Section IX. Immunization Information Systems

Instructions

All grantees that conduct registry activities in their state/territory are required to complete this report. All grantees with registries in transition are required to complete questions 1 through 5. Submission of the final Immunization 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, 2012; the year of performance is CY2011. CDC IISSB staff will contact each IIS after March 31 with questions and/or comments about the report and data submitted for CY2011. After March 31, 2012, 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 2011 data that were uploaded AFTER the March 31 cut off date. Revisions to the IIS section of the Annual Report may be forwarded to Terence Ng, CDC/NCIRD/IISSB at VFK5@cdc.gov and MUST be received by April 30, 2012.

Data Query Guidelines

- IISAR 2011 covers activities between January 1, 2011 and December 31, 2011, including:
  - Immunizations that were administered in CY2011, but were entered into the IIS after December 31, 2011;
  - Children, adolescents, and adults who were within the specified age range during CY2011, but were entered into the IIS after December 31, 2011;
  - Excluding H1N1 vaccines administered and demographic records belonging to individuals with only an H1N1 vaccination record.
  - Calculations requiring Census data will use estimates from 2010 until estimates for 2011 are released.

NOTE: Please contact Terence Ng, CDC/NCIRD/IISSB at VFK5@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.

Definitions

**Immunization Information Systems (IIS):** An immunization information system (IIS) is a confidential, computerized, population-based system that collects and consolidates vaccination data from vaccine providers and provides tools for designing and sustaining effective immunization strategies at the provider and program levels. Among the capabilities of an IIS are the capacity to inform vaccine providers of upcoming patient vaccination needs; generate vaccination coverage reports, patient reminders, or recalls for past due vaccinations; and interoperate with electronic health record (EHR) systems.

**IPOM** - The 2008-2012 Immunization Program Operations Manual (IPOM) is a compilation of resources to assist immunization program managers and their staff in implementing comprehensive immunization programs. [http://www.cdc.gov/vaccines/vac-gen/policies/ipom/default.htm](http://www.cdc.gov/vaccines/vac-gen/policies/ipom/default.htm)

**Geopolitical Area** is defined as the area that contains the population of children residing in the geopolitical location covered by the IIS.

**Children, Adolescent and Adults** 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.
There is no IIS in this state/territory.

Section I. Contact Information

Logic Guidance:

- QUESTIONS 1-5 ARE REQUIRED TO BE COMPLETED BY ALL GRANTEES, INCLUDING THOSE WITH IIS IN TRANSITION OR TEMPORARILY INNACTIVE.
- List ONLY government employee contacts in questions 4 and 5

1. Grantee: 
2. Name of IIS: CA IMMUNIZATION
2a. Immunization Program or IIS web address: HTTP://CAIRWEB
3. Name of person(s) completing this report: STEVE NICKELL
4. Programmatic IIS Contact Person (a manager or administrator who coordinates IIS activities).
   Name: STEVE NICKELL, State: California, Zip: 94804
   Title: CHIEF, REGISTRY, Phone: 510-620-3780, Ext: 
   Affiliation: , Address: 850 MARINA BA, Fax: 510-620-3774
   Address 2: , Email: STEVE.NICKELL
   City: RICHMOND
   □ Check if contact person for questions about this report

5. Technical IIS Contact Person (coordinator of IIS software and/or hardware) □ Check if same as programmatic contact
6. Which age groups are included in your IIS (Select one)?
   a. Birth through 5 years of age (under six years of age)
   b. Birth through 18 years of age
   c. All ages (including adults)
   d. Other: (please specify age range)

Section II. Saturation Measures

19-35 months old Participation

**Logic Guidance:**
- Include:
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - ALL DOSES (valid and invalid).
- 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.
  - H1N1 vaccines administered and demographic records belonging to kids with only an H1N1 vaccination record.

7. Number of children 19 through 35 months of age in your geopolitical area (2010 Census Data).
8. Number of children 19 through 35 months of age with 2 or more immunizations in the IIS (including the birth dose HepB) that are both in your geopolitical area AND in your IIS? 427134
8.1 Proportion of children 19 through 35 months of age with 2 or more immunizations in the IIS that are both in your geopolitical area AND in your IIS? 53%

19-35month old Vaccine-Specific Immunizations Coverage

**Logic Guidance:**

- **Coverage** is defined as the proportion of individuals in a certain age group who received an immunization(s) out of individuals in the same age group in the geopolitical area (Census-based denominator).

For the Valid Doses Column:

- Include:
  - ONLY VALID doses and those with documented immunity or disease.
  - When calculating Varicella coverage level, include those with history of disease.
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - When calculating complete Hib doses, include children who received 3+ doses of Hib PRP-OMP vaccine (PedVaxHib, Comvax) and children who received 4+ doses of Hib PRP-T (ActHib, Pentacel) vaccine. Children whose records indicate receipt of other types of Hib vaccine, including type unspecified require 4+ doses to be included.

For All Doses Column:

- Include:
  - ALL DOSES (valid and invalid).
  - When calculating Varicella coverage level, do NOT include those with history of disease.
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - When calculating complete Hib doses, include children who received 3+ doses of Hib PRP-OMP vaccine (PedVaxHib, Comvax) and children who received 4+ doses of Hib PRP-T (ActHib, Pentacel) vaccine. Children whose records indicate receipt of other types of Hib vaccine, including type unspecified require 4+ doses to be included.

For both columns:

- 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. 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.

<table>
<thead>
<tr>
<th>Question</th>
<th>Valid Doses Only</th>
<th>All Doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. How many children in Question 7 have received at least 4 doses of DTaP/DTP/DT vaccine?</td>
<td>238106</td>
<td>244181</td>
</tr>
<tr>
<td>9.1 Proportion of children who have received at least 4 doses of DTaP/DTP/DT vaccine. (Q.9/Q.7)</td>
<td>30%</td>
<td>31%</td>
</tr>
<tr>
<td>10. How many children in Question 7 have received at least 3 doses of Polio vaccine?</td>
<td>315985</td>
<td>317418</td>
</tr>
<tr>
<td>10.1 Proportion of children who have received at least 3 doses of Polio vaccine. (Q.10/Q.7)</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>11. How many children in Question 7 have received at least 1 dose of MMR vaccine?</td>
<td>319670</td>
<td>322002</td>
</tr>
<tr>
<td>11.1 Proportion of children who have received at least 1 dose of MMR vaccine. (Q.11/Q.7)</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>12. How many children in Question 7 have received at least 3 doses of Hepatitis B vaccine?</td>
<td>278836</td>
<td>294189</td>
</tr>
<tr>
<td>12.1 Proportion of children who have received at least 3 doses of Hepatitis B vaccine. (Q.12/Q.7)</td>
<td>35%</td>
<td>37%</td>
</tr>
<tr>
<td>13. How many children in Question 7 have received at least 3 (or 4) doses of Hib vaccine? (Depending on the type of Hib vaccine administered, the up-to-date number of doses may be 3 or more or 4 or more.)</td>
<td>322455</td>
<td>324850</td>
</tr>
<tr>
<td>13.1 Proportion of children who have received at least 3 (or 4) doses of Hib vaccine. (Q.13/Q.7)</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>14. How many children in Question 7 have received at least 1 dose of Varicella vaccine?</td>
<td>316741</td>
<td>319628</td>
</tr>
<tr>
<td>14.1 Proportion of children who have received at least 1 dose of Varicella vaccine. (Q.14/Q.7)</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>15. How many children in Question 7 have received at least 4 doses of PCV vaccine?</td>
<td>224688</td>
<td>229521</td>
</tr>
<tr>
<td>15.1 Proportion of children who have received at least 4 dose of PCV vaccine. (Q.15/Q.7)</td>
<td>28%</td>
<td>29%</td>
</tr>
<tr>
<td>16. How many children in Question 7 have received at least 2 doses of Hepatitis A vaccine?</td>
<td>161603</td>
<td>169586</td>
</tr>
<tr>
<td>16.1 Proportion of children who have received at least 2 doses of Hepatitis A vaccine. (Q.16/Q.7)</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>17. How many children in Question 7 have received at least 2 doses of Rotavirus vaccine?</td>
<td>304263</td>
<td>308775</td>
</tr>
<tr>
<td>17.1 Proportion of children in HIS who have received at least 2 doses of Rotavirus vaccine. (Q.17/Q.7)</td>
<td>38%</td>
<td>39%</td>
</tr>
</tbody>
</table>

