Background and Instructions

Please read this section carefully.

The AIRA IIS Self-Assessment Tool was developed by the IIS Assessment Steering Committe with developing and testing tools to assess IIS with the purpose of improving data quality (c and timeliness), functional capacity and data usage in accordance with IIS Standards of Exce indicators. The purpose of the IIS Self-Assessment Tool is to provide IIS projects with a com assessment and measurement process to exceed minimal standards for overall IIS operatio of the Self-Assessment Tool should be used to identify areas for improvement based on a g functionality and data quality. It is recommended that the IIS perform a self-assessment or monitor improvement and progress towards the gold standard.

The process of completing the IIS Self-Assessment Tool will take between 2-32 hours, with around 15 hours. The amount of time to complete the process depends heavily upon staff access to existing and/or custom reports/queries to run against data in the IIS database, an entities for assistance in creating and/or running queries to respond to various elements.

The Self-Assessment Tool covers three primary functional areas:

- Standard 1: Vaccine Ordering and Inventory Management
- Standard 2: Data Quality and Provider Participation in IIS - Data Timeliness, Data Accurac
- Standard 3: Population Assessment

There is a separate tab for each Standard. Each Standard is scored independently of the ot information on scoring, please see the section below.
*Note: States not using their IIS for online ordering or online inventory management should 1: Vaccine Ordering and Inventory Management.

<u>Columns</u>
The following information details the intent and instructions for each of the columns in the

Column A/B
These columns describe the Element and the various (numbered) items associated with eac cannot be edited.

Column C: Required/Recommended/Optional
Required/Recommended/Optional relates to the level of importance assigned to an item ba requirements. A required item is essential to IIS performance of the standard. A recomme be a core functional operation towards meeting the gold standard of each standard. Optio to be enhancements to the IIS performance of the standard and are encouraged for implen fields cannot be edited.

Column D: Weight (based on importance)
Based on how an item is designated in Column C, a weighting is applied that is used as a mu (Column I) to calculate the Weighted Score (Column J). A required item is assigned a weigh and optional = 1. These fields cannot be edited.

Column E: IIS Functionality
A response of “yes” should be entered in this column when the IIS supports the functionalit
A and B, and as detailed in Column K (when applicable). If the IIS does not support a partic
because the feature is under development, does not exist or applies to a population not su
(e.g. adults), a project should enter a response of “no” in Column E. The Self-Assessment T
accommodate for a response of “in progress” or “not applicable” as it is meant to be a snap
areas for improvement and track progress over time. Possible responses: 1= yes, 0= no.

Column F: Required by IIS
Responses in this column should be based on whether an IIS considers the listed item to be
IIS, meaning that a user cannot progress if the field has not been completed. A Score (Colu
when a recommended item (Column C) is “required” by an IIS. Possible responses: 1= yes,
greyed out for items where this column is not applicable.

Column G: Extent of Completeness - % of fields populated
The values in this column should be calculated using the formula provided in Column H (Sug
Numerator/Denominator). These items may require a query or custom report to be run ag
may be pulled from existing resources such as IISAR responses. The Extent of Completenes
Score (Column I) and Weighted Score (Column J). Percentage should be entered as a decim
% = .85; 100% = 1. This field will be greyed out for items where this column is not applicabl

Column H: Suggested Numerator/Denominator
The suggested formulas should be used to calculate the Extent of Completeness (Column G
specifically noted, it should be assumed that the formula applies to active patients, organiz
and users. For patient-related items, an age range can be selected if running the query aga
not possible due to time or system processing resources. Some terminology may vary amo
products, so users should adapt to the naming schemes used in their respective IIS. These f
This field will be greyed out for items where this column is not applicable.

Column I: Score
The Score is calculated automatically based on values entered in Columns E, F and G. These
For a description of scoring, please refer to the following section.

Column J: Weighted Score
The Weighted Score is calculated automatically based on the Score (Column I) and the Weig
(Column D). These fields cannot be edited. For a description of scoring, please refer to the

Column K: Comments
The Comments column provides additional detail that may be helpful in determining the in
A & B) or clarifying the formula (Column H) used for calculating Extent of Completeness (Co
cannot be edited.

