societal consequences of poor quality 1a.2 1a.3 **Summary of Evidence of High Impact:** Each year, about four million women give birth in the United States. While many women experience normal pregnancies without problems, about one million women have one or more complications during pregnancy, labor and delivery, or postpartum period. Studies indicate that as many as half of all deaths from pregnancy complications could be prevented if women had better access to health care, better quality of care, and changed their health and lifestyle habits (CDC, 2002). 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, stillborn or who die within the first year of life (National Center for Health Statistics, 2010).	**1a** C☐ P☐ M☐ N☐

The impact of pregnancy complications on health care costs is considerable. Pregnancy complications before delivery account for more than two million hospital days of care and over one billion dollars each year in the U.S. (CDC, 2002). One driver of excessive maternity costs is premature babies, or babies born before the 37th week. Preterm/low birth weight infants in the United States account for half of infant hospitalization costs and one-quarter of pediatric costs. Costs for these preterm/low birth weight admissions totaled $5.8 billion, representing 47 percent of the costs for all infant hospitalizations and 27 percent of the cost for all pediatric stays. The average cost associated with preterm/low birth weight infant hospital stays is $15,100 and the averagelength of stay is 12.9 days Conversely, for uncomplicated newborns, the averages hospital stay is approximately $600 and 1.9 days. The study lead by Russel found that costs were highest for extremely preterm infants (<28 weeks' gestation/birth weight <1000 g), on average $65,600. Often times the costs are associated with respiratory-related complications. (Rebecca B. Russell, 2007)

1a.4 Citations for Evidence of High Impact: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Safe Motherhood: Promoting Health for Women Before, During and After Pregnancy. March 2002. www.cdc.gov/nccdphp/drh/mh_ataglance.htm

National Center for Health Statistics, Division of Vital Statistics, DHS; Summary Health Statistic for U.S. Children: National Health Interview Survey, 2009.Vintzileos, A, Ananth, C, Smulian, JC, Scorza, WE, Knuppel, RA. The impact of prenatal care on postneonatal deaths in the presence and absence of antenatal high-risk conditions. Am J Obstet Gynecol November 2002; 187(5):1258-1262.

American Academy of Pediatrics and The American College of Obstetricians and Gynecologists. Guidelines for Perinatal Care (5th Edition). October 2002.

Pennsylvania Health Care Cost Containment Council. Promoting Maternal Health in the Workplace. PHC4 FYI, Issue No. 21. December 2003.

Rebecca B. Russell, Nancy S. Green, Claudia A. Steniner, Susan Meikle. Cost of Hospitalization for Preterm and Low Birth Weight Infants in the United States. PEDIATRICS Vol. 120 No. 1 July 2007, pp. e1-e9 (doi:10.1542/peds.2006-2386)

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: Research indicates that early, comprehensive prenatal care and consistent visits throughout pregnancy can promote healthier pregnancies and reduce the risk of costly, adverse birth outcomes. This measure ensures that perinatal care occurs and in a timely and consistent fashion.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
Despite great national wealth, the U.S. continues to rank poorly relative to other industrialized nations on infant mortality and other birth outcomes, and with wide inequities by race/ethnicity. Across all years, about 60% of community health centers (CHC) mothers received first-trimester prenatal care and more than 70% received postpartum and newborn care.
In a study on the effects of pregnancy and childbirth, mothers´ lack of knowledge about postpartum health was the main finding (Kline, Martin, & Deyo, 1998).

In addition, NCQA's HEDIS measure has shown that performance among health plans is low. The rate for timeliness of prenatal care was 81.37% in 2007; and the rate for postpartum care was just 58.6%.

1b.3 Citations for data on performance gap:
Kline C. R, Martin D. P, Deyo R. A. Health consequences of pregnancy and childbirth as perceived by women and clinicians. Obstetrics and Gynecology. 1998;92:842–848.

Gaynes B. N, Gavin N, Meltzer-Brody S, Lohr K. N, Swinson T, Gartlehner G. 2005. Perinatal depression: Prevalence, screening, accuracy, and screening outcomes (AHRQ Publication No. 05-E006-1). et al. Rockville, MD: Agency for Healthcare Research Quality.

1b
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1b.4 Summary of Data on disparities by population group:
In the United States, substantial racial/ethnic disparities exist in birth outcomes. As of 2002, the infant mortality rate for blacks (13.5 per 1,000 live births) was more than 2.5 times that of whites (5.7 per 1,000), Hispanics (5.4 per 1,000), and Asians (4.7 per 1,000) (Arias et al. 2003). Black infants were about twice as likely to be delivered low birth weight (LBW) (13.3%) as whites (6.9%) and Hispanics (6.5%); and black infants (17.5%) were more likely to be delivered preterm than either Hispanics (11.6%) or whites (11.0%). Both LBW and preterm birth have been associated with increased risks of infant mortality, and developmental disabilities such as mental retardation and cerebral palsy.

Substantial racial/ethnic disparities also persist in the receipt of prenatal care that has been associated with better birth outcomes (Ickovics et al. 2003;). In 2002, blacks (75%) and Hispanics (77%) were less likely than whites (89%) and Asian/Pacific Islanders (85%) to receive prenatal care in the first trimester (Martin et al. 2003). Similarly, receipt of adequate prenatal care (defined by the Revised-Graduated Index of Prenatal Care Utilization) was reported by 57%of whites and 51% of blacks (Alexander, Kogan, and Nabukera 2002). Despite these differences, other studies have challenged the effectiveness of prenatal care in reducing disparities in birth outcomes due to the strength of other, more difficult to address, factors such as social class and hereditary risks (Lu and Halfon 2003; Lu et al. 2003;).

Maximizing access to prenatal care is a key element of public health strategy to improve the early initiation and appropriate utilization of prenatal care to improve pregnancy outcomes. Utilization of prenatal care is known to vary cross-sectionally by sociodemographic characteristics, notably race/ethnicity, education, age, and marital status (Braverman P,2000).

Contemporary policy thinking about access to health care typically focuses on gaps in health insurance, other economic and transportation barriers, and lack of information as impediments to utilizing care (Frisbie WP, 2001). While some of these factors are persistent over a woman's life, others such as familiarity with prenatal services change in regular or random patterns.
Psychosocial factors may also delay initiation of care, undermine adherence to the standard schedule of visits, or both (Sarnoff R, 2001). For example, women in some sociodemographic groups may be more inclined to find the organization of services to be impersonal or threatening, and the content of services to be unresponsive to their concerns and ordinary mode of life (Pagnini DL, 2000). Some of these attitudinal factors may have a consistent impact on prenatal care throughout the lifetimes of such women. Others may, however, be responses to experience from earlier pregnancies.

1b.5 Citations for data on Disparities:
Alexander,G. R., M. D. Kogan, and S. Nabukera. 2002. ''Racial Differences in Prenatal Care Use in the United States: Are Disparities Decreasing?'' American Journal of Public Health 92 (12): 1970–5.

Arias, E., M. F. MacDorman, D. M. Strobino, and B. Guyer. 2003. ''Annual Summary of Vital Statistics——2002.'' Pediatrics 112 (6, Part 1): 1215–30.

Ickovics, J. R., T. S. Kershaw, C. Westdahl, S. S. Rising, C. Klima, H. Reynolds, and U. Magriples. 2003. ''Group Prenatal Care and Preterm Birth Weight: Results from a Matched Cohort Study at Public Clinics.'' Obstetrics and Gynecology 102 (5, Part 1): 1051–57.

Lu, M. C., and N. Halfon. 2003. ''Racial and Ethnic Disparities in Birth Outcomes: A Life-Course Perspective.'' Maternal and Child Health Journal 7 (1): 13–30.

Martin, J. A., B. E. Hamilton, P. D. Sutton, S. J. Ventura, F. Menacker, and M. L. Munson. 2003. ''Births: Final Data for 2002.'' National Vital Statistics Reports 52 (10): 1–113.

Lu, M. C., V. Tache, G. R. Alexander, M. Kotelchuck, and N. Halfon. 2003. ''Preventing Low Birth Weight: Is Prenatal Care the Answer?'' Journal of Maternal- Fetal and Neonatal Medicine 13 (6): 362–80.

1c. Outcome or Evidence to Support Measure Focus

1c
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1c.1 Relationship to Outcomes (*For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population*)**:** Proper perinatal care is

associated with improved birth outcomes. For example, one study found that 25.6 percent of women who did not receive prenatal care delivered preterm infants compared to 9.2 percent of women who received even a minimum amount of prenatal care (Vintzileos et al., 2002).
In 2001, infants of mothers who received no prenatal care had an infant mortality rate of 34.8 per 1,000 live births, compared to an infant mortality rate of only 6.2 per 1,000 when prenatal care was initiated in the first trimester of pregnancy (Matthews et al., 2003). Observational studies have consistently shown that groups having more post-delivery visits have lower maternal, fetal and neonatal illness and mortality.

Regarding postpartum visits, not only do many women experience some degree of emotional liability in the postpartum period, which warrants a follow-up visit, but they will also need personalized care during this time to hasten the development of a healthy mother-infant relationship and a sense of maternal confidence (ACOG, 2002). Should the pregnancy have an abnormal outcome, the postpartum visit is an advantageous time to discuss implications of such conditions as diabetes mellitus, intrauterine growth restriction, preterm birth, hypertension or other conditions that may recur in any future pregnancies (ACOG, 2002). The postpartum visit is also an ideal time to begin preconceptional counseling for patients who may wish to have future pregnancies.

1c.2-3. Type of Evidence: Evidence-based guideline, Expert opinion

1c.4 Summary of Evidence (*as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome*)**:**
The goal of the prenatal contact is to exchange information and identify existing risk factors that may impact the pregnancy (DoD/VA, 2002). Lack of prenatal care can be considered a high-risk factor for postneonatal death. A study that sought to determine the association between prenatal care (defined as one visit) and postneonatal death rates (defined as the number of deaths of infants between 28 and 365 days of life) found that the postneonatal deaths among women who had prenatal care was 2.1 per 1,000 women, whereas the rate among women without prenatal care was 5.9 per 1,000 (Vintzileos, A, et al., 2002). These rates applied to women without high-risk conditions. Women whose prenatal care fails to meet established standards are at a greater risk for pregnancy complications and negative birth outcomes (National Center for Health Statistics, 1997).

The goal of postpartum care is to assess the physical and psychosocial status of the mother after the mother's discharge. The majority of maternal and neonatal deaths, as well as a significant burden of long-term morbidity, occur during the postpartum period (WHO, 1998). The postpartum visit should include obtaining an interval history and performing a physical exam to evaluate the patient's current status. Additionally, the emotional status of a woman whose pregnancy had an abnormal outcome should be reviewed, as many women experience some degree of emotional liability during the postpartum period. It is also an advisable time to begin preconceptional counseling for patients who may wish to have future pregnancies (ACOG Guidelines, 2002).

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

1c.6 Method for rating evidence: Expert Consensus

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

1c.8 Citations for Evidence (*other than guidelines***):** Veterans Health Administration, Department of Defense. DoD/VA clinical practice guideline for the management of uncomplicated pregnancy. Washington (DC): Department of Veterans Affairs; 2002 October.

Department of Reproductive Health and Research (RHR), World Health Organization (WHO). Postpartum care of the mother and newborn: a practical guide; 1998.

Vintzileos, A, Ananth, C, Smulian, JC, Scorza, WE, Knuppel, RA. The impact of prenatal care on postneonatal deaths in the presence and absence of antenatal high-risk conditions. Am J Obstet Gynecol November 2002; 187(5):1258-1262

N☐

1c.9 Quote the Specific guideline recommendation (*including guideline number and/or page number*): ACOG Timeliness of Prenatal Care: Once pregnancy occurs, patients should have early contact with an obstetrician to begin counseling about prenatal testing and to develop a management plan. The frequency of subsequent antepartum office visits is determined by the individual needs of the woman and the assessment of her risks. According to ACOG guidelines, for an uncomplicated pregnancy, the ACOG guidelines suggest the following frequency of office visits: monthly office visits from the initial prenatal visit until 29 weeks of pregnancy; weekly office visits from 36 weeks until delivery; office visits every two to three weeks from 29 weeks to 36 weeks of pregnancy. (ACOG guidelines, 2010) Postpartum Care: The timing of the postpartum visit has been a topic for debate. According to the ACOG, the mother should visit her physician for a postpartum review and examination approximately 4 to 6 weeks after delivery. This interval may be modified according to the needs of the patient with medical, obstetric, or intercurrent complications (ACOG Guidelines, 2002). The DoD/VA clinical practice guideline for management of uncomplicated pregnancy Spports the recommended 8 weeks after delivery postpartum visit. Evidence suggests that eight weeks is the optimal time to decrease the rate of false positive cervical smears, though consideration of the mother's schedule should also be taken into account (2002). A visit within 7-14 days of delivery may be advisable after a cesarean delivery or a complicated gestation, primarily to assess the surgical wounds and healing. The standard postpartum care visit is recommended in follow-up to this initial visit (ACOG Guidelines) to ensure the woman's uterus has reduced to its normal size, and to conduct a depression screening and family planning counseling. **1c.10 Clinical Practice Guideline Citation:** American Academy of Pediatrics and The American College of Obstetricians and Gynecologists. Guidelines for Perinatal Care (5th Edition). October 2002. **1c.11 National Guideline Clearinghouse or other URL:** Routine prenatal and postnatal care. http://www.guideline.gov/content.aspx?id=13174&search=prenatal+and+postpartum+care **1c.12 Rating of strength of recommendation (*also provide narrative description of the rating and by whom*):** Good **1c.13 Method for rating strength of recommendation** (*If different from USPSTF system, also describe rating and how it relates to USPSTF*)**:** USPSTF **1c.14 Rationale for using this guideline over others:** The measures are access and use of service measures that are based on the body of evidence and guidelines regarding perinatal care.	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?*	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report*, met? **Rationale:**	**1** **Y☐** **N☐**
2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES	
Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)	**Eval Rating**
2a. MEASURE SPECIFICATIONS	
S.1 Do you have a web page where current detailed measure specifications can be obtained? **S.2 If yes, provide web page URL:** **2a. Precisely Specified**	**2a-specs** **C☐** **P☐**

2a.1 Numerator Statement (*Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome*)**:**
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

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

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

2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured*)**:**
Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year

2a.5 Target population gender: Female
2a.6 Target population age range: Women of child-bearing years

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

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

2a.9 Denominator Exclusions (*Brief text description of exclusions from the target population*)**:** None

M☐ N☐

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

2a.11 Stratification Details/Variables (*All information required to stratify the measure including the stratification variables, all codes, logic, and definitions***):**
None

2a.12-13 Risk Adjustment Type: No risk adjustment necessary

2a.14 Risk Adjustment Methodology/Variables (*List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method***):**
NA

2a.15-17 Detailed risk model available Web page URL or attachment:

2a.18-19 Type of Score: Rate/proportion
2a.20 Interpretation of Score: Better quality = Higher score
2a.21 Calculation Algorithm (*Describe the calculation of the measure as a flowchart or series of steps***):**
Step 1 Identify the delivery date using hospital discharge data.
Step 2 Identify the date when the member enrolled in the organization and determine the stage of pregnancy at time of enrollment. If the member has gaps in enrollment during pregnancy, use the last enrollment segment to determine continuous enrollment in the organization. For members with a gap in enrollment any time during pregnancy (including a gap in the first trimester), the last enrollment segment is the enrollment start date during the pregnancy that is closest to the delivery date.
Use the following approach (or an equivalent method) to calculate the stage of pregnancy at time of enrollment. If gestational age is not available, assume a gestational age of 280 days (40 weeks).

- Convert gestational age into days.
- Subtract gestational age (in days) from the date of delivery (step 1).
- Subtract the date obtained above from the date when the member enrolled in the organization to determine the stage of pregnancy at time of enrollment.
- Divide the numbers of days the member was pregnant at enrollment (step 3) by 30. Round the resulting number according to the .5 rule to a whole number.

