

HAB HIV Performance Measures: Pediatrics

Pediatric Performance Measure: MMR Vaccination											
Percentage of pediatric patients ¹ with HIV infection who have had at least one dose of Measles, Mumps & Rubella (MMR) vaccine administered ² between 12-24 months of age											
Numerator:	Number of HIV-infected pediatric patients who had at least one dose of MMR administered between 12-24 months of age										
Denominator:	Number of HIV-infected pediatric patients ≥ 2 years and < 3 years of age who had a medical visit with a provider with prescribing privileges ³ at least once in the measurement year										
Patient Exclusions:	<ol style="list-style-type: none"> 1. Pediatric patients with CD4 $< 15\%$ between 12-24 months of age 2. Pediatric patients newly enrolled after 2 yrs of age 										
Data Elements:	<ol style="list-style-type: none"> 1. Is the pediatric patient HIV-infected? (Y/N) <ol style="list-style-type: none"> a. If yes, was the patient ≥ 2 years and < 3 years of age at any time in the measurement year? (Y/N) <ol style="list-style-type: none"> i. If yes, was the patient seen by a provider with prescribing privileges during the measurement year? (Y/N) <ol style="list-style-type: none"> 1. If yes, did the patient receive at least one dose of MMR vaccine² between 12-24 months of age? (Y/N) <ol style="list-style-type: none"> a. If yes, list the date of immunization or serology 										
Data Sources:	<ul style="list-style-type: none"> • Electronic Medical Record/Electronic Health Record • CAREWare, Lab Tracker or other electronic data base • Medical record data abstraction by grantee of a sample of records • Billing records 										
National Goals, Targets, or Benchmarks for Comparison:	Healthy People 2010 ⁴ goal: 90% for individual vaccines National Immunization Survey ⁵ <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>2004</th> <th>2005</th> <th>2006</th> <th>2007</th> <th>2008</th> </tr> </thead> <tbody> <tr> <td>93.0%</td> <td>91.5%</td> <td>92.3%</td> <td>92.3%</td> <td>92.1%</td> </tr> </tbody> </table> <p>[Note: The NIS estimates vaccination coverage among children 19-35 months and is not specific to HIV disease].</p>	2004	2005	2006	2007	2008	93.0%	91.5%	92.3%	92.3%	92.1%
2004	2005	2006	2007	2008							
93.0%	91.5%	92.3%	92.3%	92.1%							
Outcome Measures for Consideration:	<ul style="list-style-type: none"> • Rate of measles in the clinic population • Rate of mumps in the clinic population • Rate of rubella in the clinic population 										
Basis for Selection:											
Vaccines are an effective primary prevention tool and HIV-infected children should be protected from vaccine-preventable diseases. Children with HIV infection are at higher risk than immunocompetent children for complications of varicella, herpes zoster and measles. MMR is recommended for all asymptomatic and symptomatic HIV-infected children who are not severely immunocompromised and who lack evidence of measles immunity. ⁶											

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The National Immunization Survey notes that while many of the individual vaccine rates meet or exceed the goals set by Healthy People 2010, children living below poverty had lower coverage than children living at or above poverty for most vaccines. Sustaining high coverage levels and using effective methods of reducing disparities across states/local areas and income groups remains a priority to fully protect children and limit the incidence of vaccine-preventable diseases.⁵

The measure reflects important aspects of care that significantly impacts mortality.

US Public Health Guidelines:

MMR vaccine is recommended for all asymptomatic HIV-infected persons who are not severely immunosuppressed and who lack evidence of measles immunity. MMR vaccination of symptomatic HIV-infected persons should be considered if they: a) do not have evidence of severe immunosuppression (CD4<15%) and; b) lack evidence of measles immunity.⁶

References/Notes:

¹ “Pediatric patient” includes all patients younger than 13 years.

² Documentation of vaccination can include any of the following: 1) immunization record from another provider; 2) personal record of immunization; or 3) serologic evidence of antibody titers. If serology is used, titers must have been drawn before 2 years of age.

³ A “provider with prescribing privileges” is a health care professional who is certified in his/her jurisdiction to prescribe medications.⁴ US Department of Health and Human Services (2000) Healthy People 2010. (http://www.healthypeople.gov/Document/HTML/Volume1/14Immunization.htm#_Toc494510240) Accessed February 10, 2010.

⁵ Centers for Disease Control & Prevention. National, state, and local area vaccination coverage among children aged 19-35 months—United States, 2008. MMWR; Aug 28, 2009; 58(33); 921-926. (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5833a3.htm?s_cid=mm5833a3_e) Accessed February 10, 2010.

⁶ Centers for Disease Control and Prevention. Guidelines for the Prevention and Treatment of Opportunistic Infections Among HIV-Exposed and HIV-Infected Children. MMWR 2009;58(No. RR-11). http://aidsinfo.nih.gov/contentfiles/Pediatric_OI.pdf Accessed February 10, 2010, pp.161-163.