

# NATIONAL QUALITY FORUM

## Measure Submission and Evaluation Worksheet 5.0

This form contains the information submitted by measure developers/stewards, organized according to NQF's measure evaluation criteria and process. The evaluation criteria, evaluation guidance documents, and a blank online submission form are available on the [submitting standards web page](#).

<b>NQF #:</b> 1506	<b>NQF Project:</b> Child Health Quality Measures 2010
(for Endorsement Maintenance Review)	
<b>Original Endorsement Date:</b> Aug 15, 2011 <b>Most Recent Endorsement Date:</b> Last Updated Date: Aug 15, 2011	
<b>BRIEF MEASURE INFORMATION</b>	
<b>De.1 Measure Title:</b> Immunizations by 18 years of age	
<b>Co.1.1 Measure Steward:</b> National Committee for Quality Assurance	
<b>De.2 Brief Description of Measure:</b> The percentage of adolescents who turned 18 years during the measurement year who had proper immunizations by the time they turn 18 years of age.	
<b>2a1.1 Numerator Statement:</b> Adolescents who had documentation in the medical record of HPV immunization by age 18 years.	
<b>2a1.4 Denominator Statement:</b> Females with a visit who turn 18 years in the measurement year	
<b>2a1.8 Denominator Exclusions:</b> Male patients are not included in this measure.	
<b>1.1 Measure Type:</b> Process	
<b>2a1. 25-26 Data Source:</b> Electronic Health Records, Other, Paper medical record/flow-sheet	
<b>2a1.33 Level of Analysis:</b> Other, Population : Regional/network	
<b>1.2-1.4 Is this measure paired with another measure?</b> No	
<b>De.3 If included in a composite, please identify the composite measure (title and NQF number if endorsed):</b> This measure appears in the composite Comprehensive Well Care by Age 18 Years.	

<b>STAFF NOTES</b> (issues or questions regarding any criteria)
<b>Comments on Conditions for Consideration:</b>
<b>Is the measure untested?</b> Yes <input checked="" type="radio"/> No <input checked="" type="radio"/> If untested, explain how it meets criteria for consideration for time-limited endorsement:
<b>1a. Specific national health goal/priority identified by DHHS or NPP addressed by the measure (check De.5):</b>
<b>5. Similar/related <u>endorsed</u> or submitted measures (check 5.1):</b>
<b>Other Criteria:</b>
<b>Staff Reviewer Name(s):</b>

<b>1. IMPACT, OPPORTUNITY, EVIDENCE - IMPORTANCE TO MEASURE AND REPORT</b>
Importance to Measure and Report is a threshold criterion that must be met in order to recommend a

measure for endorsement. All three subcriteria must be met to pass this criterion. See [guidance on evidence](#).

**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: H● M● L● I●**

*(The measure directly addresses a specific national health goal/priority identified by DHHS or NPP, or some other high impact aspect of healthcare.)*

**De.4 Subject/Topic Areas** (Check all the areas that apply):

**De.5 Non-Condition Specific** (Check all the areas that apply): [Population Health](#)

**1a.1 Demonstrated High Impact Aspect of Healthcare:** [Affects large numbers, A leading cause of morbidity/mortality, Severity of illness, Patient/societal consequences of poor quality](#)

**1a.2 If "Other," please describe:**

**1a.3 Summary of Evidence of High Impact** (Provide epidemiologic or resource use data):

Preventing disease through vaccination eliminates the costs associated with treating that disease including doctor visits and hospital stays, as well as time lost from work for parents. A study analyzing a cohort of 4.1 million children estimated that 2.87 million pertussis cases would occur, resulting in 1,131 deaths; 276,750 diphtheria cases, resulting in 27,675 deaths; and 165 tetanus cases, resulting in 25 deaths. From the societal perspective, these cases would cost \$23,536.5 million, with approximately \$18,772.4 million (80%) for diphtheria and \$4,770.1 million (20%) for pertussis (Ekwueme, D.U., P.M. Strebel, S.C. Hadler, M.I. Meltzer, J.W. Allen and J.R. Livengood, 2000). With the use of the Tdap vaccine, the number of diphtheria, tetanus and pertussis cases has been reduced by 99%, 93% and 96%, respectively (Ekwueme, D.U., P.M. Strebel, S.C. Hadler, M.I. Meltzer, J.W. Allen, and J.R. Livengood, 2000).

Costs associated with pertussis cases include medical costs of visits and treatment, as well as nonmedical costs that include time missed from work or school. The mean medical cost of an adolescent case of pertussis can reach \$256 for severe cases, and \$416 when nonmedical expenses are included (figures in 2004 dollars). The total costs associated with pertussis are highly dependent on the incidence estimate of the disease, which ranged from 155 per 100,000 to 507 per 100,000 across two studies (CDC, 2006). The estimated lifetime costs of sequelae ranged from \$44,000 for cases of hearing loss to almost \$865,000 for severe retardation. Indirect costs in lost productivity were estimated to be \$1 million per case (NFID, 2005). Because of the potential severity of the disease, the financial costs per case of meningococcal disease are high per case but low for society due to the low incidence.