For example, delivery date is August 8, 2010; gestational age is 33 weeks; date of enrollment is May 6, 2010. Given these variables, the process is:

- Gestational age in days is 231 days (33 weeks ? 7 days/week).
- Date of delivery – gestational age (in days) is December 22, 2009 (August 8, 2009 – 231 days).
- Date when the member enrolled in the organization – date obtained in step 2 is 135 days (May 6, 2010 – December 22, 2009).
- Month in which prenatal care began is 4.5 months (135 days/30 days) and then round up to 5 months using the 0.5 rule.

This member's stage of pregnancy at time of enrollment is 5 months.
Step 3 Use Table FPC-A to find the number of recommended prenatal visits by gestational age and stage of pregnancy at time of enrollment per the American College of Obstetricians and Gynecologists (ACOG). The chart subtracts the number of missed visits prior to the date the member enrolled from the number of recommended visits for a given gestational age.
ACOG recommends that women with an uncomplicated pregnancy receive visits every 4 weeks for the first 28 weeks of pregnancy, every 2–3 weeks until 36 weeks of pregnancy, and weekly thereafter. For example, ACOG recommends 14 visits for a 40-week pregnancy. If the member enrolled during her fourth month (3 missed visits prior to enrollment in the organization), the expected number of visits is 14 – 3 = 11.

For deliveries with a gestational age <28 weeks or >42 weeks, calculate the expected number of prenatal care visits using the date when the member enrolled and ACOG's recommended schedule of visits. For example, if gestational age is 26 weeks and the member enrolled during her second month of pregnancy, the expected number of prenatal care visits is 5 (6 expected visits [1 visit every 4 weeks or 6 visits in 24 weeks], less 1 visit missed in the first month).
If gestational age is 43 weeks and the member enrolled during her third month of pregnancy, the expected number of prenatal care visits is 15 (14 expected visits for a 40-week gestation plus 1 visit each additional

week [17 total expected prenatal care visits], less 2 visits missed in the first and second months).
Step 4 Identify the number of prenatal care visits the member received during the course of her pregnancy and while enrolled in the organization using claims and encounter data. Use Table PPC-C to identify prenatal visits that occurred during the first trimester. The organization may use any of the four rules presented in the table to search for evidence of prenatal care; a woman's record only needs to satisfy one rule.
Use Table PPC-D to identify prenatal visits that occurred during the second and third trimester. Visits that occur on the date of delivery and meet the prenatal visit criteria count toward the measure.
Count as a single visit, a HCPCS code that falls on the same date of service as a CPT or UB Revenue code. Using Table PPC-C, Decision Rule 2 as an example, count as a single visit, HCPCS H1004, CPT 99201 and ICD-9-CM Diagnosis code 651.03 that fall on the same date of service.
If the member had a gap in enrollment, count only the visits received during the last enrollment segment.
Step 5 Calculate the ratio of observed visits (step 4) over expected visits (step 3).
Step 6 Report each woman in the appropriate category.

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

Note: Ultrasound and lab results alone should not be considered a visit; they must be linked to an office visit with an appropriate practitioner in order to count for this measure.

2a.22 **Describe the method for discriminating performance** *(e.g., significance testing)*:
Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance

2a.23 **Sampling (Survey) Methodology** *If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate)*:
A systematic sample of members drawn from the eligible population. Frequency of Ongoing Prenatal Care and Prenatal and Postpartum Care measures must use the same systematic sample for both. The organization may reduce the sample size using the current year's lowest product-line-specific administrative rate for the rate of women who received >=81 percent of expected prenatal care visits and the two rates from Prenatal and Postpartum Care. It may also use the prior year's lowest audited product-line-specific rates for the rate of women who received >=81 percent of expected prenatal care visits and the two rates from Prenatal and Postpartum Care.

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

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

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

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

2a.32-35 **Level of Measurement/Analysis** (*Check the level(s) for which the measure is specified and tested)*
Health Plan, Integrated delivery system, Population: national, Population: regional/network

2a.36-37 **Care Settings** (*Check the setting(s) for which the measure is specified and tested)*
Ambulatory Care: Office, Ambulatory Care: Clinic, Ambulatory Care: Hospital Outpatient

2a.38-41 **Clinical Services** (*Healthcare services being measured, check all that apply*)
Clinicians: Nurses, Clinicians: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO), Other midwife

TESTING/ANALYSIS

2b. Reliability testing

2b.1 Data/sample *(description of data/sample and size)*: Medicaid plans who reported the measure in 2010

2b.2 Analytic Method *(type of reliability & rationale, method for testing)*:
Reliability was estimated by using the beta-binomial model. Beta-binomial is a better fit when estimating the reliability of simple pass/fail rate measures as is the case with most HEDIS® health plan measures. The beta-binomial model assumes the plan score is a binomial random variable conditional on the plan´s true value that comes from the beta distribution. The beta distribution is usually defined by two parameters, alpha and beta. Alpha and beta can be thought of as intermediate calculations to get to the needed variance estimates. The beta distribution can be symmetric, skewed or even U-shaped.
Reliability used here is the ratio of signal to noise. The signal in this case is the proportion of the variability in measured performance that can be explained by real differences in performance. A reliability of zero implies that all the variability in a measure is attributable to measurement error. A reliability of one implies that all the variability is attributable to real differences in performance. The higher the reliability score, the greater is the confidence with which one can distinguish the performance of one plan from another. A reliability score greater than or equal to 0.7 is considered very good.

2b.3 Testing Results *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)*:
Frequency of Ongoing Prenatal Care - <21 Percent Rate
0.9897
Frequency of Ongoing Prenatal Care - 21-40 Percent Rate
0.9748
Frequency of Ongoing Prenatal Care - 41-60 Percent Rate
0.9506
Frequency of Ongoing Prenatal Care - 61-80 Percent Rate
0.9533
Frequency of Ongoing Prenatal Care - 81+ Percent Rate
0.9933

2b
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2c. Validity testing

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

2c.2 Analytic Method *(type of validity & rationale, method for testing)*:
NCQA tested the measure for face validity using a panel of stakeholders with specific expertise in measurement and child health care. This panel included representatives from key stakeholder groups, including pediatricians, family physicians, health plans, state Medicaid agencies and researchers. Experts reviewed the results of the field test and assessed whether the results were consistent with expectations, whether the measure represented quality care, and whether we were measuring the most important aspect of care in this area.

2c.3 Testing Results *(statistical results, assessment of adequacy in the context of norms for the test conducted)*:
This measure was deemed valid by the expert panel.

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N☐

2d. Exclusions Justified

2d.1 Summary of Evidence supporting exclusion(s):
None

2d.2 Citations for Evidence:
NA

2d.3 Data/sample *(description of data/sample and size)*: NA

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

2d
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P☐
M☐
N☐
NA☐

2d.5 Testing Results *(e.g., frequency, variability, sensitivity analyses)*: NA	
2e. Risk Adjustment for Outcomes/ Resource Use Measures **2e.1 Data/sample** *(description of data/sample and size)*: NA **2e.2 Analytic Method** *(type of risk adjustment, analysis, & rationale)*: NA **2e.3 Testing Results** *(risk model performance metrics)*: NA **2e.4 If outcome or resource use measure is not risk adjusted, provide rationale:** The measure assesses utilization and access in a general population; risk adjustment is not indicated.	**2e** C☐ P☐ M☐ N☐ NA☐
2f. Identification of Meaningful Differences in Performance **2f.1 Data/sample from Testing or Current Use** *(description of data/sample and size)*: HEDIS National Data **2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance** *(type of analysis & rationale)*: Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance **2f.3 Provide Measure Scores from Testing or Current Use** *(description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance)*: Frequency of Ongoing Prenatal Care National Means HEDIS 2006 Data <21% 13.52 HEDIS 2007 Data 12.36 >= 81% HEDIS 2006 Data 58.6 HEDIS 2007 Data 59.59 21-40% HEDIS 2006 Data 6.04 HEDIS 2007 Data 6.63 41-60% HEDIS 2006 Data 7.84 HEDIS 2007 Data 7.74 61-80% HEDIS 2006 Data 14.1 HEDIS 2007 Data 13.85	**2f** C☐ P☐ M☐ N☐
2g. Comparability of Multiple Data Sources/Methods **2g.1 Data/sample** *(description of data/sample and size)*:	**2g** C☐ P☐

2g.2 Analytic Method *(type of analysis & rationale)*: **2g.3 Testing Results** *(e.g., correlation statistics, comparison of rankings)*:	**M☐ N☐ NA☐**
2h. Disparities in Care **2h.1 If measure is stratified, provide stratified results** *(scores by stratified categories/cohorts)*: The measure is not stratified to detect disparities. **2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:** NA	**2h C☐ P☐ M☐ N☐ NA☐**
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Scientific Acceptability of Measure Properties?*	**2**
Steering Committee: Overall, to what extent was the criterion, *Scientific Acceptability of Measure Properties*, met? **Rationale:**	***2*** **C☐ P☐ M☐ N☐**
3. USABILITY	
Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	**Eval Rating**
3a. Meaningful, Understandable, and Useful Information **3a.1 Current Use:** In use **3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large)** (*If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years*): This measure is used in public reporting. **3a.3 If used in other programs/initiatives (***If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years***):** This measure is a measure in the Healthcare Effectiveness Data and Information Set (HEDIS) **Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **3a.4 Data/sample** *(description of data/sample and size)*: General public and other stakeholder groups (i.e. HEDIS users) **3a.5 Methods** *(e.g., focus group, survey, QI project)*: For the health plan measure, we released the measure for public comment and reviewed all results with the NCQA Committee on Performance Measurement (CPM). We also reviewed first-year results with the CPM. **3a.6 Results** *(qualitative and/or quantitative results and conclusions)*: NCQA received feedback that the measure is understandable, feasible, important and valid. Upon review of public comment results, the Committee on Performance Measurement approved the NCQA staff recommendation to add the measure to HEDIS. After reviewing first-year analysis results, the CPM approved the staff recommendation to publicly report the measure. The measure was deemed usable and feasible.	**3a C☐ P☐ M☐ N☐**
3b/3c. Relation to other NQF-endorsed measures **3b.1 NQF # and Title of similar or related measures:**	

(for NQF staff use) **Notes on similar/related endorsed or submitted measures:**	
3b. Harmonization If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source or different topic but same target population): **3b.2 Are the measure specifications harmonized? If not, why?**	**3b** C☐ P☐ M☐ N☐ NA☐
3c. Distinctive or Additive Value **3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** **5.1 If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality:** NA	**3c** C☐ P☐ M☐ N☐ NA☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Usability?*	**3**
Steering Committee: Overall, to what extent was the criterion, *Usability*, met? **Rationale:**	**3** C☐ P☐ M☐ N☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
4a. Data Generated as a Byproduct of Care Processes **4a.1-2 How are the data elements that are needed to compute measure scores generated?** Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition), Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)	**4a** C☐ P☐ M☐ N☐
4b. Electronic Sources **4b.1 Are all the data elements available electronically?** (*elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims*) No **4b.2 If not, specify the near-term path to achieve electronic capture by most providers.** NCQA may eventually specify this measure for electronic health records.	**4b** C☐ P☐ M☐ N☐
4c. Exclusions **4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?** No **4c.2 If yes, provide justification.**	**4c** C☐ P☐ M☐ N☐ NA☐
4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences **4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results.** All measures that are used in NCQA programs are audited.	**4d** C☐ P☐ M☐ N☐

4e. Data Collection Strategy/Implementation **4e.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:** Based on field test results, we have specified the measure to assess whether visit occurred. **4e.2 Costs to implement the measure** (*costs of data collection, fees associated with proprietary measures*)**:** This measure appears in HEDIS and is subject to HEDIS costs. **4e.3 Evidence for costs:** Based on user feedback and other stakeholder input. **4e.4 Business case documentation:**	**4e** C☐ P☐ M☐ N☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Feasibility?*	**4**
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, met? **Rationale:**	**4** C☐ P☐ M☐ N☐
RECOMMENDATION	
(for NQF staff use) **Check if measure is untested and only eligible for time-limited endorsement.**	**Time-limited** ☐
Steering Committee: Do you recommend for endorsement? **Comments:**	Y☐ N☐ A☐
CONTACT INFORMATION	
Co.1 Measure Steward (Intellectual Property Owner) **Co.1 Organization** National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005 **Co.2 Point of Contact** Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-	
Measure Developer If different from Measure Steward **Co.3 Organization** National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005 **Co.4 Point of Contact** Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-	
Co.5 Submitter If different from Measure Steward POC Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-, National Committee for Quality Assurance	
Co.6 Additional organizations that sponsored/participated in measure development	
ADDITIONAL INFORMATION	

Workgroup/Expert Panel involved in measure development
Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.
Over the years, the following expert panel has contributed to many of the measures in the HEDIS set that apply to women and children.
David Archer, MD
Eastern Virginia Medical School
Grant P. Bagley, MD, JD
Arnold & Porter
Thomas J. Benedetti, MD
University of Washington Medical Center
Denis Dougherty
Agency for Healthcare Research and Quality (AHRQ)
Christopher B. Forrest, MD, PhD
The Children's Hospital of Philadelphia
Shirley Girouard, PhD, RN
Southern Connecticut State University
Bill Heuston, MD
Medical University of South Carolina
Mary Kay Holleran
Highmark Caring Foundation
Charles Homer MD, MPH
National Initiative for Children's Healthcare Quality
Marilyn C. Jones, MD
Children's Hospital
Milton Kotelchuck, PhD, MPH
Boston University School of Public Health Mark Mandell, MD
Partners Community Health Care, Inc.
Dorothy Mann, PhD, MPH
Consultant
Robert H. Pantell, MD
University of California, San Francisco
Lee Partridge

Ad.2 If adapted, provide name of original measure: NA
Ad.3-5 If adapted, provide original specifications URL or attachment

Measure Developer/Steward Updates and Ongoing Maintenance
Ad.6 Year the measure was first released: 1997
Ad.7 Month and Year of most recent revision: 07, 2010
Ad.8 What is your frequency for review/update of this measure? Annual
Ad.9 When is the next scheduled review/update for this measure? 07, 2011

Ad.10 Copyright statement/disclaimers: Frequency of Ongoing Prenatal Care:

Prenatal and Postpartum Care:

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

Date of Submission (*MM/DD/YY*)**:** 01/24/2011

NATIONAL QUALITY FORUM

Measure Evaluation 4.1
December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized)**:** Complete all yellow highlighted areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

Steering Committee: Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met
C = Completely (unquestionably demonstrated to meet the criterion)
P = Partially (demonstrated to partially meet the criterion)
M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) **NQF Review #:** 1517 **NQF Project:** Child Health Quality Measures 2010

MEASURE DESCRIPTIVE INFORMATION

De.1 Measure Title: Prenatal & Postpartum Care

De.2 Brief description of measure: 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.

