Section IX. 2018 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 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 2018

The IISAR underwent significant revisions in 2018 to address version 4 of the Functional Standards for IIS available at: https://www.cdc.gov/vaccines/programs/iis/func-stds.html. While there are many 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.
- Throughout the IISAR questionnaire, age ranges are described as from age X *through* Y months/years. This terminology is consistent with language used by the Advisory Committee on Immunization Practices and indicates the lower and upper age limits for who should be included in data collection. In all cases, age X is the lower bound and age Y is the upper bound. For example, adolescents aged 11 through 17 years should include adolescents at least 11 years old and less than 18 years of age. Those younger than 11 years, or 18 years or older, would not be included in this group.
- Submission of the final Immunization Information Systems Annual Report 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 29, 2019**; the year of performance is calendar year 2018. CDC IISSB staff will contact each IIS after March 29 with questions and/or comments about the report and data submitted for calendar year 2018. After March 29, 2019, the submission data will be corrected and revised. Any revised submissions from awardees should correct issues with the submitted data as of March 29 ONLY. When submitting revisions, do NOT submit additional 2018 data that were uploaded AFTER the March 29 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

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

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)_____

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:

- **For newborns born January 1 through December 31, 2018**

- Other birth record source includes birthing hospitals, perinatal or newborn screening programs.
- Day 0 refers to the date of birth.
- Days listed refer to calendar days.
- 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 the IIS by Vital Records FIRST.

- **In this section:**

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

Newborns who are considered…	Include	Exclude

Active
   • Residence in jurisdiction is confirmed or
   • Received an immunization from a provider organization within the jurisdiction and address is unknown
      o Note that this includes newborns with residence in jurisdiction confirmed, but no vaccination information
	X	

Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information	X	

Unknown, no activity for extended period of time
   • Has not received demographic and/or immunization information for an extended period of time
      Note that the "extended period of time" could be defined differently by each IIS
	X	

Deceased • Deceased at the time of query		X

7. For children born January 1 through December 31, 2018 in the IIS's jurisdiction, what number had a demographic record established in the 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

- 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 the IIS.
- Age at which vaccine is administered should be determined **as of the date of vaccine administration** during CY2018.
- 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, 1999 would be included in the "0 through 18" age range if administered before November 25, 2018, since the child would be 18 years and one day before their 19th birthday. Vaccines administered on or after November 25, 2018 would not be included because they were administered when the child then turned 19 years old.
- Timeframes listed refer to calendar days.

- **In this section:**

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

Vaccination records for individuals who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information		X
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time ○ Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

  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	Exclude
Vaccinations administered in CY2018 for all persons in the IIS	X	
Doses that were administered **before** January 1, 2019, including those **recorded** after December 31, 2018	X	
All doses (valid and invalid)	X	
H1N1 vaccines administered and demographic records belonging to those with only an H1N1 vaccination record		X
Travel vaccines (yellow fever, typhoid, etc.) See: http://wwwnc.cdc.gov/travel/page/yellowbook-home		X
Historical vaccinations (vaccination information submitted to the IIS by a provider who did not administer that vaccination)		X

Non-vaccine products (e.g. immune globulins, PPD)		X

8. For vaccinations administered in CY2018 to all persons in the IIS, list the number of vaccine doses posted to production to the IIS within the following time frames:

	Number of vaccine doses administered (i.e. non-historical) during CY2018 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:

- **For newborns born January 1 through December 31, 2018**

- If a patient record comes to the IIS through other birth record sources, but is later verified by Vital Records, consider the patient record to have come from Vital Records.
- If a patient record comes to the IIS through other birth record sources ONLY, consider the patient record to have come from other record sources.