**1a.4 Citations for Evidence of High Impact cited in 1a.3:** [Ekwueme, D.U., P.M. Strebel, S.C. Hadler, M.I. Meltzer, J.W. Allen, and J.R. Livengood. Economic Evaluation of Use of Diphtheria, Tetanus, and Acellular Pertussis Vaccine or Diphtheria Tetanus, and Whole-Cell Pertussis Vaccine in the United States, 1997. Arch Pediatr Adolesc Med. 2000; 154: 797-803.](#)

[CDC. Preventing Tetanus, Diphtheria, and Pertussis Among Adolescents: Use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccines: Recommendations of the Advisory Committee on Immunization Practices. MMWR. March 24, 2006.](#)

[National Foundation for Infectious Disease. Reducing the Impact of Meningococcal Disease in Adolescents and Young Adults. July 2005.](#)

**1b. Opportunity for Improvement: H● M● L● I●**

*(There is a demonstrated performance gap - variability or overall less than optimal performance)*

**1b.1 Briefly explain the benefits (improvements in quality) envisioned by use of this measure:**

[Preventing pertussis in adolescents would reduce disease among that population and perhaps others by eliminating a reservoir of the disease. Pertussis symptoms can be unpleasant and last for months but long](#)

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable

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term effects are rare. Meningococcal disease, on the other hand, can be deadly or debilitating. MCV4 has the potential to prevent morbidity and mortality among vaccinated adolescents as well as create a herd immunity effect, but the strategic importance is lessened due to low incidence of the disease. The fact that meningococcal disease requires a public health response is communicable and can cause significant stress within a community increases its strategic importance.

Most cases of meningococcal disease are sporadic—less than 5% of cases occur in outbreaks—but the frequency of outbreaks has increased (Jackson 1995; Woods 1998). Each case requires a public health response which includes contact tracing and antimicrobial prophylaxis. The meningococcus bacterium is spread by direct, close contact with respiratory and oral secretions of an infected person. It is often misdiagnosed because early symptoms (including sudden onset of fever, headache and stiff neck) are similar to the flu. The infection can develop and spread very quickly within the body. Even with rapid and appropriate treatment, the disease can kill an otherwise healthy young person in 48 hours or less (NFID, 2005). Statistics show that even with treatment, 10%–15% of those who get the disease will die and 20% of survivors suffer permanent problems, including brain damage, kidney damage, hearing loss or limb amputation (NFID 2005). Antibiotics are also recommended for those in close contact with an identified case of meningococcal disease.

Many states have mandates regarding meningococcal disease and college students residing on campus. The majority of states (n=33) require education about the disease and strategies for prevention. Twelve states require proof of the vaccination or a waiver for incoming students residing on campus (Immunization Action Coalition 2006).

While almost 90 percent of both low- and high-risk HPV infections occur without any symptoms and go away without treatment, (CDC) persistent HPV infection, or HPV infection lasting several months or years, significantly increases a person's risk of developing cancer. While it is not yet known how long vaccine-induced immunity will last, nearly 100 percent of the precancerous cervical cell changes caused by the types of HPV targeted by vaccination have been prevented for up to four years. (National Cancer Institute, 2007)

#### Citation:

Jackson, L.W., A. Schuchat, M.W. Reeves, et al. Serogroup C meningococcal outbreaks in the United States: an emerging threat. JAMA. 1995;273::383-389.

National Foundation for Infectious Disease. Reducing the Impact of Meningococcal Disease in Adolescents and Young Adults. July 2005.

Immunization Action Coalition. Meningococcal Prevention Mandates for Colleges and Universities. October 2006. <http://www.immunize.org/laws/menin.htm>.

Centers for Disease Control and Prevention. Genital HPV Infection - CDC Fact Sheet. <http://www.cdc.gov/STD/HPV/STDFact-HPV.htm>

Human Papillomavirus (HPV) Vaccines: Questions and Answers. National Cancer Institute, 2007. <http://www.cancer.gov/cancertopics/factsheet/prevention/hpv-vaccine>

**1b.2 Summary of Data Demonstrating Performance Gap** (*Variation or overall less than optimal performance across providers*): [**For Maintenance** – *Descriptive statistics for performance results for this measure - distribution of scores for measured entities by quartile/decile, mean, median, SD, min, max, etc.*] In the United States, adolescent immunization rates have historically lagged behind early childhood immunization rates. In 2000, the American Academy of Pediatrics reported that 35 million adolescents failed to receive at least one recommended vaccination (Little, 2000). Low immunization rates among adolescents have the potential to cause outbreaks of preventable diseases and to establish reservoirs of disease in adolescents that can affect other populations including infants, the elderly and individuals with chronic

conditions. Immunization recommendations for adolescents have changed in recent years. In addition to catch-up immunizations that may have been missed during childhood and infancy, there are new vaccines targeted specifically to adolescents. The ACIP recommended the following immunizations for adolescents age 11–12 years:

- 1 dose Tdap (or Td)
- 1 dose MCV4 (or MPSV4)

Gardasil® was approved by the Food and Drug Administration in 2006 and incorporated into ACIP recommendations published in March 2007. Since then, early reports have indicated that about one quarter (25.1 percent) of adolescent females age 13 to 17 years had initiated the vaccine series (>1 dose). (MMWR, 2008) An estimated 32.3 percent had received 1 dose, 44.2 percent had received 2 doses, and 23.5 percent had received 3 doses. (MMWR, 2008) This was the first year HPV coverage was reported.

**1b.3 Citations for Data on Performance Gap: [For Maintenance – Description of the data or sample for measure results reported in 1b.2 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]**

Little, J. 35 million teens missing recommended vaccines. AAP News. 2000;17(3):81.

Vaccination Coverage Among Adolescents Aged 13–17 Years --- United States, 2007. MMWR: October 10, 2008 / 57(40);1100–1103.

**1b.4 Summary of Data on Disparities by Population Group: [For Maintenance – Descriptive statistics for performance results for this measure by population group]**

Variations in immunization coverage exist among some populations. Children of lower socioeconomic status are less likely to be fully immunized, as the vaccine is expensive, at \$120–125 per dose on average for the three shot series. While some health insurance plans cover the costs of the HPV vaccine doses and clinic visits, not all currently provide coverage. Those without coverage are unlikely to be able to afford the vaccine. Children age 18 and younger who are eligible for the Vaccines for Children (VFC) program, including those who are Medicaid eligible, uninsured, or American Indian or Alaska Native, may be able to receive the HPV vaccine for a nominal cost.