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

De.4 National Priority Partners Priority Area: Care coordination, Population health
De.5 IOM Quality Domain: Effectiveness, Timeliness
De.6 Consumer Care Need: Staying healthy

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.* **A.1 Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)?** Yes **A.2 Indicate if Proprietary Measure** (*as defined in measure steward agreement*)**:** Proprietary measure,	**A** Y☐ N☐

Proprietary complex measure with fees A.3 **Measure Steward Agreement:** Agreement will be signed and submitted prior to or at the time of measure submission A.4 **Measure Steward Agreement attached:**	
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section	**B** Y☐ N☐
C. The intended use of the measure includes both public reporting and quality improvement. ►**Purpose:** Public reporting, Internal quality improvement	**C** Y☐ N☐
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1**Testing:** Yes, fully developed and tested D.2 **Have NQF-endorsed measures been reviewed to identify if there are similar or related measures?** Yes	**D** Y☐ N☐
(for NQF staff use) **Have all conditions for consideration been met?** **Staff Notes to Steward** (*if submission returned*)**:**	**Met** Y☐ N☐
Staff Notes to Reviewers (*issues or questions regarding any criteria*)**:**	
Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. ***Measures must be judged to be important to measure and report*** *in order to be evaluated against the remaining criteria.* (evaluation criteria) **1a. High Impact**	**Eval Rating**
(for NQF staff use) **Specific NPP goal**:	
1a.1 **Demonstrated High Impact Aspect of Healthcare:** Affects large numbers, Frequently performed procedure, Leading cause of morbidity/mortality, High resource use, Severity of illness, Patient/societal consequences of poor quality 1a.2 1a.3 **Summary of Evidence of High Impact:** Each year, about four million women give birth in the United States. While many women experience normal pregnancies without problems, about one million women have one or more complications during pregnancy, labor and delivery, or postpartum period. Studies indicate that as many as half of all deaths from pregnancy complications could be prevented if women had better access to health care, better quality of care, and changed their health and lifestyle habits (CDC, 2002). 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, stillborn or who die within the first year of life (National Center for Health Statistics, 2010). The impact of pregnancy complications on health care costs is considerable. Pregnancy complications	**1a** C☐ P☐ M☐ N☐

before delivery account for more than two million hospital days of care and over one billion dollars each year in the U.S. (CDC, 2002). One driver of excessive maternity costs is premature babies, or babies born before the 37th week. Preterm/low birth weight infants in the United States account for half of infant hospitalization costs and one-quarter of pediatric costs. Costs for these preterm/low birth weight admissions totaled $5.8 billion, representing 47 percent of the costs for all infant hospitalizations and 27 percent of the cost for all pediatric stays. The average cost associated with preterm/low birth weight infant hospital stays is $15,100 and the averagelength of stay is 12.9 days Conversely, for uncomplicated newborns, the averages hospital stay is approximately $600 and 1.9 days. The study lead by Russel found that costs were highest for extremely preterm infants (<28 weeks' gestation/birth weight <1000 g), on average $65,600. Often times the costs are associated with respiratory-related complications. (Rebecca B. Russell, 2007)

1a.4 **Citations for Evidence of High Impact:** Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Safe Motherhood: Promoting Health for Women Before, During and After Pregnancy. March 2002. www.cdc.gov/nccdphp/drh/mh_ataglance.htm

National Center for Health Statistics, Division of Vital Statistics, DHS; Summary Health Statistic for U.S. Children: National Health Interview Survey, 2009.Vintzileos, A, Ananth, C, Smulian, JC, Scorza, WE, Knuppel, RA. The impact of prenatal care on postneonatal deaths in the presence and absence of antenatal high-risk conditions. Am J Obstet Gynecol November 2002; 187(5):1258-1262.

American Academy of Pediatrics and The American College of Obstetricians and Gynecologists. Guidelines for Perinatal Care (5th Edition). October 2002.

Pennsylvania Health Care Cost Containment Council. Promoting Maternal Health in the Workplace. PHC4 FYI, Issue No. 21. December 2003.

Rebecca B. Russell, Nancy S. Green, Claudia A. Steniner, Susan Meikle. Cost of Hospitalization for Preterm and Low Birth Weight Infants in the United States. PEDIATRICS Vol. 120 No. 1 July 2007, pp. e1-e9 (doi:10.1542/peds.2006-2386)

1b. Opportunity for Improvement

1b.1 **Benefits (improvements in quality) envisioned by use of this measure:** Research indicates that early, comprehensive prenatal care and consistent visits throughout pregnancy can promote healthier pregnancies and reduce the risk of costly, adverse birth outcomes. This measure ensures that perinatal care occurs and in a timely and consistent fashion.

1b.2 **Summary of data demonstrating performance gap (variation or overall poor performance) across providers:**
Despite great national wealth, the U.S. continues to rank poorly relative to other industrialized nations on infant mortality and other birth outcomes, and with wide inequities by race/ethnicity. Across all years, about 60% of community health centers (CHC) mothers received first-trimester prenatal care and more than 70% received postpartum and newborn care.
In a study on the effects of pregnancy and childbirth, mothers´ lack of knowledge about postpartum health was the main finding (Kline, Martin, & Deyo, 1998).

In addition, NCQA's HEDIS measure has shown that performance among health plans is low. The rate for timeliness of prenatal care was 81.37% in 2007; and the rate for postpartum care was just 58.6%.

1b.3 **Citations for data on performance gap:**
Kline C. R, Martin D. P, Deyo R. A. Health consequences of pregnancy and childbirth as perceived by women and clinicians. Obstetrics and Gynecology. 1998;92:842–848.

Gaynes B. N, Gavin N, Meltzer-Brody S, Lohr K. N, Swinson T, Gartlehner G. 2005. Perinatal depression: Prevalence, screening, accuracy, and screening outcomes (AHRQ Publication No. 05-E006-1). et al. Rockville, MD: Agency for Healthcare Research Quality.

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

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In the United States, substantial racial/ethnic disparities exist in birth outcomes. As of 2002, the infant mortality rate for blacks (13.5 per 1,000 live births) was more than 2.5 times that of whites (5.7 per 1,000), Hispanics (5.4 per 1,000), and Asians (4.7 per 1,000) (Arias et al. 2003). Black infants were about twice as likely to be delivered low birth weight (LBW) (13.3%) as whites (6.9%) and Hispanics (6.5%); and black infants (17.5%) were more likely to be delivered preterm than either Hispanics (11.6%) or whites (11.0%). Both LBW and preterm birth have been associated with increased risks of infant mortality, and developmental disabilities such as mental retardation and cerebral palsy.

Substantial racial/ethnic disparities also persist in the receipt of prenatal care that has been associated with better birth outcomes (Ickovics et al. 2003;). In 2002, blacks (75%) and Hispanics (77%) were less likely than whites (89%) and Asian/Pacific Islanders (85%) to receive prenatal care in the first trimester (Martin et al. 2003). Similarly, receipt of adequate prenatal care (defined by the Revised-Graduated Index of Prenatal Care Utilization) was reported by 57%of whites and 51% of blacks (Alexander, Kogan, and Nabukera 2002). Despite these differences, other studies have challenged the effectiveness of prenatal care in reducing disparities in birth outcomes due to the strength of other, more difficult to address, factors such as social class and hereditary risks (Lu and Halfon 2003; Lu et al. 2003;).

Maximizing access to prenatal care is a key element of public health strategy to improve the early initiation and appropriate utilization of prenatal care to improve pregnancy outcomes. Utilization of prenatal care is known to vary cross-sectionally by sociodemographic characteristics, notably race/ethnicity, education, age, and marital status (Braverman P,2000).

Contemporary policy thinking about access to health care typically focuses on gaps in health insurance, other economic and transportation barriers, and lack of information as impediments to utilizing care (Frisbie WP, 2001). While some of these factors are persistent over a woman's life, others such as familiarity with prenatal services change in regular or random patterns.
Psychosocial factors may also delay initiation of care, undermine adherence to the standard schedule of visits, or both (Sarnoff R, 2001). For example, women in some sociodemographic groups may be more inclined to find the organization of services to be impersonal or threatening, and the content of services to be unresponsive to their concerns and ordinary mode of life (Pagnini DL, 2000). Some of these attitudinal factors may have a consistent impact on prenatal care throughout the lifetimes of such women. Others may, however, be responses to experience from earlier pregnancies.

1b.5 Citations for data on Disparities:

Alexander,G. R., M. D. Kogan, and S. Nabukera. 2002. ''Racial Differences in Prenatal Care Use in the United States: Are Disparities Decreasing?'' American Journal of Public Health 92 (12): 1970–5.

Arias, E., M. F. MacDorman, D. M. Strobino, and B. Guyer. 2003. ''Annual Summary of Vital Statistics——2002.'' Pediatrics 112 (6, Part 1): 1215–30.

Ickovics, J. R., T. S. Kershaw, C. Westdahl, S. S. Rising, C. Klima, H. Reynolds, and U. Magriples. 2003. ''Group Prenatal Care and Preterm Birth Weight: Results from a Matched Cohort Study at Public Clinics.'' Obstetrics and Gynecology 102 (5, Part 1): 1051–57.

Lu, M. C., and N. Halfon. 2003. ''Racial and Ethnic Disparities in Birth Outcomes: A Life-Course Perspective.'' Maternal and Child Health Journal 7 (1): 13–30.

Martin, J. A., B. E. Hamilton, P. D. Sutton, S. J. Ventura, F. Menacker, and M. L. Munson. 2003. ''Births: Final Data for 2002.'' National Vital Statistics Reports 52 (10): 1–113.

Lu, M. C., V. Tache, G. R. Alexander, M. Kotelchuck, and N. Halfon. 2003. ''Preventing Low Birth Weight: Is Prenatal Care the Answer?'' Journal of Maternal- Fetal and Neonatal Medicine 13 (6): 362–80.

1c. Outcome or Evidence to Support Measure Focus

1c.1 Relationship to Outcomes (*For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population*)**:** Proper perinatal care is associated with improved birth outcomes. For example, one study found that 25.6 percent of women who did not receive prenatal care delivered preterm infants compared to 9.2 percent of women who received

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even a minimum amount of prenatal care (Vintzileos et al., 2002).
In 2001, infants of mothers who received no prenatal care had an infant mortality rate of 34.8 per 1,000 live births, compared to an infant mortality rate of only 6.2 per 1,000 when prenatal care was initiated in the first trimester of pregnancy (Matthews et al., 2003). Observational studies have consistently shown that groups having more post-delivery visits have lower maternal, fetal and neonatal illness and mortality.

Regarding postpartum visits, not only do many women experience some degree of emotional liability in the postpartum period, which warrants a follow-up visit, but they will also need personalized care during this time to hasten the development of a healthy mother-infant relationship and a sense of maternal confidence (ACOG, 2002). Should the pregnancy have an abnormal outcome, the postpartum visit is an advantageous time to discuss implications of such conditions as diabetes mellitus, intrauterine growth restriction, preterm birth, hypertension or other conditions that may recur in any future pregnancies (ACOG, 2002). The postpartum visit is also an ideal time to begin preconceptional counseling for patients who may wish to have future pregnancies.

1c.2-3. Type of Evidence: Evidence-based guideline, Expert opinion

1c.4 Summary of Evidence (*as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome*)**:**
The goal of the prenatal contact is to exchange information and identify existing risk factors that may impact the pregnancy (DoD/VA, 2002). Lack of prenatal care can be considered a high-risk factor for postneonatal death. A study that sought to determine the association between prenatal care (defined as one visit) and postneonatal death rates (defined as the number of deaths of infants between 28 and 365 days of life) found that the postneonatal deaths among women who had prenatal care was 2.1 per 1,000 women, whereas the rate among women without prenatal care was 5.9 per 1,000 (Vintzileos, A, et al., 2002). These rates applied to women without high-risk conditions. Women whose prenatal care fails to meet established standards are at a greater risk for pregnancy complications and negative birth outcomes (National Center for Health Statistics, 1997).

The goal of postpartum care is to assess the physical and psychosocial status of the mother after the mother's discharge. The majority of maternal and neonatal deaths, as well as a significant burden of long-term morbidity, occur during the postpartum period (WHO, 1998). The postpartum visit should include obtaining an interval history and performing a physical exam to evaluate the patient's current status. Additionally, the emotional status of a woman whose pregnancy had an abnormal outcome should be reviewed, as many women experience some degree of emotional liability during the postpartum period. It is also an advisable time to begin preconceptional counseling for patients who may wish to have future pregnancies (ACOG Guidelines, 2002).

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

1c.6 Method for rating evidence: Expert Consensus

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

1c.8 Citations for Evidence (*other than guidelines***):** Veterans Health Administration, Department of Defense. DoD/VA clinical practice guideline for the management of uncomplicated pregnancy. Washington (DC): Department of Veterans Affairs; 2002 October.

Department of Reproductive Health and Research (RHR), World Health Organization (WHO). Postpartum care of the mother and newborn: a practical guide; 1998.

Vintzileos, A, Ananth, C, Smulian, JC, Scorza, WE, Knuppel, RA. The impact of prenatal care on postneonatal deaths in the presence and absence of antenatal high-risk conditions. Am J Obstet Gynecol November 2002; 187(5):1258-1262

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

ACOG Timeliness of Prenatal Care: Once pregnancy occurs, patients should have early contact with an obstetrician to begin counseling about prenatal testing and to develop a management plan. The frequency of subsequent antepartum office visits is determined by the individual needs of the woman and the assessment of her risks. According to ACOG guidelines, for an uncomplicated pregnancy, the ACOG guidelines suggest the following frequency of office visits: monthly office visits from the initial prenatal visit until 29 weeks of pregnancy; weekly office visits from 36 weeks until delivery; office visits every two to three weeks from 29 weeks to 36 weeks of pregnancy. (ACOG guidelines, 2010) Postpartum Care: The timing of the postpartum visit has been a topic for debate. According to the ACOG, the mother should visit her physician for a postpartum review and examination approximately 4 to 6 weeks after delivery. This interval may be modified according to the needs of the patient with medical, obstetric, or intercurrent complications (ACOG Guidelines, 2002). The DoD/VA clinical practice guideline for management of uncomplicated pregnancy Spports the recommended 8 weeks after delivery postpartum visit. Evidence suggests that eight weeks is the optimal time to decrease the rate of false positive cervical smears, though consideration of the mother's schedule should also be taken into account (2002). A visit within 7-14 days of delivery may be advisable after a cesarean delivery or a complicated gestation, primarily to assess the surgical wounds and healing. The standard postpartum care visit is recommended in follow-up to this initial visit (ACOG Guidelines) to ensure the woman's uterus has reduced to its normal size, and to conduct a depression screening and family planning counseling. 1c.10 **Clinical Practice Guideline Citation:** American Academy of Pediatrics and The American College of Obstetricians and Gynecologists. Guidelines for Perinatal Care (5th Edition). October 2002. 1c.11 **National Guideline Clearinghouse or other URL:** Routine prenatal and postnatal care. http://www.guideline.gov/content.aspx?id=13174&search=prenatal+and+postpartum+care 1c.12 **Rating of strength of recommendation** (*also provide narrative description of the rating and by whom*)**:** Good 1c.13 **Method for rating strength of recommendation** (*If different from USPSTF system, also describe rating and how it relates to USPSTF)*: USPSTF 1c.14 **Rationale for using this guideline over others:** The measures are access and use of service measures that are based on the body of evidence and guidelines regarding perinatal care.	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?*	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report*, met? **Rationale:**	**1** **Y☐** **N☐**
2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES	
Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)	**Eval Rating**
2a. MEASURE SPECIFICATIONS	
S.1 **Do you have a web page where current detailed measure specifications can be obtained?** S.2 **If yes, provide web page URL:** **2a. Precisely Specified**	**2a-specs** **C☐** **P☐** **M☐** **N☐**
2a.1 **Numerator Statement** (*Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome*)**:**	

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.

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

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

2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured***):**
Deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year

2a.5 Target population gender: Female
2a.6 Target population age range: Women of child-bearing years

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

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

2a.9 Denominator Exclusions (*Brief text description of exclusions from the target population***):** None

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

2a.11 Stratification Details/Variables (*All information required to stratify the measure including the stratification variables, all codes, logic, and definitions***):**
None

2a.12-13 Risk Adjustment Type: No risk adjustment necessary

2a.14 Risk Adjustment Methodology/Variables (*List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method***):**
NA

2a.15-17 Detailed risk model available Web page URL or attachment:

2a.18-19 Type of Score: Rate/proportion
2a.20 Interpretation of Score: Better quality = Higher score
2a.21 Calculation Algorithm (*Describe the calculation of the measure as a flowchart or series of steps***):**
Step 1 Identify live births. Use Method A and Method B below to identify all women with a live birth between November 6 of the year prior to the measurement year and November 5 of the measurement year. The organization must use both methods to identify the eligible population, but a member only needs to be identified by one to be included in the measure.
Step 2 Identify continuous enrollment. For women identified in step 1, determine if enrollment was continuous between 43 days prior to delivery and 56 days after delivery, with no gaps.

