H Influenza Type B (HiB) Vaccine

MEASURE DESCRIPTION:

H Influenza Type B (HiB) Vaccine indicates whether a child, who turned 2 years old during the measurement year, received three (3) *H. influenzae* type B vaccinations. This excludes children who had a previous adverse reaction to a vaccine, as well as those with a vaccine contraindication such as immunodeficiency syndrome, HIV, lymphoreticular or histiocytic tissue cancer, multiple myeloma, or leukemia.

This measure is based on the HEDIS measure *Childhood Immunization Status* (CIS).

PROPRIETARY STATUS:
This measure is owned by NCQA [NQF-Endorsed ™].

CRITERIA REVISION:
- This measure is based on the HEDIS® 2013 Technical Specifications for Physician Measurement criteria.

CRITERIA REVIEW DATE: 04/01/2013

MEASURE TYPE: Quality - process of care

MEASURE PACKAGE: Advantage Nationally Endorsed

MINIMUM DATA REQUIREMENTS (months): 24

MEASURE DETAILS:

DENOMINATOR:
Identifies the unique count of children who turned 2 years old during the measurement year. This excludes children who had a previous adverse reaction to a vaccine, as well as those with a vaccine contraindication such as immunodeficiency syndrome, HIV, lymphoreticular or histiocytic tissue cancer, multiple myeloma, or leukemia.

Age in years (as of the end of the measurement year)	Age in Years = 2

EXCLUSIONS:

Excludes from the eligible population all children who had a previous adverse reaction to a vaccine, as well as those with a vaccine contraindication such as immunodeficiency syndrome, HIV, lymphoreticular or histiocytic tissue cancer, multiple myeloma, or leukemia. Children who have a contraindication for one vaccine are excluded from the denominator for all vaccine rates and combination rates, since the denominator for all rates must be the same. Contraindications are checked as far back as possible in the patient's history, but must have occurred by their 2nd birthday.

Anaphylactic reaction to the vaccine or its components (anytime prior to the child's 2nd birthday)	ICD-9 Diagnosis Code = 999.4, 999.42
OR	
Encephalopathy (anytime prior to the child's 2nd birthday)	ICD-9 Diagnosis Code = 323.51 And ICD-9 Diagnosis Code = E948.4, E948.5, E948.6

OR	
Immunodeficiency syndromes, HIV disease, asymptomatic HIV, cancer of lymphoreticular or histiocytic tissue, multiple myeloma, or leukemia (anytime prior to the child's 2nd birthday)	ICD-9 Diagnosis Code = 042, 200.00-208.91, 279*, V08

NUMERATOR:

Identifies children who turned 2 years old during the measurement year and received three (3) *H. influenzae* type B (HiB) vaccinations with different dates of service, on or before the child's 2nd birthday. Any vaccination administered before 42 days after birth is not counted. Only evidence of the antigen or vaccine is counted in the numerator.

3 HiB vaccinations received with different dates of service (from 42 days after birth to the child's 2nd birthday)	CPT Procedure Code = 90645-90648, 90698, 90721, 90748

CONTINUOUS ENROLLMENT:

Continuously enrolled with medical coverage for the 12 months prior to the child's 2nd birthday, which equates to 12 months out of 12 months.

MEASURE BACKGROUND:

The national vaccine immunization program is a very successful preventive care program in the United States. An example is the greater-than-99 percent decrease in cases of invasive *Haemophilus influenzae* type B (HiB) infection since the introduction to a specific immunization in 1987. Vaccine-preventable diseases were a major cause of morbidity and mortality in children before the institution of routine immunizations. Rubella caused devastating congenital defects in children born to infected mothers. Hepatitis B, infecting approximately 250,000 in the U.S, may lead to liver failure or malignancy. Varicella infection (chicken pox) is generally mild, but results in school and work absences, and fatalities rarely occur.

Prevention of disease is essential for both patient health and control of medical costs. Immunization against Hepatitis A and B, diphtheria, tetanus, pertussis, HiB, polio, rotavirus, measles, mumps, rubella, varicella zoster virus (VZV), pneumococcus, influenza, meningococcus, and human papillomavirus is considered the standard for the United States. The use of combination vaccines helps reduce the number of inoculations at each visit and improve compliance. Most of the immunizations are given as combined vaccines during routine well-child checks in the first 2 years of life.

In 2009, only 69.9 percent of U.S. toddlers 19 to 35 months of age had received their basic immunization series (>=4 doses of DTP/DT/DTaP, >=3 doses of poliovirus vaccine, >=1 dose of measles-containing vaccine, >=3 doses of HiB vaccine, >=3 doses of hepatitis B vaccine, and >=1 dose of varicella vaccine). Even with generally good coverage by school age, there may be many delays in the vaccination schedule. When current scheduling guidelines aren't followed, children remain susceptible to these preventable diseases, particularly when cases of the illness can be imported from other countries. Benefits and risks are associated with using all immunizations. Patient benefits include partial or complete protection against infection. Societal benefits include prevention of disease outbreaks, and reduction in healthcare-related costs.

Vaccination risks range from common, minor, and local adverse effects to rare, severe, and life-threatening conditions. Therefore, recommendations for vaccination practices balance scientific evidence of benefits for each person and to society against the potential costs and risks for vaccination for the individual and programs.