Parental acceptance of the HPV vaccine also affects vaccine usage. One study found that 25 percent of parents have reservations about having their daughters immunized, due to concern that vaccination might influence their daughter's sexual behaviors, their uneasiness about the morality of immunizing to prevent sexually transmitted infections, and worries about the safety of the vaccine.

**1b.5 Citations for Data on Disparities Cited in 1b.4: [For Maintenance – Description of the data or sample for measure results reported in 1b.4 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]**

NCHS, Health, United States, 2002, Table 73.

National Immunization Program (NIP), Priorities, 2003, Page 7.

Kane, Mark M.D., M.P.H., Heidi Lasher. The Case for Childhood Immunization.

www.path.org/vaccineresources/files/CVP\_Occ\_Paper5.pdf. Updated March 2002.

**1c. Evidence** (Measure focus is a health outcome OR meets the criteria for quantity, quality, consistency of the body of evidence.)

Is the measure focus a health outcome? Yes ☐ No ☐ If not a health outcome, rate the body of evidence.

Quantity: H ☐ M ☐ L ☐ I ☐ Quality: H ☐ M ☐ L ☐ I ☐ Consistency: H ☐ M ☐ L ☐ I ☐

Quantit	Qualit	Consisten	Does the measure pass subcriterion1c?
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y	y	cy	
M-H	M-H	M-H	Yes🔴
L	M-H	M	Yes🔴 IF additional research unlikely to change conclusion that benefits to patients outweigh harms: otherwise No🔴
M-H	L	M-H	Yes🔴 IF potential benefits to patients clearly outweigh potential harms: otherwise No🔴
L-M-H	L-M-H	L	No 🟢
Health outcome – rationale supports relationship to at least one healthcare structure, process, intervention, or service			Does the measure pass subcriterion1c? Yes🔴 IF rationale supports relationship
<b>1c.1 Structure-Process-Outcome Relationship</b> ( <i>Briefly state the measure focus, e.g., health outcome, intermediate clinical outcome, process, structure; then identify the appropriate links, e.g., structure-process-health outcome; process- health outcome; intermediate clinical outcome-health outcome</i> ): Vaccination has been recognized as a leading medical achievement of the 20th century and the U.S. early childhood immunization program that focuses on infant and early childhood immunizations has been a remarkable success (NFID, 2004). Translating that success to the adolescent population is of significant health importance because the failure to do so can result in outbreaks of vaccine-preventable diseases, increased disease-associated costs and reservoirs of disease in the adolescent population that can affect others, including infants and the elderly. The diseases prevented by recommended adolescent vaccines—pertussis, meningococcal disease, HPV infection and eventually, cervical cancer—can be serious and deadly. Preventing these diseases is a significant public health accomplishment.			
<b>1c.2-3 Type of Evidence</b> ( <i>Check all that apply</i> ): Evidence-based guideline, Expert opinion			
<b>1c.4 Directness of Evidence to the Specified Measure</b> ( <i>State the central topic, population, and outcomes addressed in the body of evidence and identify any differences from the measure focus and measure target population</i> ): Pertussis is an acute respiratory infection characterized by a prolonged cough. It is a highly communicable disease that is transmitted via respiratory droplets from coughing or sneezing. A vaccine against the disease—DTP or pediatric diphtheria and tetanus toxoids—has been routinely recommended for young children since the 1940s. Early childhood vaccination resulted in dramatic declines in cases of pertussis to an historic low of 1,010 in 1976, but since the 1980s the number of cases has been increasing, especially among adolescents and adults (CDC 2006; CDC 2005; Farizo 1992; Guris 1999). A primary reason for the continued circulation of pertussis is that immunity to pertussis wanes approximately 5–10 years after completion of the childhood pertussis vaccination, leaving adolescents and adults vulnerable. Vaccinating adolescents against pertussis would not only protect against disease but would likely reduce the reservoir of pertussis within the population at large thereby reducing the risk for vulnerable populations such as infants. During 2004, a total of 25,827 cases of pertussis were reported in the U.S. and 8,897 of those (34%) were among adolescents for an incidence for adolescents of 30 per 100,000 (CDC 2005). From 1996–2004, Massachusetts’ enhanced surveillance system reported an average annual incidence among adolescents of 93 per 100,000 (CDC 2005). The incidence of pertussis varies widely from state to state and from year to year. One reason for the variance is that reported cases of pertussis in adolescents often happen in outbreaks at schools where close interaction occurs among large number of students with waning immunity (CDC 2005). Data from enhanced surveillance sites and prospective studies indicate that the national passive surveillance data substantially underestimate the true incidence of pertussis because reliable diagnostic tests are not widely available and not all diagnosed cases are reported. One study suggested that			



approximately 1 million cases of pertussis occur annually among persons over age 15 years in the U.S. (Ward 2005).

Meningococcal disease is a serious illness caused by the bacterium *Neisseria meningitidis*, which can cause meningitis and meningococemia, an infection of the blood. The disease affects up to 2,600 people in the U.S. every year and is a leading cause of bacterial meningitis in children 2–18 years of age in the U.S. (HealthLink 2004). Incidence of meningococcal disease is highest in children under 2 years, but also spikes in adolescents and young adults. In the 1990s, 13%–14% of disease nationwide was in persons 11–18 years (NIFD 2005). Other studies have shown that the disease peaks in 15–18-year-olds and that adolescents have the highest fatality rate, at about 20% (AAP 2005).

