Section IX. 2019 Immunization Information Systems Annual Report (IISAR)

What is the Immunization Information Systems Annual Report (IISAR)?

The IISAR is an annual survey that assesses immunization program performance in developing, maintaining, and enhancing Immunization Information Systems for a given calendar year. It is a reporting requirement for the 64 immunization programs that receive funding under section 317b of the Public Health Service Act.

A brief note on methods

- The IISAR is a self-reported, self-validated survey administered by the Centers for Disease Control and Prevention (CDC) and answered by immunization program awardees. CDC may contact you with questions after submission in order to continue data validation.
- Data are collected prior to the release of Census estimates for the year of the survey. For this reason, we include Census estimates in the survey for the year prior to provide preliminary estimates for some measures. These preliminary estimates are revised when the final Census data are released—approximately in September each year—for the prior years' data. CDC provides preliminary estimates on the IISAR to ensure the estimates are concordant with the program and past years' data.

Changes in 2019

The IISAR underwent revisions in 2019 to better standardize inclusion and exclusion criteria in the logic guidance for population-based measures. Other changes include the addition of an independent denominator for vaccine record data elements, the addition of Functional Standard 18 measures, and expanded logic guidance throughout the document that incorporate awardee feedback from previous years. While there are some new questions, there are some old questions that have subtle logic guidance changes. Please be sure to carefully review the logic guidance in all sections in order to respond to their new specifications as accurately as possible.

Instructions

- All awardees that conduct IIS activities in their state/city/territory are required to complete this report.
- All awardees with IIS in transition are required to complete questions 1 through 5 and should consult with their IISSB Project Officer to discuss completing other data elements on the questionnaire.
- Items in italics are completed by CDC; awardees only need to respond to questions that are NOT italicized.
- Items reflect a range of topics involving the IIS's live production environment. The production environment refers to the IIS being in operation and available for its intended use by its users.
- 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 (ACIP) and indicates the lower and upper age limits for who should be included in data reporting. 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 IISAR must be done by the Immunization Program Manager or their designee.
- Only one Annual Report will be accepted per awardee. If awardees receive information from other regions or counties in their jurisdiction, the awardee must compile the information into one Annual Report.
- The Annual Report is **due on March 31, 2020**; the year of performance is calendar year 2019. CDC IISSB staff will contact each IIS after March 31 with questions and/or comments about the report and data submitted for calendar year 2019. After March 31, 2020, the submission data will be corrected and revised. Any revised

submissions from awardees should correct issues with the submitted data as of March 31 ONLY. When submitting revisions, do NOT submit additional 2019 data that were uploaded AFTER the March 31 cutoff date.

- Please contact Terence Ng, CDC/NCIRD/IISSB (contractor) at VFK5@cdc.gov or Lauren Shaw, CDC/NCIRD/IISSB at ILV6@cdc.gov if you need clarification on a question or answer choice.

Resources

- For additional guidance on Patient Active/Inactive Status in Immunization Information Systems, see the AIRA guide here: http://repository.immregistries.org/files/resources/5835adc2dad8d/mirow_pais_full_guide.pdf
- For additional guidance on using dates to calculate a period of time, the Clinical Decision Support for Immunization (CDSi): Logic Specification for ACIP Recommendations can be referenced here: https://www.cdc.gov/vaccines/programs/iis/cdsi.html
- For additional guidance on IIS security, see the AIRA guide here: http://repository.immregistries.org/files/resources/595e4e25ab1b1/aira_security_guidance_-_final_new_logo.pdf

CONTACT INFORMATION AND SCOPE OF IIS

Logic Guidance:
Q.1 – Q.5 are required to be completed by all awardees, including those with IIS in transition or temporarily inactive.
List ONLY government employee contacts in Q.3 and Q.4.

1. Awardee_____

2. Name of person(s) submitting this report_____

3. Programmatic IIS contact person (a manager or administrator who coordinates IIS activities):

a. First Name: _____   e. Phone:_____ f. Ext: _____
b. Last Name: _____   g. Email:_____
c. Title: _____
d. Affiliation:_____

h. ☐   Check if contact person for questions about this report

4. Technical IIS contact person (coordinator of IIS software and/or hardware) :

☐   Check if same as programmatic contact *(if yes, autopopulate a-g)*

a. First Name: _____   e. Phone:_____ f. Ext: _____
b. Last Name: _____   g. Email:_____
c. Title: _____
d. Affiliation:_____

h. ☐   Check if contact person for questions about this report

5. ☐   There is no IIS in production in this state/city/territory. *(If yes, block out all subsequent sections of report)*

Age Groups

Logic Guidance:

The IISAR has been programmed to match the age groups below. Some questions are only relevant for defined age groups. Therefore, the number of required questions may be reduced depending on which age groups are included in your IIS.

When determining if an age group is included in your IIS, consider the age range that your IIS is authorized to collect regardless of a reporting mandate or the completeness of data captured for that age group.

6. Which age groups are included in your IIS? Select one:

a.   Birth through 18 years of age

b.   All ages, including adults

c.   Other (specify)_____

ESSENTIAL INFRASTRUCTURE STANDARDS

FUNCTIONAL STANDARD 1: The IIS contains complete and timely demographic and immunization data for children, adolescents, and adults residing or immunized within its jurisdiction.

Timeliness of Birth Records in IIS

Logic Guidance—Birth Record Timeliness:

- **Notes on Days:**
  - Day 0 refers to the date of birth.
  - Days listed refer to calendar days.

- **Notes on Vital Records versus Other Records**
  - Vital Records: Vital Records are records of life events kept under governmental authority and include birth certificates.
  - Other record: Other birth records are all other records of birth that are not Vital Records and may come from birthing hospitals, perinatal or newborn screening programs.
  - Reported numbers of newborn records established from Vital Records and other record sources should be mutually exclusive.
  - When determining whether a record was established by Vital Records or other birth record sources, consider which source the birth record was established by **first**. Therefore, regardless of whether a birth record is later established by Vital Records, if it was first established by Other Record sources, consider it established by Other Record Sources. Only consider a record established by Vital Records if it was established in your IIS by Vital Records FIRST.

- **Use the table below to identify newborns to include in the assessment:**

Status	Age	Residence	Immunization History	Include?
Active	Born 1/1/2019 through 12/31/2019	Address in jurisdiction	<any>	YES
Active	Born 1/1/2019 through 12/31/2019	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2019 through 12/31/2019	Address unknown	IIS has never received vaccination information	YES
Unknown	Born 1/1/2019 through 12/31/2019	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born 1/1/2019 through 12/31/2019	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born 1/1/2019 through 12/31/2019	Address not in jurisdiction	<any>	NO

| Deceased | Born 1/1/2019 through 12/31/2019 | <any> | <any> | NO |
| <any> | Born before 1/1/2019 or after 12/31/2019 | <any> | <any> | NO |

7. For children born January 1 through December 31, 2019 in your IIS's jurisdiction, what number had a demographic record established in your IIS within the following days after birth:

	a. Number of children with record established from Vital Records	**b. Number of children with record established from sources other than Vital Records**	*Percentage of children with records established in the specified timeframe (auto-calculated)*
≤30 days	a.	b.	*c. (a+b)/(j+k)*
>30 days - ≤60 days	d.	e.	*f. (d+e)/(j+k)*
>60 days	g.	h.	*i. (g+h)/(j+k)*
Total (auto-calculated)	j.--	k.--	

Timeliness of vaccination records in IIS

Logic Guidance—Vaccine Record Timeliness:

- **Notes on timeliness:**
    - The period of timeliness corresponds to the time between the date of administration of the vaccine dose indicated on the vaccination record and the date the vaccination record was posted to production in your IIS.
    - Timeframes listed refer to calendar days.

- **Notes on determining patient age:**
    - Age at which vaccine is administered should be determined as of the date of vaccine administration during CY2019.
    - Depending on the date of birth, vaccines administered to an individual may fall outside the question age ranges.
        - Example: Vaccines administered to a child born on November 25, 2000 would be included in the "0 through 18" age range if administered before November 25, 2019, since the child would be 18 years and one day before their 19th birthday. Vaccines administered on or after November 25, 2019 would not be included because they were administered when the child then turned 19 years old.

