

## Section IX. 2012 Immunization Information Systems Annual Report

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## Instructions

- All grantees that conduct IIS activities in their state/city/territory are required to complete this report.
- All grantees with IIS in transition are required to complete questions 1 through 7 and should consult with their IISSB Project Officer to discuss completing other data elements on the questionnaire.
- Items in italics are completed by CDC; grantees only need to respond to questions that are NOT italicized.
- Throughout the IISAR questionnaire, age ranges are described as from age X *through* Y months/years. This terminology is consistent with language used by the Advisory Committee on Immunization Practices and indicates the lower and upper age limits for who should be included in data collection. In all cases, age X is the lower bound and age Y is the upper bound. For example, adolescents aged 11 through 17 years should include adolescents at least 11 years old and less than 18 years of age. Those younger than 11 years, or 18 years or older, would not be included in this group.
- Submission of the final Immunization Information Systems Annual Progress Report must be done by the Immunization Program Manager or designee.
- Only one Annual Report will be accepted per grantee. If grantees receive information from other regions or counties in their jurisdiction, the grantee must compile the information into one Annual Report.
- The Annual Report is **due on March 31, 2013**; the year of performance is CY2012. CDC IISSB staff will contact each IIS after March 31 with questions and/or comments about the report and data submitted for CY2012. After March 31, 2013, the submission data will be corrected and revised. Any revised submissions from grantees should correct issues with the submitted data as of March 31 ONLY. When submitting revisions, do NOT submit additional 2012 data that were uploaded AFTER the March 31 cutoff date.
- Revisions to the IIS section of the Annual Report may be sent to Terence Ng, CDC/NCIRD/IISSB at VFK5@cdc.gov and MUST be received by April 30, 2013.
- Please contact Terence Ng, CDC/NCIRD/IISSB at VFK5@cdc.gov or Cristina Cardemil at IYK8@cdc.gov to expand on any answers, document an answer you feel is more appropriate than the category provided, if the answer to a question is unknown or data are not available, or if you need clarification on a question or answer choice.

## CONTACT INFORMATION

### Logic Guidance:

Questions 1-6 are required to be completed by all grantees, including those with IIS in transition or temporarily inactive  
List ONLY government employee contacts in questions 5 and 6

1. Grantee \_\_\_\_\_
2. Name of IIS \_\_\_\_\_
3. Immunization Program or IIS web address \_\_\_\_\_
4. Name of person(s) completing this report \_\_\_\_\_
  
5. Programmatic IIS Contact Person (a manager or administrator who coordinates IIS activities):
  - a. First name: \_\_\_\_\_ b. Last Name: \_\_\_\_\_ c. State
  - d. Title \_\_\_\_\_ e. Zip \_\_\_\_\_ f. Affiliation \_\_\_\_\_ g. Phone: \_\_\_\_\_ h. Ext \_\_\_\_\_ i. Address \_\_\_\_\_ j. Fax \_\_\_\_\_ k. Address 2 \_\_\_\_\_ l. Email \_\_\_\_\_ m. City \_\_\_\_\_ n.  Check if contact person for questions about this report
  
6. Technical IIS Contact Person (coordinator of IIS software and/or hardware) :
  - a.  Check if same as programmatic contact (if yes, autopopulate b-o)
  - b. First name \_\_\_\_\_ c. Last Name \_\_\_\_\_ d. State
  - e. Title \_\_\_\_\_ f. Zip \_\_\_\_\_ g. Affiliation \_\_\_\_\_ h. Phone: \_\_\_\_\_ i. Ext \_\_\_\_\_ j. Address \_\_\_\_\_ k. Fax \_\_\_\_\_ l. Address 2 \_\_\_\_\_ m. Email \_\_\_\_\_ n. City \_\_\_\_\_ o.  Check if contact person for questions about this report

## SCOPE OF IIS

7.  There is no IIS in this state/city/territory. *(If yes, block out entire report)*
8. Which age groups are included in your IIS? Select one:
- a. Birth through 59 months of age *(If selected, block out adolescent and adult questions)*
  - b. Birth through 18 years of age *(If selected, block out adult questions)*
  - c. All ages, including adults
  - d. Other: please specify age range

## PARTICIPATION MEASURES

### Child Participation in IIS (aged 4 months through 5 years)

#### Logic Guidance:

- For children born from Jan 1, 2007 through Aug 31, 2012.
- Include:
  - All doses (valid and invalid) administered **before** 1/1/2013, including those **recorded** after 12/31/2012.
- Exclude:
  - Children with addresses outside of your state or geopolitical area. Geopolitical Area is defined as the area that contains the population of children residing in the geopolitical location covered by the IIS.
  - INACTIVE children in IIS. Children are considered inactive for this report if they are (1) inactive permanently, or (2) have moved or gone elsewhere from the geopolitical area covered by the IIS.
  - H1N1 vaccines administered and demographic records belonging to those with only an H1N1 vaccination record.
  - Travel vaccines (yellow fever, typhoid, etc.) <http://wwwnc.cdc.gov/travel/page/yellowbook-2012-home.htm>.

9. *Number of children aged 4 months through 5 years in the geopolitical area (2012 Census Data)*

10. How many children aged 4 months through 5 years (born from Jan 1, 2007 through Aug 31, 2012) are both in your geopolitical area AND in your IIS? \_\_\_\_\_

**10.1.** *Proportion of children aged 4 months through 5 years in both your geopolitical area AND in your IIS (Q10/Q9)*

11. How many children in question 10 (children born from Jan 1, 2007 through Aug 31, 2012 that are both in your geopolitical area AND in your IIS) have 2 or more immunizations recorded in your IIS? (Healthy People 2020 Objective) \_\_\_\_\_

**11.1.** *Proportion of children aged 4 months through 5 years in your geopolitical area and IIS that have 2 or more immunizations recorded in your IIS (Q11/Q9)*