19-35 months old - 4:3:1:3:3:1 Series Coverage and Completeness

**Logic Guidance:**

- **Coverage** is defined as the proportion of individuals in a certain age group who received an immunization(s) out of individuals in the same age group in the geopolitical area (Census-based denominator).
- **Completeness** is defined as the proportion of individuals in a certain age group who received an immunization(s) out of individuals who are in the geopolitical area and
who participate in the IIS (i.e. have 2+ immunization recorded in the IIS) (IIS-based denominator).


For the Valid Doses Column:

- Include:
  - ONLY VALID doses and those with documented immunity or disease.
  - When calculating Varicella coverage level, INCLUDE those with history of disease.
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - 4:3:1:3:3:1 series (4 or more DTaP/DTP/DT, 3 or more Polio, 1 or more MMR, 3 or more Hepatitis B, 3+ or 4+ of Hib*, depending on the type used, and 1 or more Varicella).
    * When calculating complete Hib doses, include children who received 3+ doses of Hib PRP-OMP vaccine (PedVaxHib, Comvax) and children who received 4+ doses of Hib PRP-T (ActHib, Pentacel) vaccine. Children whose records indicate receipt of other types of Hib vaccine, including type unspecified require 4+ doses to be included.

For All Doses Column:

- Include:
  - ALL DOSES (valid and invalid).
  - When calculating Varicella coverage level, do NOT include those with history of disease.
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - 4:3:1:3:3:1 series (4 or more DTaP/DTP/DT, 3 or more Polio, 1 or more MMR, 3 or more Hepatitis B, 3+ or 4+ of Hib*, depending on the type used, and 1 or more Varicella).
    * When calculating complete Hib doses, include children who received 3+ doses of Hib PRP-OMP vaccine (PedVaxHib, Comvax) and children who received 4+ doses of Hib PRP-T (ActHib, Pentacel) vaccine. Children whose records indicate receipt of other types of Hib vaccine, including type unspecified require 4+ doses to be included.

For both columns:

- 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.

<table>
<thead>
<tr>
<th>Question</th>
<th>Valid Doses Only</th>
<th>All Doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. How many children in Question 8 have received the complete 4:3:1:3:3:1 series?</td>
<td>199437</td>
<td>207932</td>
</tr>
</tbody>
</table>
**18.1 Coverage – Proportion of children that have completed 4:3:1:3:3:1 series in the population. (Q.18/Q.7)**

| Percentage | 25% | 26% |

**18.2 Completeness – Proportion of children that have completed 4:3:1:3:3:1 series in IIS (Q.18/Q.8)**

| Percentage | 46% | 49% |

19. How many children in Question 8 have **NOT** received the complete 4:3:1:3:1 series?

| Number | 227697 | 219202 |

**19.1 Coverage – Proportion of children that have **NOT** completed 4:3:1:3:3:1 series in the population. (Q.19/Q.7)**

| Percentage | 29% | 27% |

**19.2 Completeness – Proportion of children that have **NOT** completed 4:3:1:3:3:1 series in IIS. (Q.19/Q.8)**

| Percentage | 53% | 51% |

### 19-35 months old - 4:3:1:3:1:4 Series Coverage and Completeness

**Logic Guidance:**

- **Coverage** is defined as the proportion of individuals in a certain age group who received an immunization(s) out of individuals in the same age group in the geopolitical area (Census-based denominator).
- **Completeness** is defined as the proportion of individuals in a certain age group who received an immunization(s) out of individuals who are in the geopolitical area and who participate in the IIS (i.e. have 2+ immunization recorded in the IIS) (IIS-based denominator).

**For the Valid Doses Column:**

- Include:
  - **ONLY VALID** doses and those with documented immunity or disease.
  - When calculating Varicella coverage level, **INCLUDE** those with history of disease.
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - 4:3:1:3:1:4 series (4 or more DTaP/DTP/DT, 3 or more Polio, 1 or more MMR, 3 or more Hepatitis B, 3+ or 4+ of Hib*, depending on the type used, 1 or more Varicella, and 4 or more PCV).
    - *When calculating complete Hib doses, include children who received 3+ doses of Hib PRP-OMP vaccine (PedVaxHib, Comvax) and children who received 4+ doses of Hib PRP-T (ActHib, Pentacel) vaccine. Children whose records indicate receipt of other types of Hib vaccine, including type unspecified require 4+ doses to be included.

**For All Doses Column:**

- Include:
  - **ALL DOSES** (valid and invalid).
  - When calculating Varicella coverage level, **DO NOT** include those with history of disease.
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - 4:3:1:3:1:4 series (4 or more DTaP/DTP/DT, 3 or more Polio, 1 or more MMR, 3 or more Hepatitis B, 3+ or 4+ of Hib*, depending on the type used, 1 or more Varicella, and 4 or more PCV).
When calculating complete Hib doses, include children who received 3+ doses of Hib PRP-OMP vaccine (PedVaxHib, Comvax) and children who received 4+ doses of Hib PRP-T (ActHib, Pentacel) vaccine. Children whose records indicate receipt of other types of Hib vaccine, including type unspecified require 4+ doses to be included.

For both columns:

- **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.