- **Use the table below to identify individuals to include in the assessment:**

Status	Age	Residence	Immunization History	Include?
Active	Born 1/1/2001 through 12/31/2019	Address in jurisdiction	\<any\>	YES
Active	Born 1/1/2001 through 12/31/2019	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2001 through 12/31/2019	Address unknown	IIS has never received vaccination information	NO
Unknown	Born 1/1/2001 through 12/31/2019	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES

Inactive	Born 1/1/2001 through 12/31/2019	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born 1/1/2001 through 12/31/2019	Address not in jurisdiction	<any>	NO
Deceased	Born 1/1/2001 through 12/31/2019	<any>	<any>	NO
<any>	Born 1/1/2001 through 12/31/2019	<any>	Only received an H1N1 vaccination and no other immunization information	NO
<any>	Born before 1/1/2001 or after 12/31/2019	<any>	<any>	NO

- **After identifying individuals in the table above, use this table to determine the appropriate vaccination records to include in the assessment:**

General vaccination inclusions/exclusions	Include?
Vaccinations administered in CY2019 for all persons 0 – 18 years in your IIS	YES
Doses that were administered **before** January 1, 2020, including those **recorded** after December 31, 2019	YES
All doses (valid and invalid)	YES
H1N1 vaccines administered	NO
Travel vaccines (yellow fever, typhoid, etc.) See: http://wwwnc.cdc.gov/travel/page/yellowbook-home	NO
Historical vaccinations (vaccination information submitted to your IIS by a provider who did not administer that vaccination)	NO
Non-vaccine products (e.g. immune globulins, PPD)	NO

8. For vaccinations administered in CY2019 to all persons 0 – 18 years in your IIS, list the number of vaccine doses posted to production to your IIS within the following time frames:

	Number of vaccine doses administered (i.e. non-historical) during CY2019 to persons aged 0 through 18 years as of the date of vaccination	*Percentage of doses reported for persons aged 0 through 18 years for the specified timeframe (auto-calculated)*
≤1 days	a	*f (a/e)*
>1 days–≤14 days	b	*g (b/e)*
>14 days–≤30 days	c	*h (c/e)*
>30 days	d	*i (d/e)*
Total (auto-calculated)	e	

Newborn Population Capture

Logic Guidance—Newborn Population Capture:

- **Notes on Vital Records vs Other Records**
    - Vital Records: Vital Records are records of life events kept under governmental authority and include birth certificates.
    - Other record: Other birth records are all other records of birth that are not Vital Records and may come from birthing hospitals, perinatal or newborn screening programs.
    - Reported numbers of newborn records established from Vital Records and other record sources should be mutually exclusive.
    - For Q.10 – Q.11 below, if a patient record comes to your IIS through other birth record sources, but is later verified by Vital Records, consider the patient record to have come from Vital Records.
    - For Q.10 – Q.11 below, if a patient record comes to your IIS through other birth record sources ONLY, consider the patient record to have come from other record sources.

- **Use the table below to identify newborns to include in the assessment:**

Status	Age	Residence	Immunization History	Include?
<any>	Born 1/1/2019 through 12/31/2019	Known to reside in jurisdiction at time of query, regardless of residence at time of birth		Yes
Active	Born 1/1/2019 through 12/31/2019	Address in jurisdiction	<any>	YES
Active	Born 1/1/2019 through 12/31/2019	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2019 through 12/31/2019	Address unknown	IIS has never received vaccination information	YES
Unknown	Born 1/1/2019 through 12/31/2019	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born 1/1/2019 through 12/31/2019	Address in jurisdiction	IIS has not received immunization information for an extended period of time*	NO

			* Note that the "extended period of time" could be defined differently by each IIS	
Inactive	Born 1/1/2019 through 12/31/2019	Address not in jurisdiction	<any>	NO
Deceased	Born 1/1/2019 through 12/31/2019	<any>	<any>	NO
<any>	Born before 1/1/2019 or after 12/31/2019	<any>	<any>	NO

9. *Number of children in the jurisdiction born from January 1 through December 31, 2019. (2018 Census data)*

10. Number of patient records created in your IIS from Vital Records for children born from January 1 through December 31, 2019 who resided in your jurisdiction at the time of query._____

11. Number of patient records created in your IIS from sources other than Vital Records for children born from January 1 through December 31, 2019 who resided in your jurisdiction at the time of query. _____

   a.   *Percentage of children in your IIS born from January 1 through December 31, 2019 with records created in your IIS from all sources. (Q.10+Q.11/Q.9)*

Enrollment in IIS (0–18 years, lifespan)

Logic Guidance—Enrollment among individuals aged 0 through 18 years:

- **Q.13: For individuals 0 – 18 year of age**

- Use the table below to identify individuals to include in the assessment:

Status	Age	Residence	Immunization History	Include?
Active	Born 1/1/2001 through 12/31/2019	Address in jurisdiction	\<any\>	YES
Active	Born 1/1/2001 through 12/31/2019	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2001 through 12/31/2019	Address unknown	IIS has never received vaccination information	YES
Unknown	Born 1/1/2001 through 12/31/2019	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born 1/1/2001 through 12/31/2019	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born 1/1/2001 through 12/31/2019	Address not in jurisdiction	\<any\>	NO
Deceased	Born 1/1/2001 through 12/31/2019	\<any\>	\<any\>	NO
\<any\>	Born 1/1/2001 through 12/31/2019	\<any\>	Only received an H1N1 vaccination and no other immunization information	NO
\<any\>	Born before 1/1/2001 or after 12/31/2019	\<any\>	\<any\>	NO

- **After identifying individuals in the table above, use this table to further identify individuals to include in the assessment for Q.13:**

General demographic inclusions/exclusions	Include?
Individuals enrolled in your IIS, even if they only have travel vaccines, non-vaccine products, or no vaccines in the vaccine record	YES

12. *Number of individuals aged 0 years through 18 years in the jurisdiction at the time of query. (2018 Census data)*

13. Number of individuals aged 0 years through 18 years (born from January 1, 2001 through December 31, 2019) in both your jurisdiction AND your IIS. _____

    a. *0–18 years enrollment: Percentage of individuals aged 0 years through 18 years in both your jurisdiction AND your IIS. (Q.13/Q.12)*

Logic Guidance—Enrollment among individuals of all ages:

- **Q.15: For individuals of all ages**

- **Use the table below to identify individuals to include in the assessment:**

Status	Age	Residence	Immunization History	Include?
Active	Born on or before 12/31/2019	Address in jurisdiction	<any>	YES
Active	Born on or before 12/31/2019	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born on or before 12/31/2019	Address unknown	IIS has never received vaccination information	YES
Unknown	Born on or before 12/31/2019	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born on or before 12/31/2019	Address in jurisdiction	IIS has not received immunization information for an extended period of time*	NO

			* Note that the "extended period of time" could be defined differently by each IIS	
Inactive	Born on or before 12/31/2019	Address not in jurisdiction	<any>	NO
Deceased	Born on or before 12/31/2019	<any>	<any>	NO
<any>	Born on or before 12/31/2019	<any>	Only received an H1N1 vaccination and no other immunization information	NO
<any>	Born after 12/31/2019	<any>	<any>	NO

- **After identifying individuals in the table above, use this table to further identify individuals to include in the assessment for Q.15:**

General demographic inclusions/exclusions	Include?
Individuals enrolled in your IIS, even if they only have travel vaccines, non-vaccine products, or no vaccines in the vaccine record	YES

14. *Number of individuals of all ages in the jurisdiction at the time of query. (2018 Census data)*

15. Number of individuals of all ages (born on or before December 31, 2019) in both your jurisdiction AND your IIS. _____

   a.   *Lifespan enrollment: Percentage of individuals of all ages in both your jurisdiction AND your IIS. (Q.15/Q.14)*

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

Logic Guidance—Enrollment among children aged 4 months through 5 years:

- **For Q.17:**

- **Use the table below to identify children to include in the enrollment assessment:**

Status	Age	Residence	Immunization History	Include?
Active	Born 1/1/2014 through 8/31/2019	Address in jurisdiction	<any>	YES
Active	Born 1/1/2014 through 8/31/2019	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2014 through 8/31/2019	Address unknown	IIS has never received vaccination information	YES
Unknown	Born 1/1/2014 through 8/31/2019	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born 1/1/2014 through 8/31/2019	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born 1/1/2014 through 8/31/2019	Address not in jurisdiction	<any>	NO
Deceased	Born 1/1/2014 through 8/31/2019	<any>	<any>	NO
<any>	Born before 1/1/2014 or after 8/31/2019	<any>	<any>	NO

- **After identifying children in the table above, use this table to further identify children to include in the assessment for Q.17:**

General demographic inclusions/exclusions	Include?