## Adolescent Participation in IIS (aged 11 through 17 years)

### Logic Guidance – Adolescent participation

- Skip this section if you answered 'a' on question 8.
- For adolescents born from Jan 1, 1995 through Dec 31, 2001
- Include:
  - All doses (valid and invalid) administered **before** 1/1/2013, including those **recorded** after 12/31/2012.
  - Adolescent doses **ONLY** if they were administered from age 9 through 17 years. Include: Tdap/Td, HPV, meningococcal, seasonal influenza, pneumococcal, HepA, HepB, polio, MMR, and varicella.  
<http://www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html#printable>
- Exclude:
  - Doses administered to adolescents before the child's 9<sup>th</sup> birthday.
  - Adolescents with addresses outside of your state or geopolitical area. Geopolitical Area is defined as the area that contains the population of children residing in the geopolitical location covered by the IIS.
  - INACTIVE adolescents in IIS. Adolescents are considered inactive for this report if they are (1) inactive permanently, or (2) have moved or gone elsewhere from the geopolitical area covered by the IIS.
  - H1N1 vaccines administered and demographic records belonging to those with only an H1N1 vaccination record.
  - Travel vaccines (yellow fever, typhoid, etc.) <http://wwwnc.cdc.gov/travel/page/yellowbook-2012-home.htm>

**12.** *Number of adolescents aged 11 through 17 years in your geopolitical area (2011 Census)*

**13.** How many adolescents aged 11 through 17 years (born from Jan 1, 1995 through Dec 31, 2001) are both in your geopolitical area AND in your IIS? \_\_\_\_\_

**13.1.** *Proportion of adolescents aged 11 through 17 years that are both in your geopolitical area AND in your IIS (Q13/Q12)*

**14.** How many adolescents in question 13 (adolescents born from Jan 1, 1995 through Dec 31, 2001 that are both in your geopolitical area AND in your IIS) have 2 or more adolescent immunizations administered from age 9 through 17 years recorded in your IIS? (Healthy People 2020 Objective) \_\_\_\_\_

**14.1.** *Proportion of adolescents aged 11 through 17 years in your geopolitical area and IIS that have 2 or more adolescent immunizations recorded in your IIS (Q14/Q12)*

## Adult Participation in IIS (aged 19 years and older)

### Logic Guidance - Adult Participation in IIS

- Skip this section if you answered 'a' or 'b' on question 8.
- For adults born on or before Dec 31, 1993
- Include:
  - All doses (valid and invalid) administered **before** 1/1/2013, including those **recorded** after 12/31/2012.
  - Adult doses **ONLY** if they were administered from age 19 years and older. Include: seasonal influenza, Tdap/Td, varicella, HPV, zoster, MMR, pneumococcal, meningococcal, HepA, and HepB  
<http://www.cdc.gov/vaccines/schedules/downloads/adult/adult-schedule.pdf>
- Exclude:
  - Doses administered before 19 years of age.
  - Adults with addresses outside of your state or geopolitical area. Geopolitical Area is defined as the area that contains the population of adults residing in the geopolitical location covered by the IIS.
  - INACTIVE adults. Adults are considered inactive for this report if they are (1) inactive permanently, or (2) have moved or gone elsewhere from the geopolitical area covered by the IIS.
  - H1N1 vaccines administered and demographic records belonging to those with only an H1N1 vaccination record.
  - Travel vaccines (yellow fever, typhoid, etc.) <http://wwwnc.cdc.gov/travel/page/yellowbook-2012-home.htm>

**15.** *Number of adults aged 19 years and older in your geopolitical area (2012 Census Data)*

**16.** How many adults aged 19 years and older (born on or before Dec 31, 1993) are both in your geopolitical area AND in your IIS?

**16.1.** *Proportion of adults aged 19 years and older that are both in your geopolitical area AND in your IIS (Q16/Q15)*

**17.** How many adults in question 16 (adults born on or before Dec 31, 1993 who are both in your geopolitical area AND in your IIS) have 1 or more immunization(s) administered at 19 years and older recorded in your IIS? \_\_\_\_\_

**17.1.** *Proportion of adults aged 19 years and older in your geopolitical area and IIS that have 1 or more adult immunization(s) recorded in your IIS (Q17/Q15)*

## Provider Site Participation

### Logic Guidance

- **Immunization Site:** A service delivery location (public or private) that maintains permanent records (excluding temporary or mobile immunization clinics, health fairs, etc.).
- **Public Provider Immunization Site:** an immunization site funded by a governmental agency directly; a unit of government is responsible for managing operations.
- **Private Provider Immunization Site:** an immunization site funded privately and or indirectly by a governmental agency (e.g., CMS); a non-governmental unit is responsible for managing operations.
- **Include:**
  - All provider sites enrolled in your IIS, regardless of age group served by those sites or your IIS.
  - All provider sites enrolled in the IIS as of December 31, 2012.
- **Exclude:**

**Provider sites that only enrolled because of H1N1 AND only provide emergency vaccines.** (e.g., exclude a community center that only enrolled due to H1N1 and does not provide other immunizations. However, include a pediatrician that enrolled due to H1N1, but provides routine immunizations.)

Examples of Public Provider Sites	Examples of Private Provider Sites
Public health department operated clinic	Private practice (solo, group, or HMO)
Public health department clinic as agent for FQHC/RHC	Private practice (solo or group) as agent for FQHC/RHC
Public hospital	Private hospital
FQHC/RHC (community, migrant, or rural)	Special vaccine clinics, e.g. flu clinics
Community health center	Pharmacy
Tribal or Indian Health Service clinic	Other private health facility
WIC	
STD/HIV	
Family planning	
Juvenile detention center	
Correctional facility (all ages)	
Drug treatment facility	
Military health care facility	

NOTE: Examples are not mutually exclusive. For example, correctional facilities/drug treatment facilities/Community Health Centers/family planning clinics/etc can be either public or private depending on funding source.

### PUBLIC Provider Sites

	VFC Sites	Non-VFC Sites
<b>18.</b> Number of public provider sites in your geopolitical area enrolled in your IIS as of Dec 31, 2012	a.	b.
<b>19.</b> Number of enrolled public provider sites reporting data to your IIS from Jul 1 – Dec 31, 2012	a.	b.

### PRIVATE Provider Sites

	VFC Sites	Non-VFC Sites
<b>20.</b> Number of private provider sites in your geopolitical area enrolled in your IIS as of Dec 31, 2012	a.	b.
<b>21.</b> Number of enrolled private provider sites reporting data to your IIS from Jul 1 – Dec 31, 2012	a.	b.