Step 3 Determine enrollment status during the first trimester. Determine if women identified in step 2 were enrolled on or before 280 days prior to delivery (or estimated date of delivery [EDD]). For these women, go to step 4. For women not enrolled on or before 280 days prior to delivery (or EDD), who were therefore pregnant at the time of enrollment, proceed to step 6.
Step 4 Determine continuous enrollment for the first trimester. Determine if women identified in step 3 were continuously enrolled during the first trimester (176–280 days prior to delivery [or EDD]) with no gaps in enrollment. For these women, use one of the four decision rules in Table PPC-C to determine if there was a prenatal visit during the first trimester.4 For women who were not continuously enrolled during the first trimester, proceed to step 5.
Step 5 For women who had a gap between 176 and 280 days before delivery, proceed to step 6.
Step 6 For women identified in step 3 and step 5, determine the start date of the last enrollment segment.5 For women not enrolled in the organization on or before 280 days before delivery (or EDD) and for women who had a gap between 176 and 280 days before delivery (step 5), determine the start date of the last enrollment segment.
For women whose last enrollment started on or between 219 and 279 days before delivery, proceed to step 7. For women whose last enrollment started less than 219 days before delivery proceed to step 8.
Step 7 Determine numerator compliance if enrollment started on or between 219 and 279 days before delivery. If the last enrollment segment started on or between 219 and 279 days before delivery, determine numerator compliance using the numerator criteria in Table PPC-D and find a visit between the last enrollment start date and 176 days before delivery.6
Step 8 Determine numerator compliance if enrollment started less than 219 days before delivery (i.e., between 219 days before delivery and the day of delivery). If the last enrollment segment started less than 219 days before delivery, determine numerator compliance using Table PPC-D numerator criteria for a visit within 42 days after enrollment.

2a.22 **Describe the method for discriminating performance** *(e.g., significance testing)*:
Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance

2a.23 **Sampling (Survey) Methodology** *If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate)*:
A systematic sample of members drawn from the eligible population. Frequency of Ongoing Prenatal Care and Prenatal and Postpartum Care measures must use the same systematic sample for both. The organization may reduce the sample size using the current year's lowest product-line-specific administrative rate for the rate of women who received >=81 percent of expected prenatal care visits and the two rates from Prenatal and Postpartum Care. It may also use the prior year's lowest audited product-line-specific rates for the rate of women who received >=81 percent of expected prenatal care visits and the two rates from Prenatal and Postpartum Care.

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

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

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

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

2a.32-35 **Level of Measurement/Analysis** (*Check the level(s) for which the measure is specified and tested)*
Health Plan, Integrated delivery system, Population: national, Population: regional/network

2a.36-37 **Care Settings (***Check the setting(s) for which the measure is specified and tested)*
Ambulatory Care: Office, Ambulatory Care: Clinic, Ambulatory Care: Hospital Outpatient

2a.38-41 **Clinical Services** (*Healthcare services being measured, check all that apply*)
Clinicians: Nurses, Clinicians: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO), Other midwife

TESTING/ANALYSIS	
2b. Reliability testing **2b.1 Data/sample** *(description of data/sample and size)*: The reliability metric for each measure was calculated separately for Commercial and Medicaid plans where applicable using 2010 data. **2b.2 Analytic Method** *(type of reliability & rationale, method for testing)*: Reliability was estimated by using the beta-binomial model. Beta-binomial is a better fit when estimating the reliability of simple pass/fail rate measures as is the case with most HEDIS® health plan measures. The beta-binomial model assumes the plan score is a binomial random variable conditional on the plan´s true value that comes from the beta distribution. The beta distribution is usually defined by two parameters, alpha and beta. Alpha and beta can be thought of as intermediate calculations to get to the needed variance estimates. The beta distribution can be symmetric, skewed or even U-shaped. Reliability used here is the ratio of signal to noise. The signal in this case is the proportion of the variability in measured performance that can be explained by real differences in performance. **2b.3 Testing Results** *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)*: Rate - Timeliness of Prenatal Care: Reliability - Commercial Plans: 0.9961 Reliability - Medicaid Plans: 0.9564 Rate - Postpartum Care: Reliability - Commercial Plans: 0.9944 Reliability - Medicaid Plans: 0.9217 A reliability of zero implies that all the variability in a measure is attributable to measurement error. A reliability of one implies that all the variability is attributable to real differences in performance. The higher the reliability score, the greater is the confidence with which one can distinguish the performance of one plan from another. A reliability score greater than or equal to 0.7 is considered very good.	**2b** C☐ P☐ M☐ N☐
2c. Validity testing **2c.1 Data/sample** *(description of data/sample and size)*: expert panel **2c.2 Analytic Method** *(type of validity & rationale, method for testing)*: NCQA tested the measure for face validity using a panel of stakeholders with specific expertise in measurement and child health care. This panel included representatives from key stakeholder groups, including pediatricians, family physicians, health plans, state Medicaid agencies and researchers. Experts reviewed the results of the field test and assessed whether the results were consistent with expectations, whether the measure represented quality care, and whether we were measuring the most important aspect of care in this area. **2c.3 Testing Results** *(statistical results, assessment of adequacy in the context of norms for the test conducted)*: This measure was deemed valid by the expert panel.	**2c** C☐ P☐ M☐ N☐
2d. Exclusions Justified **2d.1 Summary of Evidence supporting exclusion(s):** None **2d.2 Citations for Evidence:** NA **2d.3 Data/sample** *(description of data/sample and size)*: NA	**2d** C☐ P☐ M☐ N☐ NA☐

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

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

2e. Risk Adjustment for Outcomes/ Resource Use Measures

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

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

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

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

2e
C ☐
P ☐
M ☐
N ☐
NA ☐

2f. Identification of Meaningful Differences in Performance

2f.1 Data/sample from Testing or Current Use *(description of data/sample and size)*: HEDIS National Data

2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance *(type of analysis & rationale)*:
Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance

2f.3 Provide Measure Scores from Testing or Current Use *(description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance)*:
Frequency of Ongoing Prenatal Care
National Means
HEDIS 2006 Data
<21%
13.52
HEDIS 2007 Data
12.36
>= 81%
HEDIS 2006 Data
58.6
HEDIS 2007 Data
59.59
21-40%
HEDIS 2006 Data
6.04
HEDIS 2007 Data
6.63
41-60%
HEDIS 2006 Data
7.84
HEDIS 2007 Data
7.74
61-80%
HEDIS 2006 Data
14.1
HEDIS 2007 Data
13.85

2f
C ☐
P ☐
M ☐
N ☐

Prenatal and Postpartum Care Postpartum Care HEDIS 2006 59.08 HEDIS 2007 58.6 Timeliness of Prenatal Care HEDIS 2006 81.24 HEDIS 2007 81.37	
2g. Comparability of Multiple Data Sources/Methods 2g.1 **Data/sample** *(description of data/sample and size)*: 2g.2 **Analytic Method** *(type of analysis & rationale)*: 2g.3 **Testing Results** *(e.g., correlation statistics, comparison of rankings)*:	**2g** C☐ P☐ M☐ N☐ NA☐
2h. Disparities in Care 2h.1 **If measure is stratified, provide stratified results** *(scores by stratified categories/cohorts)*: The measure is not stratified to detect disparities. 2h.2 **If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:** NA	**2h** C☐ P☐ M☐ N☐ NA☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Scientific Acceptability of Measure Properties?*	**2**
Steering Committee: Overall, to what extent was the criterion, *Scientific Acceptability of Measure Properties*, met? **Rationale:**	***2*** C☐ P☐ M☐ N☐
3. USABILITY	
Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	**Eval Rating**
3a. Meaningful, Understandable, and Useful Information 3a.1 **Current Use:** In use 3a.2 **Use in a public reporting initiative (disclosure of performance results to the public at large)** (*If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years*): This measure is used in public reporting. 3a.3 **If used in other programs/initiatives (***If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years*): This measure is a measure in the Healthcare Effectiveness Data and Information Set (HEDIS) **Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) 3a.4 **Data/sample** *(description of data/sample and size)*: General public and other stakeholder groups (i.e.	**3a** C☐ P☐ M☐ N☐

HEDIS users) 3a.5 **Methods** *(e.g., focus group, survey, QI project)*: For the health plan measure, we released the measure for public comment and reviewed all results with the NCQA Committee on Performance Measurement (CPM). We also reviewed first-year results with the CPM. 3a.6 **Results** *(qualitative and/or quantitative results and conclusions)*: NCQA received feedback that the measure is understandable, feasible, important and valid. Upon review of public comment results, the Committee on Performance Measurement approved the NCQA staff recommendation to add the measure to HEDIS. After reviewing first-year analysis results, the CPM approved the staff recommendation to publicly report the measure. The measure was deemed usable and feasible.	
3b/3c. Relation to other NQF-endorsed measures 3b.1 **NQF # and Title of similar or related measures:**	
(for NQF staff use) **Notes on similar/related endorsed or submitted measures:**	
3b. Harmonization If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source or different topic but same target population): 3b.2 **Are the measure specifications harmonized? If not, why?**	**3b** C☐ P☐ M☐ N☐ NA☐
3c. Distinctive or Additive Value 3c.1 **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** 5.1 **If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality:** NA	**3c** C☐ P☐ M☐ N☐ NA☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Usability?*	**3**
Steering Committee: Overall, to what extent was the criterion, *Usability*, met? **Rationale:**	**3** C☐ P☐ M☐ N☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
4a. Data Generated as a Byproduct of Care Processes 4a.1-2 **How are the data elements that are needed to compute measure scores generated?** Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition), Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)	**4a** C☐ P☐ M☐ N☐
4b. Electronic Sources 4b.1 **Are all the data elements available electronically?** (*elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims*) No	**4b** C☐ P☐ M☐ N☐

4b.2 If not, specify the near-term path to achieve electronic capture by most providers. NCQA may eventually specify this measure for electronic health records.	
4c. Exclusions **4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?** No **4c.2 If yes, provide justification.**	**4c** C☐ P☐ M☐ N☐ NA☐
4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences **4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results.** All measures that are used in NCQA programs are audited.	**4d** C☐ P☐ M☐ N☐
4e. Data Collection Strategy/Implementation **4e.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:** Based on field test results, we have specified the measure to assess whether visit occurred. **4e.2 Costs to implement the measure** (*costs of data collection, fees associated with proprietary measures*)**:** This measure appears in HEDIS and is subject to HEDIS costs. **4e.3 Evidence for costs:** Based on user feedback and other stakeholder input. **4e.4 Business case documentation:**	**4e** C☐ P☐ M☐ N☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Feasibility?*	**4**
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, met? **Rationale:**	**4** C☐ P☐ M☐ N☐
RECOMMENDATION	
(for NQF staff use) **Check if measure is untested and only eligible for time-limited endorsement.**	**Time-limited** ☐
Steering Committee: Do you recommend for endorsement? **Comments:**	Y☐ N☐ A☐
CONTACT INFORMATION	
Co.1 Measure Steward (Intellectual Property Owner) **Co.1 Organization** National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005 **Co.2 Point of Contact**	

Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-

Measure Developer If different from Measure Steward
Co.3 Organization
National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005

Co.4 Point of Contact
Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-

Co.5 Submitter If different from Measure Steward POC
Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-, National Committee for Quality Assurance

Co.6 Additional organizations that sponsored/participated in measure development

ADDITIONAL INFORMATION

Workgroup/Expert Panel involved in measure development
Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.
Over the years, the following expert panel has contributed to many of the measures in the HEDIS set that apply to women and children.
David Archer, MD
Eastern Virginia Medical School
Grant P. Bagley, MD, JD
Arnold & Porter
Thomas J. Benedetti, MD
University of Washington Medical Center
Denis Dougherty
Agency for Healthcare Research and Quality (AHRQ)
Christopher B. Forrest, MD, PhD
The Children's Hospital of Philadelphia
Shirley Girouard, PhD, RN
Southern Connecticut State University
Bill Heuston, MD
Medical University of South Carolina
Mary Kay Holleran
Highmark Caring Foundation
Charles Homer MD, MPH
National Initiative for Children's Healthcare Quality
Marilyn C. Jones, MD
Children's Hospital
Milton Kotelchuck, PhD, MPH
Boston University School of Public Health Mark Mandell, MD
Partners Community Health Care, Inc.
Dorothy Mann, PhD, MPH
Consultant
Robert H. Pantell, MD
University of California, San Francisco
Lee Partridge

Ad.2 If adapted, provide name of original measure: NA
Ad.3-5 If adapted, provide original specifications URL or attachment

Measure Developer/Steward Updates and Ongoing Maintenance
Ad.6 Year the measure was first released: 1997
Ad.7 Month and Year of most recent revision: 07, 2010
Ad.8 What is your frequency for review/update of this measure? Annual
Ad.9 When is the next scheduled review/update for this measure? 07, 2011

Ad.10 Copyright statement/disclaimers: Frequency of Ongoing Prenatal Care:

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

Date of Submission (*MM/DD/YY*)**:** 01/06/2011

NATIONAL QUALITY FORUM

Measure Evaluation 4.1
December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized)**:** Complete all yellow highlighted areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

Steering Committee: Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met
C = Completely (unquestionably demonstrated to meet the criterion)
P = Partially (demonstrated to partially meet the criterion)
M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) **NQF Review #:** 1382 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Percentage of low birthweight births
De.2 **Brief description of measure:** The percentage of births with birthweight <2,500 grams
1.1-2 **Type of Measure:** Outcome De.3 **If included in a composite or paired with another measure, please identify composite or paired measure** N/A
De.4 **National Priority Partners Priority Area:** Population health De.5 **IOM Quality Domain:** Safety De.6 **Consumer Care Need:** Getting better, Staying healthy, Living with illness

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.* A.1 **Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)?** Yes A.2 **Indicate if Proprietary Measure** (*as defined in measure steward agreement*)**:** A.3 **Measure Steward Agreement:** Government entity and in the public domain - no agreement necessary A.4 **Measure Steward Agreement attached:**	**A** Y☐ N☐
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section	**B** Y☐ N☐

C. The intended use of the measure includes both public reporting and quality improvement. ►**Purpose:** Public reporting, Internal quality improvement Other Improving infant health and reducing infant mortality	**C** Y☐ N☐
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. **D.1Testing:** Yes, fully developed and tested **D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures?** Yes	**D** Y☐ N☐
(for NQF staff use) **Have all conditions for consideration been met?** **Staff Notes to Steward** (*if submission returned*)**:**	**Met** Y☐ N☐
Staff Notes to Reviewers (*issues or questions regarding any criteria*)**:**	
Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. ***Measures must be judged to be important to measure and report*** *in order to be evaluated against the remaining criteria.* (evaluation criteria) **1a. High Impact**	**Eval Rating**
(for NQF staff use) **Specific NPP goal**:	
1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Leading cause of morbidity/mortality, High resource use, Severity of illness, Patient/societal consequences of poor quality **1a.2** **1a.3 Summary of Evidence of High Impact:** Here is a quotation from reference 1 below: "Infants born at low birth weight (LBW) – conventionally defined as a birth weight less than 2,500 grams – experience severe health and developmental difficulties that can impose substantial costs on society. For example, the expected costs of delivery and initial care of a baby weighing 1000 grams at birth can exceed $100,000 (in year 2000 dollars), and the risk of death within one year of birth is over one-in-five. Even among babies weighing 2000-2100 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." **1a.4 Citations for Evidence of High Impact:** 1. Almond D, Chay KY, Lee DS. The costs of low birthweight. National Bureau of Economic Research, Working Paper 10552, June 2004. Available at: http://www.nber.org/papers/w10552. 2. Petrou S, Eddama O, Mangham L. Arch Dis Child Fetal Neonatal Ed. 2010 May 20. [Epub ahead of print] A structured review of the recent literature on the economic consequences of preterm birth. 3. Dorling J, D'Amore A, Salt A, et al. Data collection from very low birthweight infants in a geographical region: methods, costs, and trends in mortality, admission rates, and resource utilisation over a fi ve-year period. Early Hum Dev 2006;82:117–24.	**1a** C☐ P☐ M☐ N☐

4. Tommiska V, Tuominen R, Fellman V. Economic costs of care in extremely low birthweight infants during the fi rst 2 years of life. Pediatr Crit Care Med 2003;4:157–63.

5. Russell RB, Green NS, Steiner CA, et al. Cost of hospitalization for preterm and low birth weight infants in the United States. Pediatrics 2007;120:e1–9.