Children enrolled in your IIS, even if they only have travel vaccines, non-vaccine products, or no vaccines in the vaccine record	YES

16. *Number of children aged 4 months through 5 years in the jurisdiction at the time of query. (2018 Census data)*

17. Number of children aged 4 months through 5 years (born from January 1, 2014 through Aug 31, 2019) in both your jurisdiction AND IIS at the time of query. _____

    a. *Child enrollment: Percentage of children aged 4 months through 5 years in both your jurisdiction AND IIS at the time of query. (Q.17/Q.16)*

Logic Guidance—Participation among enrolled children aged 4 months through 5 years:

- **For Q.18:**

- **After identifying children for enrollment in Q.17, use this table to further identify children with the following vaccinations for Q.18:**

General vaccination inclusions/exclusions	Include?
All doses (valid and invalid) administered **before** January 1, 2020, including those **recorded** in your IIS after December 31, 2019	YES
Travel vaccines (yellow fever, typhoid, etc.) See: http://wwwnc.cdc.gov/travel/page/yellowbook-home	NO
Non-vaccine products (e.g. immune globulins, PPD)	NO

18. Number of children in Q.17 (children born from January 1, 2014 through Aug 31, 2019 in both your jurisdiction AND IIS at the time of query) who have 2 or more vaccine doses recorded in your IIS. (Healthy People 2020 objective) _____

    a. *Child participation: Percentage of children aged 4 months through 5 years in both your jurisdiction AND IIS at the time of query who have 2 or more vaccine doses recorded in your IIS. (Q.18/Q.16)*

Adolescent Participation in IIS (aged 11 through 17 years)

Logic Guidance—Enrollment among adolescents aged 11 through 17 years:

- **For Q.20:**

- **Use the table below to identify adolescents to include in the enrollment assessment:**

Status	Age	Residence	Immunization History	Include?
Active	Born 1/1/2002 through 12/31/2008	Address in jurisdiction	<any>	YES
Active	Born 1/1/2002 through 12/31/2008	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2002 through 12/31/2008	Address unknown	IIS has never received vaccination information	YES
Unknown	Born 1/1/2002 through 12/31/2008	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born 1/1/2002 through 12/31/2008	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born 1/1/2002 through 12/31/2008	Address not in jurisdiction	<any>	NO
Deceased	Born 1/1/2002 through 12/31/2008	<any>	<any>	NO
<any>	Born 1/1/2002 through 12/31/2008	<any>	Only received an H1N1 vaccination and no other immunization information	NO
<any>	Born before 1/1/2002 or after 12/31/2008	<any>	<any>	NO

- **After identifying adolescents in the table above, use this table to further identify adolescents to include in the assessment for Q.20:**

General demographic inclusions/exclusions	Include?
Adolescents enrolled in your IIS, even if they only have travel vaccines, non-vaccine products, or no vaccines in the vaccine record	YES

19. *Number of adolescents aged 11 through 17 years in your jurisdiction at the time of query. (2018 Census data)*

20. Number of adolescents aged 11 through 17 years (born from January 1, 2002 through December 31, 2008) in both your jurisdiction AND IIS at the time of query. _____

   a. *Adolescent enrollment: Percentage of adolescents aged 11 through 17 years in both your jurisdiction AND IIS at the time of query. (Q.20/Q.19)*

Logic Guidance—Participation among enrolled adolescents aged 11 through 17 years:

- **For Q.21:**

- **After identifying adolescents for enrollment in Q.20, use this table to further identify adolescents with the following vaccinations for Q.21:**

General vaccination inclusions/exclusions	Include?
All doses (valid and invalid) administered **before** January 1, 2020, including those **recorded** in your IIS after December 31, 2019	YES
Adolescent doses ONLY if they were <u>administered</u> from age 9 through 17 years. Only include: Tdap/Td, HPV, meningococcal (any serotype), seasonal influenza, pneumococcal, HepA, HepB, polio, MMR, and varicella (http://www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html#printable)	YES
Doses administered to adolescents before the adolescent's 9th birthday	NO
H1N1 vaccines administered	NO
Travel vaccines (yellow fever, typhoid, etc.) See: http://wwwnc.cdc.gov/travel/page/yellowbook-home	NO
Non-vaccine products (e.g. immune globulins, PPD)	NO

21. Number of adolescents in Q.20 (adolescents born from January 1, 2002 through December 31, 2008 in both your jurisdiction AND IIS at the time of query) who have 2 or more adolescent vaccine doses administered from age 9 through 17 years recorded in your IIS? (Healthy People 2020 objective). _____

   a. *Adolescent participation: Percentage of adolescents aged 11 through 17 years in both your jurisdiction AND IIS at the time of query who have 2 or more adolescent vaccine doses recorded in your IIS. (Q.21/Q.19)*

Adult Participation in IIS (aged 19 years and older)

Logic Guidance—Enrollment among adults aged 19 years and older:

- **For Q.23:**

- **Use the table below to identify adults to include in the enrollment assessment:**

Status	Age	Residence	Immunization History	Include?
Active	Born on or before 12/31/2000	Address in jurisdiction	<any>	YES
Active	Born on or before 12/31/2000	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born on or before 12/31/2000	Address unknown	IIS has never received vaccination information	YES
Unknown	Born on or before 12/31/2000	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born on or before 12/31/2000	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born on or before 12/31/2000	Address not in jurisdiction	<any>	NO
Deceased	Born on or before 12/31/2000	<any>	<any>	NO
<any>	Born on or before 12/31/2000	<any>	Only received an H1N1 vaccination and no other immunization information	NO
<any>	Born after 12/31/2000	<any>	<any>	NO

- **After identifying adults in the table above, use this table to further identify adults to include in the assessment for Q.23:**

General demographic inclusions/exclusions	Include?

Adults enrolled in your IIS, even if they only have travel vaccines, non-vaccine products, or no vaccines in the vaccine record	YES

22. *Number of adults aged 19 years and older in your jurisdiction at the time of query. (2018 Census data)*

23. Number of adults aged 19 years and older (born on or before December 31, 2000) in both your jurisdiction AND IIS at the time of query. _____

    a. *Adult enrollment: Percentage of adults aged 19 years and older in both your jurisdiction AND IIS at the time of query. (Q.23/Q.22)*

Logic Guidance—Participation among enrolled adults aged 19 years and older:

- **For Q.24:**

- **After identifying adults for enrollment in Q.23, use this table to further identify adults with the following vaccinations for Q.24:**

General vaccination inclusions/exclusions	Include?
All doses (valid and invalid) administered **before** January 1, 2020, including those **recorded** in your IIS after December 31, 2019	YES
Adult doses ONLY if they were <u>administered</u> from age 19 years and older. Only include: seasonal influenza, Tdap/Td, varicella, HPV, zoster, MMR, pneumococcal, meningococcal (any serotype), HepA, and HepB https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf	YES
Doses administered to adults before 19 years of age	NO
H1N1 vaccines administered	NO
Travel vaccines (yellow fever, typhoid, etc.) See: http://wwwnc.cdc.gov/travel/page/yellowbook-home	NO
Non-vaccine products (e.g. immune globulins, PPD)	NO

24. Number of adults in Q.23 (born on or before December 31, 2000 in both your jurisdiction AND IIS at the time of query) who have 1 or more adult vaccine dose(s) administered at 19 years and older recorded in your IIS._____

    a. *Adult participation: percentage of adults aged 19 years and older in both your jurisdiction AND IIS at the time of query who have 1 or more adult vaccine dose(s) recorded in your IIS. (Q.24/Q.22)*

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

Logic Guidance—Child Immunization Coverage in IIS:

- **Notes on Coverage:**
  - **Coverage** is defined as the number of individuals in a certain age group who received a vaccination(s) divided by the Census-based estimate of persons in that age group in your jurisdiction. Jurisdiction is defined as the area that contains the population of individuals residing in geographic location covered by your IIS.

- **For Q.26:**

- **Use the table below to identify children to include in the assessment:**

Status	Age	Residence	Immunization History	Include?
Active	Born 1/1/2017 through 5/31/2018	Address in jurisdiction	<any>	YES
Active	Born 1/1/2017 through 5/31/2018	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2017 through 5/31/2018	Address unknown	IIS has never received vaccination information	NO
Unknown	Born 1/1/2017 through 5/31/2018	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born 1/1/2017 through 5/31/2018	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born 1/1/2017 through 5/31/2018	Address not in jurisdiction	<any>	NO
Deceased	Born 1/1/2017 through 5/31/2018	<any>	<any>	NO
<any>	Born before 1/1/2017 or after 5/31/2018	<any>	<any>	NO

- **After identifying children using the tables above, use this table to further identify children with the following vaccinations for Q.26:**

General vaccination inclusions/exclusions	Include?
Both valid and invalid doses.	YES
Doses administered **before** January 1, 2020, including those **recorded** after December 31, 2019	YES
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, ≥3 or ≥4 of Hib*, 1 or more Varicella†, and 4 or more pneumococcal containing vaccine).	YES

*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 ≥1 Hib dose of any type.

† When counting Varicella, only include those who received 1 or more dose of Varicella. Do not count history of disease.

	All Doses
25. *Number of children aged 19 through 35 months in your jurisdiction at the time of query. (2018 Census data)*	--
26. Number of children born during January 1, 2017 through May 31, 2018 in both your jurisdiction AND IIS at the time of query who have received the complete 4:3:1:3:3:1:4 series?	
a. *Coverage – percentage of children aged 19 through 35 months in the population who have completed the 4:3:1:3:3:1:4 series. (Q.26/Q.25)*	*Q.26/Q.25 (Autocalculated)*

4:3:1:3:3:1:4 Series Coverage (for children born in 2017)

Logic Guidance—Legacy Child Immunization Coverage in IIS:

- **Notes on Coverage:**
  - **Coverage** is defined as the number of individuals in a certain age group who received a vaccination(s) divided by the Census-based estimate of persons in that age group in your jurisdiction. Jurisdiction is defined as the area that contains the population of individuals residing in geographic location covered by the IIS.