<table>
<thead>
<tr>
<th>Question</th>
<th>Valid Doses Only</th>
<th>All Doses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>20.</strong> How many children in Question 8 have received the complete 4:3:1:3:3:1:4 series?</td>
<td>187724</td>
<td>196492</td>
</tr>
<tr>
<td><strong>20.1</strong> Coverage – Proportion of children that have completed 4:3:1:3:3:1:4 series in the population. (Q.20/Q.7)</td>
<td>24%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>20.2</strong> Completeness – Proportion of children that have completed 4:3:1:3:3:1:4 series in IIS (Q.20/Q.8)</td>
<td>44%</td>
<td>46%</td>
</tr>
<tr>
<td><strong>21.</strong> How many children in Question 8 have NOT received the complete 4:3:1:3:3:1:4 series?</td>
<td>239410</td>
<td>230642</td>
</tr>
<tr>
<td><strong>21.1</strong> Coverage – Proportion of children that have NOT completed 4:3:1:3:3:1:4 series in the population. (Q.21/Q.7)</td>
<td>30%</td>
<td>29%</td>
</tr>
<tr>
<td><strong>21.2</strong> Completeness – Proportion of children that have NOT completed 4:3:1:3:3:1:4 series in IIS. (Q.21/Q.8)</td>
<td>56%</td>
<td>54%</td>
</tr>
</tbody>
</table>

**6-23 months old – Seasonal Influenza**

**Logic Guidance:**

- For children born from **July 1, 2009** through February 1, 2010.

For Valid Doses Column:

- **Include:**
  - ONLY VALID doses.
  - Doses that were reported after June 30, 2011 but administered from August 1, 2010 through June 30, 2011.
For All Doses Column:

- Include:
  - ALL doses (valid and invalid)
  - Doses that were reported after June 30, 2011 but administered from August 1, 2010 through June 30, 2011

For both columns:

- 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.

### Question

22. Number of children 6 through 23 months of age in your geopolitical area? (2010 Census data)

<table>
<thead>
<tr>
<th>Question</th>
<th>Valid Doses Only</th>
<th>All Doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. How many children 6-23 months of age have received at least 1 dose of Seasonal Influenza vaccine in your IIS from Aug 1, 2010 through June 30, 2011?</td>
<td>79049</td>
<td>80213</td>
</tr>
</tbody>
</table>

23.1 Proportion of children in IIS who have received at least 1 dose of Seasonal Influenza vaccine in your IIS from Aug 1, 2010 through June 30, 2011.

<table>
<thead>
<tr>
<th>Question</th>
<th>Valid Doses Only</th>
<th>All Doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.1 Proportion of children in IIS who have received at least 1 dose of Seasonal Influenza vaccine in your IIS from Aug 1, 2010 through June 30, 2011.</td>
<td>27%</td>
<td>27%</td>
</tr>
</tbody>
</table>

### 4 months - Under 6 years Participation

**Logic Guidance:**

- For children born from Jan 1, 2006 through August 31, 2011.
- Include:
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - ALL DOSES (valid and invalid).
- 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.
  - H1N1 vaccines administered and demographic records belonging to kids with only an H1N1 vaccination record.
24. Number of children between ≥4 months of age and < 6 years of age in the geopolitical area. (2010 Census Data)
25. How many children between ≥4 months of age and under 6 years of age are both in your geopolitical area AND in your IIS? 2470471
   25.1 Proportion of children between ≥4 months of age and under 6 years of age are both in your geopolitical area AND in your IIS 86%
26. How many children in Question 25 have 2 or more immunization that are both in your geopolitical area AND in your IIS? (Healthy People 2020 Objective) 1862258
   26.1 Proportion of children in Question 25 have 2 or more immunizations that are both in your geopolitical area AND in your IIS 75%

6 years of age- Series Coverage and Completion

Logic Guidance:

- **For children born from January 1, 2005 through December 31, 2005,** Skip this section if you answered 'a.' on question 6.
- **Coverage** is defined as the proportion of individuals in a certain age group who received an immunization(s) out of individuals in the same age group in the geopolitical area (Census-based denominator).
- **Completeness** is defined as the proportion of individuals in a certain age group who received an immunization(s) out of individuals who are in the geopolitical area and who participate in the IIS (i.e. have 2+ immunization recorded in the IIS) (IIS-based denominator).
- Include:
  - **ONLY VALID doses** and those with documented immunity or disease.
  - When calculating Varicella coverage level, include those with history of disease.
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - 4:3:1:3:3:1 series (4 or more DTaP/DTP/DT, 3 or more Polio, 1 or more MMR, 3 or more Hepatitis B, 3+ or 4+ of Hib*, depending on the type used, and 1 or more Varicella).
    * When calculating complete Hib doses, include children who received 3+ doses of Hib PRP-OMP vaccine (PedVaxHib, Comvax) and children who received 4+ doses of Hib PRP-T (ActHib, Pentacel) vaccine. Children whose records indicate receipt of other types of Hib vaccine, including type unspecified require 4+ doses to be included.
- 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.
  - H1N1 vaccines administered and demographic records belonging to kids with only an H1N1 vaccination record in CY2011.

27. Number of children 6 years of age in the geopolitical area. (2010 Census Data)
28. How many children 6 years of age are both in your geopolitical area AND in your IIS with 2 or more immunizations?
Exclude travel vaccines (Encephalitis, yellow fever, typhoid, etc.)

28. Proportion of children 6 years of age in the geopolitical area. 73%

29. How many children in Question 28 have received the complete 4:3:1:3:3:1 series? 236333

29.1 Coverage – Proportion of children that have completed 4:3:1:3:3:1 series in the population. (Q.29/Q.27) 47%
29.2 Completeness - Proportion of children that have completed 4:3:1:3:3:1 series in IIS. (Q.29/Q.28) 65%

Early Adolescent Immunization Participation (9-10 years old)

Logic Guidance – Early Adolescent Participation in IIS

- Skip this section if you answered 'a.' on question 6.
- For adolescents 9 – 10 years (birthdates from Jan 1, 2001 through Dec 31, 2002)
- Include:
  - ONLY adolescent recommended Tdap/Td, MCV4, and HPV doses. http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm#printable
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - Doses only if administered on or after their 9th birthday and before their 11th birthday.
  - ALL DOSES (valid and invalid).
- Exclude:
  - Doses administered before the age of 9, such as doses given due to risk factors.
  - Early 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 early adolescents in IIS. Early adolescents 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.
  - All seasonal flu and all childhood catch-up vaccines.
  - H1N1 vaccines administered and demographic records belonging to kids with only an H1N1 vaccination record.
  - Travel vaccines (Encephalitis, yellow fever, typhoid, etc.) http://wwwnc.cdc.gov/travel/content/yellowbook/home-2010.aspx.

30. How many early adolescents (age 9 – 10) in your geopolitical area AND in your IIS? 802570

31. How many early adolescents in Question 30 have 2 or more immunizations recorded in your IIS? 15926

31.1 Proportion of early adolescents in in Question 30 that have 2 or more immunizations recorded in your IIS. 2%

Adolescent Participation in IIS (11-17 years old)

Logic Guidance - Participation
- Skip this section if you answered 'a.' on question 6.
- For adolescents 11-17 years (birthdates from Jan 1, 1994 through Dec 31, 2000)
  - 11 – 12 years birthdates are from January 1, 1999 through December 31, 2000
  - 13 – 17 years birthdates are from January 1, 1994 through December 31, 1998
Include:
- Doses that were reported after Dec 31, 2011 but administered during CY2011.
- Adolescent doses ONLY if they were administered on or after their 11th birthday and before the 18th birthday. Include: Tdap/Td, HPV, meningococcal, seasonal influenza, pneumococcal, HepA, HepB, polio, MMR, and varicella. [http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm#printable](http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm#printable)
- ALL DOSES (valid and invalid).