## IMMUNIZATION COVERAGE MEASURES

### Birth Dose Hepatitis B Coverage

#### **Logic Guidance:**

- **Coverage** is defined as the number of individuals in a certain age group who received an immunization(s) divided by the census-based estimate of persons in that age group in your geopolitical area.
- For children born from Jan 1, 2012 through Dec 31, 2012.
- Include:
  - Hepatitis B doses administered on or before the 3<sup>rd</sup> day of life ONLY. The day of birth equals Day 0.
    - Example: For a child born on Jan 1, only include Hep B doses administered on Jan 1, Jan 2, Jan 3, or Jan 4.
  - Hep B doses administered **before** 1/1/2013, including those **recorded** after 12/31/2012.
- Exclude:
  - Doses administered after the 3<sup>rd</sup> day of life (e.g., for a child born on Jan 1, a dose administered on Jan 5 or later would be excluded)
  - Children with addresses outside of your state or geopolitical area. Geopolitical Area is defined as the area that contains the population of children residing in the geopolitical location covered by the IIS.
  - INACTIVE children in IIS. Children are considered inactive for this report if they are (1) inactive permanently, or (2) have moved or gone elsewhere from the geopolitical area covered by the IIS.

**22.** *Number of children born in 2012 in your geopolitical area (2012 Census Data)*

**23.** How many children born from Jan 1 through Dec 31, 2012 in your geopolitical area AND in your IIS received birth dose of Hep B on or before the 3<sup>rd</sup> day of life? \_\_\_\_\_

**23.1.** *Coverage – Proportion of children born in 2012 in your geopolitical area who received birth dose of Hep B on or before the 3<sup>rd</sup> day of life*

## 4:3:1:3:3:1:4 Series Coverage and Completeness (for children aged 19 through 35 months)

### Logic Guidance:

- **Coverage** is defined as the number of individuals in a certain age group who received an immunization(s) divided by the census-based estimate of persons in that age group in your geopolitical area.
- **Completeness** is defined as the number of individuals in a certain age group who received a particular immunization(s) (e.g., complete 4:3:1:3:3:1:4 series ) divided by the number of individuals in that age group who are in the geopolitical area and who participate in the IIS (i.e. have 2 or more immunizations recorded in the IIS).
- For children born from Jan 1, 2010 through May 31, 2011.
- Doses administered **before** 1/1/2013, including those **recorded** after 12/31/2012.
- The 4:3:1:3:3:1:4 series includes 4 or more DTaP/DTP/DT, 3 or more Polio, 1 or more MMR, 3 or more Hepatitis B,  $\geq 3$  or  $\geq 4$  of Hib\*, 1 or more Varicella<sup>†</sup>, and 4 or more pneumococcal containing vaccine).
  - \*When calculating Hib doses, include children who received 4+ Hib-containing vaccine doses (includes any type of Hib vaccine, including Hib, unspecified formulation) or 2 Hib-OMP doses (manufactured by Merck; includes PedVaxHib and Comvax) followed by  $\geq 1$  Hib dose of any type.

### Valid Doses:

- Include:
  - Valid doses are defined as doses that were administered according to ACIP recommendations.
  - † When counting Varicella, INCLUDE those with history of disease.

### All Doses:

- Include:
  - Both valid and invalid doses.
  - † When counting Varicella, EXCLUDE those with history of disease.

### For Both Columns (Valid and All Doses):

- Exclude:
  - Children with addresses outside of your state or geopolitical area. Geopolitical Area is defined as the area that contains the population of children residing in the geopolitical location covered by the IIS. INACTIVE children in IIS. Children are considered inactive for this report if they are (1) inactive permanently, or (2) have moved or gone elsewhere from the geopolitical area covered by the IIS. H1N1 vaccines administered and demographic records belonging to those with only an H1N1 vaccination record.
  - Travel vaccines (yellow fever, typhoid, etc.) <http://wwwnc.cdc.gov/travel/page/yellowbook-2012-home.htm>

	Valid doses	All doses
24. Number of children aged 19 through 35 months in your geopolitical area (2012 Census Data)	--	--
25. How many children aged 19 through 35 months (born during Jan 1, 2010 through May 31, 2011) that are both in your geopolitical area AND in your IIS and have 2 or more immunizations recorded in your IIS?		
26. How many children in question 25 (children born during Jan 1, 2010 through May 31, 2011 that		

	are both in your geopolitical area AND have 2 or more doses recorded in your IIS) have received the complete 4:3:1:3:3:1:4 series?		
	<b>26.1.</b> <i>Coverage – Proportion of children aged 19 through 35 months in the population that have completed 4:3:1:3:3:1:4 series (Q.26/Q.24)</i>	--	--
	<b>26.2.</b> <i>Completeness – Proportion of children aged 19 through 35 months who participate in your IIS that have completed the 4:3:1:3:3:1:4 series (Q.26/Q.25)</i>	--	--

## Adolescent Immunization Coverage (aged 13 through 17 years)

### Logic Guidance – Adolescent Immunization Coverage in IIS

- Skip this section if you answered 'a' on question 8.
- For adolescents born from Jan 1, 1995 through Dec 31,1999
- **Coverage** is defined as the number of individuals in a certain age group who received an immunization(s) divided by the census-based estimate of persons in that age group in your geopolitical area.

### Valid Doses

- **Valid doses** are defined as doses that were administered according to ACIP recommendations.
- Include:
  - Doses administered **before** 1/1/2013, including those **recorded** after 12/31/2012.
  - Valid ACIP recommended adolescent doses administered at any time before the child's 18<sup>th</sup> birthday

### All Doses (Valid and Invalid)

- Include:
  - Doses administered **before** 1/1/2013, including those **recorded** after 12/31/2012.
  - All ACIP recommended adolescent doses administered at any time before the child's 18th birthday

### For Both Columns (Valid and All Doses)

- Exclude:
  - Adolescents with addresses outside of your state or geopolitical area. Geopolitical Area is defined as the area that contains the population of children residing in the geopolitical location covered by the IIS.
  - INACTIVE adolescents in IIS. Adolescents are considered inactive for this report if they are (1) inactive permanently, or (2) have moved or gone elsewhere at a jurisdictional level.
  - H1N1 vaccines administered and demographic records belonging to those with only an H1N1 vaccination record.