- **Q.31:**

- **Use the appropriate age ranges listed above and the table below to identify children to include in the assessment:**

Status	Age	Residence	Immunization History	Include?
Active	Born 1/1/2017 through 12/31/2017	Address in jurisdiction	<any>	YES
Active	Born 1/1/2017 through 12/31/2017	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2017 through 12/31/2017	Address unknown	IIS has never received vaccination information	NO
Unknown	Born 1/1/2017 through 12/31/2017	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born 1/1/2017 through 12/31/2017	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born 1/1/2017 through 12/31/2017	Address not in jurisdiction	<any>	NO
Deceased	Born 1/1/2017 through 12/31/2017	<any>	<any>	NO
<any>	Born before 1/1/2017 or after 12/31/2017	<any>	<any>	NO

- **After identifying children using the tables above, use this table to further identify children with the following vaccinations for Q.31:**

General vaccination inclusions/exclusions	Include?
Both valid and invalid doses.	YES
Doses administered **before** January 1, 2020, including those **recorded** after December 31, 2019	YES
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, ≥3 or ≥4 of Hib*, 1 or more Varicella†, and 4 or more pneumococcal containing vaccine).	YES

*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 ≥1 Hib dose of any type.

† When counting Varicella, only include those who received 1 or more dose of Varicella. Do not count history of disease.

	All Doses
27. *Number of children born in 2016. (2018 Census data)*	--
28. *Number of children born in 2017. (2018 Census data)*	--
29. *NIS 4:3:1:3:3:1:4 series coverage percentage for children born in 2015-2016 who have received complete 4:3:1:3:3:1:4 series **before** they reached 24 months of age. (2018 NIS data)*	--
30. *Number of children born during January 1, 2016 through December 31, 2016 in both your jurisdiction AND IIS at the time of query who have received the complete 4:3:1:3:3:1:4 series **before** they reached 24 months of age. (2018 IISAR data)*	--
31. Number of children born during January 1, 2017 through December 31, 2017 in both your jurisdiction AND IIS at the time of query who have received the complete 4:3:1:3:3:1:4 series **before** they reached 24 months of age?	
*a. Coverage – percentage of children born in 2016-2017 in the population who have completed the 4:3:1:3:3:1:4 series **before** reaching 24 months of age. (Q.30 + Q.31/Q.27 + Q.28)*	*(Q.30 + Q.31)/(Q.27 + Q.28) (Autocalculated)*
b. IIS Point Estimate Difference – NIS — IIS 4:3:1:3:3:1:4 series coverage percentage minus NIS 4:3:1:3:3:1:4 series coverage percentage. (Q.31a – Q.29)	*Q.31a – Q.29 (Autocalculated)*

Adolescent Immunization Coverage (for adolescents aged 13 through 17 years)

Logic Guidance—Adolescent Immunization Coverage in IIS:

- **Notes on Coverage:**
  - **Coverage** is defined as the number of individuals in a certain age group who received a vaccination(s) divided by the Census-based estimate of persons in that age group in your jurisdiction. Jurisdiction is defined as the area that contains the population of individuals residing in geographic location covered by your IIS.

- **For Q.34:**

- **Use the table below to identify adolescents to include in the assessment:**

Status	Age	Residence	Immunization History	Include?
Active	Born 1/1/2002 through 12/31/2006	Address in jurisdiction	<any>	YES
Active	Born 1/1/2002 through 12/31/2006	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2002 through 12/31/2006	Address unknown	IIS has never received vaccination information	NO
Unknown	Born 1/1/2002 through 12/31/2006	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born 1/1/2002 through 12/31/2006	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born 1/1/2002 through 12/31/2006	Address not in jurisdiction	<any>	NO
Deceased	Born 1/1/2002 through 12/31/2006	<any>	<any>	NO
<any>	Born before 1/1/2002 or after 12/31/2006	<any>	<any>	NO

- **After identifying adolescents using the tables above, use this table to further identify adolescents with the following vaccinations for Q.34:**

General vaccination inclusions/exclusions	Include?
Both valid and invalid doses.	YES
Tdap/Td vaccines, including those labeled as "unspecified"	YES

Any DT/DTP/DTaP-containing vaccines* given at or after age 7 years, including those labeled as "unspecified" *Doses reported as DT/DTP/DTaP-containing that were administered at or after age 7 years could reflect misreported Tdap doses. DTaP that has been misadministered at age 7 years or older may also be counted toward adolescent Tdap.	YES
Any undeterminable DT/DTP/DTaP/Tdap/Td-labeled dose* given at or after age 7 years, BUT be**fore** the adolescent's 18th birthday AND **before** January 1, 2010 *"Undeterminable DT/DTP/DTaP/Tdap/Td" is a specific label used by some IIS to indicate doses where the contents of the dose regarding DT, DTP, DTaP, Tdap, or Td were not specified in the documentation. Doses reported under this label of "undeterminable DT/DTP/DTaP/Tdap/Td" that were administered at or after age 7 years could reflect misreported Tdap doses. If your IIS does not use the "undeterminable DT/DTP/DTaP/Tdap/Td" label, disregard this logic guidance.	YES
Doses administered **before** January 1, 2020, including those **recorded** after December 31, 2019	YES
Doses administered on or after the adolescent's 18th birthday	NO

	All Doses
32. *Number of adolescents aged 13 through 17 years in your jurisdiction at the time of query. (2018 Census data)*	--
33. *NIS Tdap/Td coverage percentage for adolescents aged 13 through 17. (2018 NIS data)*	--
34. Number of adolescents aged 13 through 17 years (born from January 1, 2002 through December 31, 2006) who are in both in your jurisdiction at the time of query AND in your IIS who have at least one dose of Tdap/Td?	
a. *Coverage — Percentage of adolescents aged 13 through 17 years in the population who have at least one dose of Tdap/Td. (Q.34/Q.32)*	*Q.34/Q.32 (Autocalculated)*
b. *IIS Point Estimate Difference – NIS — IIS Tdap/Td coverage percentage minus NIS Tdap/Td coverage percentage. (Q.34a – Q.33)*	*Q.34a – Q.33 (Autocalculated)*

Adult Influenza Coverage (aged 18 and older)

Logic Guidance—Adult Influenza Coverage in IIS:

- **Notes on Coverage:**
  - **Coverage** is defined as the number of individuals in a certain age group who received a vaccination(s) divided by the Census-based estimate of persons in that age group in your jurisdiction. Jurisdiction is defined as the area that contains the population of individuals residing in geographic location covered by your IIS.

- **Q.37:**

- **Use the table below to identify adults to include in the assessment:**

Status	Age	Residence	Immunization History	Include?
Active	Born on or before 12/31/2001	Address in jurisdiction	<any>	YES
Active	Born on or before 12/31/2001	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born on or before 12/31/2001	Address unknown	IIS has never received vaccination information	NO
Unknown	Born on or before 12/31/2001	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born on or before 12/31/2001	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born on or before 12/31/2001	Address not in jurisdiction	<any>	NO
Deceased	Born on or before 12/31/2001	<any>	<any>	NO
<any>	Born after 12/31/2001	<any>	<any>	NO

- **After identifying adults using the tables above, use this table to further identify adults with the following vaccinations for Q.37:**

General vaccination inclusions/exclusions	Include?
Both valid and invalid doses	YES
Doses of adult influenza administered **on or after** July 1, 2018 through May 31, 2019	YES
Doses administered **before** June 1, 2019, including those **recorded** after May 31, 2019	YES
Doses administered at any time on or after the adult's 18th birthday	YES

	Doses of influenza administered to a patient during the 2018 – 2019 flu vaccination season **before** the patient's 18th birthday	YES

	All Doses
35. *Number of adults 18 years or older in your jurisdiction at the time of query. (2018 Census data)*	--
36. *BRFSS influenza coverage percentage for adults 18 years or older. (2017 – 2018 BRFSS data)*	--
37. Number of adults aged 18 years or older (born on or before December 31, 2001) in both your jurisdiction AND IIS at the time of query who have at least one dose of adult influenza vaccine administered during the 2018 – 2019 flu vaccination season (July 1, 2018 – May 31, 2019) at the age of 18 or older?	
a. *Coverage — Percentage of adults aged 18 years or older who have at least one dose of adult influenza administered during the 2018 – 2019 flu vaccination season (July 1, 2018 – May 31, 2019). (Q.37/Q.35)*	*Q.37/Q.35 (Autocalculated)*
b. *IIS Point Estimate Difference – BRFSS — IIS influenza coverage percentage minus BRFSS influenza coverage percentage. (Q.37a – Q.36)*	*Q.37a – Q.36 (Autocalculated)*

Data Elements — Vaccination Records

Logic Guidance—Data Elements—Vaccination Records:

- **Notes on Data Elements for Vaccination Records:**
  - These questions pertain to all **vaccinations** administered from January 1, 2019 through December 31, 2019, for individuals aged 0 years through 18 years born from January 1, 2001 through December 31, 2019.