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 the purposes of this reporting 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 kids with only an H1N1 vaccination record.

### Question 32
Number of adolescents by age category in your geopolitical area (2010 Census).

### Question 33
How many adolescents in the following age groups are both in your geopolitical area AND in your IIS?

<table>
<thead>
<tr>
<th>Age Group</th>
<th>11-12 years of age</th>
<th>13-17 Years of age</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.1 Proportion of adolescents in the following age groups that are both in your geopolitical area AND in your IIS</td>
<td>75%</td>
<td>68%</td>
</tr>
</tbody>
</table>

### Question 34
How many adolescents in the following age groups in Question 33 have 2 or more immunizations recorded in your IIS?

<table>
<thead>
<tr>
<th>Age Group</th>
<th>11-12 years of age</th>
<th>13-17 Years of age</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.1 Proportion of adolescents in the following age groups in Question 33 that have 2 or more immunizations recorded in your IIS</td>
<td>24%</td>
<td>42%</td>
</tr>
</tbody>
</table>

### Adolescent Immunization Coverage and Completeness (11-17 years old)

**Logic Guidance – Adolescent Immunization Coverage in IIS**
- Skip this section if you answered 'a.' on question 6.
- For adolescents 11-17 years (birthdates from Jan 1, 1994 through Dec 31, 2000)
  - 11 – 12 years birthdates are from January 1, 1999 through December 31, 2000
  - 13 – 17 years birthdates are from January 1, 1994 through December 31, 1998
- **Coverage** is defined as the number of individuals of a certain age group who received an immunization or immunizations out of the total estimated population within the same age range.
- **Completeness** is defined as the completeness of vaccination data for individuals of a certain age group in the IIS.

For 11 – 12 Years Valid Doses Column:

- Include:
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - **VALID DOSES ONLY**
  - Valid ACIP recommended adolescent doses administered at any time before their 13th birthday (MCV4, Tdap, HPV, etc.).
For 11 – 12 Years All Doses Column:

- Include:
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - ALL DOSES (valid and invalid).
  - All ACIP recommended adolescent doses administered at any time before their 13th birthday (MCV4, Tdap, HPV, etc.).

- 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 the purposes of this reporting 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 kids with only an H1N1 vaccination record.

For 13 – 17 Valid Doses Column:

- Include:
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - VALID DOSES ONLY.
  - Valid ACIP recommended adolescent doses administered at any time before their 18th birthday (MCV4, Tdap, HPV, etc.).

For 13 – 17 All Doses Column:

- Include:
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - ALL DOSES (valid and invalid).
  - All ACIP recommended adolescent doses administered at any time before their 18th birthday (MCV4, Tdap, HPV, etc.).

- 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 the purposes of this reporting 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 kids with only an H1N1 vaccination record.

<table>
<thead>
<tr>
<th>Question</th>
<th>11-12 Years of Age</th>
<th>11-12 Years of Age</th>
<th>13-17 Years of Age</th>
<th>13-17 Years of Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Valid Doses Only</td>
<td>All Doses</td>
<td>Valid Doses Only</td>
<td>All Doses</td>
</tr>
<tr>
<td>35. How many adolescents in Question 33 have received at least 1 dose of seasonal Influenza</td>
<td>82835</td>
<td>83346</td>
<td>181035</td>
<td>183440</td>
</tr>
<tr>
<td>Question</td>
<td>Number of Adolescents</td>
<td>Proportion of Adolescents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>---------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35.1 Proportion of adolescents in Question 33 have received at least 1 dose of seasonal influenza vaccine and recorded in your IIS from Aug 1, 2010 through June 30, 2011?</td>
<td>11% 11%</td>
<td>10% 10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. How many adolescents in Question 33 have at least one dose of Tdap/Td?</td>
<td>521431 524688</td>
<td>1307444 1315381</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36.1 Proportion of adolescents in Question 33 that have at least one dose of Tdap/Td.</td>
<td>67% 67%</td>
<td>70% 71%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. How many adolescents in Question 31 have at least one dose of MCV4/MPSV4?</td>
<td>171385 177544</td>
<td>731993 743405</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.1 Proportion of adolescents in Question 33 with at least one dose of MCV4/MPSV4.</td>
<td>22% 23%</td>
<td>39% 40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. How many adolescent FEMALES are in your geopolitical area? (2010 Census)</td>
<td>389057</td>
<td>929769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. How many adolescents FEMALES are both in your geopolitical area AND in your IIS?</td>
<td>16475 17361</td>
<td>145445 150222</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40.1 Coverage – Proportion of adolescent FEMALES that have at least 3 doses of HPV (Q.40/Q.38)</td>
<td>3% 3%</td>
<td>11% 11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40.2 Completeness – Proportion of adolescent FEMALES that have at least 3 doses of HPV (Q.40/Q.39)</td>
<td>4% 4%</td>
<td>16% 16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. How many adolescent MALES are in your geopolitical area? (2010 Census)</td>
<td>392161</td>
<td>950583</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42. How many adolescents MALES are both in your geopolitical area AND in your IIS?</td>
<td>6167 7534</td>
<td>27970 30586</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42.1 Coverage – Proportion of adolescent MALES that have at least 3 doses of HPV (Q.43/Q.41)</td>
<td>1% 1%</td>
<td>2% 2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42.2 Completeness – Proportion of adolescent MALES that have at least 3 doses of HPV (Q.43/Q.42)</td>
<td>2% 2%</td>
<td>3% 3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Adult Participation in IIS (≥19 years old)**

**Logic Guidance - Adult Participation and Coverage in IIS**

- Skip this section if you answered 'a.' or 'b.' on question 6.
- Questions 43-44 for adults ≥19 years old: (DOB ≤ 12/31/1992)
- Questions 45-47 for adults ≥50 years old (DOB ≤ 12/31/1961)
- Include:
  - Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - Doses only if administered on or after 19yrs of age for questions 43-44.
  - Doses only if administered on or after 50 yrs of age for questions 45-47.
  - ALL DOSES (valid and invalid) for Questions 43 - 47.
- Exclude:
  - 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 in IIS. Adults 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.
- H1N1 vaccines administered and demographic records belonging to adults with only an H1N1 vaccination record.