- **In this section:**

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

General demographic inclusions/exclusions	Include	Exclude
Newborns who currently are known to reside in your jurisdiction at the time of query, regardless of residence at the time of birth.	X	

After identifying newborns in the table above, use this table to further identify newborns to include in the assessment:

Newborns who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information	X	
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time o Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

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

10. Number of patient records created in your IIS from Vital Records for children born from January 1 through December 31, 2018 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, 2018 who resided in your jurisdiction at the time of query. _____

    a. *Percentage of children in the IIS born from January 1 through December 31, 2018 with records created in the IIS from all sources (Q.10+Q.11/Q.9)*

Enrollment in IIS (0–18 years, lifespan)

Logic Guidance:

- **Q.13: For individuals born from January 1, 2000 through December 31, 2018**
- **Q.15: For individuals born on or before December 31, 2018**

Enrollment:

- **In this section:**

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

Individuals who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information	X	
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time o Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

  After identifying individuals in the table above, use this table to further identify individuals to include in the assessment:

General demographic inclusions/exclusions	Include	Exclude
Demographic records belonging to those with **only** an H1N1 vaccination record		X

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, 2000 through December 31, 2018) 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)*

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, 2018) 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:

- **For children born from January 1, 2013 through August 31, 2018**

Enrollment among children:

- **For Q.17:**

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

Individuals who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information	X	
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time o Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

  After identifying children in the table above, use this table to further identify children to include in the assessment:

General demographic inclusions/exclusions	Include	Exclude
Children enrolled in the IIS, even if they only have travel vaccines, non-vaccine products, or no vaccines in the vaccine record	X	

Participation among enrolled children:

- **For Q.18:**

  After identifying children for enrollment using the tables above, use this table to further identify children with the following vaccinations:

General vaccination inclusions/exclusions	Include	Exclude
All doses (valid and invalid) administered **before** January 1, 2019, including those **recorded** in the IIS after December 31, 2018	X	
Travel vaccines (yellow fever, typhoid, etc.) See: http://wwwnc.cdc.gov/travel/page/yellowbook-home		X
Non-vaccine products (e.g. immune globulins, PPD)		X

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, 2013 through Aug 31, 2018) 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)*

18. Number of children in Q.17 (children born from January 1, 2013 through Aug 31, 2018 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 — Adolescent participation in IIS

- **For adolescents born from January 1, 2001 through December 31, 2007**

Enrollment among adolescents:

- **For Q.20:**

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

Individuals who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information	X	
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time o Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

After identifying adolescents in the table above, use this table to further identify adolescents to include in the assessment:

General demographic inclusions/exclusions	Include	Exclude
Adolescents enrolled in the IIS, even if they only have travel vaccines, non-vaccine products, or no vaccines in the vaccine record	X	
Demographic records belonging to adolescents with only an H1N1 vaccination record		X

Participation among enrolled adolescents:

- **For Q.21:**

After identifying adolescents for enrollment using the tables above, use this table to further identify adolescents with the following vaccinations:

General vaccination inclusions/exclusions	Include	Exclude
All doses (valid and invalid) administered **before** January 1, 2019, including those **recorded** in the IIS after December 31, 2018	X	
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)	X	

Doses administered to adolescents before the adolescent's 9th birthday		X
H1N1 vaccines administered		X
Travel vaccines (yellow fever, typhoid, etc.) See: http://wwwnc.cdc.gov/travel/page/yellowbook-home		X
Non-vaccine products (e.g. immune globulins, PPD)		X

19. *Number of adolescents aged 11 through 17 years in your jurisdiction at the time of query (2017 Census)*

20. Number of adolescents aged 11 through 17 years (born from January 1, 2001 through December 31, 2007) 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)*

21. Number of adolescents in Q.20 (adolescents born from January 1, 2001 through December 31, 2007 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 — Adult Participation in IIS

- **For adults born on or before December 31, 1999**

Enrollment among adults:

- **For Q.23:**

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

Individuals who are considered...	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information	X	
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time o Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

  After identifying adults in the table above, use this table to further identify adults to include in the assessment:

General demographic inclusions/exclusions	Include	Exclude
Adults enrolled in the IIS, even if they only have travel vaccines, non-vaccine products, or no vaccines in the vaccine record	X	
Demographic records belonging to adults with only an H1N1 vaccination record		X

Participation among enrolled adults:

- **For Q.24:**

  After identifying adults for enrollment using the tables above, use this table to further identify adults with the following vaccinations:

General vaccination inclusions/exclusions	Include	Exclude
All doses (valid and invalid) administered **before** January 1, 2019, including those **recorded** in the IIS after December 31, 2018	X	
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	X	
Doses administered to adolescents before 19 years of age		X
H1N1 vaccines administered		X
Travel vaccines (yellow fever, typhoid, etc.) See: http://wwwnc.cdc.gov/travel/page/yellowbook-home		X

Non-vaccine products (e.g. immune globulins, PPD)		X

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, 1999) 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)*

24. Number of adults in Q.23 (born on or before December 31, 1999 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:

- **For children born from January 1, 2016 through May 31, 2017**

- **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 children residing in geographic location covered by the IIS.

- **In this section:**

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

Children who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information		X
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time ○ Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

After identifying children using the tables above, use this table to further identify children with the following vaccinations:

General vaccination inclusions/exclusions	Include	Exclude
Both valid and invalid doses.	X	
Doses administered **before** January 1, 2019, including those **recorded** after December 31, 2018	X	
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). *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.	X	

	All Doses
25. *Number of children aged 19 through 35 months in your jurisdiction at the time of query (2018 Census Data)*	--
26. *NIS 4:3:1:3:3:1:4 series coverage percentage for children aged 19 through 35 months (2017 NIS data)*	--
27. Number of children born during January 1, 2016 through May 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?	
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.27/Q.25)*	*Q.27/Q.25 (Autocalculated)*
b. *NIS–IIS Point Estimate Difference (2016 data) – NIS 4:3:1:3:3:1:4 series coverage percentage minus IIS 4:3:1:3:3:1:4 series coverage percentage (Q.26 – Q.27a)*	*Q.26 – Q.27a (Autocalculated)*

4:3:1:3:3:1:4 Series Coverage (for children born in 2014, 2015, and 2016)

Logic Guidance:

- **Q.29: For children born from January 1, 2014 – December 31, 2014**
- **Q.31: For children born from January 1, 2015 – December 31, 2015**
- **Q.33: For children born from January 1, 2016 – December 31, 2016**

- **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 children residing in geographic location covered by the IIS.

- **In this section:**

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

Children who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information		X
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time ○ Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

After identifying children using the tables above, use this table to further identify children with the following vaccinations:

General vaccination inclusions/exclusions	Include	Exclude
Both valid and invalid doses.	X	
Doses administered **before** the child reached 24 months of age, including those **recorded** after the child reached 24 months of age	X	
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). *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.	X	

	All Doses
28. *Number of children born in 2014 (2018 Census Data)*	--
29. Number of children born during January 1, 2014 through December 31, 2014 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 2014 in the population who have completed the 4:3:1:3:3:1:4 series before reaching 24 months of age (Q.29/Q.28)*	*Q.29/Q.28 (Autocalculated)*
30. *Number of children born in 2015 (2018 Census Data)*	--
31. Number of children born during January 1, 2015 through December 31, 2015 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 2015 in the population who have completed the 4:3:1:3:3:1:4 series before reaching 24 months of age (Q.31/Q.30)*	*Q.31/Q.30 (Autocalculated)*
32. *Number of children born in 2016 (2018 Census Data)*	--
33. 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?	
a. *Coverage – percentage of children born in 2016 in the population who have completed the 4:3:1:3:3:1:4 series before reaching 24 months of age (Q.33/Q.32)*	*Q.33/Q.32 (Autocalculated)*

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

Logic Guidance — Adolescent Immunization Coverage in IIS

- **For adolescents born from January 1, 2001 through December 31, 2005**

- **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 adolescents residing in the jurisdiction covered by the IIS.