27. Number of adolescents aged 13 through 17 years in your geopolitical area (2012 Census Data)	--	
	Valid doses	All doses
28. How many adolescents aged 13 through 17 years (born from Jan 1, 1995 through Dec 31, 1999) that are both in your geopolitical area AND in your IIS have at least one dose of Tdap/Td?		
<b>28.1.</b> Coverage - Proportion of adolescents aged 13 through 17 years in the population that have at least one dose of Tdap/Td. (Q28/Q27)	--	--
29. How many adolescents aged 13 through 17 years (born from Jan 1, 1995 through Dec 31, 1999) that are both in your geopolitical area AND in your IIS have at least one dose of meningococcal vaccine?		
<b>29.1.</b> Coverage - Proportion of adolescents aged 13 through 17 years in the population that have at least one dose of meningococcal vaccine (Q29/Q27)	--	--
30. How many adolescent FEMALES aged 13 through 17 years are in your geopolitical area? (2011 Census)		
31. How many adolescent FEMALES aged 13 through 17 years (born from Jan 1, 1995 through Dec 31, 1999) that are both in your geopolitical area AND in your IIS have at least 3 doses of HPV?		
<b>31.1.</b> Coverage – Proportion of adolescent FEMALES aged 13 through 17 years in the population that have at least 3 doses of HPV (Q.31/Q.30)	--	--
32. How many adolescent MALES aged 13 through 17 years are in your geopolitical area? (2011	--	--

<i>Census)</i>		
<b>33.</b> How many adolescent MALES aged 13 through 17 years (born from Jan 1, 1995 through Dec 31, 1999) that are both in your geopolitical area AND in your IIS have at least 3 doses of HPV?		
<b>33.1.</b> <i>Coverage – Proportion of adolescent MALES aged 13 through 17 years in the population that have at least 3 doses of HPV (Q.33/Q.32)</i>	--	--

## FUNCTIONAL STANDARDS

### Functional Standard 1: Electronically store data on all National Vaccine Advisory Committee (NVAC)-approved core data elements

Definition: The IIS contains fields for all NVAC-approved core data elements.

<http://www.cdc.gov/vaccines/programs/iis/core-data-elements.html>

#### Logic Guidance: Functional Standard 1 – NVAC Core Data Elements – Patient Records

- Please fill in the following on each core data element field included in your IIS database.
- For children **aged 4 months through 5 years**: born during January 1, 2007 through August 31, 2012.
- % Data Element Populated should be filled out as in this example for Patient's First Name:

$$\% \text{ Patient First Name populated} = \frac{\text{Number of patient records in the IIS with date of birth during Jan 1, 2007 through Aug 31, 2012, that have child's first name populated}}{\text{Number of patient records in the IIS with date of birth during Jan 1, 2007 through Aug 31, 2012}}$$

- Exclude:
  - Children with addresses outside of your state or geopolitical area. Geopolitical Area is defined as the area that contains the population of children residing in the geopolitical location covered by the IIS.
  - INACTIVE children in IIS. Children are considered inactive for this report if they are (1) inactive permanently, or (2) have moved or gone elsewhere from the geopolitical area covered by the IIS.
  - H1N1 vaccines administered and demographic records belonging to those with only an H1N1 vaccination record.
  - Travel vaccines (yellow fever, typhoid, etc.) <http://wwwnc.cdc.gov/travel/page/yellowbook-2012-home.htm>.

	Field Status	% Data Element Populated <i>Note: the denominator for each of these calculations is the number of patient records in the IIS with date of birth from Jan 1, 2007 through Aug 31, 2012</i>
<b>34. Patient's First Name</b>	a. <input type="checkbox"/> No field in IIS	b. %
<b>35. Patient's Middle Name or Initial</b>	a. <input type="checkbox"/> No field in IIS	b. %
<b>36. Patient's Last Name</b>	a. <input type="checkbox"/> No field in IIS	b. %
<b>37. Patient's Birth Date</b>	a. <input type="checkbox"/> No field in IIS	b. %
<b>38. Patient's Sex</b>	a. <input type="checkbox"/> No field in IIS	b. %
<b>39. Patient's Birth state</b>	a. <input type="checkbox"/> No field in IIS	b. %
<b>40. Patient's Birth Country</b>	a. <input type="checkbox"/> No field in IIS	b. %
<b>41. Patient's Birth Order</b> Definition: If the patient was part of a multiple birth, a number indicating the	a. <input type="checkbox"/> No field in IIS	X

patient's birth order is entered in this field.		
<b>42. Mother's First Name</b> Definition: The mother's name element refers to current legal mother (who may or may not be the birth mother).	a. <input type="checkbox"/> No field in IIS	b. %
<b>43. Mother's Middle Name</b> Definition: The mother's name element refers to current legal mother (who may or may not be the birth mother).	a. <input type="checkbox"/> No field in IIS	b. %
<b>44. Mother's Last Name</b> Definition: The mother's name element refers to current legal mother (who may or may not be the birth mother).	a. <input type="checkbox"/> No field in IIS	b. %
<b>45. Mother's Maiden Name</b> Definition: The mother's name element refers to current legal mother (who may or may not be the birth mother).	a. <input type="checkbox"/> No field in IIS	b. %
<b>46. Address (Street, City, State, Zip)</b> Logic guidance: Exclude addresses outside your geopolitical area. Include PO box addresses.	a. <input type="checkbox"/> No field in IIS	b. % Street c. % City d. % State e. % Zip code
<b>47. Phone Number</b> Logic guidance: Phone number associated with the patient that could be used to communicate with patient and/or the parent/guardian.	a. <input type="checkbox"/> No field in IIS	b. %
<b>48. Race</b> Examples: <ul style="list-style-type: none"> <li>American Indian or Alaskan Native</li> <li>Asian</li> <li>Black or African American</li> <li>Native Hawaiian or Other Pacific Islander</li> <li>White</li> <li>Other</li> </ul>	a. <input type="checkbox"/> No field in IIS	b. %
<b>49. Ethnicity</b> Examples: <ul style="list-style-type: none"> <li>Hispanic or Latino [A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race]</li> <li>Not Hispanic or Latino</li> </ul>	a. <input type="checkbox"/> No field in IIS	b. %
<b>50. Patient-Level VFC eligibility</b> Definition: A field to denote that a person's eligibility for VFC was assessed. Examples: <ul style="list-style-type: none"> <li>Not VFC eligible</li> <li>VFC eligible – Medicaid/Medicaid Managed Care</li> <li>VFC eligible – Uninsured</li> <li>VFC eligible – American Indian/Alaskan</li> </ul>	a. <input type="checkbox"/> No field in IIS	b. %