6. Mistry H, Dowie R, Franklin RC, Jani BR. Acta Paediatr. 2009 Jul;98(7):1123-9. Epub 2009 Apr 30.Costs of neonatal care for low-birthweight babies in English hospitals.

1b. Opportunity for Improvement

1b.1 **Benefits (improvements in quality) envisioned by use of this measure:** The percentage of low birthweight infants has increased by 22% from 6.7% of births in 1984 to 8.2% in 2007. Since a substantially lower percentage of low birthweight births has already been achieved in the United States in the past, there appears to be no reason why a substantially lower level could not be achieved again.

1b.2 **Summary of data demonstrating performance gap (variation or overall poor performance) across providers:**
The US percentage of low birthweight births has increased by 22% since 1984. The US percentage of low birthweight births is substantially higher than in most other developed countries.

1b.3 **Citations for data on performance gap:**
1. Martin JA, Hamilton BE, Sutton PD et al. Births: Final data for 2007. National vital statistics reports, vol 58 no 24, August 2010.

2. Organization for Economic Cooperation and Development Health Data 2010. Available at: http://www.ecosante.org/index2.php?base=OCDE&langh=ENG&langs=ENG&sessionid=

1b.4 **Summary of Data on disparities by population group:**
In 2007, the percentage of low birthweight births was 13.9% for non-Hispanic black women, 1.9 times the 7.3% for non-Hispanic white women. The higher percentage of low birthweight infants for non-Hispanic black women accounts for much of their elevated infant mortality risk, when compared to non-Hispanic white women.

1b.5 **Citations for data on Disparities:**
Martin JA, Hamilton BE, Sutton PD et al. Births: Final data for 2007. National vital statistics reports, vol 58 no 24, August 2010.

1b
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1c. Outcome or Evidence to Support Measure Focus

1c.1 **Relationship to Outcomes** (*For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population*)**:** In 2006, the infant mortality rate for low birthweight infants was 55.38 infant deaths per 1,000 live births, 25 times the rate of 2.24 for infants born weighing 2,500 grams or more. For very low birthweight infants (<1,500 grams), the infant mortality rate was 240.44 infant deaths per 1,000 live births, 107 times the rate for normal birthweight infants. Source: Mathews T.J., MacDorman MF. Infant mortality statistics from the 2006 period linked birth/infant death data set. National vital statistics reports vol 58 no 17. Hyattsville, MD: April 2010.

1c.2-3. **Type of Evidence:** Other Linked birth and infant death certificate data for the entire US population

1c.4 **Summary of Evidence** (*as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome*)**:**
Prenatal care can assist women in eliminating or successfully managing pregnancy risk factors such as smoking during pregnancy, inadequate weight gain, pregnancy-associated diabetes, and others. Women who resolve pregnancy risks can substantially lower their chance of having a low birthweight infant. Source: Ricketts SA, Murray EK, Schwalberg R. Reducing low birthweight by resolving risks: results from Colorado´s prenatal plus program. Am J Public Health. 2005 Nov;95(11):1952-7. Epub 2005 Sep 29.

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

1c
C☐
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whom): Women who smoke during pregnancy and who have late or no prenatal care have a higher percentage of low birthweight births, and higher infant mortality rates. This is from national birth certificate data and these relationships have been stable in the data each year since we began measuring these variables. 1c.6 **Method for rating evidence:** To my knowledge, the evidence has not been formally rated, but since it is based on an accurate population data source, and these relationships have been found each year for the past 30 years of data collection, I believe that they constitute high quality evidence. 1c.7 **Summary of Controversy/Contradictory Evidence:** None 1c.8 **Citations for Evidence** (*other than guidelines*)**:** Martin JA, Hamilton BE, Sutton PD et al. Births: Final data for 2007. National vital statistics reports, vol 58 no 24, August 2010. 1c.9 **Quote the Specific guideline recommendation** (*including guideline number and/or page number*)**:** Healthy People 2010 Objective 16-10: Reduce low birthweight and very low birthweight. 1c.10 **Clinical Practice Guideline Citation:** http://www.healthypeople.gov/hpscripts/KeywordResult.asp?n269=269&n362=362&Submit=Submit 1c.11 **National Guideline Clearinghouse or other URL:** http://www.healthypeople.gov/hpscripts/KeywordResult.asp?n269=269&n362=362&Submit=Submit 1c.12 **Rating of strength of recommendation** (*also provide narrative description of the rating and by whom*)**:** N/A 1c.13 **Method for rating strength of recommendation** (*If different from USPSTF system, also describe rating and how it relates to USPSTF)*: 1c.14 **Rationale for using this guideline over others:** Scientific acceptability. Widely-used measure. Easy to measure, use and understand.	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?*	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report*, met? **Rationale:**	**1** **Y☐** **N☐**
2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES	
Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)	**Eval Rating**
2a. MEASURE SPECIFICATIONS	
S.1 **Do you have a web page where current detailed measure specifications can be obtained?** S.2 **If yes, provide web page URL:** **2a. Precisely Specified**	
2a.1 **Numerator Statement** (*Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome*)**:** The number of babies born weighing <2,500 grams at birth in the United States 2a.2 **Numerator Time Window** (*The time period in which cases are eligible for inclusion in the numerator*)**:** A calendar year (for example, 2010) 2a.3 **Numerator Details** (*All information required to collect/calculate the numerator, including all codes,*	**2a-specs** **C☐** **P☐** **M☐** **N☐**

logic, and definitions):
Data are directly available from public-use data files of national birth certificate data produced by the National Center for Health Statistics.

2a.4 **Denominator Statement** (*Brief, text description of the denominator - target population being measured*):
All births in the United States

2a.5 **Target population gender:** Female, Male
2a.6 **Target population age range:** Under 1 year (365 days) of age

2a.7 **Denominator Time Window** (*The time period in which cases are eligible for inclusion in the denominator*):
A calendar year (for example, 2010)

2a.8 **Denominator Details** (*All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions*):
Data are directly available from public-use data files of national birth certificate data produced by the National Center for Health Statistics.

2a.9 **Denominator Exclusions** (*Brief text description of exclusions from the target population*): None

2a.10 **Denominator Exclusion Details** (*All information required to collect exclusions to the denominator, including all codes, logic, and definitions*):
None

2a.11 **Stratification Details/Variables** (*All information required to stratify the measure including the stratification variables, all codes, logic, and definitions*):
- Stratify the measure by single vs. multiple births
- Stratify the measure by birthweight of less thant 1,500 grams (i.e. very low birthweight) vs. 1,500-2,499 grams (i.e. moderately low birthweight).

2a.12-13 **Risk Adjustment Type:** No risk adjustment necessary

2a.14 **Risk Adjustment Methodology/Variables** (*List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method*):
N/A

2a.15-17 **Detailed risk model available Web page URL or attachment:**

2a.18-19 **Type of Score:** Other Percentage
2a.20 **Interpretation of Score:** Better quality = Lower score
2a.21 **Calculation Algorithm** (*Describe the calculation of the measure as a flowchart or series of steps*):
The number of births weighing <2,500 grams/Total births at any birthweight * 100

2a.22 **Describe the method for discriminating performance** *(e.g., significance testing)*:
percentage of low birthweight births significantly higher or lower than the national average.

2a.23 **Sampling (Survey) Methodology** *If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate)*:
This measure is based on the complete population of 4.2 million births in the United States each year. As such, it is not a sample and is not subject to sampling limitations.

2a.24 **Data Source** (*Check the source(s) for which the measure is specified and tested)*
Public health data/vital statistics

2a.25 **Data source/data collection instrument** (*Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.*):
National Center for Health Statistics, Natality Detail file. These publicly available data files contain individual record data for the 4.2 million births in the United States each year. Data are from birth certificates.

2a.26-28 Data source/data collection instrument reference web page URL or attachment: URL not needed http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm **2a.29-31 Data dictionary/code table web page URL or attachment:** URL not needed ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/DVS/natality/UserGuide2007.pdf **2a.32-35 Level of Measurement/Analysis** (*Check the level(s) for which the measure is specified and tested)* Population: national, Population: regional/network, Population: states, Population: counties or cities **2a.36-37 Care Settings (***Check the setting(s) for which the measure is specified and tested)* Other United States, states, counties **2a.38-41 Clinical Services** (*Healthcare services being measured, check all that apply*) Clinicians: Physicians (MD/DO)	
TESTING/ANALYSIS	
2b. Reliability testing **2b.1 Data/sample** *(description of data/sample and size)***:** Many studies have found a high degree of reliability in the percent low birthweight measure from the birth certificate. I describe two examples below. Study 1. 110 birth certificates were randomly sampled from each of 4 different counties in New York State. Total sample size = 440. Birth certificates were traced back to their hospital of origin and birth certificate data were directly compared to hospital medical record data. Study 2. A random sample of birth certificates from 20 hospitals in the Cleveland metropolitan area. Total sample size =33,616 **2b.2 Analytic Method** *(type of reliability & rationale, method for testing)***:** Study 1 - Direct comparison of birth certificate data to medical records. Sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) were computed. Study 2 – Direct comparison of birth certificate data to data from medical records collected by the Cleveland Health Quality Choice Initiative, a voluntary regional initiative to compare hospital performance. Concordance, sensitivity, specificity, PPV, and NPV were computed. **2b.3 Testing Results** *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)***:** Study 1 – Low birthweight (<2,500 g) - Sensitivity, specificity, PPV, NPV all 100%. Study 2 – Birthweight <3000 g or > 3000 g. Concordance 99%, sensitivity 99% specificity 99% PPV 100% NPV 98%. Source: Study 1 – Roohan PJ, Josberger RE, Acar J et al. Validation of birth certificate data in New York State. Journal of Community Health 2003;28:335-46. Study 2 – DiGuiseppe DL, Aron DC, Ranbom L et al. Reliability of birth certificate data: A multi-hospital comparison to medical records information. Maternal and Child Health Journal 2002;6:169-179.	**2b** C☐ P☐ M☐ N☐
2c. Validity testing **2c.1 Data/sample** *(description of data/sample and size)***:** Many studies have found a high degree of validity in the percent low birthweight measure from the birth certificate. I describe two examples below. Study 1. 110 birth certificates were randomly sampled from each of 4 different counties in New York State. Total sample size = 440. Birth certificates were traced back to their hospital of origin and birth certificate	**2c** C☐ P☐ M☐ N☐

data were directly compared to hospital medical record data.

Study 2. A random sample of birth certificates from 20 hospitals in the Cleveland metropolitan area. Total sample size =33,616

2c.2 Analytic Method *(type of validity & rationale, method for testing)*:
Study 1 - Direct comparison of birth certificate data to medical records. Sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) were computed.

Study 2 – Direct comparison of birth certificate data to data from medical records collected by the Cleveland Health Quality Choice Initiative, a voluntary regional initiative to compare hospital performance. Concordance, sensitivity, specificity, PPV, and NPV were computed.

2c.3 Testing Results *(statistical results, assessment of adequacy in the context of norms for the test conducted)*:
Study 1 – Low birthweight (<2,500 g) - Sensitivity, specificity, PPV, NPV all 100%.

Study 2 – Birthweight <3000 g or > 3000 g. Concordance 99%, sensitivity 99% specificity 99% PPV 100% NPV 98%.

Source: Study 1 – Roohan PJ, Josberger RE, Acar J et al. Validation of birth certificate data in New York State. Journal of Community Health 2003;28:335-46.

Study 2 – DiGuiseppe DL, Aron DC, Ranbom L et al. Reliability of birth certificate data: A multi-hospital comparison to medical records information. Maternal and Child Health Journal 2002;6:169-179.

2d. Exclusions Justified

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

2d.2 Citations for Evidence:

2d.3 Data/sample *(description of data/sample and size)*:

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

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

2d C☐ P☐ M☐ N☐ NA☐

2e. Risk Adjustment for Outcomes/ Resource Use Measures

2e.1 Data/sample *(description of data/sample and size)*: No risk adjustment needed.

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

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

2e.4 If outcome or resource use measure is not risk adjusted, provide rationale:

2e C☐ P☐ M☐ N☐ NA☐

2f. Identification of Meaningful Differences in Performance

2f.1 Data/sample from Testing or Current Use *(description of data/sample and size)*: Data are based on the complete population of 4.2 million birth certificates filed in the United States each year.

2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance

2f C☐ P☐ M☐ N☐

(type of analysis & rationale):
Any statisically significant increase or decrease,using standard methods for significance testing.

2f.3 Provide Measure Scores from Testing or Current Use *(description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance)*:
N/A - no scores needed

2g. Comparability of Multiple Data Sources/Methods

2g.1 Data/sample *(description of data/sample and size)*: Multiple data sources and/or methods are not needed as birth certificate data provide the gold standard for any measurement of this variable.

2g.2 Analytic Method *(type of analysis & rationale)*:
N/A

2g.3 Testing Results *(e.g., correlation statistics, comparison of rankings)*:
N/A

2g C☐ P☐ M☐ N☐ NA☐

2h. Disparities in Care

2h.1 If measure is stratified, provide stratified results *(scores by stratified categories/cohorts)*: Number and percent of low, very low, and moderately low birthweight births by single vs. multiple birth: United States, 2008

Birthweight (grams)	Number of births			% low birthweight		
	Total	Single	Twin/+	Total	Single	Twin/+
Total	4247694	4102766		144928		
2499 or less	347209	262479	84730	8.18	6.40	58.62
1499 or less	61773	45441	16332	1.46	1.11	11.30
1500 - 2499	285436	217038	68398	6.73	5.30	47.32
2500 or more	3896124		3836320		59804	
Not stated	4361	3967	394			

2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:
N/A

2h C☐ P☐ M☐ N☐ NA☐

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

2

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

2 C☐ P☐ M☐ N☐

3. USABILITY

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

Eval Rating

3a. Meaningful, Understandable, and Useful Information

3a.1 Current Use: In use

3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large) *(If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years)*:
Publicly reported in many NCHS publications, such as: Martin JA, Hamilton BE, Sutton PD et al. Births: Final data for 2007. National vital statistics reports, vol 58 no 24, August 2010. http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_24.pdf.