- **In this section:**

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

Adolescents who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information		X
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time o Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

After identifying adolescents using the tables above, use this table to further identify adolescents with the following vaccinations:

General vaccination inclusions/exclusions	Include	Exclude
Both valid and invalid doses	X	
Tdap/Td vaccines	X	
Any DT/DTP/DTaP-containing vaccines* given at or after age 7 years *Doses reported as DT/DTP/DTaP-containing that were administered at or after age 7 years could reflect misreported Tdap doses.	X	
Doses administered **before** January 1, 2019, including those **recorded** after December 31, 2018	X	
Doses administered at any time before the adolescent's 18th birthday	X	

	All Doses
34. *Number of adolescents aged 13 through 17 years in your jurisdiction at the time of query (2018 Census Data)*	--
35. *NIS Tdap/Td coverage percentage for adolescents aged 13 through 17 (2017 NIS data)*	--

36. Number of adolescents aged 13 through 17 years (born from January 1, 2001 through December 31, 2005) 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.36/Q.34)*	*Q.36/Q.34 (Autocalculated)*
b.	*NIS–IIS Point Estimate Difference (2016 data) – NIS Tdap/Td coverage percentage minus IIS Tdap/Td coverage percentage (Q.35 – Q.36a)*	*Q.35 – Q.36a (Autocalculated)*

Adult Influenza Coverage (aged 18 and older)

Logic Guidance — Adult Influenza Coverage in IIS

- **For adults born *on or before* December 31, 2000**

- For the flu vaccination season of **July 1, 2017 – May 31, 2018**

- **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 adults residing in the jurisdiction covered by the IIS.

- **In this section:**

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

Adults who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information		X
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time ○ Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

After identifying adults using the tables above, use this table to further identify adults with the following vaccinations:

General vaccine inclusions/exclusions	Include	Exclude
Both valid and invalid doses	X	
Doses of adult influenza administered **on or after** July 1, 2017 through May 31, 2018	X	
Doses administered **before** July 1, 2018, including those **recorded** after May 31, 2018	X	
Doses administered at any time on or after the adult's 18th birthday	X	
Doses of influenza administered to a patient during the 2018 half flu vaccination season **before** the patient's 18th birthday	X	

	All Doses
37. *Number of adults 18 years or older in your jurisdiction at the time of query (2018 Census Data)*	--
38. *BRFSS influenza coverage percentage for adults 18 years or older (2017 – 2018 BRFSS data)*	--

39. Number of adults aged 18 years or older (born on or before December 31, 2000) in both your jurisdiction AND IIS at the time of query who have at least one dose of adult influenza vaccine administered during the 2017 – 2018 flu vaccination season (July 1, 2017 – May 31, 2018) 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 2017 – 2018 flu vaccination season (July 1, 2017 – May 31, 2018) (Q.39/Q.37)*	*(Q.39/Q.37) (Auotcalculated)*
b.	*BRFSS–IIS Point Estimate Difference (2017 data) – BRFSS influenza coverage percentage minus IIS influenza coverage percentage (Q.38 – Q.39a)*	*Q.38 – Q.39a (Autocalculated)*

Logic Guidance: Data Elements — Vaccination Records

- These questions pertain to all **vaccinations** administered from January 1, 2018 through December 31, 2018, for:

  o **Individuals** aged **0 years through 18 years** born from **January 1, 2000 through December 31, 2018**

- Please fill in the following on each data element field included in your IIS database.

- **In this section:**

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

Vaccination records for individuals who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information		X
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time o Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

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

General vaccination record inclusions/exclusions	Include	Exclude
Vaccinations administered in CY2018 for all persons in the IIS	X	
Doses that were administered before January 1, 2019, including those recorded after December 31, 2018	X	
All doses (valid and invalid)	X	
H1N1 vaccines administered and demographic records belonging to those with only an H1N1 vaccination record		X
Travel vaccines (yellow fever, typhoid, etc.) See: http://wwwnc.cdc.gov/travel/page/yellowbook-home		X
Historical vaccinations (vaccination information submitted to the IIS by a provider who did not administer that vaccination)		X
Non-vaccine products (e.g. immune globulins, PPD)		X

Vaccination data elements	Vaccines administered in 2018 to individuals aged 0–18 years with field populated with data
40. Vaccine Product Type Administered	a. # b. % (Autocalculated w/ Q.8e)

Logic guidance: Vaccine Type 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.	
41. 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.8e)*
42. 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.8e)*

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

- If VFC/awardee program vaccine eligibility is stored in the 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 the IIS), answer 'field present' and complete questions b and c. This is true if the eligibility status is collected and stored by the 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 the IIS to the dose level (e.g. the eligibility status for the event is recorded as VFC-Medicaid and the 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 the IIS at the vaccination event/visit level and not translated by the IIS to each unique administered dose, answer 'no field' present.