<p>Native</p> <ul style="list-style-type: none"> <li>• VFC eligible – Underinsured (FQHC/RHC/Provider with delegated authority)</li> <li>• VFC eligible – State- or Local-specific eligibility</li> </ul> <p>NOTE: If the patient can have more than one status recorded in your IIS, <b>include</b> the patient in the numerator if at least <b>one</b> of the fields contains data that indicate the child is or is not VFC-eligible.</p>		
<p><b>51. Patient status indicators:</b>  Definition: A field to denote the status of a patient.  Examples:</p> <ul style="list-style-type: none"> <li>• Active</li> <li>• Inactive</li> <li>• Inactive – Lost to follow-up,(cannot contact)</li> <li>• Inactive – Moved or gone elsewhere (transferred)</li> <li>• Inactive – Permanently inactive (deceased)</li> </ul> <p>NOTE: If the patient has more than one patient status indicator in your IIS (e.g. for multiple provider sites), include the patient in the numerator if they have at least <b>one</b> active or inactive status indicated in their record.</p>	<p>a. Provider level:  <input type="checkbox"/> No field in IIS</p> <p>b. Jurisdictional level:  <input type="checkbox"/> No field in IIS</p>	<p>c. Provider level %</p> <p>d. Jurisdictional level %</p>
<p><b>52. Email address</b>  Logic guidance: Email address that could be used to communicate with patient and/or parent/guardian.</p>	<p>a. <input type="checkbox"/> No field in IIS</p>	<p>b. %</p>
<p><b>53. History of Varicella Disease Indicator</b>  Definition: A field to denote that person had varicella.</p> <p>NOTE: History of Varicella Disease Indicator response in 53b must be the <b>number</b> of children, <b>NOT</b> a percentage.</p>	<p>a. <input type="checkbox"/> No field in IIS</p>	<p>b. Number of records with Varicella history_____</p>

## VACCINATION RECORDS

### Logic Guidance: Functional Standard 1 – NVAC Core Data Elements – Vaccination Records

- Please fill in the following on each core data element field included in your IIS database.
- For all **vaccinations** administered to children **aged 4 months through 5 years** (born from January 1, 2007 through August 31, 2012) in CY2012.
- % Data Element Populated should be filled out as in this example numerator and denominator for the field ‘vaccine type’:

$$\% \text{ Vaccine Type populated} = \frac{\text{Number of vaccination records in the IIS for children born during Jan 1, 2007 through August 31, 2012 with vaccine administration date during Jan 1, 2012 through Dec 31, 2012, that have the field 'vaccine type' populated}}{\text{Number of vaccination records in the IIS for children born during Jan 1, 2007 through August 31, 2012 with vaccine administration date during Jan 1, 2012 through Dec 31, 2012}}$$

- Exclude:
  - Children with addresses outside of your state or geopolitical area. Geopolitical Area is defined as the area that contains the population of children residing in the geopolitical location covered by the IIS.
  - INACTIVE children in IIS. Children are considered inactive for this report if they are (1) inactive permanently, or (2) have moved or gone elsewhere from the geopolitical area covered by the IIS.
  - H1N1 vaccines administered and demographic records belonging to those with only an H1N1 vaccination record.
  - Travel vaccines (yellow fever, typhoid, etc.) <http://wwwnc.cdc.gov/travel/page/yellowbook-2012-home.htm>.
  - Historical vaccinations

	Field Status	% Data Element Populated <i>Note: the denominator for each of these calculations is the number of vaccination records in the IIS for children born during Jan 1, 2007 through August 31, 2012 with vaccine administration date during Jan 1, 2012 through Dec 31, 2012</i>
<b>54. Vaccine Type</b>	a. <input type="checkbox"/> No field in IIS	b. %
<b>55. Vaccine Manufacturer</b>	a. <input type="checkbox"/> No field in IIS	b. %
<b>56. Vaccination Date</b>	a. <input type="checkbox"/> No field in IIS	b. %
<b>57. Vaccine Lot Number</b>	a. <input type="checkbox"/> No field in IIS	b. %
<b>58. Historical vaccination flag indicator</b>	a. <input type="checkbox"/> No field in IIS	

<p>Definition: Field to denote that a vaccination was entered based on historical information.</p>		
<p><b>59. Vaccine-Level VFC eligibility</b>  Definition: A field to denote that a vaccination's eligibility for coverage under VFC was assessed.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• Not VFC eligible</li> <li>• VFC eligible – Medicaid/Medicaid Managed Care</li> <li>• VFC eligible – Uninsured</li> <li>• VFC eligible – American Indian/Alaskan Native</li> <li>• VFC eligible – Underinsured (FQHC/RHC/Provider with delegated authority)</li> <li>• VFC eligible – State- or Local-specific eligibility</li> </ul>	<p>a. <input type="checkbox"/> No field in IIS</p>	<p>b. %</p>

**Functional Standard 2: Establish a registry record within 6 weeks of birth for each newborn child born in the catchment area**

Definition: Identifying information from a population-based data set (e.g., vital statistics) is regularly sent to or retrieved by the IIS in a computer file format that requires little, if any, manipulation by IIS staff for the data to be entered into the IIS. Such information is available in the IIS within 6 weeks of birth.

**Logic Guidance: Functional Standard 2**

- For children born from January 1 through December 31, 2012.
- Include:
  - Records that were reported after Dec 31, 2012 for CY2012 births born in the catchment area.
- Other birth record source includes birthing hospitals, perinatal or newborn screening programs.
- Exclude:
  - Children with addresses outside of your state or geopolitical area. Geopolitical Area is defined as the area that contains the population of children residing in the geopolitical location covered by the IIS.
  - INACTIVE children in IIS. Children are considered inactive for the purposes of this reporting if they are (1) inactive permanently, or (2) have moved or gone elsewhere at a jurisdictional level.