### Provider Site Participation

**Logic Guidance**

- **Immunization SITE** definition - A clinic/site is the physical location where a sub-unit of a provider organization is based. This is not the physical location of an intermittent clinic is held.
- **Public Provider Immunization Site** definition - funded by a governmental agency directly. A unit of government is responsible managing operations.
- **Private Provider Immunization Site** definition - funded privately and indirectly by a governmental agency (CMS for instance). A non-governmental unit is responsible for managing operations.
- **Exclude provider sites that only enrolled because of H1N1 and only provide emergency vaccines.** (Ex. Include a pediatrician that only enrolled due to H1N1, but continues to provide routine immunizations. Exclude a community center that only enrolled due to H1N1 and does not provide immunizations otherwise.)
- Examples:
  - a) Public Provider Sites:
    1) Public health department operated clinic
    2) Public health department clinic as agent for FQHC/RHC
    3) Public hospital
    4) FQHC/RHC (community, migrant, or rural)
    5) Community health center
    6) Tribal or Indian Health Service clinic
    7) WIC
    8) STD/HIV
    9) Family planning
    10) Juvenile detention center
    11) Correctional facility (all ages)
    12) Drug treatment facility
13) Other public health facility
b) Private Provider Sites:
   1) Private practice (solo, group, or HMO)
   2) Private practice (solo or group) as agent for FQHC/RHC
   3) Private hospital
   4) Special vaccine clinics, e.g. flu clinics
   5) Pharmacy
   6) Other private health facility

*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 Site Participation – IIS-based measure

49. Number of public provider immunization SITES in your geopolitical area enrolled in your IIS. **2932**
50. Number of enrolled public provider immunization SITES in your geopolitical area that have submitted data to your IIS in the last 6 months of the year? **1965**
   50.1 Proportion of enrolled public provider immunization SITES in your geopolitical area that have submitted data to your IIS in the last 6 months of the year? **67%**

### Private Provider Site Participation – IIS-based measure

51. Number of private provider immunization SITES in your geopolitical area enrolled in your IIS. **3441**
52. Number of enrolled private provider immunization SITES in your geopolitical area that have submitted data to your IIS in the last 6 months of the year? **1432**
   52.1 Proportion of enrolled private provider immunization SITES in your geopolitical area that have submitted data to your IIS in the last 6 months of the year? **42%**

### Section III. Functional Standards

53. Functional Standards

**Functional Standard 1: Electronically store data on all NVAC-approved core data elements**

**Definition:** The registry's computer database contains fields for all NVAC-approved core data elements.

**FS 1.** Please fill in the following on each core data element fields included in your IIS database.

**Logic Guidance: Functional Standard 1 – NVAC Core Data Elements**

- For children at least 4 months of age and under 6 years of age: born from January 1, 2006 through August 31, 2011.
- Core Data Elements **Bolded** under Functional Standard 1 are NVAC **REQUIRED** elements. [http://www.cdc.gov/vaccines/programs/iis/standards/coredata.htm](http://www.cdc.gov/vaccines/programs/iis/standards/coredata.htm)
<table>
<thead>
<tr>
<th>No</th>
<th>(Bold type indicates REQUIRED ELEMENT)</th>
<th>Field Status</th>
<th>CY2011 % Data Element Populated</th>
<th>Do you receive this data from the birth record source?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Patient’s First Name</td>
<td>☐ No field in IIS</td>
<td>100%</td>
<td>✓ Yes ☐ No</td>
</tr>
<tr>
<td>b.</td>
<td>Patient’s Middle Name or Initial</td>
<td>☐ No field in IIS</td>
<td>46%</td>
<td>✓ Yes ☐ No</td>
</tr>
<tr>
<td>c.</td>
<td>Patient’s Last Name</td>
<td>☐ No field in IIS</td>
<td>100%</td>
<td>✓ Yes ☐ No</td>
</tr>
<tr>
<td>d.</td>
<td>Patient’s Birth Date</td>
<td>☐ No field in IIS</td>
<td>100%</td>
<td>✓ Yes ☐ No</td>
</tr>
<tr>
<td>e.</td>
<td>Patient’s Sex</td>
<td>☐ No field in IIS</td>
<td>99%</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>f.</td>
<td>Patient’s Birth state</td>
<td>☐ No field in IIS</td>
<td>12%</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>g.</td>
<td>Patient’s Birth Order</td>
<td>✓ No field in IIS</td>
<td></td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>h.</td>
<td>Patient’s Birth Country</td>
<td>☐ No field in IIS</td>
<td>5%</td>
<td>☐ Yes ✓ No</td>
</tr>
<tr>
<td>i.</td>
<td>Mother’s Name (first, middle, last, maiden)</td>
<td>☐ No field in IIS (for each variable)</td>
<td>First % <em>82</em>_ Middle % <em>54</em>_ Last % <em>57</em>_ Maiden % <em>45</em>_</td>
<td>✓ Yes ☐ No (for each variable)</td>
</tr>
<tr>
<td>j.</td>
<td>Vaccine Type</td>
<td>☐ No field in IIS</td>
<td>100%</td>
<td>✓ Yes ☐ No</td>
</tr>
<tr>
<td>k.</td>
<td>Vaccine Manufacturer</td>
<td>☐ No field in IIS</td>
<td>64%</td>
<td>✓ Yes ☐ No</td>
</tr>
<tr>
<td>l.</td>
<td>Vaccination Date</td>
<td>☐ No field in IIS</td>
<td>100%</td>
<td>✓ Yes ☐ No</td>
</tr>
<tr>
<td>m.</td>
<td>Vaccination Lot Number</td>
<td>☐ No field in IIS</td>
<td>72%</td>
<td>✓ Yes ☐ No</td>
</tr>
<tr>
<td>n.</td>
<td>Race</td>
<td>☐ No field in IIS</td>
<td>31%</td>
<td>✓ Yes ☐ No</td>
</tr>
<tr>
<td>o.</td>
<td>Ethnicity</td>
<td>☐ No field in IIS</td>
<td>32%</td>
<td>✓ Yes ☐ No</td>
</tr>
</tbody>
</table>
### Address (Street, City, State, Zip)
- **Logic guidance**: Exclude addresses outside your geopolitical area. Include PO box addresses.

<table>
<thead>
<tr>
<th>Field</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>No field in IIS</td>
<td>☐ No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Phone Number
- **Logic guidance**: Phone number associated to patient that could be used to communicate with patient and/or the parent/guardian.

<table>
<thead>
<tr>
<th>Field</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>No field in IIS</td>
<td>48%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>☐ No</td>
</tr>
</tbody>
</table>

### Historical vaccination flag indicator
- **Definition**: Field to denote that a vaccination was entered based on historical information such as: (source unspecified, from other provider, from parent’s written record, from parent’s recall, from other IIS, from birth certificate, from school record, or from public agency or if your system has a default value where if blank it defaults to historic).

<table>
<thead>
<tr>
<th>Field</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>No field in IIS</td>
<td>75%</td>
</tr>
</tbody>
</table>

### VFC eligibility
- **Definition**: A field to denote that a person is eligible for VFC such as: (VFC eligibility not determined/unknown, Not VFC eligible, VFC eligible - Medicaid/Medicaid Managed Care, VFC eligible - Uninsured, VFC eligible – American Indian/Alaskan Native, VFC eligible - Federally Qualified Health Center Patient (under-insured), VFC eligible - State-specific eligibility (e.g. S-CHIP plan), or VFC eligible - Local-specific eligibility)

<table>
<thead>
<tr>
<th>Field</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient-level: No field in IIS</td>
<td>Vaccine-level: Yes</td>
</tr>
</tbody>
</table>

### History of Varicella Disease Indicator
- **Definition**: A field to denote if person had Varicella.

<table>
<thead>
<tr>
<th>Field</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>No field in IIS</td>
<td>50%</td>
</tr>
</tbody>
</table>

### Patient status indicators:
- **Definition**: A field to denote the status of a patient such as: Active, Inactive, Inactive-Lost to follow-up,(cannot contact), Inactive-Moved or gone elsewhere (transferred), Inactive-Permanently inactive (deceased), Other, or Unknown

<table>
<thead>
<tr>
<th>Field</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider level: No field in IIS</td>
<td>Jurisdictional level: No field in IIS</td>
</tr>
</tbody>
</table>

### Email address
- **Logic guidance**: Email address associated with patient that could be used to communicate with patient and/or the parent/guardian.