- For this question only, please limit to doses administered from **January 1 through December 31, 2018** to 0 through 18 year olds (**date of birth January 1, 2000 through December 31, 2018**) as only this age group is eligible for VFC.

- A provider is counted as VFC provider if enrolled as such during the entire calendar year

- **In this section:**

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

Vaccination records for individuals who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information		X
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time o Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

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

General vaccination record inclusions/exclusions	Include	Exclude
Vaccinations administered in CY2018 for all persons in the IIS	X	
Doses that were administered before January 1, 2019, including those recorded after December 31, 2018	X	
All doses (valid and invalid)	X	
H1N1 vaccines administered and demographic records belonging to those with only an H1N1 vaccination record		X
Travel vaccines (yellow fever, typhoid, etc.) See: http://wwwnc.cdc.gov/travel/page/yellowbook-home		X

Historical vaccinations (vaccination information submitted to the IIS by a provider who did not administer that vaccination)		X
Non-vaccine products (e.g. immune globulins, PPD)		X

Vaccination data element	Field status (check one)	VFC providers only	
43. VFC/Awardee Program Vaccine Eligibility at Dose Level 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, 2018, administered to persons aged 0 through 18 years (DOB January 1, 2000 through December 31, 2018), by VFC providers only with **this field populated with data**) c. # denominator (with vaccine date of administration from January 1 through December 31, 2018, administered to persons aged 0 through 18 years (DOB January 1, 2000 through December, 31, 2018) by VFC providers only in the IIS)	d. *Autocalculated percent vaccination records with vaccine date of administration from January 1 through December 31, 2018 administered to persons aged 0 through 18 years with field populated with data (Q.43b/Q.43c)*

44. In 2018, how many publicly purchased vaccine doses were physically received in your jurisdiction? _____

45. How many publicly purchased vaccine doses were administered in your jurisdiction during 2018 and were reported to your IIS? _____

   a.   *Percentage of publicly purchased doses received in your jurisdiction that were administered and reported to your IIS during 2018 (Q.45/Q.44)*

46. In 2018, for administered vaccines, was your program able to accept and process, in production…(select all that apply):

   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 children with **date of birth from January 1 through December 31, 2018**.

- Please fill in the following on each data element field included in your IIS database.

- **In this section:**

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

Newborns who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information	X	
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time ○ Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

Patient-level data elements	Field Status (check one)	Number of child records with date of birth from January 1 through December 31, 2018, <u>with field populated with data</u>	*Percentage of child records with date of birth from January 1 through December 31, 2018 with field populated with data. Denominator derived from Q.10+Q.11 (auto-calculated)*
47. 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.47/(Q.10+Q.11)* f. –
48. 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. --
49. Address (Street, City, State, ZIP code) Logic guidance: if there is more than one address listed per child, only include one per	a. Street: ☐ Field present ☐ No field b. City: ☐ Field present ☐ No field	e. # Street f. # City g. # State h. # ZIP code	i. – j. – k. – l. –

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.	c. State: ☐ Field present ☐ No field d. ZIP code: ☐ Field present ☐ No field		
50. 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.