- **Use the table below to identify individuals to include in the assessment:**

Status	Age	Residence	Immunization History	Include?
Active	Born 1/1/2001 through 12/31/2019	Address in jurisdiction	\<any\>	YES
Active	Born 1/1/2001 through 12/31/2019	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2001 through 12/31/2019	Address unknown	IIS has never received vaccination information	NO
Unknown	Born 1/1/2001 through 12/31/2019	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born 1/1/2001 through 12/31/2019	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born 1/1/2001 through 12/31/2019	Address not in jurisdiction	\<any\>	NO
Deceased	Born 1/1/2001 through 12/31/2019	\<any\>	\<any\>	NO
\<any\>	Born 1/1/2001 through 12/31/2019	\<any\>	Only received an H1N1 vaccination and no other immunization information	NO
\<any\>	Born before 1/1/2001 or after 12/31/2019	\<any\>	\<any\>	NO

- **After identifying individuals in the table above, use this table to determine the appropriate vaccination records to include in the assessment for Q.38 – Q.41:**

General vaccination record inclusions/exclusions	Include?
Vaccinations administered in CY2019 for all persons in your IIS	YES
Doses that were administered before January 1, 2020, including those recorded after December 31, 2019	YES
All doses (valid and invalid)	YES
H1N1 vaccines administered	NO

Travel vaccines (yellow fever, typhoid, etc.) See: http://wwwnc.cdc.gov/travel/page/yellowbook-home	NO
Historical vaccinations (vaccination information submitted to your IIS by a provider who did not administer that vaccination)	NO
Non-vaccine products (e.g. immune globulins, PPD)	NO

38. What is the number of vaccination records in your IIS for vaccines administered in CY2019 to individuals born from January 1, 2001 through December 31, 2019? _____

Vaccination data elements	Vaccines administered in 2019 to individuals aged 0–18 years <u>with field populated with data</u>
39. Vaccine Product Logic guidance: Vaccine Product can refer to CVX, CPT, or NDC. If a record is populated with an acceptable value for any of these product type codes, consider the field populated.	a. # b. % *(Autocalculated w/ Q.38)*
40. Vaccination Administration Date Logic guidance: if the value for administration date is in the future or not a real date, consider the field not populated.	a. # b. % *(Autocalculated w/ Q.38)*
41. Vaccine Lot Number Logic guidance: if the value is unacceptable for your IIS (e.g. vaccine type, "N/A", "Missing"), consider the field not populated.	a. # b. % *(Autocalculated w/ Q.38)*

Vaccination data element for VFC/awardee program vaccine eligibility at the dose level

Logic Guidance— Vaccination data element for VFC/awardee program vaccine eligibility at the dose level:

- **Notes on VFC/awardee program vaccine eligibility:**
    - For this question only, please limit to **vaccinations** administered from **January 1 through December 31, 2019** to 0 through 18 year olds (**date of birth January 1, 2001 through December 31, 2019**) as only this age group is eligible for VFC.
    - If VFC/awardee program vaccine eligibility is stored in your IIS at the dose level (i.e. a VFC/awardee program vaccine eligibility status is assigned to and stored for every administered dose recorded in your IIS), answer '**field present**' and complete questions b and c.
        - This is true if…
            - The eligibility status is collected and stored by your IIS for each uniquely administered dose
            - Or if eligibility is collected at the vaccination event/visit level (i.e. for all vaccinations administered during a single vaccination event) and is translated by your IIS to the dose level

                Example: The eligibility status for an event is recorded as VFC-Medicaid and your IIS assigns this status to a vaccination record indicating DTaP administered during the visit, but not to a vaccination record indicating yellow fever vaccine administered during the same visit.
    - If VFC / awardee program eligibility is stored in your IIS at the vaccination event/visit level and not translated by your IIS to each unique administered dose, answer '**no field present**.'
    - A provider is counted as VFC provider if enrolled as such during the **entire** calendar year.

- **Use the table below to identify individuals to include in the assessment:**

Status	Age	Residence	Immunization History	Include?
Active	Born 1/1/2001 through 12/31/2019	Address in jurisdiction	\<any\>	YES
Active	Born 1/1/2001 through 12/31/2019	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2001 through 12/31/2019	Address unknown	IIS has never received vaccination information	NO
Unknown	Born 1/1/2001 through 12/31/2019	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born 1/1/2001 through 12/31/2019	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born 1/1/2001 through 12/31/2019	Address not in jurisdiction	\<any\>	NO
Deceased	Born 1/1/2001 through 12/31/2019	\<any\>	\<any\>	NO

<any>	Born 1/1/2001 through 12/31/2019	<any>	Only received an H1N1 vaccination and no other immunization information	NO
<any>	Born before 1/1/2001 or after 12/31/2019	<any>	<any>	NO

- **After identifying individuals in the table above, use this table to determine the appropriate vaccination records to include in the assessment for Q.42:**

General vaccination record inclusions/exclusions	Include?
Vaccinations administered in CY2019 for all persons in your IIS	YES
Doses that were administered before January 1, 2020, including those recorded after December 31, 2019	YES
All doses (valid and invalid)	YES
H1N1 vaccines administered	NO
Travel vaccines (yellow fever, typhoid, etc.) See: http://wwwnc.cdc.gov/travel/page/yellowbook-home	NO
Historical vaccinations (vaccination information submitted to your IIS by a provider who did not administer that vaccination)	NO
Non-vaccine products (e.g. immune globulins, PPD)	NO

Vaccination data element	Field status (check one)	VFC providers only	
42. VFC/Awardee Program Vaccine Eligibility at Dose Level Logic guidance: Include public and private doses administered by VFC providers only. Private stock should be populated with "Not VFC eligible". Examples: • Not VFC eligible • VFC eligible — Medicaid • VFC eligible — Uninsured • VFC eligible — American Indian/Alaskan Native • VFC eligible — Underinsured (FQHC/RHC/Provider with delegated authority) • Eligible for a non-VFC funding source (e.g., state or locally defined)	a. ☐ Field present ☐ No field	b. # numerator (number of vaccination records with vaccine date of administration from January 1 through December 31, 2019, administered to persons aged 0 through 18 years (DOB January 1, 2001 through December 31, 2019), by VFC providers only with **this field populated with data**) c. # denominator (number of vaccination records with vaccine date of administration from January 1 through December 31, 2019, administered to persons aged 0 through 18 years (DOB January 1, 2001 through December, 31, 2019) by VFC providers only in your IIS)	d. *Autocalculated percent vaccination records with vaccine date of administration from January 1 through December 31, 2019 administered to persons aged 0 through 18 years with field populated with data (Q.42b/Q.42c)*

43. In 2019, for administered vaccines, was your program able to accept and process, in production…:

a. Unit of **use** NDC codes from other electronic health systems? Yes/No
b. Unit of **sale** NDC codes from other electronic health systems? Yes/No

Logic Guidance— Data Elements—Patient Records for newborns:

- Use the table below to identify newborns to include in the assessment for Q.44 – Q.47:

Status	Age	Residence	Immunization History	Include?
Active	Born 1/1/2019 through 12/31/2019	Address in jurisdiction	<any>	YES
Active	Born 1/1/2019 through 12/31/2019	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2019 through 12/31/2019	Address unknown	IIS has never received vaccination information	YES
Unknown	Born 1/1/2019 through 12/31/2019	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born 1/1/2019 through 12/31/2019	Address in jurisdiction	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	NO
Inactive	Born 1/1/2019 through 12/31/2019	Address not in jurisdiction	<any>	NO
Deceased	Born 1/1/2019 through 12/31/2019	<any>	<any>	NO
<any>	Born before 1/1/2019 or after 12/31/2019	<any>	<any>	NO

Patient-level data elements	Field Status (check one)	Number of child records with date of birth from January 1 through December 31, 2019, <u>with field populated with data</u>	*Percentage of newborn records with date of birth from January 1 through December 31, 2019 with field populated with data. Denominator derived from Q.10+Q.11 (auto-calculated)*
44. Patient Name Logic guidance: if the value is unacceptable for your IIS (e.g. "Baby Boy"), consider the field not populated.	**a.** First Name ☐ Field present ☐ No field **b.** Last Name ☐ Field present ☐ No field	c. # d. #	e. *Q.44/(Q.10+Q.11)* f. –
45. Patient Date of Birth Logic guidance: if the value for birthdate is in the future or not a real date, consider the field not populated.	a. ☐ Field present ☐ No field	b. #	c. --

46. Address (Street, City, State, ZIP code) Logic guidance: if there is more than one address listed per child, only include one per child record, such as the most recent. Consider Street to be populated if the field is populated with the patient's P.O. Box number.	a. Street: ☐ Field present ☐ No field b. City: ☐ Field present ☐ No field c. State: ☐ Field present ☐ No field d. ZIP code: ☐ Field present ☐ No field	e. # Street f. # City g. # State h. # ZIP code	i. – j. – k. – l. –
47. Patient Telephone Number Logic guidance: refers to the telephone number of either the patient or the parent/responsible person.	a. ☐ Field present ☐ No field	b. #	c.--

Notes for Functional Standard 1	Please provide any relevant notes or comments for data provided for Functional Standard 1.