**60.** What is the average amount of time, IN WEEKS, between a child's birth and the establishment of an IIS record for the child? *Note: Leave field BLANK if no records/not applicable. Use "0" to indicate average time of "0 weeks".*

	Average time (in WEEKS)	Percentage of all records (%). Total should equal 100%	
From Vital Records	a.	e.	
From Other birth record sources	b.	f.	
From NON-birth record sources	c.	g.	h. Please describe source: _____
<i>All records (auto-generated) (formula: Weighted average of a. – c. based on percentage reported)</i>	<i>d. --</i>	<i>i. --</i>	

**61.** Number of children born in your geopolitical area in CY2012 who have an IIS record established within 6 weeks (42 days) of birth

**61.1.** *Proportion of children born in your geopolitical area in 2012 that have an IIS record established within 6 weeks (42 days) of birth (Q61/Q22)*

**Functional Standard 3: Enable access to and retrieval of immunization information in the registry at the time of encounter.**

Definition: The IIS provides a means by which providers can access and retrieve immunization records prior to or at the time of a scheduled encounter.

**62.** PRIOR to a patient encounter, can participating providers access immunization information in the IIS?  Yes  No

**63.** DURING a patient encounter, can participating providers access immunization information in the IIS?  Yes  No

**Functional Standard 4: Receive and process immunization information *within 1 month (30 days) of vaccine administration.***

Definition: The IIS receives and processes immunization information within 1 month of vaccine(s) administration (e.g., can include fax or phone requests).

**Logic Guidance: Functional Standard 4**

- For children aged 4 months through 5 years: born from January 1, 2007 through August 31, 2012.
- For vaccines administered in CY2012:
- Include: Doses that were reported after Dec 31, 2012 but administered during CY2012.
- Exclude:
  - Children with addresses outside of your state or geopolitical area. Geopolitical Area is defined as the area that contains the population of children residing in the geopolitical location covered by the IIS.
  - INACTIVE children in IIS. Children are considered inactive for this report if they are (1) inactive permanently, or (2) have moved or gone elsewhere from the geopolitical area covered by the IIS.
  - H1N1 vaccines administered and demographic records belonging to those with only an H1N1 vaccination record.
  - Travel vaccines (yellow fever, typhoid, etc.) <http://wwwnc.cdc.gov/travel/page/yellowbook-2012-home.htm>.
  - Historical records. These are vaccinations entered based on historical information such as from other provider, parent's written record, parent's recall, other IIS, birth certificate, school record, public agency, or source unspecified.

**64.** For all of the vaccines administered during CY2012 and recorded in the IIS for children aged 4 months through 5 years, what number of vaccine doses were reported to the IIS within the following time frames:

Timeframe (time from immunization to record entry into the IIS)	All Records
equal to or less than 1 day	%
greater than 1 day - equal to or less than 7 days	%
greater than 7 days - equal to or less than 14 days	%
greater than 14 days - equal to or less than 30 days	%
greater than 30 days	%
<i>f. % TOTAL (Auto-calculated)</i> <i>Column total should add up to 100%</i>	%
<b>g. Total number of records</b>	#

**Functional Standard 5: Protect the confidentiality of health care information.**

Definition: The IIS has written confidentiality policies and procedures in place and implemented, including administrative and technical practices to protect health care information. The policies and procedures are consistent with applicable state and local laws, and Federal law (HIPAA and other privacy law) when implemented, and with the recommended specifications and guidelines outlined in the updated "Community Immunization Registries Manual: Chapter II: Confidentiality," except where they conflict with applicable legislation.

**65.** Has your IIS implemented a written confidentiality policy that protects information in the IIS (note this can be set by state grantee, agency IT department, higher level state Health Information Exchange, state law, etc)     Yes  No

**Functional Standard 6: Ensure security of health care information**

**Definition:** The IIS has written security policies and procedures in place and implemented, including administrative and technical practices and physical safeguards to protect health care information. The policies and procedures are consistent with applicable state and local laws and with Federal law when implemented.

66. Has your IIS implemented a written security policy that protects information in your IIS? (Note this can be set by state grantee, agency IT department, higher level state Health Information Exchange, state law, etc)  Yes  No

**Functional Standard 7: Exchange immunization records using Health Level Seven (HL7) standards.**

Definition: The IIS has a function, at the central level, that creates, receives, and properly processes HL7 messages, as specified in NCIRD's Implementation Guide for Immunization Data Transactions

<http://www.cdc.gov/vaccines/programs/iis/technical-guidance/downloads/hl7guide.pdf>

using Version 2.3.1 or 2.5.1 of the Health Level Seven (HL7) Standard Protocol.

**Logic Guidance: HL7 Capacity**

- Consider ONLY your system's capability to use HL7. DO NOT consider flat-file or web-interface transactions.
- Consider message exchanges that occurred in CY2012 only. DO NOT consider messages exchanged AFTER Dec 31, 2012.
- Consider ONLY messages received or sent by your production IIS, NOT a test system.
- For questions that refer to HL7 version 2.3.1, include messages identified as version 2.3.1, 2.3 or 2.4.