51. In 2018, did the IIS have written confidentiality policies that are reviewed and approved by the appropriate authority?　　　Yes/No

52. In 2018, were the 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.

53. In 2018, did the IIS have a written account management security policy (or policies) that is reviewed and approved by the appropriate state or local authority?　　　Yes/No

54. In 2018, did the 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.

55. In 2018, did the IIS have a written physical and digital security policy (or policies) reviewed and approved by the appropriate state or local authority?   Yes/No

56. In 2018, did the 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.
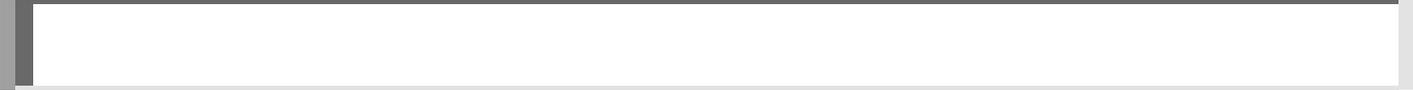
FUNCTIONAL STANDARD 8: The IIS exchanges data with health information systems in accordance with current interoperability standards endorsed by CDC for message content, format, and transport.

57. In 2018, did your IIS participate in and receive results from AIRA's validation for transport?   Yes/No

58. In 2018, did your IIS support the SOAP Standard Interface 1.2 specification, Web Services Definition Language (WSDL) in production, as endorsed by CDC?   Yes/No

59. If yes to Q.58, in 2018, how did you test that your IIS's message transport functionality was consistent with the national standard?   (select all that apply)

    a.   Tested through AIRA's assessment or testing and discovery for transport.
    b.   Tested using NIST's testing tools for transport.
    c.   My IIS's transport functionality was not tested with AIRA or NIST's tools.

60. In 2018, did your IIS participate in and receive results from AIRA's validation for submission and acknowledgement? Yes/No

61. In 2018, did your IIS support submission and acknowledgement messages in production? Yes/No

62. If yes to Q.61, in 2018, how were your IIS's submission and acknowledgement messages tested to evaluate consistency with the national standard?   (select all that apply)

    a.   Tested through AIRA's assessment or testing and discovery for submission and acknowledgement.
    b.   Tested using NIST's testing tools for submission and/or acknowledgement.
    c.   My IIS's submission and acknowledgement messages were not tested with AIRA or NIST's tools.

63. In 2018, did your IIS participate in and receive results from AIRA's validation for query and response? Yes/No

64. In 2018, did your IIS support query and response messages in production? Yes/No

65. If yes to Q.64, in 2018, how were your IIS's query and response messages tested to evaluate consistency with the national standard?   (select all that apply)

    a.   Tested through AIRA's assessment or testing and discovery for query and response.
    b.   Tested using NIST's testing tools for query and/or response.
    c.   My IIS's query and response messages were not tested with AIRA or NIST's tools.

66. Indicate the TOTAL number of provider sites connected with the IIS in production as of the end of 2018.

	HL7 2.5.1, release 1.5			Other than HL7 2.5.1, release 1.5			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)	

- Count each provider site only once in the table.

- Count both immunizing and non-immunizing provider sites that the IIS intends to move to production or that are already in production.

67. Indicate the TOTAL number of provider sites in each onboarding category as of the end of 2018.

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.66a+Q.66d+Q.66h+Q.66k)*	h. *(Q.66b+Q.66e+Q.66i+Q.66l)*	i. *(Q.66c+Q.66f+Q.66j+Q.66m)*

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:** A provider organization that provides vaccination services and that maintains permanent records (excluding temporary or mobile immunization clinics, health fairs, etc.).
- All provider sites enrolled in VFC as of December 31, 2018 should be counted as a VFC site.

- **In this section:**

  Use the table below to identify provider sites to include in the assessment:

General provider site inclusions/exclusions	Include	Exclude
All provider sites enrolled in your IIS, regardless of age group served by those sites or your IIS	X	
All provider sites enrolled in the IIS as of December 31, 2018	X	
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.		X

Provider Sites		
	VFC Sites	**Non-VFC Sites**
68. Number of provider sites in your jurisdiction as of December 31, 2018	a.	--
69. Number of provider sites in your jurisdiction enrolled in your IIS as of December 31, 2018	a.	b.
70. Number of enrolled provider sites reporting data to your IIS at least once from July 1, 2018 – December 31, 2018	a.	b.
c. Percentage of VFC provider sites that reported data to your IIS at least once from July 1, 2018 – December 31, 2018 (auto-calculated)	*Q.70a/Q.68a*	
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, 2018 – December 31, 2018 (auto-calculated)	*(Q.70a + Q.70b)/(Q.68a + Q.69b)*	

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.