FUNCTIONAL STANDARD 4: The IIS implements written and approved confidentiality policies that protect the privacy of individuals whose data are contained in the system.

Logic Guidance: Confidentiality policies

- Confidentiality policies must have received approval **as** of 2019, according to state IIS policy. It is not required that confidentiality polices were reviewed and approved **in** 2019.

48. In 2019, did your IIS have written confidentiality policies that were reviewed and approved by the appropriate authority?   Yes/No

49. In 2019, were your IIS site agreements based on the confidentiality policies and approved by the appropriate authority?   Yes/No/Not Applicable (no confidentiality policy)

Notes for Functional Standard 4	Please provide any relevant notes or comments for data provided for Functional Standard 4.

FUNCTIONAL STANDARD 5: The IIS implements comprehensive account management policies consistent with industry security standards.

> **Logic Guidance: Account management security policies**
>
> - Account management security policies must have received approval **as of** 2019, according to state IIS policy. It is not required that account management security policies were reviewed and approved **in** 2019.

50. In 2019, did your IIS have a written account management security policy (or policies) that were reviewed and approved by the appropriate state or local authority?   Yes/No

51. In 2019, did your IIS create and store audit information, including the date, time, and the IIS user or site taking the action, when individual-level data in an IIS record are: (select all that apply)

    a.   Created   Yes/No
    b.   Viewed   Yes/No
    c.   Modified   Yes/No

Notes for Functional Standard 5	Please provide any relevant notes or comments for data provided for Functional Standard 5.

FUNCTIONAL STANDARD 6: The IIS is physically and digitally secured in accordance with industry standards for protected health information, security, encryption, uptime, and disaster recovery.

Logic Guidance: Physical and digital security policies

- Physical and digital security policies must have received approval **as of** 2019, according to state IIS policy. It is not required that physical and digital security policies were reviewed and approved **in** 2019.

52. In 2019, did your IIS have a written physical and digital security policy (or policies) reviewed and approved by the appropriate state or local authority?   Yes/No

53. In 2019, did your IIS have written backup and recovery plans identifying the required equipment, procedures, and the maximum allowable downtime for recovery from adverse security events and disasters?   Yes/No

Notes for Functional Standard 6	Please provide any relevant notes or comments for data provided for Functional Standard 6.

FUNCTIONAL STANDARD 8: The IIS exchanges data with health information systems in accordance with current interoperability standards endorsed by CDC for message content, format, and transport.

Logic Guidance

Q.54:

- **Provider Site:** A provider organization that provides vaccination services and that maintains permanent records (excluding temporary or mobile immunization clinics, health fairs, etc.).

- Count physical sites, not individual providers.

- If multiple provider sites report through a single portal, count each provider site separately.

- Count each provider site only once in the table.

- "Connected with your IIS" is defined as using any of the methods listed in the columns in the table below.

54. Indicate the TOTAL number of provider sites connected with your IIS in production as of the end of 2019.

	HL7 2.5.1			Other than HL7 2.5.1			*Total (auto-calculated)*
	Both Submission/ Acknowled-gement and Query/ Response	**Submission/ Acknowled-gement only**	**Query/ Response only**	**Both Submission/ Acknowledg-ement and Query/ Response**	**Submission/ Acknowled-gement only**	**Query/ Response only**	
Mediated by a Health Information Exchange	a.	b.	c.	d.	e.	f.	g. *(a+b+c+d+e+f)*
Not mediated by a Health Information Exchange	h.	i.	j.	k.	l.	m.	n. *(h+i+j+k+l+m)*
TOTAL	o. *(a+h)*	p. *(b+i)*	q. *(c+j)*	r. *(d+k)*	s. *(e+l)*	t. *(f+m)*	

55. Indicate the TOTAL number of provider sites in each onboarding category as of the end of 2019.

Onboarding Category	<u>Both</u> Submission/Acknowledgement and Query/Response	Submission/Acknowledgement <u>only</u>	Query/Response <u>only</u>
Registered intent, and are not testing or in production	a.	b.	c.
Currently testing, and are not in production	d.	e.	f.
In production *(auto-calculated)*	g. *(Q.54a+Q.54d+Q.54h+Q.54k)*	h. *(Q.54b+Q.54e+Q.54i+Q.54l)*	i. *(Q.54c+Q.54f+Q.54j+Q.54m)*

Notes for Functional Standard 8	Please provide any relevant notes or comments for data provided for Functional Standard 8.

FUNCTIONAL STANDARD 9: The IIS ensures and promotes user access to immunization records for clinical decision making.

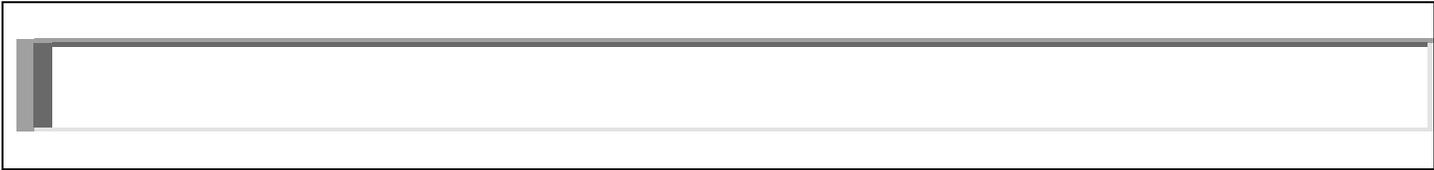**Provider Site Participation**

Logic Guidance— Provider Site Participation:

- **Notes on Provider Site Classifications:**
    - o **Provider Site:** A provider organization that provides vaccination services and that maintains permanent records (excluding temporary or mobile immunization clinics, health fairs, etc.).
    - o **Enrolled:** A provider site is consider enrolled if it is in the IIS and has achieved a live interface or is manually entering data to the IIS.
    - o All provider sites enrolled in VFC as of December 31, 2019 should be counted as a VFC site.

- **Use the table below to identify provider sites to include in the assessment for Q.56 – 58.**

General provider site inclusions/exclusions	Include?
All provider sites enrolled in your IIS, regardless of age group served by those sites or your IIS	YES
All provider sites enrolled in your IIS as of December 31, 2019	YES
Provider sites that only enrolled to provide emergency vaccines such as during pandemic response scenarios. Example: Exclude a community center that only enrolled due to the 2010 H1N1 influenza pandemic and does not provide other immunizations. **However**, *include* a pediatrician that enrolled due to the 2010 H1N1 influenza pandemic if they **also** continue to provide routine immunizations.	NO

Provider Sites		
	VFC Sites	**Non-VFC Sites**
56. Number of provider sites in your jurisdiction as of December 31, 2019.	a.	--
57. Number of provider sites in your jurisdiction enrolled in your IIS as of December 31, 2019.	a.	b.
58. Number of enrolled provider sites reporting data to your IIS at least once from July 1, 2019 – December 31, 2019.	a.	b.
c. Percentage of VFC provider sites that reported data to your IIS at least once from July 1, 2019 – December 31, 2019. (auto-calculated)	*Q.58a/Q.56a*	
d. Percentage of all VFC provider sites and enrolled non-VFC provider sites that reported data to your IIS at least once from July 1, 2019 – December 31, 2019. (auto-calculated)	*(Q.58a + Q.58b)/(Q.56a + Q.57b)*	

Notes for Functional Standard 9	Please provide any relevant notes or comments for data provided for Functional Standard 9.

FUNCTIONAL STANDARD 10: The IIS forecasts pediatric, adolescent, and adult immunizations in a manner consistent with Advisory Committee on Immunization Practices (ACIP) recommendations.

Logic Guidance

- **Immunization evaluation**: This is the process of evaluating a single vaccine dose administered against a defined target dose to determine if the vaccine dose administered is valid or not valid for that specific target dose.

- **Target dose:** This refers to any of the defined requirements for validity attributed to a specific dose of vaccine including, but not limited to: dose age range, spacing from previous doses within a vaccine series, etc.

- **Immunization forecast**: This is the process of using a patient's history to determine immunization due dates.