**67. In CY2012 could your IIS send an HL7 v2.3.1 outbound message to another system?**  Yes  No *(If No, skip table and go to Q68)*

HL7 v2.3.1 Messages SENT by IIS to another system	In CY2012, <b>could</b> your IIS send this message type to another system?	In CY2012, <b>did</b> your IIS send this message type to another system?
VXR	a. <input type="checkbox"/> Yes <input type="checkbox"/> No	b. <input type="checkbox"/> Yes <input type="checkbox"/> No
VXX	c. <input type="checkbox"/> Yes <input type="checkbox"/> No	d. <input type="checkbox"/> Yes <input type="checkbox"/> No
ACK	e. <input type="checkbox"/> Yes <input type="checkbox"/> No	f. <input type="checkbox"/> Yes <input type="checkbox"/> No
QCK	g. <input type="checkbox"/> Yes <input type="checkbox"/> No	h. <input type="checkbox"/> Yes <input type="checkbox"/> No
ORU	i. <input type="checkbox"/> Yes <input type="checkbox"/> No	j. <input type="checkbox"/> Yes <input type="checkbox"/> No
ADT	k. <input type="checkbox"/> Yes <input type="checkbox"/> No	l. <input type="checkbox"/> Yes <input type="checkbox"/> No

**68. In CY2012, could your IIS receive an HL7 v2.3.1 inbound message from another system?**  Yes  No *(If No, skip table and go to Q69)*

HL7 v2.3.1 Messages RECEIVED by IIS from another system	In CY2012, <b>could</b> your IIS receive this message type from another system?	In CY2012, <b>did</b> your IIS receive this message type from another system?
VXU	a. <input type="checkbox"/> Yes <input type="checkbox"/> No	b. <input type="checkbox"/> Yes <input type="checkbox"/> No
VXQ	c. <input type="checkbox"/> Yes <input type="checkbox"/> No	d. <input type="checkbox"/> Yes <input type="checkbox"/> No
ORU	e. <input type="checkbox"/> Yes <input type="checkbox"/> No	f. <input type="checkbox"/> Yes <input type="checkbox"/> No
ADT	g. <input type="checkbox"/> Yes <input type="checkbox"/> No	h. <input type="checkbox"/> Yes <input type="checkbox"/> No
ACK	g. <input type="checkbox"/> Yes <input type="checkbox"/> No	h. <input type="checkbox"/> Yes <input type="checkbox"/> No

**69. In CY2012 could your IIS send an HL7 v2.5.1 outbound message to another system?**  Yes  No *(If No, skip table and go to Q70)*

HL7 v2.5.1 Messages SENT by IIS to another system	In CY2012, <b>could</b> your IIS send this message type to another system?	In CY2012, <b>did</b> your IIS send this message type to another system?
---	--	--

ADT	a. <input type="checkbox"/> Yes <input type="checkbox"/> No	b. <input type="checkbox"/> Yes <input type="checkbox"/> No
RSP	c. <input type="checkbox"/> Yes <input type="checkbox"/> No	d. <input type="checkbox"/> Yes <input type="checkbox"/> No
ACK	e. <input type="checkbox"/> Yes <input type="checkbox"/> No	f. <input type="checkbox"/> Yes <input type="checkbox"/> No

70. In CY2012, could your IIS **receive an HL7 v2.5.1 inbound message** from another system?  Yes  No *(If No, skip table and go to Q71)*

HL7 v2.5.1 Messages <b>RECEIVED</b> by IIS from another system	In CY2012, could your IIS receive this message type from another system?	In CY2012, did your IIS receive this message type from another system?
VXU	a. <input type="checkbox"/> Yes <input type="checkbox"/> No	b. <input type="checkbox"/> Yes <input type="checkbox"/> No
ADT	c. <input type="checkbox"/> Yes <input type="checkbox"/> No	d. <input type="checkbox"/> Yes <input type="checkbox"/> No
QBP	e. <input type="checkbox"/> Yes <input type="checkbox"/> No	f. <input type="checkbox"/> Yes <input type="checkbox"/> No
ACK	g. <input type="checkbox"/> Yes <input type="checkbox"/> No	h. <input type="checkbox"/> Yes <input type="checkbox"/> No

**Functional Standard 8: Automatically determine the routine childhood immunization(s) needed, in compliance with current ACIP recommendations, when an individual presents for a scheduled immunization.**

Definition: The IIS has an automated function, accessible at the provider level, that determines needed routine childhood immunizations, in compliance with current ACIP recommendations, given an individual's immunization history to date.

71. Does your IIS have a forecasting algorithm function (i.e. scheduler, recommender, etc) in place, accessible at the provider level that identifies needed immunizations, consistent with current ACIP recommendations, given an individual's immunization history to date?  Yes  No

**Functional Standard 9: Automatically identify individuals due/late for immunization(s) to enable the production of reminder/recall notifications.**

Definition: The IIS has an automated function that produces a list of individuals who, as of a given date, are due or late for immunizations according to the IIS's algorithm (see Functional Standard #8). The output from this function gives the ability to produce reminder or recall notices.

72. Can your IIS electronically generate the following notifications based on ACIP recommendations? (e.g., notices to be mailed, input to an automated telephone reminder system, lists for provider use)
- a. REMINDER  Yes  No
  - b. RECALL  Yes  No

**Functional Standard 10: Automatically produce immunization coverage reports by providers, age groups, and geographic areas.**

Definition: The IIS has an automated function to assess immunization coverage (e.g., % of children "age-appropriately" immunized) as of a given date for an individual provider's practice, for the IIS's entire catchment area, and for subgroups within a practice or the catchment area (e.g., children of a certain age).

73. Can your IIS produce immunization coverage reports by providers, age groups, and geographic areas upon request?  Yes  No

**Functional Standard 11: Produce official immunization records.**

Definition: The IIS has a function that allows authorized users to produce an individual's immunization history that is accepted as an official immunization record.

74. Is an IIS function in place that allows authorized users to print a copy of an individual's immunization history that serves as an "official immunization record"?  Yes  No

**Functional Standard 12: Promote accuracy and completeness of registry data.**

Definition: The IIS has developed and implemented a data quality protocol to combine all available information relating to a particular individual into a single, accurate immunization record.

75. Does the IIS have a patient de-duplication protocol to combine all available information relating to a particular individual into a single accurate immunization record?

Definition: De-duplication algorithm selects records for comparison based on criteria and compares a set of data elements based on rules established by the IIS and takes actions as defined by the IIS to merge the records, present them for manual resolution or maintain them as separate records.  Yes  No

### Transport Layer Functionality

#### Logic Guidance

Definition: Transport layer refers to the protocol that enables IIS to physically transmit the data contained in an HL7 message to a receiving information system or for a sending information system to transmit it to the IIS. It is not the system that processes, sends, or receives a message, but rather the mechanism used to transfer a message between systems.