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

71. In 2018, did your IIS send an immunization evaluation to another system via HL7 in production?   Yes/No

72. In 2018, did your IIS send an immunization forecast to another system via HL7 in production?   Yes/No

73. In 2018, how were your IIS's evaluations and/or forecasts tested to evaluate consistency with the ACIP recommendations?   (select all that apply)

  a.   Tested through AIRA's testing and discovery for clinical decision support.
  b.   Tested using CDC's CDSi test cases.
  c.   Tested using NIST's testing tools for clinical decision support.
  d.   My IIS's evaluations and forecasts were not tested with AIRA, CDC, or NIST's tools.

74. CDC released CDSi supporting data version 3.8 on August 24, 2018, 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.   The IIS has the capability to be updated to reflect the August 24, 2018 (Version 3.8) CDSi recommendations for influenza, but this update has not been completed.

  e.   The IIS does not have the capability to be updated to reflect the August 24, 2018 (Version 3.8) 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 age 0–18 years with date of birth from January 1, 2000 through December 31, 2018**.

- **In this section:**

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

Individuals who are considered…	Include	Exclude
Active • Residence in **jurisdiction** is confirmed or • Received an immunization from a provider organization within the jurisdiction and address is unknown	X	
Inactive, outside jurisdiction • Does not reside in the **jurisdiction**		X
Unknown, no address – no vaccination • Address is unknown and IIS has never received vaccination information	X	
Unknown, no activity for extended period of time • Has not received demographic and/or immunization for an extended period of time ○ Note that the "extended period of time" could be defined differently by each IIS	X	
Deceased • Deceased at the time of query		X

After identifying individuals in the table above, use this table to further identify individuals to include in the assessment:

General demographic inclusions/exclusions	Include	Exclude
Demographic records belonging to those with **only** an H1N1 vaccination record		X

Patient-level data elements	Field Status (check one)	Number of patient records with date of birth from January 1, 2000 through December 31, 2018, <u>with field populated with data</u>	*Percentage of patient records with date of birth from January 1, 2000 through December 31, 2018 with field populated with data. Denominator from Q.13 (auto-calculated)*
75. 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	a. ☐ Field present ☐ No field	b. #	c. Q.75b/Q.13

• Inactive – Unspecified • Deceased NOTE: If the patient has more than one patient status indicator in your IIS (e.g. for multiple provider sites), include the patient in the numerator if they have at least **one** active or inactive status indicated in their record.			

76. In 2018, 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]

77. In 2018, did the IIS generate a roster of active patients for a provider site from the IIS?   Yes/No

78. In 2018, did the IIS automatically assign PAIS to a patient for one or more provider levels based on information in the 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 the IIS being able to run reports or generate data to support the categories below.

In 2018, did the 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 2018	My IIS has the capability to support this function but it was not utilized in 2018	My IIS does not have the capability to support this function
79. Identify individuals who received recalled vaccine (select one)	○	○	○
80. Identify providers who received recalled vaccine in inventory (select one)	○	○	○
81. Support vaccine preventable disease outbreak investigation and control (select one)	○	◉	○
82. Support generation of HEDIS reports (select one)	○	○	○
83. Support generation of Medicaid or Medicare quality improvement reports (select one)	○	○	○
84. Generate AFIX reports that adhere to published CDC AFIX-IIS assessment requirements (select one)	○	○	○
85. Identify geographic or demographic under-immunized populations in my jurisdiction (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 2018.

86. In 2018, did vaccine adverse event investigators in your jurisdiction routinely use IIS data? Yes/No/Not Applicable

87. In 2018, 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 2018.

88. In 2018, did disease investigators in your jurisdiction routinely use IIS data?   Yes/No/Not Applicable

89. In 2018, did Perinatal HepB 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.

FUNCTIONAL STANDARD 15: The IIS supports immunization-related efforts in school settings.