59. In 2019, did your IIS send an immunization evaluation to another system via HL7 in production?   Yes/No

60. In 2019, did your IIS send an immunization forecast to another system via HL7 in production?   Yes/No

61. CDC released CDSi supporting data version 4.1 on August 27, 2019, which included updates for the 2018–2019 influenza seasonal recommendations. How long did it take for your IIS to implement all of the influenza guidance for evaluation and forecasting (e.g., adding Flumist as a preferable vaccine and updating influenza season dates) into production?

   a.   30 days or less

   b.   31-60 days

   c.   Greater than 60 days

   d.   Your IIS has the capability to be updated to reflect the August 27, 2019 (Version 4.1) CDSi recommendations for influenza, but this update has not been completed.

   e.   Your IIS does not have the capability to be updated to reflect the August 27, 2019 (Version 4.1) CDSi recommendations for influenza.

Notes for Functional Standard 10	Please provide any relevant notes or comments for data provided for Functional Standard 10.

FUNCTIONAL STANDARD 11: The IIS manages patient status at the provider organization and jurisdiction levels.

Data Elements – Patient Status Indicators

Logic Guidance— Data Elements—Patient Status Indicators for individuals aged 0 – 18 years:

- Use the table below to identify individuals to include in the assessment:

Status	Age	Residence	Immunization History	Include?
Active	Born 1/1/2001 through 12/31/2019	Address in jurisdiction	<any>	YES
Active	Born 1/1/2001 through 12/31/2019	Address unknown	Received an immunization from a provider organization within the jurisdiction	YES
Unknown	Born 1/1/2001 through 12/31/2019	Address unknown	IIS has never received vaccination information	YES
Unknown	Born 1/1/2001 through 12/31/2019	Address unknown	IIS has not received immunization information for an extended period of time* * Note that the "extended period of time" could be defined differently by each IIS	YES
Inactive	Born 1/1/2001 through 12/31/2019	Address not in jurisdiction	<any>	NO
Deceased	Born 1/1/2001 through 12/31/2019	<any>	<any>	NO
<any>	Born 1/1/2001 through 12/31/2019	<any>	Only received an H1N1 vaccination and no other immunization information	NO
<any>	Born before 1/1/2001 or after 12/31/2019	<any>	<any>	NO

Patient-level data elements	Field Status (check one)	Number of patient records with date of birth from January 1, 2001 through December 31, 2019, <u>with field populated with data</u>	*Percentage of patient records with date of birth from January 1, 2001 through December 31, 2019 with field populated with data. Denominator from Q.13 (auto-calculated)*
62. Patient status indicators at the provider site level: Definition: A field to denote the status of a patient. Examples: • Active • Inactive – No longer a patient • Inactive – Lost to follow-up • Inactive – Unspecified • Deceased NOTE: If the patient has more than one patient status indicator in your IIS (e.g. for	a. ☐ Field present ☐ No field	b. #	c. Q.62b/Q.13

multiple provider sites), include the patient in the numerator if they have at least **one** active or inactive status indicated in their record. If your IIS cannot assign active status and only assigns inactive or deceased status, do not count the field as present.			

63. In 2019, by which mechanism(s) could an IIS user update PAIS? Check all that apply:
  a.   Direct user interface
  b.   HL7 message
  c.   Other. Please explain. [Free text box, open ended no text limit]

64. In 2019, did your IIS generate a roster of active patients for a provider site from your IIS?   Yes/No

65. In 2019, did your IIS automatically assign PAIS to a patient for one or more provider levels based on information in your IIS (e.g., based on which provider administered the most recent vaccinations)?   Yes/No

Notes for Functional Standard 11	**Please provide any relevant notes or comments for data provided for Functional Standard 11.**

FUNCTIONAL STANDARD 12: The IIS supports vaccine product recall activities.

> **Logic Guidance**
>
> - The questions in this section are about your IIS being able to run reports or generate data to support the categories below.

In 2019, did your IIS generate vaccination coverage and line list reports based on user-defined query parameters (e.g. a patient age group/DOB range, list of specific individuals, geographic area, recipients of specific vaccines, etc.) to *support* the following:

	This report was generated in 2019	My IIS has the capability to support this function but it was not utilized in 2019	My IIS does not have the capability to support this function
66. Identify individuals who received recalled vaccine (select one)	○	○	○
67. Identify providers who received recalled vaccine in inventory (select one)	○	○	○
68. Support vaccine preventable disease outbreak investigation and control (select one)	○	◉	○

Notes for Functional Standard 12	**Please provide any relevant notes or comments for data provided for Functional Standard 12.**

FUNCTIONAL STANDARD 13: The IIS supports reporting and investigation of vaccine adverse events.

Logic Guidance

- "Not Applicable" refers to instances in which no investigations occurred during 2019.

69. In 2019, did vaccine adverse event investigators in your jurisdiction routinely use IIS data? Yes/No/Not Applicable

70. In 2019, did you have a link to the Vaccine Adverse Event Reporting System (VAERS) form in your IIS for users to access?   Yes / No

Notes for Functional Standard 13	Please provide any relevant notes or comments for data provided for Functional Standard 13.

FUNCTIONAL STANDARD 14: The IIS supports public health response during disease outbreaks.

Logic Guidance
• "Not Applicable" refers to instances in which no investigations occurred during 2019.

71. In 2019, did disease investigators in your jurisdiction routinely use IIS data?   Yes/No/Not Applicable

72. In 2019, did Perinatal Hepatitis B investigators in your jurisdiction routinely use IIS data? Yes/No

Notes for Functional Standard 14	Please provide any relevant notes or comments for data provided for Functional Standard 14.

Logic Guidance

- "Determine" refers to your ability to provide the figure in question. If you can determine this figure, regardless of the source being internal or external to your IIS, please do so. If you cannot determine this figure for your jurisdiction, please answer "no".

- Include public schools that are subject to school entry requirements by age or grade in your jurisdiction.

- Use kindergarten entry requirements, requirements for 6-year-old children, etc. when defining elementary schools.

    o If your state has school entry requirements for kindergarten, then count any school with a kindergarten as an elementary school. If your state has school entry requirements by age, then count any school that serves that age as an elementary school.

- Use 6th grade entry requirements, requirements for 12 year olds, etc. when defining middle schools.

    o If your state has school entry requirements for 6th grade, then only count schools with a 6th grade as a middle school. If your state has school entry requirements by age, then count any school that serves that age as a middle school.

- Use 9th grade entry requirements, requirements for 15 year olds, etc. when defining high schools.

    o If your state has school entry requirements for 9th grade, then only count schools with a 9th grade as a high school. If your state has school entry requirements by age, then count any school that serves that age as a high school.

- If a school serves age ranges encompassing elementary, middle, and/or high schools, it is acceptable to count the school twice for the public elementary school count and the public middle and high school count.

    o Example: A school serves kindergarten-age children through 13-year-old children. This school would be included in counts for public elementary schools and public middle schools.

73. Can you determine the number of public elementary schools that were in your jurisdiction in 2019? Yes/No

    a.   If yes to Q.73, in 2019, how many public elementary schools were in your jurisdiction? _____

74. Can you determine the number of public elementary schools that were authorized users of your IIS in 2019? Yes/No

    a.   If yes to Q.74, how many public elementary schools were authorized users of your IIS in 2019? _____

    b.   *Percentage of public elementary schools in your jurisdiction that were authorized users of IIS data. (Q.74a/Q.73a)*

75. Can you determine the number of public middle schools and high schools that were in your jurisdiction in 2019? Yes/No

a. If yes to Q.75, in 2019, how many public middle schools and high schools were in your jurisdiction? _____

76. Can you determine the number of public middle schools and high schools that were authorized users of your IIS in 2019?   Yes/No

a. If yes to Q.76, how many public middle schools and high schools were authorized users of your IIS in 2019? _____

b. *Percentage of public middle schools and high schools in your jurisdiction that were authorized users of IIS data. (Q.76a/Q.75a)*

Notes for Functional Standard 15	Please provide any relevant notes or comments for data provided for Functional Standard 15.

FUNCTIONAL STANDARD 16: The IIS supports immunization efforts in childcare settings.

Logic Guidance

- "Determine" refers to your ability to provide the figure in question. If you can determine this figure, regardless of the source being internal or external to your IIS, please do so. If you cannot determine this figure for your jurisdiction, please answer "no".

- Include any facility, regardless of type, that is licensed by your jurisdiction.

77. Can you determine the number of licensed childcare facilities subject to immunization requirements that were in your jurisdiction in 2019?   Yes/No

   a.   If yes to Q.77, in 2019, how many licensed childcare facilities subject to immunization requirements were in your jurisdiction? _____

78. Can you determine the number of licensed childcare facilities subject to immunization requirements that were authorized users of your IIS in 2019?   Yes/No

   a.   If yes to Q.78, how many licensed childcare facilities subject to immunization requirements were authorized users of your IIS in 2019? _____

   b.   *Percentage of licensed childcare facilities subject to immunization requirements in your jurisdiction that were authorized users of IIS data. (Q.78a/Q.77a)*

Notes for Functional Standard 16	Please provide any relevant notes or comments for data provided for Functional Standard 16.