3a C☐ P☐ M☐ N☐

Widely used by the research and policy community. A Medline search of the term "low birthweight" yields 32,070 articles. 3a.3 **If used in other programs/initiatives (***If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years***):** Monitoring the percentage of low birthweight births is widely used in quality improvement programs in maternity hospitals, health care systems, by the US Government's Healthy Start Program, and others too numerous to mention. **Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) 3a.4 **Data/sample** *(description of data/sample and size)***:** The percentage of low birthweight births is widely reported in the US media, in hospitals throughout the country, and by the research and quality improvement communities. These are commonly understood constructs. I don't know what "testing of interpretability" could be done or would be needed. 3a.5 **Methods** *(e.g., focus group, survey, QI project)***:** N/A 3a.6 **Results** *(qualitative and/or quantitative results and conclusions)***:** N/A	
3b/3c. Relation to other NQF-endorsed measures 3b.1 **NQF # and Title of similar or related measures:**	
(for NQF staff use) **Notes on similar/related endorsed or submitted measures:**	
3b. Harmonization If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source or different topic but same target population): 3b.2 **Are the measure specifications harmonized? If not, why?**	**3b** C☐ P☐ M☐ N☐ NA☐
3c. Distinctive or Additive Value 3c.1 **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** 5.1 **If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality:**	**3c** C☐ P☐ M☐ N☐ NA☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Usability?*	**3**
Steering Committee: Overall, to what extent was the criterion, *Usability*, met? **Rationale:**	**3** C☐ P☐ M☐ N☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
4a. Data Generated as a Byproduct of Care Processes	**4a** C☐

4a.1-2 How are the data elements that are needed to compute measure scores generated? Other Data are from birth certificates filed for each US birth.	P☐ M☐ N☐
4b. Electronic Sources **4b.1 Are all the data elements available electronically?** (*elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims*) Yes **4b.2 If not, specify the near-term path to achieve electronic capture by most providers.**	4b C☐ P☐ M☐ N☐
4c. Exclusions **4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?** No **4c.2 If yes, provide justification.**	4c C☐ P☐ M☐ N☐ NA☐
4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences **4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results.** N/A - no data problems have been identified or are expected.	4d C☐ P☐ M☐ N☐
4e. Data Collection Strategy/Implementation **4e.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:** Data are of high quality and no modifications are needed. **4e.2 Costs to implement the measure** (*costs of data collection, fees associated with proprietary measures*)**:** **4e.3 Evidence for costs:** **4e.4 Business case documentation:**	4e C☐ P☐ M☐ N☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Feasibility?*	4
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, met? **Rationale:**	4 C☐ P☐ M☐ N☐
RECOMMENDATION	
(for NQF staff use) **Check if measure is untested and only eligible for time-limited endorsement.**	Time-limited ☐
Steering Committee: Do you recommend for endorsement? **Comments:**	Y☐ N☐ A☐

CONTACT INFORMATION
Co.1 Measure Steward (Intellectual Property Owner) **Co.1 Organization** Division of Vital Statistics, National Center for Health Statistics, CDC, 3311 Toledo Road, Room 7318, Hyattsville, Maryland, 20782 **Co.2 Point of Contact** Marian, MacDorman, Ph.D., M.A., mfm1@cdc.gov, 301-458-4356-
Measure Developer If different from Measure Steward **Co.3 Organization** Division of Vital Statistics, National Center for Health Statistics, CDC, 3311 Toledo Road, Room 7318, Hyattsville, Maryland, 20782 **Co.4 Point of Contact** Marian, MacDorman, Ph.D., M.A., mfm1@cdc.gov, 301-458-4356-
Co.5 Submitter If different from Measure Steward POC Marian, MacDorman, Ph.D., M.A., mfm1@cdc.gov, 301-458-4356-, Division of Vital Statistics
Co.6 Additional organizations that sponsored/participated in measure development
ADDITIONAL INFORMATION
Workgroup/Expert Panel involved in measure development **Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.**
Ad.2 If adapted, provide name of original measure: **Ad.3-5 If adapted, provide original specifications URL or attachment**
Measure Developer/Steward Updates and Ongoing Maintenance **Ad.6 Year the measure was first released:** **Ad.7 Month and Year of most recent revision:** **Ad.8 What is your frequency for review/update of this measure?** This measure has been used in vital statistics data since the 1930´s. Data quality reviewed annually **Ad.9 When is the next scheduled review/update for this measure?**
Ad.10 Copyright statement/disclaimers:
Ad.11 -13 Additional Information web page URL or attachment: not needed http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm
Date of Submission (*MM/DD/YY*)**:** 12/15/2010

NATIONAL QUALITY FORUM

Measure Evaluation 4.1
December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized)**:** Complete all yellow highlighted areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

Steering Committee: Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met
C = Completely (unquestionably demonstrated to meet the criterion)
P = Partially (demonstrated to partially meet the criterion)
M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) **NQF Review #:** 1397 **NQF Project:** Child Health Quality Measures 2010
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** Sudden Infant Death Syndrome Counseling
De.2 **Brief description of measure:** The percentage of children who turned 6 months old during the measurement year and who had Suddent Infant Death Syndrome (SIDS) counseling.
1.1-2 **Type of Measure:** Process De.3 **If included in a composite or paired with another measure, please identify composite or paired measure** This measure appears in the composite Comprehensive Well Care by Age 6 Months.
De.4 **National Priority Partners Priority Area:** Patient and family engagement, Population health, Safety De.5 **IOM Quality Domain**: Effectiveness, Safety, Timeliness De.6 **Consumer Care Need:** Staying healthy

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.* A.1 **Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)?** Yes A.2 **Indicate if Proprietary Measure** (*as defined in measure steward agreement*)**:** Proprietary measure A.3 **Measure Steward Agreement:** Agreement will be signed and submitted prior to or at the time of measure submission A.4 **Measure Steward Agreement attached:**	A Y☐ N☐
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and	B

update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section	Y☐ N☐
C. The intended use of the measure includes both public reporting and quality improvement. ►**Purpose:** Public reporting, Internal quality improvement Accountability	**C** Y☐ N☐
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1**Testing:** Yes, fully developed and tested D.2 **Have NQF-endorsed measures been reviewed to identify if there are similar or related measures?** Yes	**D** Y☐ N☐
(for NQF staff use) **Have all conditions for consideration been met?** **Staff Notes to Steward** (*if submission returned*)**:**	**Met** Y☐ N☐
Staff Notes to Reviewers (*issues or questions regarding any criteria*)**:**	
Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. ***Measures must be judged to be important to measure and report*** *in order to be evaluated against the remaining criteria.* (evaluation criteria) **1a. High Impact**	**Eval Rating**
(for NQF staff use) **Specific NPP goal**:	
1a.1 **Demonstrated High Impact Aspect of Healthcare:** Affects large numbers, Leading cause of morbidity/mortality, Severity of illness, Patient/societal consequences of poor quality 1a.2 1a.3 **Summary of Evidence of High Impact:** Sudden Infant Death Syndrome (SIDS) is the most common cause of deaths among infants age one month to one year old; in the U.S. alone, 2,500 infants die from SIDS a year (The Nemours Foundation, 2005; AAP, 2005). 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" (AAP, 2005). A SIDS death is rare in the first month of life; the occurrence peaks between two and three months of age and continues to decline until it is no longer a threat at age one. Organizations, including the AAP and the SIDS Global Strategy Task Force, concluded the risk of SIDS outweighs any benefits of stomach sleeping (Pollack and Frohna, 2002). 1a.4 **Citations for Evidence of High Impact:** The Nemours Foundation. Sudden Infant Death Syndrome (SIDS). http://kidshealth.org/parent/general/sleep/sids.html. Updated: September 2005. American Academy of Pediatrics, Task Force on Infant Positioning and SIDS. Positioning and SIDS. Pediatrics. 1992;89:1120-1126. American Academy of Pediatrics. Task Force on Sudden Infant Death Syndrome. The Changing Concept of	**1a** C☐ P☐ M☐ N☐

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.

Pollack HA and Frohna JG. Infant Sleep Placement After the Back to Sleep Campaign. Pediatrics Vol. 109(4) April 2002.

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: In 1992, the American Academy of Pediatrics (AAP) issued a recommendation that healthy term infants be placed on their backs (supine) to sleep and to avoid the prone sleeping position. This measure encourages health care providers to counsel mothers and caregivers on the importance of placing infants in the supine sleeping position, which could prevent sudden infant death syndrome.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
As a result of the "Back to Sleep" campaign of 1994, parents have been encouraged to place infants in the supine sleep position opposed to the prone sleep position, meaning laying babies on their back instead of their stomachs when putting them down for the night of just a nap. The prone sleep position more than triples the risk of sudden infant death syndrome among infants less than a year old (Kinney, Thach, 2009).

In the ten years spanning from 1992 to 2002, evidence showed the rate in which infants were placed in the prone sleep position decreased by 63.7%, from 75% to 11.3%. Unfortunately, in 2008 this rate had increased to 14.5%. In 2006, the National Center for Health Statistics reported a total of 2,323 SIDS deaths across the nation resulting in a SIDS rate of 0.54 per 1000 live births (Carolan, 2009). This is clear evidence that there is still an important need for counseling parents about the potential dangers of placing their babies in the prone sleep position.

1b.3 Citations for data on performance gap:
Kinney HC, Thach BT. The Sudden Infant Death Syndrome. N Engl J Med 2009; 361:795-805, August 20, 2009.

Patrick L Carolan, MD. Sudden Infant Death Syndrome at http://emedicine.medscape.com/article/1004238-overview. Oct 1, 2009.

1b.4 Summary of Data on disparities by population group:
The rate of SIDS among Hispanic/Latino infants are the lowest compared to white infants and African American infants. African American infants have SIDS incidences twice that of white infants. The AAP (2005) noted that campaigns to eradicate SIDS should especially concentrate on the black and American Indian/Alaska Native populations. Low birth weight infants also have higher incidences of SIDS. (Pollack and Frohna, 2002)
Low socioeconomic status and low educational attainment of mothers also affects adherence to recommendations to place infants in the supine sleeping position. Other risk factors include poor prenatal care, smoking or drinking during pregnancy or after birth, and young age of the mother (The Nemours Foundation, 2005; Hagan, JF, 2008; AAP, 2005).

1b.5 Citations for data on Disparities:
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

Pollack HA and Frohna, JG. Infant Sleep Placement After the Back to Sleep Campaign. Pediatrics Vol. 109 No. 4 April 2002

The Nemours Foundation. Sudden Infant Death Syndrome (SIDS). http://kidshealth.org/parent/general/sleep/sids.html. Updated: September 2005.

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

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1c. Outcome or Evidence to Support Measure Focus

1c.1 Relationship to Outcomes (*For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population*)**:** Continuous education and counseling of caregivers to place infants on their backs to sleep is associated with positive health outcomes. Since the American Academy of Pediatrics (AAP) released its recommendation in 1992 that infants be placed in a non-prone sleeping position, there has been a major decrease in the incidence of SIDS. According to one study, the SIDS rate for the U.S. was 1.20 deaths per 1000 live births in 1992. In 2001, the SIDS rate was reported at 0.56 deaths per 1000 live births, (Mathews, 2003), representing a decrease of 53 percent over 10 years.

1c.2-3. Type of Evidence: Evidence-based guideline, Expert opinion

1c.4 Summary of Evidence (*as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome*)**:**
The AAP identifies any nonprone position (i.e. side or supine) as being optimal for reducing SIDS risk. In 2000, on the basis of new evidence, the AAP advised that placing infants on their backs confers the lowest risk and is the preferred position. However, the risk of side position was reported as less risky than prone, and the AAP advised that if the side position is used, caregivers should be advised to bring the dependent arm forward to lessen the likelihood of the infant rolling to the prone position. The AAP guideline is endorsed by several other organizations, including the National Institute of Child Health and Human Development , the Association of SIDS and Infant Mortality Programs, and the SIDS Alliance.

In large part due to the employment of the supine sleeping position, the incidence of SIDS decreased by 56% in the United Stated from 1992 to 2003 (Coleman-Phox, Odouli, Li, 2008). Generally thought of as common knowledge and practice, placing infants in the supine sleep position is the safest way to lay them down for either naps or bed to prevent SIDS.

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

1c.6 Method for rating evidence: Expert Consensus

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

1c.8 Citations for Evidence (*other than guidelines***):** Kattwinkel J, Brooks J, Myerberg D; American Academy of Pediatrics, Task Force on Infant Positioning and SIDS. Positioning and SIDS. Pediatrics. 1992;89:1120–1126

Kimberly Coleman-Phox; Roxana Odouli; De-Kun Li. Use of a Fan During Sleep and the Risk of Sudden Infant Death Syndrome. Arch Pediatr Adolesc Med. 2008;162(10):963-968.

Mathews TJ, Menacker F, MacDorman MF. Infant mortality statistics from the 2001 period linked birth/infant death data set. Natl Vital Stat Rep. 2003;52(2):1–28

1c.9 Quote the Specific guideline recommendation (*including guideline number and/or page number***):**
American Academy of Pediatrics (2005) and other organizations*
Infants should be placed for sleep in a supine position (wholly on the back) for every sleep. Side sleeping is not as safe as supine sleeping and is not advised. Also discuss the relationship of SIDS and sleep surface; objects in crib; smoking; location and temperature of sleep environment; bed sharing; pacifier use while sleeping; not using commercial monitors to reduce SIDS; avoid development of positional plagiocephaly ("tummy time, etc")
* The AAP guideline is endorsed by the Association of SIDS and Infant Mortality Programs - Professional Association; National Institute of Child Health and Human Development - Federal Government Agency [U.S.]; SIDS Alliance - Professional Association

Bright Futures (2008)

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Bright Futures recommends that health care providers provide anticipatory guidance for parents and caregivers of newborns up to age four months. Health care providers should discuss sleep positions and topics of back to sleep, location, and crib safety. ICSI (2007) ICSI recommends that parents of infants from birth to two years of age be asked how the child is positioned for sleep. Parents should be informed of the importance of back-sleeping position. Health care providers should also demonstrate the appropriate sleeping position when the patient is under medical care. • Infants should be placed on their back for sleep. Side sleeping is no longer recognized as an alternative position. Advise about the appropriate sleeping position starting in the newborn nursery • Infant sleep surfaces should be firm and there should be no loose bedding or soft objects around the infant. • Parents should be encouraged not to smoke, as this has many important health benefits. Smoking during pregnancy has been shown to be associated with increased risk of SIDS. • A proximate but separate sleeping environment and the use of pacifiers have been recommended. These should be discussed with parents in the context of fully supporting breastfeeding Level II (Good Evidence) Michigan Quality Improvement Consortium (2007) The Michigan Quality Improvement Consortium recommends parental education and counseling for newborns up to to 24 months of age to place infants on their back to sleep. B Level of Evidence **1c.10 Clinical Practice Guideline Citation:** 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 Hagan, JF, Shaw JS, Duncan PM, eds. 2008. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, Third Edition. Elk Grove, IL: American Academy of Pediatrics Institute for Clinical Systems Improvement. Preventive Services for Children and Adolescents Thirteenth Edition. October 2007 Michigan Quality Improvement Consortium. Routine preventive services for infants and children (birth-24 months). Southfield (MI): Michigan Quality Improvement Consortium; 2007 May. 1 **1c.11 National Guideline Clearinghouse or other URL:** http://www.guideline.gov/content.aspx?id=15116&search=sids and http://www.guideline.gov/content.aspx?id=13314&search=sids+infant **1c.12 Rating of strength of recommendation (***also provide narrative description of the rating and by whom***):** Good **1c.13 Method for rating strength of recommendation** (*If different from USPSTF system, also describe rating and how it relates to USPSTF)*: Evidence Review **1c.14 Rationale for using this guideline over others:** There is broad guideline support for this measure.	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?*	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report*, met? **Rationale:**	**1** **Y☐** **N☐**
2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES	
Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)	**Eval Rating**

2a. MEASURE SPECIFICATIONS

S.1 Do you have a web page where current detailed measure specifications can be obtained?
S.2 If yes, provide web page URL:

2a. Precisely Specified

2a.1 Numerator Statement (*Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome*):
Children who had documentation in the medical record of a SIDS counseling within 4 weeks of birth or by the first pediatric visit, whichever comes first.

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

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

2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured*):
Children who turned 6 months of age

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

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

2a.8 Denominator Details (*All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions*):
Children who turned 6 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.

2a.9 Denominator Exclusions (*Brief text description of exclusions from the target population*): None

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

2a.11 Stratification Details/Variables (*All information required to stratify the measure including the stratification variables, all codes, logic, and definitions*):
None

2a.12-13 Risk Adjustment Type: No risk adjustment necessary

2a.14 Risk Adjustment Methodology/Variables (*List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method*):
NA

2a.15-17 Detailed risk model available Web page URL or attachment:

2a-specs
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N☐

2a.18-19 Type of Score: Rate/proportion
2a.20 Interpretation of Score: Better quality = Higher score
2a.21 Calculation Algorithm (*Describe the calculation of the measure as a flowchart or series of steps***):**
Step 1: Determine the denominator
Children who turned the requisite age in the measurement year, AND
Who had a visit within the past 6 months of the child´s 6-month birthday
Step 2: Determine the numerator
Step 2a: Determine the date of the first pediatric visit
Step 2b: Determine the date of the child´s 4-week birthday
Step 2c: Choose the earlier of the dates in Step 2a and Step 2b
Step 2d: Determine the date of documentation of the service as defined in the numerator specification.
Step 2e: Is the date in Step 2d <= the date in Step 2c?
Step 3: If Step 2e response = yes, then this patient is numerator positive; if Step 2e response = no, then the patient is numerator negative

2a.22 Describe the method for discriminating performance *(e.g., significance testing)***:**
Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance

2a.23 Sampling (Survey) Methodology *If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate)*:
For this physician-level measure, we anticipate the entire population will be used in the denominator. If a sample is used, a random sample is ideal. NCQA's work has indicated that a sample size of 30-50 patients would be necessary for a typical practice size of 2000 patients.