Human papillomaviruses (HPVs) are a group of more than 100 related viruses. (National Cancer Institute) About 60 types of HPV cause warts, or papillomas, on the hands and feet. The other 40 viruses are mucosal, or genital, and are often associated with genital warts and certain types of cancer. (Division of STD Prevention, 1999) Approximately 20 million Americans are currently infected with HPV, and another 6.2 million people become newly infected each year. (CDC)

Genital HPV is passed from one person to another through sexual contact (Division of STD Prevention, 1999) and is currently the most common sexually transmitted infection (STI). (CDC) It is estimated that approximately 50 percent of sexually active men and women will acquire a genital HPV infection at some point in their lives. (CDC) Genital HPV viruses are divided into two categories: “low-risk,” or wart-causing, and “high-risk,” or those that put a person at risk for cancer. These high-risk, or oncogenic, types of HPV cause 100 percent of cervical cancers, 90 percent of anal cancers, 40 percent of vulvar and vaginal cancers, 12 percent of oropharyngeal cancers, and three percent of oral cancers. (Parkin DM, 2006)

**1c.5 Quantity of Studies in the Body of Evidence** *(Total number of studies, not articles):*

**1c.6 Quality of Body of Evidence** *(Summarize the certainty or confidence in the estimates of benefits and harms to patients across studies in the body of evidence resulting from study factors. Please address: a) study design/flaws; b) directness/indirectness of the evidence to this measure (e.g., interventions, comparisons, outcomes assessed, population included in the evidence); and c) imprecision/wide confidence intervals due to few patients or events):*

**1c.7 Consistency of Results across Studies** *(Summarize the consistency of the magnitude and direction of the effect):*

**1c.8 Net Benefit** *(Provide estimates of effect for benefit/outcome; identify harms addressed and estimates of effect; and net benefit - benefit over harms):*

**1c.9 Grading of Strength/Quality of the Body of Evidence.** Has the body of evidence been graded?

**1c.10 If body of evidence graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias:**

**1c.11 System Used for Grading the Body of Evidence:** The U.S. Preventive Services Task Force, an independent panel of experts that rate the evidence for preventive services, defers to the CDC’s Advisory Committee on Immunization Practices (ACIP) guidelines for recommended vaccinations. ACIP consists of 15 experts in fields associated with immunization, who have been selected by the Secretary of the U. S. Department of Health and Human Services to provide advice and guidance to the Secretary, the Assistant Secretary for Health, and the Centers for Disease Control and Prevention (CDC) on the control of vaccine-preventable diseases. In addition to the 15 voting members, ACIP includes 8 ex officio members who represent other federal agencies with responsibility for immunization programs in the United States, and 26

non-voting representatives of liaison organizations that bring related immunization expertise. The role of the ACIP is to provide advice that will lead to a reduction in the incidence of vaccine preventable diseases in the United States, and an increase in the safe use of vaccines and related biological products.

The Committee develops written recommendations for the routine administration of vaccines to children and adults in the civilian population; recommendations include age for vaccine administration, number of doses and dosing interval, and precautions and contraindications. The ACIP is the only entity in the federal government that makes such recommendations.

To formulate policy recommendations, the ACIP reviews data on morbidity and mortality associated with the disease in the general US population and in specific risk groups along with available scientific literature (both published and unpublished) on the safety, efficacy, effectiveness, cost-effectiveness, and acceptability of the immunizing agent, with consideration of the relevant quality and quantity of data. When data permit, specific rules of evidence – such as those followed by the US Preventive Services Task Force – are used to judge the quality of data and to make decisions regarding the nature and strength of recommendations. In the absence of data or when data are inadequate, expert opinions of voting members and other experts are used to make recommendations.

Other considerations and inputs used in formulating policy recommendations include clinical trial results and information provided in the manufacturer's labeling or package insert; equity in access to the vaccine and responsible management of public funds; recommendations of other professional liaison organizations; and the feasibility of incorporating the vaccine into existing immunization programs. ACIP Work Groups often review WHO recommendations as a secondary source of information in their deliberations.

**1c.12 If other, identify and describe the grading scale with definitions:**

**1c.13 Grade Assigned to the Body of Evidence:** NA

**1c.14 Summary of Controversy/Contradictory Evidence:** None

**1c.15 Citations for Evidence other than Guidelines(*Guidelines addressed below*):**

Centers for Disease Control and Prevention (CDC). Vaccines and Immunizations: HPV Vaccination. <http://www.cdc.gov/vaccines/vpd-vac/hpv/default.htm>

Centers for Disease Control and Prevention. Genital HPV Infection - CDC Fact Sheet. <http://www.cdc.gov/STD/HPV/STDFact-HPV.htm>

CDC. Prevention and Control of Meningococcal Disease: Recommendation of the Advisory Committee on Immunization Practices. MMWR. May 27, 2005.

CDC. Preventing Tetanus, Diphtheria, and Pertussis Among Adolescents: Use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccines: Recommendations of the Advisory Committee on Immunization Practices. MMWR. March 24, 2006.

Centers for Disease Control and Prevention (CDC). Vaccines and Immunizations: HPV Vaccination. <http://www.cdc.gov/vaccines/vpd-vac/hpv/default.htm>

Division of STD Prevention. Prevention of genital HPV infection and sequelae: Report of an external consultants' meeting. Atlanta, GA: Centers for Disease Control and Prevention, 1999.

Farizo, K.M., S.L. Cochi, E.R. Zell, et al. Epidemiological features of pertussis in the United States, 1980–1989. Clinical Infectious Disease. 1992;14:708-719.

Guris, D., P.M. Strebel, B. Bardenheier, et al. Changing epidemiology of pertussis in the United States: increasing reported incidence among adolescents and adults, 1990-1996. *Clinical Infectious Disease*. 1999;28:1230-1237.

HealthLink. The Facts about Meningococcal Disease. Medical College of Wisconsin, September 2004.

National Foundation for Infectious Disease. Reducing the Impact of Meningococcal Disease in Adolescents and Young Adults. July 2005.