**76.** What protocol do you use to transport data between your IIS and Health Information Systems? Please choose all that apply: *(if "SOAP/XMLP" is not selected, skip Q.77)*

- ebXML
- HTTPS/REST
- sFTP
- SOAP/XMLP
- Message queuing
- Email/SMTP
- MLLP
- Other
- Does not apply

**77.** If you use SOAP as a transport protocol, which specification(s) do you support?

- CDC TLEP WSDL
- NwHIN SOAP Specification
- Local specification

**Logic Guidance**

Please use your knowledge of the Modeling of Immunization Registry Operations Workgroup (MIROW) best practice guidelines <http://www.cdc.gov/vaccines/programs/iis/activities/mirow.html> to answer the following questions.

	Of the general recommendations, principles, and business rules contained in the MIROW documents listed below...		
	...how many do you <b>agree</b> with? <i>(select one)</i>	...how many are you <b>implementing</b> ? <i>(select one)</i>	For implementation, if you chose none or few, why are you not implementing most or all? <i>(select all that apply)</i>
<p><b>Moved or Gone Elsewhere (MOGE) Status</b></p> <p>78.</p>	<p>a.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> none</li> <li><input type="checkbox"/> few</li> <li><input type="checkbox"/> most</li> <li><input type="checkbox"/> all</li> <li><input type="checkbox"/> am not familiar with the guidelines <i>(if checked 'am not familiar with guidelines', skip questions b and c)</i></li> </ul>	<p>b.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> none</li> <li><input type="checkbox"/> few</li> <li><input type="checkbox"/> most</li> <li><input type="checkbox"/> all</li> <li><i>(if checked most or all, skip question c)</i></li> </ul>	<p>c.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Do not agree with those recommendations, principles, or business rules</li> <li><input type="checkbox"/> IIS is not capable of implementing those recommendations, principles, or business rules</li> <li><input type="checkbox"/> Limited resources to implement those recommendations, principles, or business rules</li> <li><input type="checkbox"/> Other _____</li> </ul>
<p><b>Vaccine-Level Deduplication</b></p> <p>79.</p>	<p>a.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> none</li> <li><input type="checkbox"/> few</li> <li><input type="checkbox"/> most</li> <li><input type="checkbox"/> all</li> <li><input type="checkbox"/> am not familiar with the guidelines <i>(if checked 'am not familiar with guidelines', skip questions b and c)</i></li> </ul>	<p>b.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> none</li> <li><input type="checkbox"/> few</li> <li><input type="checkbox"/> most</li> <li><input type="checkbox"/> all</li> <li><i>(if checked most or all, skip question c)</i></li> </ul>	<p>c.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Do not agree with those recommendations, principles, or business rules</li> <li><input type="checkbox"/> IIS is not capable of implementing those recommendations, principles, or business rules</li> <li><input type="checkbox"/> Limited resources to implement those recommendations, principles, or business rules</li> <li><input type="checkbox"/> Other _____</li> </ul>
<p><b>Data Quality for Incoming Data</b></p> <p>80.</p>	<p>a.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> none</li> <li><input type="checkbox"/> few</li> <li><input type="checkbox"/> most</li> <li><input type="checkbox"/> all</li> <li><input type="checkbox"/> am not familiar with the guidelines <i>(if checked 'am not</i></li> </ul>	<p>b.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> none</li> <li><input type="checkbox"/> few</li> <li><input type="checkbox"/> most</li> <li><input type="checkbox"/> all</li> <li><i>(if checked most or all, skip question c)</i></li> </ul>	<p>c.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Do not agree with those recommendations, principles, or business rules</li> <li><input type="checkbox"/> IIS is not capable of implementing those recommendations, principles, or business rules</li> <li><input type="checkbox"/> Limited resources to implement those recommendations, principles, or business rules</li> <li><input type="checkbox"/> Other _____</li> </ul>

	<i>familiar with guidelines', skip questions b and c)</i>		
<b>81. Reminder-Recall</b>	<p>a.</p> <input type="checkbox"/> none <input type="checkbox"/> few <input type="checkbox"/> most <input type="checkbox"/> all <input type="checkbox"/> am not familiar with the guidelines <i>(if checked 'am not familiar with guidelines', skip questions b and c)</i>	<p>b.</p> <input type="checkbox"/> none <input type="checkbox"/> few <input type="checkbox"/> most <input type="checkbox"/> all  <i>(if checked most or all, skip question c)</i>	<p>c.</p> <input type="checkbox"/> Do not agree with those recommendations, principles, or business rules <input type="checkbox"/> IIS is not capable of implementing those recommendations, principles, or business rules <input type="checkbox"/> Limited resources to implement those recommendations, principles, or business rules <input type="checkbox"/> Other _____
<b>82. Collaboration with the Vaccines for Children Program</b>	<p>a.</p> <input type="checkbox"/> none <input type="checkbox"/> few <input type="checkbox"/> most <input type="checkbox"/> all <input type="checkbox"/> am not familiar with the guidelines <i>(if checked 'am not familiar with guidelines', skip questions b and c)</i>	<p>b.</p> <input type="checkbox"/> none <input type="checkbox"/> few <input type="checkbox"/> most <input type="checkbox"/> all  <i>(if checked most or all, skip question c)</i>	<p>c.</p> <input type="checkbox"/> Do not agree with those recommendations, principles, or business rules <input type="checkbox"/> IIS is not capable of implementing those recommendations, principles, or business rules <input type="checkbox"/> Limited resources to implement those recommendations, principles, or business rules <input type="checkbox"/> Other _____
<b>83. Inventory Management Operations</b>	<p>a.</p> <input type="checkbox"/> none <input type="checkbox"/> few <input type="checkbox"/> most <input type="checkbox"/> all <input type="checkbox"/> am not familiar with the guidelines <i>(if checked 'am not familiar with guidelines', skip questions b and c)</i>	<p>b.</p> <input type="checkbox"/> none <input type="checkbox"/> few <input type="checkbox"/> most <input type="checkbox"/> all  <i>(if checked most or all, skip question c)</i>	<p>c.</p> <input type="checkbox"/> Do not agree with those recommendations, principles, or business rules <input type="checkbox"/> IIS is not capable of implementing those recommendations, principles, or business rules <input type="checkbox"/> Limited resources to implement those recommendations, principles, or business rules <input type="checkbox"/> Other _____