<table>
<thead>
<tr>
<th>Field</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

### 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 registry in a computer file format that requires little, if any, manipulation by registry staff for the data to be entered into the immunization registry. Such information is available in the registry within 6 weeks of birth.
Logic Guidance: Functional Standard 2 and 2.1
- For children born from January 1 through December 31, 2011.
- Include:
  - Records that were reported after Dec 31, 2011 for CY2011 births born in the catchment area.
  - Other birth record source includes birthing hospitals, perinatal or newborn screening programs.
- Exclude:
  - Deceased children.
  - Newborns with addresses outside of your state or geopolitical area. Geopolitical Area is defined as the area that contains the population of individuals residing in the geopolitical location covered by the IIS.

FS 2. What is the average amount of time, IN WEEKS, between a newborn child's birth and the establishment of an IIS record for newborn child in the catchment area? Note: Leave field BLANK if no records/not applicable. Use "0" to indicate average time of "0 weeks".

<table>
<thead>
<tr>
<th>Source</th>
<th>Average time (in WEEKS)</th>
<th>Percentage of all records (%) total should equal 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. From Vital Records</td>
<td>2.5</td>
<td>17%</td>
</tr>
<tr>
<td>b. From Other birth record sources</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>c. From NON-birth record sources</td>
<td>4.1</td>
<td>83%</td>
</tr>
<tr>
<td>d. All records (auto-generated)</td>
<td>3.3</td>
<td>100</td>
</tr>
</tbody>
</table>

Please describe source: PROVIDER ENTRY

FS 2.1 Number of newborn children born in the catchment area who have an IIS record established within 6 weeks (42 days) of birth in CY2011? 333699
i) Proportion of newborn children born in the catchment area that have an IIS record established within 6 weeks (42 days) of birth? 69%
(formula: F.S. 2.2.1/2012 birth cohort from census data provided by CDC)

Number of newborn children born in the catchment area (2010 Census data)

Functional Standard 3: Enable access to and retrieval of immunization information in the registry at the time of encounter.
Definition: The registry provides a means by which providers can access and retrieve immunization records prior to or at the time of a scheduled encounter.

FS 3.
- FS 3.1 PRIOR to a patient encounter, can participating providers access immunization information in the IIS? Yes No
- FS 3.2 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 registry receives and processes immunization information within 1 month of vaccine(s) administration (e.g., can include fax or phone requests).

**FS 4.** For all of the vaccines administered during CY2011 and recorded in the IIS for children at least 4 months of age and under 6 years of age, what number of vaccine doses were reported to the IIS within the following time frames:

<table>
<thead>
<tr>
<th>No</th>
<th>Timeframe (time from immunization to record entry into the IIS)</th>
<th>Paper</th>
<th>Batch</th>
<th>Electronic Real time</th>
<th>Direct Entry</th>
<th>Cannot separate by type</th>
<th>% Total (auto calc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td># equal to or less than 1 day</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>✓</td>
<td>83% Auto</td>
</tr>
<tr>
<td>b.</td>
<td># greater than 1 day - equal to or less than 7 days</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>✓</td>
<td>9% Auto</td>
</tr>
<tr>
<td>c.</td>
<td># greater than 7 days - equal to or less than 14 days</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>✓</td>
<td>3% Auto</td>
</tr>
<tr>
<td>d.</td>
<td># greater than 14 days - equal to or less than 30 days</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>✓</td>
<td>2% Auto</td>
</tr>
</tbody>
</table>

**Logic Guidance: Functional Standard 4**
- For children at least 4 months of age and under 6 years of age: born from January 1, 2006 through August 31, 2011.
- For vaccines administered in CY2011:
  - Include: Doses that were reported after Dec 31, 2011 but administered during CY2011.
  - Exclude:
    - Historical records – Field to denote that a vaccination was entered based on historical information such as: (source unspecified, from other provider, from parent's written record, from parent's recall, from other IIS, from birth certificate, from school record, or from public agency).
    - Exclude H1N1 vaccines.

**Definitions:**
- **Batch** – vaccines electronically imported in batch files that are loaded regularly (daily, weekly, monthly, etc.) after a provider is enrolled. Should include current vaccines administered.
- **Electronic real time** – vaccines electronically transmitted real-time for doses administered after a provider is enrolled. Electronic real time should allow indication of administered vs. historical vaccinations. Do not include historical vaccinations.
- **Direct entry** – vaccines entered into the IIS using the IIS user interface.

| e.  | # greater than 30 days                                       | %     | %     | %                    | %            | ✓                      | 3% Auto             |

**TOTALS (Auto-calculated)**
Column totals should EACH add up to 100%

| # of Records by type | % | % | % | ✔ | 100% Auto |

**Functional Standard 5: Protect the confidentiality of health care information.**
**Definition:** The registry 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 or 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.
**FS 5.** Has a written confidentiality policy been implemented that protects information in 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 registry 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.

**FS 6.** Has a written security policy that protects information in your IIS been implemented? (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 registry has a function, at the central level, that creates, receives, and properly processes the HL7 messages, as specified in NCIRD’s Implementation Guide for Immunization Data Transactions using Version 2.3.1 or 2.5.1 of the Health Level Seven (HL7) Standard Protocol.

**Logic Guidance: FS 7.1- 7.2 HL7 Capacity**

- Please consider ONLY your system’s capability using HL7. DO NOT consider flat-file or web-interface transactions.
- Please consider message exchanges that occurred in CY2011 only. DO NOT consider messages exchanged AFTER Dec 31, 2011.

**Definitions:**

- “Can you exchange this message type”: IIS has functionality to send the message type.
- “Do you exchange this message type”: IIS has functionality to send the message type AND does exchange message type if necessary.
- “# of messages”: If the IIS can and does exchange the message type, provide the total number exchanged in CY2011. If you cannot determine the number of messages, leave the field blank. Do NOT enter “0”.
  - An entry of “0” indicates that the IIS can and does exchange the message type, but that the determinable number exchanged in CY2011 was 0.
- “Check if cannot determine”: Check the box if the IIS can and does exchange the message type, but the number exchanged in CY2011 cannot be determined.
- “Will be implemented in <12 months”: IIS either does not have functionality or does not exchange the message type, but plans to within 12 months.
- “Not available nor planned”: System does not have functionality or does not exchange the message type and is not planning implementation.