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

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

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

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

2a.32-35 Level of Measurement/Analysis (*Check the level(s) for which the measure is specified and tested)*
Clinicians: Individual, Clinicians: Group, Population: national, Population: regional/network

2a.36-37 Care Settings (*Check the setting(s) for which the measure is specified and tested)*
Ambulatory Care: Office, Ambulatory Care: Clinic, Ambulatory Care: Hospital Outpatient

2a.38-41 Clinical Services (*Healthcare services being measured, check all that apply*)
Clinicians: Nurses, Clinicians: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO)

TESTING/ANALYSIS

2b. Reliability testing

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

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

2b.3 Testing Results *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)***:**
Rate (Upper Confidence Interval, Lower Confidence Interval):

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0.761 (0.70, 0.82)	
2c. Validity testing **2c.1 Data/sample** *(description of data/sample and size)*: NCQA received data from 18 physician practices who submitted 10 records per measure (total 180 records per measure) **2c.2 Analytic Method** *(type of validity & rationale, method for testing)*: NCQA tested the measure for face validity using a panel of stakeholders with specific expertise in measurement and child health care. This panel included representatives from key stakeholder groups, including pediatricians, family physicians, health plans, state Medicaid agencies and researchers. Experts reviewed the results of the field test and assessed whether the results were consistent with expectations, whether the measure represented quality care, and whether we were measuring the most important aspect of care in this area. This measure was deemed valid by the expert panel. In addition, this measure does not utilize administrative data sources; data recorded in the chart is considered the gold standard. **2c.3 Testing Results** *(statistical results, assessment of adequacy in the context of norms for the test conducted)*: NA	**2c** C☐ P☐ M☐ N☐
2d. Exclusions Justified **2d.1 Summary of Evidence supporting exclusion(s):** No exclusions **2d.2 Citations for Evidence:** NA **2d.3 Data/sample** *(description of data/sample and size)*: NA **2d.4 Analytic Method** *(type analysis & rationale)*: NA **2d.5 Testing Results** *(e.g., frequency, variability, sensitivity analyses)*: NA	**2d** C☐ P☐ M☐ N☐ NA☐
2e. Risk Adjustment for Outcomes/ Resource Use Measures **2e.1 Data/sample** *(description of data/sample and size)*: NA **2e.2 Analytic Method** *(type of risk adjustment, analysis, & rationale)*: NA **2e.3 Testing Results** *(risk model performance metrics)*: NA **2e.4 If outcome or resource use measure is not risk adjusted, provide rationale:** The measure assesses prevention and wellness in a general population; risk adjustment is not indicated.	**2e** C☐ P☐ M☐ N☐ NA☐
2f. Identification of Meaningful Differences in Performance **2f.1 Data/sample from Testing or Current Use** *(description of data/sample and size)*: NCQA received data from 18 physician practices who submitted 10 records per measure (total 180 records per measure) **2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance** *(type of analysis & rationale)*: Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance **2f.3 Provide Measure Scores from Testing or Current Use** *(description of scores, e.g., distribution by*	**2f** C☐ P☐ M☐ N☐

quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance): Elig Population: 180 Documentation of counseling for SIDS: 76%	
2g. Comparability of Multiple Data Sources/Methods 2g.1 **Data/sample** *(description of data/sample and size)*: NCQA received data from 18 physician practices who submitted 10 records per measure (total 180 records per measure) 2g.2 **Analytic Method** *(type of analysis & rationale)*: This measure is chart review only; no other sources were identified by the expert panel; this measure does not utilize administrative data 2g.3 **Testing Results** *(e.g., correlation statistics, comparison of rankings)*: NA	**2g** C☐ P☐ M☐ N☐ NA☐
2h. Disparities in Care 2h.1 **If measure is stratified, provide stratified results** *(scores by stratified categories/cohorts)*: The measure is not stratified to detect disparities. 2h.2 **If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:** NA	**2h** C☐ P☐ M☐ N☐ NA☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Scientific Acceptability of Measure Properties?*	**2**
Steering Committee: Overall, to what extent was the criterion, *Scientific Acceptability of Measure Properties*, met? **Rationale:**	***2*** C☐ P☐ M☐ N☐
3. USABILITY	
Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	**Eval Rating**
3a. Meaningful, Understandable, and Useful Information 3a.1 **Current Use:** Not in use but testing completed 3a.2 **Use in a public reporting initiative (disclosure of performance results to the public at large)** (*If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years*): This measure is not currently publicly reported. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate. 3a.3 **If used in other programs/initiatives (***If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years*): This measure is not currently used in QI. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate. NCQA anticipates that after we release these measures, they will become widely used, as all our measures do. **Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) 3a.4 **Data/sample** *(description of data/sample and size)*: NA 3a.5 **Methods** *(e.g., focus group, survey, QI project)*: NCQA vetted the measures with its expert panel. In addition, throughout the development process, NCQA	**3a** C☐ P☐ M☐ N☐

vetted the measure concepts and specifications with other stakeholder groups, including the National Association of State Medicaid Directors, NCQA's Health Plan Advisory Council, NCQA's Committee on Performance Measurement, and the American Academy of Pediatrician's Quality Improvement Innovation Network. After field testing, NCQA also conducted a debrief call with field test participants. In the form of a group interview, NCQA systematically sought feedback on whether the measures were understandable, feasible, important, and had face validity. 3a.6 **Results** *(qualitative and/or quantitative results and conclusions)*: NCQA received feedback that the measure is understandable, feasible, important and valid.	
3b/3c. Relation to other NQF-endorsed measures 3b.1 **NQF # and Title of similar or related measures:**	
(for NQF staff use) **Notes on similar/related endorsed or submitted measures:**	
3b. Harmonization If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source or different topic but same target population): 3b.2 **Are the measure specifications harmonized? If not, why?**	**3b** C☐ P☐ M☐ N☐ NA☐
3c. Distinctive or Additive Value 3c.1 **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** 5.1 **If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality:** NA	**3c** C☐ P☐ M☐ N☐ NA☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Usability?*	**3**
Steering Committee: Overall, to what extent was the criterion, *Usability*, met? **Rationale:**	**3** C☐ P☐ M☐ N☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	**Eval Rating**
4a. Data Generated as a Byproduct of Care Processes 4a.1-2 **How are the data elements that are needed to compute measure scores generated?** Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition), Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)	**4a** C☐ P☐ M☐ N☐
4b. Electronic Sources 4b.1 **Are all the data elements available electronically?** (*elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims*) No	**4b** C☐ P☐ M☐ N☐

4b.2 If not, specify the near-term path to achieve electronic capture by most providers. NCQA plans to eventually specify this measure for electronic health records.	
4c. Exclusions **4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?** No **4c.2 If yes, provide justification.**	**4c** C☐ P☐ M☐ N☐ NA☐
4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences **4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results.** During the measure development process the Child Health MAP and measure development team worked with NCQA's certified auditors and audit department to ensure that the measure specifications were clear and auditable. The denominator, numerator and optional exclusions are concisely specified and align with our audit standards.	**4d** C☐ P☐ M☐ N☐
4e. Data Collection Strategy/Implementation **4e.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:** Based on field test results, we have specified the measure to assess whether screening was documented and whether use of a standardized tool was documented. Our field test results showed that these data elements are available in the medical record. In addition, our field test participants noted that many were able to program these requirements into their electronic health record systems, and several implemented point-of-service physician reminders for this measure. **4e.2 Costs to implement the measure** (*costs of data collection, fees associated with proprietary measures*)**:** Collecting measures from medical charts is time-consuming and can be burdensome. Adapting this measure in electronic health records may relieve some of this burden. **4e.3 Evidence for costs:** Based on field test participant feedback and other stakeholder input **4e.4 Business case documentation:**	**4e** C☐ P☐ M☐ N☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Feasibility?*	**4**
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, met? **Rationale:**	**4** C☐ P☐ M☐ N☐
RECOMMENDATION	
(for NQF staff use) **Check if measure is untested and only eligible for time-limited endorsement.**	**Time-limited** ☐
Steering Committee: Do you recommend for endorsement? **Comments:**	**Y**☐ **N**☐ **A**☐
CONTACT INFORMATION	

Co.1 Measure Steward (Intellectual Property Owner)
Co.1 Organization
National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005

Co.2 Point of Contact
Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-

Measure Developer If different from Measure Steward
Co.3 Organization
National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005

Co.4 Point of Contact
Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-

Co.5 Submitter If different from Measure Steward POC
Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-, National Committee for Quality Assurance

Co.6 Additional organizations that sponsored/participated in measure development

ADDITIONAL INFORMATION

Workgroup/Expert Panel involved in measure development
Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.
Child Health Measurement Advisory Panel:
Jeanne Alicandro
Barbara Dailey
Denise Dougherty, PhD
Ted Ganiats, MD
Foster Gesten, MD
Nikki Highsmith, MPA
Charlie Homer, MD, MPH
Jeff Kamil, MD
Elizabeth Siteman
Mary McIntyre, MD, MPH
Virginia Moyer, MD, MPH, FAAP
Lee Partridge
Xavier Sevilla, MD, FAAP
Michael Siegal
Jessie Sullivan

Ad.2 If adapted, provide name of original measure: NA
Ad.3-5 If adapted, provide original specifications URL or attachment

Measure Developer/Steward Updates and Ongoing Maintenance
Ad.6 Year the measure was first released:
Ad.7 Month and Year of most recent revision:
Ad.8 What is your frequency for review/update of this measure?
Ad.9 When is the next scheduled review/update for this measure?

Ad.10 Copyright statement/disclaimers: © 2009 by the National Committee for Quality Assurance
1100 13th Street, NW, Suite 1000
Washington, DC 20005

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

Date of Submission (*MM/DD/YY*)**:** 01/06/2011

NATIONAL QUALITY FORUM

Measure Evaluation 4.1
December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized)**:** Complete all yellow highlighted areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

Steering Committee: Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met
C = Completely (unquestionably demonstrated to meet the criterion)
P = Partially (demonstrated to partially meet the criterion)
M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) **NQF Review #:** 1401 **NQF Project:** Child Health Quality Measures 2010

MEASURE DESCRIPTIVE INFORMATION

De.1 Measure Title: Maternal Depression Screening

De.2 Brief description of measure: 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.

1.1-2 Type of Measure: Process
De.3 If included in a composite or paired with another measure, please identify composite or paired measure
This measure is included in the NCQA composite measure: Comprehensive Well Care for Children by Age 6 Months

De.4 National Priority Partners Priority Area: Care coordination, Population health
De.5 IOM Quality Domain: Effectiveness, Timeliness
De.6 Consumer Care Need: Staying healthy

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.* **A.1 Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)?** Yes **A.2 Indicate if Proprietary Measure** (*as defined in measure steward agreement*)**:** Proprietary measure **A.3 Measure Steward Agreement:** Agreement will be signed and submitted prior to or at the time of measure submission **A.4 Measure Steward Agreement attached:**	**A** Y☐ N☐

B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section	**B** Y☐ N☐
C. The intended use of the measure includes both public reporting and quality improvement. ►**Purpose:** Public reporting, Internal quality improvement	**C** Y☐ N☐
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1**Testing:** Yes, fully developed and tested D.2 **Have NQF-endorsed measures been reviewed to identify if there are similar or related measures?** Yes	**D** Y☐ N☐
(for NQF staff use) **Have all conditions for consideration been met?** **Staff Notes to Steward** (*if submission returned*)**:**	**Met** Y☐ N☐
Staff Notes to Reviewers (*issues or questions regarding any criteria*)**:**	
Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. ***Measures must be judged to be important to measure and report*** *in order to be evaluated against the remaining criteria.* (evaluation criteria) **1a. High Impact**	**Eval Rating**
(for NQF staff use) **Specific NPP goal**:	
1a.1 **Demonstrated High Impact Aspect of Healthcare:** High resource use, Severity of illness, Patient/societal consequences of poor quality 1a.2 1a.3 **Summary of Evidence of High Impact:** Maternal depression is one of the most common perinatal complications; however, the disorder often remains unrecognized, undiagnosed, and untreated (VanLandeghem, 2006). The various maternal depression disorders are defined by the severity of the depression and the timing and length of the episode. Studies report that three to 25 percent of women experience major depression during the year following childbirth (Gaynes BN, 2005 ; Kessler RC, 1994)). Maternal depression should be distinguished from the "baby blues", which is much more common but lasts only a few days and has little effect on functioning (Hagan, JF, 2008). The incidence of depression may be higher in women who already have young children (VanLandeghem, 2006; Gaynes BN, 2005). Maternal depression can greatly affect mothers, their baby, and their family's well-being. Postpartum depression can have lasting effects on a mother's self-esteem and confidence as a mother (Epperson, 1999). 1a.4 **Citations for Evidence of High Impact:** Epperson, C Neill, MD. Postpartum Major Depression: Detection and Treatment. American Family Physician. April 15, 1999.	**1a** C☐ P☐ M☐ N☐

Gaynes BN, G. et al. Perinatal Depression: Prevalence, Screening Accuracy, and Screening Outcomes. Summary, Evidence Report/Technology Assessment No. 119. (Prepared by the RTI-University of North Carolina Evidence based Practice Center under Contract No. 290-02-0016.) AHRQ Publication No. 05-E006-1. Rockville, MD: Agency for Healthcare Research and Quality. February 2005.

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

Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman 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;51:8-19.

VanLandeghem, Karen, MPH. National Academy for State Health Policy. Financing Strategies for Medicaid Reimbursement of Maternal Depression Screening by Pediatric Providers. April 2006.

1b. Opportunity for Improvement

1b.1 **Benefits (improvements in quality) envisioned by use of this measure:** This measure encourages health care providers to screen new mothers for maternal depression. Periodic screening for maternal depression has been recommended and found to be feasible during an infant health supervision visits. Pediatricians have an opportunity to screen and intervene during well child visits.

1b.2 **Summary of data demonstrating performance gap (variation or overall poor performance) across providers:**
Screening is important, as mothers with post-partum depression who are not treated can have symptoms that carry over into the second year post-partum. Mothers that have had post-partum depression are also more likely to have a recurrence with subsequent children. (Epperson, C Neill, 1999).

More than 10% of mothers experience depression six weeks after giving birth, whether it is minor of major post partum depression (PPD). There are clinically and cost-effective treatments available for PPD, but unfortunately less than half of PPD cases are ever diagnosed (Gibson, 2010). Less than 50% of mothers with an infant child are currently being screened for postpartum depression (Gjerdingen, Crow, McGovern, Miner, Center, 2009).

1b.3 **Citations for data on performance gap:**
Epperson, C Neill, MD. Postpartum Major Depression: Detection and Treatment. American Family Physician. April 15, 1999.

Jennifer Gibson. Screening for Postpartum Depression Not Worth the Time or Money. March 27, 2010.

Gjerdingen D, Crow S, McGovern P, Miner M, Center B. Postpartum Depression Screening at Well-Child Visits: Validity of a 2-Question Screen and the PHQ-9. Annals of Family Medicine 7:63-70 (2009).

1b.4 **Summary of Data on disparities by population group:**
Risk factors that increase the likelihood of depression include poverty, chronic maternal health conditions, domestic violence, substance abuse, and marital discord. Parents of children with special health care needs also should be closely monitored for depression symptoms (Hagan, JF, 2008).

1b.5 **Citations for data on Disparities:**
Hagan, JF, Shaw JS, Duncan PM, eds. 2008. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, Third Edition. Elk Grove, IL: American Academy of Pediatrics.

1b
C☐
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1c. Outcome or Evidence to Support Measure Focus

1c.1 **Relationship to Outcomes** (*For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population*)**:** There is strong evidence that children whose mothers are depressed experience developmental delays, including delays in expressive language development, cognitive skills, and emotional development (Epperson, 1999). Studies have shown a possible link between maternal depression and a decreased likelihood that a child's health and environment

1c
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are safeguarded.