National Cancer Institute. Human Papillomaviruses and Cancer: Questions and Answers. <http://www.cancer.gov/cancertopics/factsheet/Risk/HPV>

Parkin DM, Bray F. Chapter 2: the burden of HPV-related cancers. *Vaccine* 2006;24:Suppl 3:S11-S25.

**1c.16 Quote verbatim, the specific guideline recommendation** (Including guideline # and/or page #):

ACIP [CDC, AAP, AAFP] (2009): Children 7—18:

1. Tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap). (Minimum age: 10 years for BOOSTRIX® and 11 years for ADACEL®)
  1. Administer at age 11 or 12 years for those who have completed the recommended childhood DTP/DTaP vaccination series and have not received a tetanus and diphtheria toxoid (Td) booster dose.
  2. Persons aged 13 through 18 years who have not received Tdap should receive a dose.
  3. A 5-year interval from the last Td dose is encouraged when Tdap is used as a booster dose; however, a shorter interval may be used if pertussis immunity is needed.
2. Human papillomavirus vaccine (HPV). (Minimum age: 9 years)
  4. Administer the first dose to females at age 11 or 12 years.
  5. Administer the second dose 2 months after the first dose and the third dose 6 months after the first dose (at least 24 weeks after the first dose).
  6. Administer the series to females at age 13 through 18 years if not previously vaccinated.
3. Meningococcal conjugate vaccine (MCV).
  7. Administer at age 11 or 12 years, or at age 13 through 18 years if not previously vaccinated.
  8. Administer to previously unvaccinated college freshmen living in a dormitory.
  9. MCV is recommended for children aged 2 through 10 years with terminal complement component deficiency, anatomic or functional asplenia, and certain other groups at high risk. See MMWR 2005;54(No. RR-7).
  10. Persons who received MPSV 5 or more years previously and remain at increased risk for meningococcal disease should be revaccinated with MCV.
4. Influenza vaccine.
  11. Administer annually to children aged 6 months through 18 years.
  12. For healthy nonpregnant persons (i.e., those who do not have underlying medical conditions that predispose them to influenza complications) aged 2 through 49 years, either LAIV or TIV may be used.
  13. Administer 2 doses (separated by at least 4 weeks) to children aged younger than 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time during the previous influenza season but only received 1 dose.
5. Pneumococcal polysaccharide vaccine (PPSV).
  - Administer to children with certain underlying medical conditions (see MMWR 1997;46[No. RR-8]), including a cochlear implant. A single revaccination should be administered to children with functional or anatomic asplenia or other immunocompromising condition after 5 years.
6. Hepatitis A vaccine (HepA).
  - Administer 2 doses at least 6 months apart.
  - HepA is recommended for children older than 1 year who live in areas where vaccination programs target older children or who are at increased risk of infection. See MMWR 2006;55(No. RR-7).
7. Hepatitis B vaccine (HepB).



- Administer the 3-dose series to those not previously vaccinated.
  - A 2-dose series (separated by at least 4 months) of adult formulation Recombivax HB is licensed for children aged 11 through 15 years.
  - 8. Inactivated poliovirus vaccine (IPV).
    - For children who received an all-IPV or all-oral poliovirus (OPV) series, a fourth dose is not necessary if the third dose was administered at age 4 years or older.
    - If both OPV and IPV were administered as part of a series, a total of 4 doses should be administered, regardless of the child's current age.
  - 9. Measles, mumps, and rubella vaccine (MMR).
    - If not previously vaccinated, administer 2 doses or the second dose for those who have received only 1 dose, with at least 28 days between doses.
  - 10. Varicella vaccine.
    - For persons aged 7 through 18 years without evidence of immunity (see MMWR 2007;56[No. RR-4]), administer 2 doses if not previously vaccinated or the second dose if they have received only 1 dose.
    - For persons aged 7 through 12 years, the minimum interval between doses is 3 months. However, if the second dose was administered at least 28 days after the first dose, it can be accepted as valid.
    - For persons aged 13 years and older, the minimum interval between doses is 28 days.
- ICSI (2008): Children Ages 11—18:
1. Diphtheria and Tetanus Toxoids and Acellular Pertussis (DTaP/Td/Tdap) Vaccine  
Tdap should be given routinely at age 11-12 years of age, as well as to older adolescents 13-18 of age who missed the 11- to 12-year-old dose, as a one-time booster for adults in place of Td.
  2. Meningococcal Vaccine  
For those adolescents who have not previously received the meningococcal conjugate vaccine, vaccination is recommended before high school entry for children at 11 to 12 years of age. Those unvaccinated adolescents 13 to 18 years of age should also undergo vaccination
  3. Human Papillomavirus (HPV) Vaccine  
A vaccine for human papillomavirus (HPV) has been licensed for women ages 9 through 26, and the Advisory Committee on Immunization Practices has recommended routine use of the vaccine for all 11- to 12-year-old females, and catch-up use of the vaccine for females ages 12 through 26
- 1c.17 Clinical Practice Guideline Citation:** Advisory Committee on Immunization Practices. Recommended adult immunization schedule: United States, 2009\*. Ann Intern Med 2009 Jan 6;150(1):40-4. PubMed
- ICSI: Immunizations (Guideline). Updated January 2009.
- 1c.18 National Guideline Clearinghouse or other URL:** Immunization programs for infants, children, adolescents, and adults: clinical practice guidelines by the Infectious Diseases Society of America. <http://www.guideline.gov/content.aspx?id=15442&search=adolescent+immunizations>
- 1c.19 Grading of Strength of Guideline Recommendation.** Has the recommendation been graded?
- 1c.20 If guideline recommendation graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias:**
- 1c.21 System Used for Grading the Strength of Guideline Recommendation:** NA
- 1c.22 If other, identify and describe the grading scale with definitions:**
- 1c.23 Grade Assigned to the Recommendation:** NA
- 1c.24 Rationale for Using this Guideline Over Others:** The measure follows the ACIP guidelines. ACIP

is an independent panel that advises the Secretary of Health and Human Services and the Centers for Disease Control and Prevention on immunization practices.