Logic Guidance

- 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.

    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.

    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.

    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.

90. Can you calculate the number of public elementary schools that were in your jurisdiction in 2018?   Yes/No

   a.   If yes to Q.90, in 2018, how many public elementary schools were in your jurisdiction? _____

91. Can you calculate the number of public elementary schools that were authorized users of the IIS in 2018?   Yes/No

   a.   If yes to Q.91, how many public elementary schools were authorized users of the IIS in 2018? _____

   b.   *Percentage of public elementary schools in your jurisdiction that were authorized users of IIS data (Q.91a/Q.90a)*

92. Can you calculate the number of public middle schools and high schools that were in your jurisdiction in 2018?   Yes/No

   a.   If yes to Q.92, in 2018, how many public middle schools and high schools were in your jurisdiction? _____

93. Can you calculate the number of public middle schools and high schools that were authorized users of the IIS in 2018?   Yes/No

a.   If yes to Q.93, how many public middle schools and high schools were authorized users of the IIS in 2018? _____

b.   *Percentage of public middle schools and high schools in your jurisdiction that were authorized users of IIS data (Q.93a/Q.92a)*

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

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

94. Can you calculate the number of licensed childcare facilities subject to immunization requirements that were in your jurisdiction in 2018?   Yes/No

   a.   If yes to Q.94, in 2018, how many licensed childcare facilities subject to immunization requirements were in your jurisdiction? _____

95. Can you calculate the number of licensed childcare facilities subject to immunization requirements that were authorized users of the IIS in 2018? Yes/No

   a.   If yes to Q.95, how many licensed childcare facilities subject to immunization requirements were authorized users of the IIS in 2018? _____

   b.   *Percentage of licensed childcare facilities subject to immunization requirements in your jurisdiction that were authorized users of IIS data (Q.95a/Q.94a)*

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

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

96. In 2018, 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.97:

- 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.

---

97. At least once in 2018, did any provider or the immunization program use the IIS to generate age-based reminder and/or recall messages for any individuals who were not up-to-date for their vaccinations?   Yes/No

98. In 2018, 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 2018)

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.

99. In 2018, could individuals, parents, and custodial guardians obtain an official immunization record from the 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 the IIS? Yes/No

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

d.   Directly from the 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.

100. In 2018, did your IIS send at least one QBP message in production to another jurisdiction's IIS?   Yes/No

101. In 2018, did your IIS send at least one VXU message in production to another jurisdiction's IIS?   Yes/No

102. In 2018, if your IIS sent patient demographic and vaccination records to IIS in other jurisdictions, list all of these jurisdictions: [Free text box, open ended no text limit]

103. In 2018, if your IIS received patient demographic and vaccination records from IIS in other jurisdictions, list all of these jurisdictions: [Free text box, open ended no text limit]

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.

104. In 2018, did the IIS capture provider site Master Data in accordance with VTrckS data exchange specifications? Yes/No

105. In 2018, did the IIS maintain a list of vaccines available for ordering consistent with the most current federal vaccines list? Yes/No

106. In 2018, did the IIS provide the status of vaccine orders placed in the 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).

107. In 2018, was the IIS inventory populated automatically through receipt of vaccine shipment data from VTrckS or by provider site acknowledgement of receipt? 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.

108. In 2018, did the IIS organize and indicate vaccine inventory by any combination of NDC, lot number, expiration date, and public private indicator for vaccine inventory managed in the IIS?   Yes/No

109. In 2018, did the 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

110. In 2018, did the IIS automatically decrement via electronic data exchange administered doses (and not historical doses) from the current inventory? Yes/No

111. In 2018, for each provider site, did the 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

112. In 2018, did the IIS document reductions in vaccine inventory (e.g., outgoing vaccine transfers, returns, wastage, and other)?   Yes/No

113. In 2018, did the IIS support the printing of a packing slip for vaccines being returned to the distributor?   Yes/No

114. In 2018, did the 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.

115. In 2018, did the 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

116. In 2018, did the 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.