1c.2-3. Type of Evidence: Evidence-based guideline, Expert opinion

1c.4 Summary of Evidence (*as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome*)**:**
A number of adverse health concerns could develop in children of mothers suffering from untreated postpartum depression including delayed psychological, cognitive, neurological and motor development. They are also at higher risk of developing habits of avoidance and distressed behavior. Compared with non-depressed mothers, women who have suffered through post partum depression are 3 times more likely to see serious emotional problems in their children and are 10 times more likely to have a poor relationship with the child (Gjerdingen, Yawn, 2007). Timely identification of PPD in mothers could potentially interrupt this cycle, hopefully before damage to mother, child, and family becomes irreparable.

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

1c.6 Method for rating evidence: Expert consensus

1c.7 Summary of Controversy/Contradictory Evidence: There has been evidence of controversy related to whose responsibility it is to provide postpartum depression screenings. While postpartum depression is not always easily identified and oftentimes can be misdiagnosed (i.e. false positives) there is substantial benefit in urging pedestrians to provide postpartum depression screenings for mothers while at their offices. Pediatricians have several options if the mother of one of their patients screens positive for depression. They can refer the mother back to her primary physician or at least help educate her about postpartum depression and its effects on children (Levin, 2007).

1c.8 Citations for Evidence (*other than guidelines***):** Barbara P. Yawn. Postpartum Depression: Prevalence and Considerations in Screening. February 2010.

U.S. Preventive Services Task Force. Screening for Depression, May 2002.
Hagan, JF, Shaw JS, Duncan PM, eds. 2008. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, Third Edition. Elk Grove, IL: American Academy of Pediatrics

Gjerdingen DK, Yawn BP. Postpartum Depression Screening: Importance, Methods, Barriers, and Recommendations for Practice. The Journal of the American Board of Family Medicine 20 (3): 280-288 (2007).

Jane Collingwood. The Efficacy of Postpartum Depression Screening. August 17, 2010.

Aaron Levin. Postpartum-Depression Questions Should Be Routine for Pediatricians. Psychiatric News, February 2, 2007,
Volume 42, Number 3, Page 27.

1c.9 Quote the Specific guideline recommendation (*including guideline number and/or page number***):**
U.S. Preventive Services Task Force (2002)
The USPSTF recommends screening for depression in clinical practices that have systems in place to assure accurate diagnosis, effective treatment, and follow up for the general adult population*
Grade: B Recommendation
*NOTE: General adult population (not specific to mothers of newborns)

Bright Futures (2008)
Health care professionals should screen mothers on the following topics:

Mothers of one week old infants:
Discuss health and depression, family stress, uninvited advice, parent role.
Differentiate between short-term "baby blues" and postpartum depression, and counsel and refer was appropriate:
It may be helpful to advise women that the ´postpartum blues´ are a different entity from depression. The

´blues´, with characteristic tearfulness, anxiety and low mood, are relatively common but are transient, peaking at 3-5 days after birth and resolving by 10-14 days. Mothers of one month old infants: Discuss maternal health (postpartum, checkup, depression, substance abuse) Mothers of two month old children: Discuss maternal health (maternal postpartum, checkup and resumption of activities, depression) Grade: Expert Consensus **1c.10 Clinical Practice Guideline Citation:** U.S. Preventive Services Task Force. Screening for Depression, May 2002. Hagan, JF, Shaw JS, Duncan PM, eds. 2008. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, Third Edition. Elk Grove, IL: American Academy of Pediatrics **1c.11 National Guideline Clearinghouse or other URL:** http://www.guideline.gov/content.aspx?id=12994&search=maternal+depression+screening+and+maternal+depression+and+maternal+depression **1c.12 Rating of strength of recommendation** (*also provide narrative description of the rating and by whom*)**:** Fair to good **1c.13 Method for rating strength of recommendation** (*If different from USPSTF system, also describe rating and how it relates to USPSTF)*: USPSTF-based and expert consensus with evidence review **1c.14 Rationale for using this guideline over others:** This measure is based on a review of the body of evidence and guidelines as a whole.	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?*	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report*, met? **Rationale:**	**1** **Y☐** **N☐**
2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES	
Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)	**Eval Rating**
2a. MEASURE SPECIFICATIONS	
S.1 Do you have a web page where current detailed measure specifications can be obtained? **S.2 If yes, provide web page URL:** **2a. Precisely Specified**	
2a.1 Numerator Statement (*Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome*)**:** Children who had documentation in the medical record of a maternal depression screening by age 6 months **2a.2 Numerator Time Window** (*The time period in which cases are eligible for inclusion in the numerator*)**:** 2 years **2a.3 Numerator Details** (*All information required to collect/calculate the numerator, including all codes, logic, and definitions*)**:** Documentation must include a note indicating the date and evidence of screening the mother for maternal	**2a-specs** **C☐** **P☐** **M☐** **N☐**

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.

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

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

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

2a.8 Denominator Details (*All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions***):**
See 2a4; chart review only

2a.9 Denominator Exclusions (*Brief text description of exclusions from the target population***):** None

2a.10 Denominator Exclusion Details (*All information required to collect exclusions to the denominator, including all codes, logic, and definitions***):**
None

2a.11 Stratification Details/Variables (*All information required to stratify the measure including the stratification variables, all codes, logic, and definitions***):**
None

2a.12-13 Risk Adjustment Type: No risk adjustment necessary

2a.14 Risk Adjustment Methodology/Variables (*List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method***):**
NA

2a.15-17 Detailed risk model available Web page URL or attachment:

2a.18-19 Type of Score: Rate/proportion
2a.20 Interpretation of Score: Better quality = Higher score
2a.21 Calculation Algorithm (*Describe the calculation of the measure as a flowchart or series of steps***):**
Step 1: Determine the denominator
Children who turned the requisite age in the measurement year, AND
Who had a visit within the past 12 months of the child´s birthday
Step 2: Determine the numerator
Children who had documentation in the medical record of the screening or service during the measurement year or the year previous to the measurement year.

2a.22 Describe the method for discriminating performance *(e.g., significance testing)***:**
Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance.

2a.23 Sampling (Survey) Methodology *If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate)*:
For this physician-level measure, we anticipate the entire population will be used in the denominator. If a sample is used, a random sample is ideal. NCQA's work has indicated that a sample size of 30-50 patients would be necessary for a typical practice size of 2000 patients.

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

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

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

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

2a.32-35 Level of Measurement/Analysis (*Check the level(s) for which the measure is specified and tested)*
Clinicians: Individual, Clinicians: Group, Population: national, Population: regional/network

2a.36-37 Care Settings (*Check the setting(s) for which the measure is specified and tested)*
Ambulatory Care: Amb Surgery Center, Ambulatory Care: Office, Ambulatory Care: Clinic, Ambulatory Care: Hospital Outpatient, Behavioral health/psychiatric unit

2a.38-41 Clinical Services (*Healthcare services being measured, check all that apply*)
Behavioral Health: Mental Health, Clinicians: Nurses, Clinicians: Physicians (MD/DO)

TESTING/ANALYSIS

2b. Reliability testing

2b.1 Data/sample *(description of data/sample and size)***:** NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure)

2b.2 Analytic Method *(type of reliability & rationale, method for testing)***:**
We did not conduct reliability testing for this measure.

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

2b
C☐ P☐ M☐ N☐

2c. Validity testing

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

2c.2 Analytic Method *(type of validity & rationale, method for testing)***:**
NCQA tested the measure for face validity using a panel of stakeholders with specific expertise in measurement and child health care. This panel included representatives from key stakeholder groups, including pediatricians, family physicians, health plans, state Medicaid agencies and researchers. Experts reviewed the results of the field test and assessed whether the results were consistent with expectations, whether the measure represented quality care, and whether we were measuring the most important aspect of care in this area.

2c.3 Testing Results *(statistical results, assessment of adequacy in the context of norms for the test conducted)***:**
This measure was deemed valid by the expert panel. In addition, this measure does not utilize administrative data sources; data recorded in the chart is considered the gold standard.

2c
C☐ P☐ M☐ N☐

2d. Exclusions Justified

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

2d.2 Citations for Evidence:
NA

2d
C☐ P☐ M☐ N☐ NA☐

2d.3 Data/sample *(description of data/sample and size)*: NA **2d.4 Analytic Method** *(type analysis & rationale)*: NA **2d.5 Testing Results** *(e.g., frequency, variability, sensitivity analyses)*: NA	
2e. Risk Adjustment for Outcomes/ Resource Use Measures **2e.1 Data/sample** *(description of data/sample and size)*: NA **2e.2 Analytic Method** *(type of risk adjustment, analysis, & rationale)*: NA **2e.3 Testing Results** *(risk model performance metrics)*: NA **2e.4 If outcome or resource use measure is not risk adjusted, provide rationale:** The measure assesses prevention and wellness in a general population; risk adjustment is not indicated.	**2e** C☐ P☐ M☐ N☐ NA ☐
2f. Identification of Meaningful Differences in Performance **2f.1 Data/sample from Testing or Current Use** *(description of data/sample and size)*: NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure) **2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance** *(type of analysis & rationale)*: Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance **2f.3 Provide Measure Scores from Testing or Current Use** *(description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance)*: Elig Population: 180 Performance Rate: Screening documented in the Medical Chart: 30%	**2f** C☐ P☐ M☐ N☐
2g. Comparability of Multiple Data Sources/Methods **2g.1 Data/sample** *(description of data/sample and size)*: NCQA received data from 19 physician practices who submitted 10 records per measure (total 190 records per measure) **2g.2 Analytic Method** *(type of analysis & rationale)*: This measure is chart review only; no other sources were identified by the expert panel; this measure does not utilize administrative data. **2g.3 Testing Results** *(e.g., correlation statistics, comparison of rankings)*: NA	**2g** C☐ P☐ M☐ N☐ NA ☐
2h. Disparities in Care **2h.1 If measure is stratified, provide stratified results** *(scores by stratified categories/cohorts)*: The measure is not stratified to detect disparities. **2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:** NA	**2h** C☐ P☐ M☐ N☐ NA ☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Scientific*	**2**

Acceptability of Measure Properties?	
Steering Committee: Overall, to what extent was the criterion, *Scientific Acceptability of Measure Properties*, met? **Rationale:**	**2** **C** ☐ **P** ☐ **M** ☐ **N** ☐
3. USABILITY	
Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	**Eval Rating**
3a. Meaningful, Understandable, and Useful Information 3a.1 **Current Use:** Not in use but testing completed 3a.2 **Use in a public reporting initiative (disclosure of performance results to the public at large)** (*If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years*)**:** This measure is not currently publicly reported. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate. 3a.3 **If used in other programs/initiatives (***If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years***):** This measure is not currently used in QI. NCQA is exploring the feasibility of adding this measure and its related measures into a physician-level program and/or the HEDIS® measurement set as appropriate. NCQA anticipates that after we release these measures, they will become widely used, as all our measures do. **Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) 3a.4 **Data/sample** *(description of data/sample and size)***:** Expert panel, other stakeholders, and 19 physician field test participants 3a.5 **Methods** *(e.g., focus group, survey, QI project)***:** NCQA vetted the measures with its expert panel. In addition, throughout the development process, NCQA vetted the measure concepts and specifications with other stakeholder groups, including the National Association of State Medicaid Directors, NCQA's Health Plan Advisory Council, NCQA's Committee on Performance Measurement, and the American Academy of Pediatrician's Quality Improvement Innovation Network. After field testing, NCQA also conducted a debrief call with field test participants. In the form of a group interview, NCQA systematically sought feedback on whether the measures were understandable, feasible, important, and had face validity. 3a.6 **Results** *(qualitative and/or quantitative results and conclusions)***:** NCQA received feedback that the measure is understandable, feasible, important and valid.	**3a** **C** ☐ **P** ☐ **M** ☐ **N** ☐
3b/3c. Relation to other NQF-endorsed measures 3b.1 **NQF # and Title of similar or related measures:**	
(for NQF staff use) **Notes on similar/related endorsed or submitted measures:**	
3b. Harmonization If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target	**3b** **C** ☐

population/setting/data source or different topic but same target population): **3b.2 Are the measure specifications harmonized? If not, why?**	P☐ M☐ N☐ NA ☐
3c. Distinctive or Additive Value **3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** **5.1 If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality:** NA	**3c** C☐ P☐ M☐ N☐ NA ☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Usability?*	**3**
Steering Committee: Overall, to what extent was the criterion, *Usability*, met? **Rationale:**	**3** C☐ P☐ M☐ N☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
4a. Data Generated as a Byproduct of Care Processes **4a.1-2 How are the data elements that are needed to compute measure scores generated?** Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition), Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)	**4a** C☐ P☐ M☐ N☐
4b. Electronic Sources **4b.1 Are all the data elements available electronically?** (*elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims*) No **4b.2 If not, specify the near-term path to achieve electronic capture by most providers.** NCQA plans to eventually adapt this measure for use in electronic health records.	**4b** C☐ P☐ M☐ N☐
4c. Exclusions **4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?** No **4c.2 If yes, provide justification.**	**4c** C☐ P☐ M☐ N☐ NA ☐
4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences **4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results.** During the measure development process the Child Health MAP and measure development team worked with NCQA's certified auditors and audit department to ensure that the measure specifications were clear and auditable. The denominator, numerator and any exclusions are concisely specified and align with our audit standards.	**4d** C☐ P☐ M☐ N☐

4e. Data Collection Strategy/Implementation

4e.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:
Based on field test results, we have specified the measure to assess whether screening was documented and whether use of a standardized tool was documented. Our field test results showed that these data elements are available in the medical record. In addition, our field test participants noted that many were able to program these requirements into their electronic health record systems, and several implemented point-of-service physician reminders for this measure.

4e.2 Costs to implement the measure (*costs of data collection, fees associated with proprietary measures*)**:**
Collecting measures from medical charts is time-consuming and can be burdensome. Adapting this measure in electronic health records may relieve some of this burden.

4e.3 Evidence for costs:
Based on field test participant feedback and other stakeholder input

4e.4 Business case documentation:

4e
C☐
P☐
M☐
N☐

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

4

Steering Committee: Overall, to what extent was the criterion, *Feasibility*, met?
Rationale:

4
C☐
P☐
M☐
N☐

RECOMMENDATION

(for NQF staff use) **Check if measure is untested and only eligible for time-limited endorsement.**

Time-limited ☐

Steering Committee: Do you recommend for endorsement?
Comments:

Y☐
N☐
A☐

CONTACT INFORMATION

Co.1 Measure Steward (Intellectual Property Owner)
Co.1 Organization
National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005

Co.2 Point of Contact
Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-

Measure Developer If different from Measure Steward
Co.3 Organization
National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005

Co.4 Point of Contact
Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-

Co.5 Submitter If different from Measure Steward POC
Sepheen, Byron, MHS, byron@ncqa.org, 202-955-3573-, National Committee for Quality Assurance

Co.6 Additional organizations that sponsored/participated in measure development

ADDITIONAL INFORMATION
Workgroup/Expert Panel involved in measure development **Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.** Child Health Measurement Advisory Panel: Jeanne Alicandro Barbara Dailey Denise Dougherty, PhD Ted Ganiats, MD Foster Gesten, MD Nikki Highsmith, MPA Charlie Homer, MD, MPH Jeff Kamil, MD Elizabeth Siteman Mary McIntyre, MD, MPH Virginia Moyer, MD, MPH, FAAP Lee Partridge Xavier Sevilla, MD, FAAP Michael Siegal Jessie Sullivan
Ad.2 If adapted, provide name of original measure: **Ad.3-5 If adapted, provide original specifications URL or attachment**
Measure Developer/Steward Updates and Ongoing Maintenance **Ad.6 Year the measure was first released:** **Ad.7 Month and Year of most recent revision:** **Ad.8 What is your frequency for review/update of this measure?** **Ad.9 When is the next scheduled review/update for this measure?**
Ad.10 Copyright statement/disclaimers: © 2009 by the National Committee for Quality Assurance 1100 13th Street, NW, Suite 1000
Ad.11 -13 Additional Information web page URL or attachment:
Date of Submission (*MM/DD/YY*)**:** 09/01/2010