**Based on the NQF descriptions for rating the evidence, what was the developer's assessment of the quantity, quality, and consistency of the body of evidence?**

1c.25 Quantity: 1c.26 Quality: 1c.27 Consistency:

1c.28 Attach evidence submission form:

1c.29 Attach appendix for supplemental materials:

**Was the threshold criterion, *Importance to Measure and Report*, met?**

**(1a & 1b must be rated moderate or high and 1c yes) Yes ☐ No ☒**

**Provide rationale based on specific subcriteria:**

**For a new measure if the Committee votes NO, then STOP.**

**For a measure undergoing endorsement maintenance, if the Committee votes NO because of 1b. (no opportunity for improvement), it may be considered for continued endorsement and all criteria need to be evaluated.**

## 2. RELIABILITY & VALIDITY - SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **(evaluation criteria)**

Measure testing must demonstrate adequate reliability and validity in order to be recommended for endorsement. Testing may be conducted for data elements and/or the computed measure score. Testing information and results should be entered in the appropriate field. Supplemental materials may be referenced or attached in item 2.1. See [guidance on measure testing](#).

**S.1 Measure Web Page** (*In the future, NQF will require measure stewards to provide a URL link to a web page where current detailed specifications can be obtained*). Do you have a web page where current detailed specifications for this measure can be obtained? **No**

**S.2 If yes, provide web page URL:**

**2a. RELIABILITY. Precise Specifications and Reliability Testing: H ☒ M ☒ L ☒ I ☒**

**2a1. Precise Measure Specifications.** (*The measure specifications precise and unambiguous.*)

**2a1.1 Numerator Statement** (*Brief, narrative description of the measure focus or what is being measured about the target population, e.g., cases from the target population with the target process, condition, event, or outcome*):

[Adolescents who had documentation in the medical record of HPV immunization by age 18 years.](#)

**2a1.2 Numerator Time Window** (*The time period in which the target process, condition, event, or outcome is eligible for inclusion*):

[2 years](#)

**2a1.3 Numerator Details** (*All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, codes with descriptors, and/or specific data collection items/responses*):

[Medical Record Specification:](#)

[Three HPV vaccinations, with different dates of service on or before the 18th birthday.](#)

**2a1.4 Denominator Statement** (*Brief, narrative description of the target population being measured*):

[Females with a visit who turn 18 years in the measurement year](#)

**2a1.5 Target Population Category** (*Check all the populations for which the measure is specified and*

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable

Created on: 05/24/2021 at 11:04 AM

tested if any): [Children](#)

**2a1.6 Denominator Time Window** *(The time period in which cases are eligible for inclusion):*  
[1 year](#)

**2a1.7 Denominator Details** *(All information required to identify and calculate the target population/denominator such as definitions, codes with descriptors, and/or specific data collection items/responses):*

[Female patients who turned 18 years of age between January 1 of the measurement year and December 31 of the measurement year and who had documentation of a face-to-face visit between the clinician and the patient that predates the patient's birthday by at least 12 months.](#)

**2a1.8 Denominator Exclusions** *(Brief narrative description of exclusions from the target population):*  
[Male patients are not included in this measure.](#)

**2a1.9 Denominator Exclusion Details** *(All information required to identify and calculate exclusions from the denominator such as definitions, codes with descriptors, and/or specific data collection items/responses):*

[Exclude males](#)

**2a1.10 Stratification Details/Variables** *(All information required to stratify the measure results including the stratification variables, codes with descriptors, definitions, and/or specific data collection items/responses):*

[None](#)

**2a1.11 Risk Adjustment Type** *(Select type. Provide specifications for risk stratification in 2a1.10 and for statistical model in 2a1.13):* [No risk adjustment or risk stratification](#) **2a1.12 If "Other," please describe:**

**2a1.13 Statistical Risk Model and Variables** *(Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development should be addressed in 2b4.):*

[NA](#)

**2a1.14-16 Detailed Risk Model Available at Web page URL** *(or attachment). Include coefficients, equations, codes with descriptors, definitions, and/or specific data collection items/responses. Attach documents only if they are not available on a webpage and keep attached file to 5 MB or less. NQF strongly prefers you make documents available at a Web page URL. Please supply login/password if needed:*

**2a1.17-18. Type of Score:** [Rate/proportion](#)

**2a1.19 Interpretation of Score** *(Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score):*  
[Better quality = Higher score](#)

**2a1.20 Calculation Algorithm/Measure Logic** *(Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.):*

[Step 1: Determine the denominator](#)

[Adolescents who turned 18 years old in the measurement year, AND  
 Who had a visit within the past 12 months of the adolescent's birthday](#)

**Step 2: Determine the numerator**

Adolescents who had documentation in the medical record of immunization during the measurement year or the year previous to the measurement year.

**2a1.21-23 Calculation Algorithm/Measure Logic Diagram URL or attachment:**

**2a1.24 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.

**2a1.25 Data Source** (*Check all the sources for which the measure is specified and tested*). If other, please describe:

Electronic Health Records, Other, Paper medical record/flow-sheet

**2a1.26 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](#)

**2a1.27-29 Data Source/data Collection Instrument Reference Web Page URL or Attachment:**

**2a1.30-32 Data Dictionary/Code Table Web Page URL or Attachment:**

**2a1.33 Level of Analysis** (*Check the levels of analysis for which the measure is specified and tested*):  
[Other, Population : Regional/network](#)

**2a1.34-35 Care Setting** (*Check all the settings for which the measure is specified and tested*): [Ambulatory Care : Clinic, Ambulatory Care : Hospital Outpatient, Ambulatory Care : Office](#)

**2a2. Reliability Testing.** (*Reliability testing was conducted with appropriate method, scope, and adequate demonstration of reliability.*)

**2a2.1 Data/Sample** (*Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included*):

NCQA received data from 18 physician practices who submitted 10 records per measure (total 180 records per measure)

**2a2.2 Analytic Method** (*Describe method of reliability testing & rationale*):

We calculated 95% confidence intervals, which speak to the precision of the rates obtained from field testing.