FUNCTIONAL STANDARD 18: The IIS provides predefined and ad hoc assessment and coverage reports that users can generate without assistance from the IIS staff.

Logic Guidance

- Q.79 – Q.84 ask about activity during the 2019 calendar year. If assessments were not conducted or did not meet the stated criteria, answer "No".

- Q.85 asks about functionality during the 2019 calendar year.

79. In 2019, was your IIS used to generate provider-level coverage assessments that met current published CDC operational and technical guidelines for provider-level quality improvement?   Yes/No

80. In 2019, did IIS staff produce IIS-generated provider-level coverage assessments based on user-selected criteria?   Yes/No

81. In 2019, did non-IIS immunization program staff (VFC coordinators, IQIP coordinators etc.,) produce IIS-generated provider-level coverage assessments based on user-selected criteria?   Yes/No

82. In 2019, did your IIS generate vaccination coverage assessments for geographic sub-jurisdiction-level areas (e.g. county, ZIP code, region, etc.) to identify under-immunized populations?   Yes/No

83. In 2019, was your IIS used to generate data for health plans to support HEDIS or other quality reports?   Yes/No

84. In 2019, was your IIS used to generate data to support Medicaid and Medicare quality improvement based on user-selected parameters?   Yes/No

85. In 2019, could providers produce IIS-generated coverage assessments based on user-selected criteria?   Yes/No

Notes for Functional Standard 18	Please provide any relevant notes or comments for data provided for Functional Standard 18.

FUNCTIONAL STANDARD 19: The IIS supports reminder and recall activities.

86. In 2019, were external sources (e.g., U.S. Postal Service, Lexis-Nexis) of residential addresses used to verify whether patients currently reside at the addresses listed in their IIS record, or to update the record to reflect the current address?   Yes/No

---

Logic Guidance

Q.87:

- Answer "yes" if IIS data were used to support reminder and/or recall messages regardless if messages were generated by third-party systems or the IIS itself.

- If age-based reminder and/or recall messages were generated for any individuals within a listed age range, answer "yes" for that age range, even if the entire age range was not included.

---

87. At least once in 2019, did any provider or the immunization program use your IIS to generate age-based reminder and/or recall messages for any individuals who were not up-to-date for their vaccinations?   Yes/No

88. In 2019, did your IIS exclude individuals from reminder and recall outputs upon request by a parent, guardian, or individual?   Yes/No/Not Applicable (no requests were received in 2019)

Notes for Functional Standard 19	Please provide any relevant notes or comments for data provided for Functional Standard 19.

FUNCTIONAL STANDARD 20: The IIS provides immunization records to individuals with appropriate authentication.

Logic Guidance:

- An "**official immunization record**" refers to an immunization record that is acceptable for business functions including school entry and travel.

89. In 2019, could individuals, parents, and custodial guardians obtain an official immunization record from your IIS… (select all that apply)

    a.   Through their healthcare provider? Yes/No

    b.   Through a provider-managed patient portal that interfaces directly or indirectly with your IIS? Yes/No

    c.   Directly from your IIS through a consumer access portal?   Yes/No

    d.   Directly from your IIS or Immunization Program without a consumer access portal (e.g. fax, mail, walk-in paper record, etc.)?   Yes/No

Notes for Functional Standard 20	Please provide any relevant notes or comments for data provided for Functional Standard 20.

FUNCTIONAL STANDARD 22: The IIS reliably exchanges information electronically with IISs in other jurisdictions consistent with the current CDC endorsed HL7 Implementation Guide.

Logic Guidance:

- The intent of the questions in this section is to measure cross-jurisdictional messaging, regardless of the transport mechanism.

90. In 2019, did your IIS send at least one QBP message in production to another jurisdiction's IIS?   Yes/No

91. In 2019, did your IIS send at least one VXU message in production to another jurisdiction's IIS?   Yes/No

Notes for Functional Standard 22	Please provide any relevant notes or comments for data provided for Functional Standard 22.

FUNCTIONAL STANDARD 23: The IIS supports vaccine management and quality assurance functions for VFC and state and local vaccine programs.

92. In 2019, did your IIS capture provider site Master Data in accordance with VTrckS data exchange specifications? Yes/No

93. In 2019, did your IIS maintain a list of vaccines available for ordering consistent with the most current federal vaccines list?   Yes/No

94. In 2019, did your IIS provide the status of vaccine orders placed in your IIS to provider sites? Yes/No

Notes for Functional Standard 23	Please provide any relevant notes or comments for data provided for Functional Standard 23.

FUNCTIONAL STANDARD 24: The IIS supports data exchange with the national Vaccine Tracking System (VTrckS).

95. In 2019, was your IIS inventory populated automatically through receipt and upload of vaccine shipment data from VTrckS?   Yes/No

Notes for Functional Standard 24	Please provide any relevant notes or comments for data provided for Functional Standard 24.

FUNCTIONAL STANDARD 25: The IIS supports provider site level vaccine inventory management and reconciliation according to VFC and state and local immunization program requirements.

Logic Guidance:

- The questions in this section are about the activities your IIS engaged in during the calendar year. The intent is not to measure if these functions are required and/or automated.

96. In 2019, did your IIS organize and indicate vaccine inventory by any combination of NDC, lot number, expiration date, and public private indicator for vaccine inventory managed in your IIS?   Yes/No

97. In 2019, did your IIS allow provider sites to record information about inventory that they received (e.g., vaccine orders or incoming transfers) for instances when inventory could not be populated automatically?   Yes/No

98. In 2019, did your IIS automatically decrement via electronic data exchange administered doses (and not historical doses) from the current inventory? Yes/No

99. In 2019, for each provider site, did your IIS: (Select all that apply)

    a.   Display the expected inventory for the reconciliation period (i.e. since the last reconciliation)?   Yes/No

    b.   Support providers in reporting actual physical inventory of VFC vaccines?   Yes/No

    c.   Support providers in documenting discrepancies between expected and actual inventory?   Yes/No

100. In 2019, did your IIS document reductions in vaccine inventory (e.g., outgoing vaccine transfers, returns, wastage, and other)?   Yes/No

101. In 2019, did your IIS support the printing of a packing slip for vaccines being returned to the distributor?   Yes/No
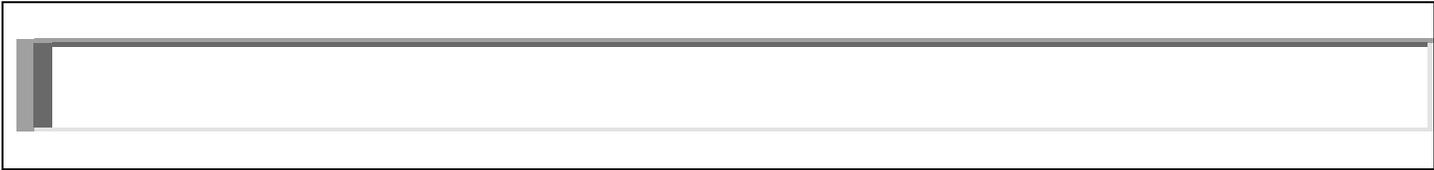
Logic Guidance:

Q.102:

- If your IIS can **only** display inventory type by public and private, answer "No".

- If your IIS displays inventory fund type solely depending on the fund type designation being made by the provider site, answer "No".

102. In 2019, did your IIS display inventory by fund type for each provider site?   Yes/No

Notes for Functional Standard 25	Please provide any relevant notes or comments for data provided for Functional Standard 25.

FUNCTIONAL STANDARD 26: The IIS provides data or produces reports for VFC and state and local immunization programs.

103. In 2019, did your IIS produce reports or data that… (select all that apply)

a.   Estimate, by patient age, the number of doses of publicly purchased vaccine **each** provider site will administer during the upcoming year?   Yes/No

b.   Estimate, by patient age, the aggregate number of publicly purchased vaccines **all** providers will administer during the upcoming year?   Yes/No

c.   Detail publicly purchased vaccine doses administered by a provider site?   Yes/No

d.   Support vaccine inventory management and accountability for purposes other than ordering and reconciliation?   Yes/No

Logic Guidance:

Q.104:

- "Accountability reports" refers to any report or query that assists with efficient and effective vaccine ordering.
- If your IIS produces accountability reports or data to support the vaccine ordering process, but does not support vaccine ordering or inventory itself, answer "No".

104. In 2019, did your IIS produce accountability reports or data that support the vaccine ordering process? Yes/No

Notes for Functional Standard 26	Please provide any relevant notes or comments for data provided for Functional Standard 26.