**FS 7.1 HL7 vs. 2.3.1** Can your IIS generate an HL7 vs. 2.3.1 outbound file?  ✓ Yes    □ No

<table>
<thead>
<tr>
<th>Exchange Requests</th>
<th>Can you exchange this message type</th>
<th>Do you exchange this message type</th>
<th># of messages</th>
<th>Check if cannot determine #</th>
<th>Will be implemented in &lt;12 months?</th>
<th>Not available nor planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL7 vs. 2.3.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### Messages SENT by IIS

<table>
<thead>
<tr>
<th></th>
<th>VXU</th>
<th>VXR</th>
<th>VXX</th>
<th>ACK</th>
<th>QCK</th>
<th>VXQ</th>
<th>ORU</th>
<th>ADT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
</tr>
<tr>
<td></td>
<td>192689</td>
<td>#</td>
<td>#</td>
<td>#</td>
<td>#</td>
<td>#</td>
<td>#</td>
<td>#</td>
<td>192689</td>
</tr>
</tbody>
</table>

#### FS 7.2 HL7 vs. 2.3.1
Can your IIS process a HL7 vs. 2.3.1 inbound file?  ✓ Yes ☐ No

#### Exchange Requests

<table>
<thead>
<tr>
<th>HL7 vs. 2.3.1 Messages RECEIVED by IIS</th>
<th>Can you exchange this message type</th>
<th>Do you exchange this message type</th>
<th># of messages</th>
<th>Check if cannot determine #</th>
<th>Will be implemented in &lt;12 months?</th>
<th>Not available nor planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>VXU</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>2704277</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>VXR</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>#</td>
<td>✓</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>VXX</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>#</td>
<td>✓</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>ACK</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>#</td>
<td>✓</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>QCK</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>#</td>
<td>✓</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>VXQ</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>1346658</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>ORU</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>#</td>
<td>✓</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>ADT</td>
<td>✓ Yes ☐ No</td>
<td>✓ Yes ☐ No</td>
<td>104600</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>TOTAL</td>
<td>-</td>
<td>-</td>
<td># (auto)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### FS 7.3 HL7 vs. 2.5.1
Can your IIS generate an HL7 vs. 2.5.1 outbound file?  ✓ Yes ☐ No
<table>
<thead>
<tr>
<th>Exchange Requests</th>
<th>Can you exchange this message type</th>
<th>Do you exchange this message type</th>
<th># of messages</th>
<th>Check if cannot determine #</th>
<th>Will be implemented in &lt;12 months?</th>
<th>Not available nor planned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HL7 vs. 2.5.1 Messages SENT by IIS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VXU</td>
<td>✔ Yes  ☐ No</td>
<td>✔ Yes  ☐ No</td>
<td>#</td>
<td>✔</td>
<td>☐ Yes  ☐ No</td>
<td>☐</td>
</tr>
<tr>
<td>ADT</td>
<td>✔ Yes  ☐ No</td>
<td>✔ Yes  ☐ No</td>
<td>#</td>
<td>✔</td>
<td>☐ Yes  ☐ No</td>
<td>☐</td>
</tr>
<tr>
<td>QBP</td>
<td>✔ Yes  ☐ No</td>
<td>✔ Yes  ☐ No</td>
<td>#</td>
<td>✔</td>
<td>☐ Yes  ☐ No</td>
<td>☐</td>
</tr>
<tr>
<td>RSP</td>
<td>✔ Yes  ☐ No</td>
<td>✔ Yes  ☐ No</td>
<td>#</td>
<td>✔</td>
<td>☐ Yes  ☐ No</td>
<td>☐</td>
</tr>
<tr>
<td>ACK</td>
<td>✔ Yes  ☐ No</td>
<td>✔ Yes  ☐ No</td>
<td>#</td>
<td>✔</td>
<td>☐ Yes  ☐ No</td>
<td>☐</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FS 7.3 HL7 vs. 2.5.1**  
Can your IIS process a HL7 vs. 2.5.1 inbound file?  
☐ Yes  ☐ No

<table>
<thead>
<tr>
<th>Exchange Requests</th>
<th>Can you exchange this message type</th>
<th>Do you exchange this message type</th>
<th># of messages</th>
<th>Check if cannot determine #</th>
<th>Will be implemented in &lt;12 months?</th>
<th>Not available nor planned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HL7 vs. 2.5.1 Messages RECEIVED by IIS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VXU</td>
<td>✔ Yes  ☐ No</td>
<td>✔ Yes  ☐ No</td>
<td>#</td>
<td>✔</td>
<td>☐ Yes  ☐ No</td>
<td>☐</td>
</tr>
<tr>
<td>ADT</td>
<td>✔ Yes  ☐ No</td>
<td>✔ Yes  ☐ No</td>
<td>#</td>
<td>✔</td>
<td>☐ Yes  ☐ No</td>
<td>☐</td>
</tr>
<tr>
<td>QBP</td>
<td>✔ Yes  ☐ No</td>
<td>✔ Yes  ☐ No</td>
<td>#</td>
<td>✔</td>
<td>☐ Yes  ☐ No</td>
<td>☐</td>
</tr>
<tr>
<td>RSP</td>
<td>✔ Yes  ☐ No</td>
<td>✔ Yes  ☐ No</td>
<td>#</td>
<td>✔</td>
<td>☐ Yes  ☐ No</td>
<td>☐</td>
</tr>
<tr>
<td>ACK</td>
<td>✔ Yes  ☐ No</td>
<td>✔ Yes  ☐ No</td>
<td>#</td>
<td>✔</td>
<td>☐ Yes  ☐ No</td>
<td>☐</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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 registry 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.
FS 8. 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 registry 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 registry's algorithm (see Functional Standard #8). The output from this function gives the ability to produce reminder or recall notices.

FS 9. 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)

REMINDER ✓ Yes ☐ No
RECALL ✓ Yes ☐ No

Functional Standard 10: Automatically produce immunization coverage reports by providers, age groups, and geographic areas.
Definition: The registry 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 registry's entire catchment area, and for subgroups within a practice or the catchment area (e.g., children of a certain age).

FS 10. 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 registry has an function that allows authorized users to produce an individual's immunization history that is accepted as an official immunization record.

FS 11. 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 registry has developed and implemented a data quality protocol to combine all available information relating to a particular individual into a single, accurate immunization record.

FS 12. 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

Section IV. Interoperability
Section IV-A – Electronic Transaction Received by IIS by Type

Logic Guidance – Question 54

- **Definition**: Electronic transaction is any form of electronic information that is received by your IIS.
- Estimate at the patient and vaccination record levels.
- Include: Any transaction with new information (history submissions, query requests, updates, etc.).
- Include: Messages exchanged during January 1, 2011 through December 31, 2011.

54. Estimate the percentage of the different types of electronic transactions by format type that are received (excluding the vital record feed) by your IIS during CY2011. (Percentages should total 100%)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>Health Level 7 (any message type or version)</td>
</tr>
<tr>
<td>33%</td>
<td>Flat file (include Excel, comma, tab separated, column defined, etc)</td>
</tr>
<tr>
<td></td>
<td>Database format</td>
</tr>
<tr>
<td></td>
<td>XML schema</td>
</tr>
<tr>
<td></td>
<td>Digitally scanned document (can include forms that have to be scanned once they arrive at the IIS, OCR)</td>
</tr>
<tr>
<td>62%</td>
<td>User Interface (real-time data entry)</td>
</tr>
</tbody>
</table>
|   | Other1 describe format_____________________
|   | Other2 describe format_____________________ |

Section IV-B – Transport Layer Functionality

Logic Guidance – Question 55- 56
**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.