**2a2.3 Testing Results** (*Reliability statistics, assessment of adequacy in the context of norms for the test conducted*):

Rate (Upper Confidence Interval, Lower Confidence Interval): 0.178 (0.12, 0.24)

In this field test, measures with smaller denominators (e.g. female-only measures) had larger confidence

intervals, as expected with smaller sample sizes.

**2b. VALIDITY. Validity, Testing, including all Threats to Validity: H M L I NA**

**2b1.1 Describe how the measure specifications (measure focus, target population, and exclusions) are consistent with the evidence cited in support of the measure focus (criterion 1c) and identify any differences from the evidence:**

**2b2. Validity Testing.** (Validity testing was conducted with appropriate method, scope, and adequate demonstration of validity.)

**2b2.1 Data/Sample** (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

NCQA received data from 18 physician practices who submitted 10 records per measure (total 180 records per measure)

**2b2.2 Analytic Method** (Describe method of validity testing and rationale; if face validity, describe systematic assessment):

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.

**2b2.3 Testing Results** (Statistical results, assessment of adequacy in the context of norms for the test conducted; if face validity, describe results of systematic assessment):

NA

**POTENTIAL THREATS TO VALIDITY.** (All potential threats to validity were appropriately tested with adequate results.)

**2b3. Measure Exclusions.** (Exclusions were supported by the clinical evidence in 1c or appropriately tested with results demonstrating the need to specify them.)

**2b3.1 Data/Sample for analysis of exclusions** (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

NA

**2b3.2 Analytic Method** (Describe type of analysis and rationale for examining exclusions, including exclusion related to patient preference):

NA

**2b3.3 Results** (Provide statistical results for analysis of exclusions, e.g., frequency, variability, sensitivity analyses):

NA

**2b4. Risk Adjustment Strategy.** (For outcome measures, adjustment for differences in case mix (severity) across measured entities was appropriately tested with adequate results.)

**2b4.1 Data/Sample** (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

NA

**2b4.2 Analytic Method** (Describe methods and rationale for development and testing of risk model or risk



stratification including selection of factors/variables):

NA

**2b4.3 Testing Results** (*Statistical risk model: Provide quantitative assessment of relative contribution of model risk factors; risk model performance metrics including cross-validation discrimination and calibration statistics, calibration curve and risk decile plot, and assessment of adequacy in the context of norms for risk models. Risk stratification: Provide quantitative assessment of relationship of risk factors to the outcome and differences in outcomes among the strata*):

NA

**2b4.4 If outcome or resource use measure is not risk adjusted, provide rationale and analyses to justify lack of adjustment:** The measure assesses prevention and wellness in a general population; risk adjustment is not indicated.

**2b5. Identification of Meaningful Differences in Performance.** (*The performance measure scores were appropriately analyzed and discriminated meaningful differences in quality.*)

**2b5.1 Data/Sample** (*Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included*):

NCQA received data from 18 physician practices who submitted 10 records per measure (total 180 records per measure)

**2b5.2 Analytic Method** (*Describe methods and rationale to identify statistically significant and practically/meaningfully differences in performance*):

Comparison of means and percentiles; analysis of variance against established benchmarks; if sample size is >400, we would use an analysis of variance

**2b5.3 Results** (*Provide measure performance results/scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningful differences in performance*):

Eligible Population: 163

HPV Rate: 0.178

**2b6. Comparability of Multiple Data Sources/Methods.** (*If specified for more than one data source, the various approaches result in comparable scores.*)

**2b6.1 Data/Sample** (*Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included*):

NCQA received data from 18 physician practices who submitted 10 records per measure (total 180 records per measure)

**2b6.2 Analytic Method** (*Describe methods and rationale for testing comparability of scores produced by the different data sources specified in the measure*):

This measure is chart review only; no other sources were identified by the expert panel; this measure does not utilize administrative data

**2b6.3 Testing Results** (*Provide statistical results, e.g., correlation statistics, comparison of rankings; assessment of adequacy in the context of norms for the test conducted*):

NA

**2c. Disparities in Care: H M L I NA** (*If applicable, the measure specifications allow identification of disparities.*)

**2c.1 If measure is stratified for disparities, provide stratified results** (*Scores by stratified categories/cohorts*): The measure is not stratified to detect disparities.

**2c.2 If disparities have been reported/identified (e.g., in 1b), but measure is not specified to detect disparities, please explain:**

NA

**2.1-2.3 Supplemental Testing Methodology Information:**

**Steering Committee: Overall, was the criterion, *Scientific Acceptability of Measure Properties*, met? (Reliability and Validity must be rated moderate or high) Yes ☒ No ☒**

**Provide rationale based on specific subcriteria:**

**If the Committee votes No, STOP**

### 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**)

**C.1 Intended Actual/Planned Use** (Check all the planned uses for which the measure is intended): Public Reporting, Quality Improvement (Internal to the specific organization)

**3.1 Current Use** (Check all that apply; for any that are checked, provide the specific program information in the following questions):

**3a. Usefulness for Public Reporting: H ☒ M ☒ L ☒ I ☒**

(The measure is meaningful, understandable and useful for public reporting.)

**3a.1. Use in Public Reporting - disclosure of performance results to the public at large** (If used in a public reporting program, provide name of program(s), locations, Web page URL(s)). If not publicly reported in a national or community program, state the reason AND plans to achieve public reporting, potential reporting programs or commitments, and timeline, e.g., within 3 years of endorsement: **[For Maintenance** – If not publicly reported, describe progress made toward achieving disclosure of performance results to the public at large and expected date for public reporting; provide rationale why continued endorsement should be considered.]