55. What protocol do you use to transport data between your IIS and Health Information Systems? Please choose all that apply:
   a. ebXML
   b. HTTPS/SSL
   c. sFTP
   d. SOAP/XMLP
   e. Message queuing
   f. Email/SMTP
   g. MLLP
   h. Other
   i. Does not apply

56. What application, if any, do you use to transport data between your IIS and Health Information Systems? Please choose all that apply:
   a. PHIN-MS
   b. STC Bridge
   c. Rhapsody
   d. Other - CAIR
   e. Does not apply

Section IV-C - Health Information Exchanges and IIS

57. Does your IIS actively send or receive data from any state/city/regional HIE exchange?  
   □ Yes  ✔ No (if no skip to question 63)

58. If yes to 57, list which state/city/regional HIE exchanges you participate in ______________________ |

59. Indicate how you exchange data below (check all that apply).
   __ Unidirectional (One-way data exchange)    □ Real time    □ Batch
   __ Unidirectional+ (One-way data exchange, including acknowledgement and error messages)    □ Real time    □ Batch
   __ Bidirectional (Two-way data exchange including responses, queries, acknowledgement, and error messages)    □ Real time    □ Batch

60. What information does your IIS receive and supply through the HIE?
a. Immunization data (vaccine types, dates)  □ receive □ supply
b. Vaccine forecasting data  □ receive □ supply
c. Patient demographic data  □ receive □ supply
d. Other non-immunization data: describe  □ receive □ supply
e. Have not determined yet  □ receive □ supply

61. Does your IIS exchange data grantee to grantee?  □ Yes  □ No If yes, which states/cities ____________________________.

62. If yes to 61, indicate how you exchange data below (check all that apply).
   __Flat file exchange
   __HL7 unidirectional  □ Real time  □ Batch
   __HL7 bidirectional  □ Real time  □ Batch

Section IV-D – VTrckS and IIS

63. Is your program using or planning to use the VTrckS ExIS interface?
   __ Currently interfacing the IIS with VTrckS
   ✓ Plan to interface the IIS with VTrckS in the next year
   __ Plan to interface the IIS with VTrckS in the next 2 years
   __ Currently interfacing or planning to interface an ExIS (not an IIS) with VTrckS
   __ Do not plan to interface the IIS or an ExIS with VTrckS

64. Currently what proportion of your providers track inventory at the NDC level?
   __ 75 – 100% of providers track inventory at the NDC level
   __ 50 – 74% of providers track inventory at the NDC level
   __ 25 – 49% of providers track inventory at the NDC level
   ✓ <25% of providers track inventory at the NDC level
   __ Providers track inventory by lot and product type; the IIS connects this information to NDC

65. Does your IIS handle any of the vaccine inventory transactions listed below?
   ✓ Lost Vaccine
   ✓ Borrowed Vaccine
   ✓ Transferred Vaccine
   ✓ Wasted Vaccine
Section V. Data Use

Logic Guidance:
- **Automatic report**: A canned report pre-programmed into the system
- **Ad hoc report**: Any report that requires any level of customization either from the front-end of the system or from additional programming

66. **If Yes to FS 10**, how are the reports generated: (can have answer on both lines)
   - Automatic/standard reports  ✔ Yes ☐ No  If yes, who generates these reports? ✔ IIS Staff  ✔ Providers ☐ Vendor ☐ Other, please describe
   - Ad hoc reports  ✔ Yes ☐ No  If yes, who generates these reports? ✔ IIS Staff  ✔ Providers ☐ Vendor ☐ Other, please describe

67. Do you use IIS data for immunization program management purposes such as: (Check all that apply)
   a. **Epidemiology**
      i. routine surveillance ✔ Yes ☐ No
      ii. outbreak management ✔ Yes ☐ No
      iii. new vaccine uptake ✔ Yes ☐ No
      iv. monitor contraindications ✔ Yes ☐ No
      v. track adverse events ✔ Yes ☐ No
      vi. track children born to HbsAG unknown/positive mothers for intensified HepB surveillance ✔ Yes ☐ No
      vii. facilitate report to VAERS (IIS reporting to VAERS for initial evaluation of vaccine safety issues.) ✔ Yes ☐ No
   b. **Program management reports**
      i. IIS data quality reports, if yes please list type of reports ✔ Yes ☐ No
      ii. Vaccine inventory management
         a) doses administered report ✔ Yes ☐ No
         b) vaccine recall ✔ Yes ☐ No
         c) VFC eligibility ✔ Yes ☐ No
      iii. Assessments
         a) UTD status ✔ Yes ☐ No
         b) school assessments ✔ Yes ☐ No
         c) vaccine coverage ✔ Yes ☐ No
         d) pockets of need (geopolitical or demographic pockets of need) ☐ Yes ✗ No
         e) AFIX ✔ Yes ☐ No
         f) HEDIS reporting ✔ Yes ☐ No
   c. **Emergency preparedness**
68. Is your IIS data geo-coded for Geographic Information System (GIS) analysis?  

**Definition:** Geo-coding is a process of assigning coordinates to addresses so they can be displayed as a point on a map.

- **Yes**
- **No**

69. If yes to 68, do you use IIS data to generate GIS maps (either GIS is built into your IIS or exporting IIS data to GIS software)?

- **Yes**
- **No**

70. If yes to 69, what type(s) of GIS maps do you generate? Open text (see below).

71. How are users accessing IIS data through an IIS user interface? (Check all that apply)

<table>
<thead>
<tr>
<th>No</th>
<th>User types</th>
<th>User type has Read-only (view-only) access to IIS data</th>
<th>User type can update a record (read/view, update, and exchange a record)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Hospitals (birthing hospitals or hospitals administering birth dose Hepatitis B vaccine) (IPOM 7.1)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>b)</td>
<td>Daycare/Head Start (IPOM 10.2d)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>c)</td>
<td>Elementary Schools (IPOM 10.2d)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td>High Schools (IPOM 10.2d)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>e)</td>
<td>Higher Education (trade schools, junior college, college/university)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>f)</td>
<td>Correctional facilities</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>g)</td>
<td>WIC (IPOM 11c)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>h)</td>
<td>STD/HIV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i)</td>
<td>Long-term care facilities (IPOM 7.1)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>j)</td>
<td>Health Plans</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>k)</td>
<td>IHS/Tribal/Urban (I/T/U) (IPOM 1.1b)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>l)</td>
<td>Veterans Administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>m)</td>
<td>Juvenile facilities</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>n)</td>
<td>Military</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o)</td>
<td>Family planning</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>p)</td>
<td>Medicaid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>q)</td>
<td>Medicare</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
72. Does your IIS have the following features? (Check all that apply)

<table>
<thead>
<tr>
<th>No.</th>
<th>Features</th>
<th>Check if Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Newborn Hearing Screening</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>Lead Screening</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>BMI (body mass index)</td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td>VPD Surveillance (vaccine preventable diseases)</td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td>TB</td>
<td>✓</td>
</tr>
<tr>
<td>f.</td>
<td>Oral health</td>
<td></td>
</tr>
<tr>
<td>g.</td>
<td>Other [please specify]</td>
<td></td>
</tr>
</tbody>
</table>