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.2. Provide a rationale for why the measure performance results are meaningful, understandable, and useful for public reporting.** If usefulness was demonstrated (e.g., focus group, cognitive testing), describe the data, method, and results:

**3.2 Use for other Accountability Functions (payment, certification, accreditation).** If used in a public accountability program, provide name of program(s), locations, Web page URL(s): 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.

**3b. Usefulness for Quality Improvement: H ☒ M ☒ L ☒ I ☒**

(The measure is meaningful, understandable and useful for quality improvement.)

**3b.1. Use in QI.** If used in quality improvement program, provide name of program(s), locations, Web page URL(s):

**[For Maintenance – If not used for QI, indicate the reasons and describe progress toward using performance results for improvement].**

**3b.2. Provide rationale for why the measure performance results are meaningful, understandable, and useful for quality improvement.** If usefulness was demonstrated (e.g., QI initiative), describe the data, method and results:

**Overall, to what extent was the criterion, *Usability*, met? H M L I**  
**Provide rationale based on specific subcriteria:**

#### 4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (**evaluation criteria**)

**4a. Data Generated as a Byproduct of Care Processes: H M L I**

**4a.1-2 How are the data elements needed to compute measure scores generated?** (Check all that apply).

Data used in the measure are:

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

**4b. Electronic Sources: H M L I**

**4b.1 Are the data elements needed for the measure as specified available electronically** (Elements that are needed to compute measure scores are in defined, computer-readable fields): No

**4b.2 If ALL data elements are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources:** NCQA plans to eventually specify this measure for electronic health records.

**4c. Susceptibility to Inaccuracies, Errors, or Unintended Consequences: H M L I**

**4c.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measurement identified during testing and/or operational use and strategies to prevent, minimize, or detect. 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. Data Collection Strategy/Implementation: H M L I**

**A.2 Please check if either of the following apply** (regarding proprietary measures): Proprietary measure

**4d.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 and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues** (e.g., fees for use of proprietary measures):

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.](#)

Overall, to what extent was the criterion, *Feasibility*, met? H ☐ M ☐ L ☐ I ☐

Provide rationale based on specific subcriteria:

### OVERALL SUITABILITY FOR ENDORSEMENT

Does the measure meet all the NQF criteria for endorsement? Yes ☐ No ☐

Rationale:

**If the Committee votes No, STOP.**

**If the Committee votes Yes, the final recommendation is contingent on comparison to related and competing measures.**

### 5. COMPARISON TO RELATED AND COMPETING MEASURES

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

**5.1 If there are related measures (either same measure focus or target population) or competing measures (both the same measure focus and same target population), list the NQF # and title of all related and/or competing measures:**

#### 5a. Harmonization

**5a.1 If this measure has EITHER the same measure focus OR the same target population as [NQF-endorsed measure\(s\)](#): Are the measure specifications completely harmonized?**

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

#### 5b. Competing Measure(s)

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

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

### CONTACT INFORMATION

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

**Co.2 Point of Contact:** [Sepheen, Byron, byron@ncqa.org, 202-955-3573-](#)

**Co.3 Measure Developer if different from Measure Steward:** [National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005](#)

**Co.4 Point of Contact:** [Sepheen, Byron, byron@ncqa.org, 202-955-3573-](#)

<b>Co.5 Submitter:</b> <a href="#">Sepheen, Byron, byron@ncqa.org, 202-955-3573-, National Committee for Quality Assurance</a>
<b>Co.6 Additional organizations that sponsored/participated in measure development:</b>
<b>Co.7 Public Contact:</b> <a href="#">Sepheen, Byron, byron@ncqa.org, 202-955-3573-, National Committee for Quality Assurance</a>

ADDITIONAL INFORMATION
<b>Workgroup/Expert Panel involved in measure development</b> <b>Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.</b> <a href="#">Child Health Measurement Advisory Panel:</a> <a href="#">Jeanne Alicandro</a> <a href="#">Barbara Dailey</a> <a href="#">Denise Dougherty, PhD</a> <a href="#">Ted Ganiats, MD</a> <a href="#">Foster Gesten, MD</a> <a href="#">Nikki Highsmith, MPA</a> <a href="#">Charlie Homer, MD, MPH</a> <a href="#">Jeff Kamil, MD</a> <a href="#">Elizabeth Siteman</a> <a href="#">Mary McIntyre, MD, MPH</a> <a href="#">Virginia Moyer, MD, MPH, FAAP</a> <a href="#">Lee Partridge</a> <a href="#">Xavier Sevilla, MD, FAAP</a> <a href="#">Michael Siegal</a> <a href="#">Jessie Sullivan</a>
<b>Ad.2 If adapted, provide title of original measure, NQF # if endorsed, and measure steward. Briefly describe the reasons for adapting the original measure and any work with the original measure steward:</b> <a href="#">NA</a>
<b>Measure Developer/Steward Updates and Ongoing Maintenance</b> <b>Ad.3 Year the measure was first released:</b> <b>Ad.4 Month and Year of most recent revision:</b> <b>Ad.5 What is your frequency for review/update of this measure?</b> <b>Ad.6 When is the next scheduled review/update for this measure?</b>
<b>Ad.7 Copyright statement:</b> <a href="#">© 2009 by the National Committee for Quality Assurance</a> <a href="#">1100 13th Street, NW, Suite 1000</a> <a href="#">Washington, DC 20005</a>
<b>Ad.8 Disclaimers:</b>
<b>Ad.9 Additional Information/Comments:</b>
<b>Date of Submission (MM/DD/YY):</b> <a href="#">11/05/2010</a>