<u>Scoring</u>
Scoring is assessed based on percentage of the optimal score for each standard. The follow
values needed to achieve a good (70% or higher), better (80% or higher), or best (90% or hi

standard. Scores for each standard are calculated by adding the values entered in Columns (Required) and G (Extent of Completeness). The Weighted Score (Column J) is calculated by (Column I) and the Weight assigned to the item (Column D).

Standard 1	Percent	Score	Weighted
Good	70%	73	207
Better	80%	83	236
Best	90%	94	266
High Value	100%	104	295

Standard 2	Percent	Score	Weighted
Good	70%	118	277
Better	80%	135	316
Best	90%	152	356
High Value	100%	169	395

Standard 3	Percent	Score	Weighted
Good	70%	62	160
Better	80%	71	182
Best	90%	80	205
High Value	100%	89	228

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STANDARD 1
VACCINE ORDERING AND INVENTORY MANAGEMENT

Definition: The IIS electronically supports the ordering, safe storage and handling , appropriate ordering and distribution, and accountability of vaccine by immunization providers.

Objective: The program has readily accessible, timely, and useful information on vaccine ordering, allocation and use that enables it to monitor the performance of providers and report to providers' own internal use.

		Required/ Recommended/ Optional	Weight (based on importance: 3=REQ, 2=REC, 1=OPT)	IIS Functionality - Yes =1; No = 0	Required by IIS - Yes = 1; No =0	Extent of Completeness - % of fields populated	Suggested Numerator/ Denominator	Score	Weighted Score
A	B	C	D	E	F	G	H	I	J
ELEMENT A: Basic Data for Vaccine Management and Accountability: ESSENTIAL DATA ELEMENTS TO BE COLLECTED									
The program collects data in its IIS as it relates to vaccine management and includes the following data fields:									
1	VFC Provider Information								
	a. Provider name	REQ	3				*# names/# VFC providers in IIS*	0	**0**
	b. Provider PIN number	REQ	3				*#PINs/ # VFC providers in IIS*	0	**0**
	c. Shipping Contact	OPT	1				*#contacts/ # VFC providers in IIS*	0	**0**
	d. Phone number	REQ	3				*#ph/# VFC providers in IIS*	0	**0**
	e. Fax number	REC	2				*#fax/# VFC providers in IIS*	0	**0**
	f. Shipping address	REQ	3				*#address/ # VFC providers in IIS*	0	**0**
	g. Shipping info - days/hours	REQ	3				*# ship info/ # VFC providers in IIS*	0	**0**
	h. e-mail address	REQ	3				*#email/# VFC providers in IIS*	0	**0**

	STANDARD 1 **VACCINE ORDERING AND INVENTORY MANAGEMENT**								
2	Inventory management/lot creation								
	a. Vaccine type	**REQ**	**3**				***#vaccine types/# of active lot numbers***	0	**0**
	b. Vaccine brand name	**REQ**	**3**				***#brand names/# of active lot numbers***	0	**0**
	c. Vaccine lot number	**REQ**	**3**				***# lot #'s/ # of active lot numbers***	0	**0**
	d. Vaccine manufacturer	**REQ**	**3**				***# manufacturers/# of active lot numbers***	0	**0**
	e. NDC Code	**REQ**	**3**				***# codes/# of active lot numbers***	0	**0**
	f. Vaccine expiration dates	**REQ**	**3**				***# exp dates/# of active lot numbers***	0	**0**
	g. Funding source of vaccine - public vs. private	**REQ**	**3**				***# fund source/# of active lot numbers***	0	**0**
3	Vaccine inventory management features								
	a. Doses on hand	**REQ**	**3**					0	**0**
	b. Doses administered	**REQ**	**3**					0	**0**
	c. Doses wasted	**REQ**	**3**					0	**0**
	d. Manual adjustments to doses on hand and **reasons** for the adjustments (subtractions, additions)	**REQ**	**3**					0	**0**
	e. Vaccine transfers, dates, in and out sites.	**REQ**	**3**					0	**0**
4	Patient Information								

STANDARD 1
VACCINE ORDERING AND INVENTORY MANAGEMENT

	a. Patient name	REQ	3				# names/ # records	0	0
	b. Patient address	REQ	3				# addresses/ # records	0	0
	c. Patient VFC Eligibility	REQ	3				# VFC checked / # records	0	0
	d. Patient DOB	REQ	3				#dates/ # records	0	0
5	Recording patient vaccination events								
	a. IIS differentiates between administered and historical vaccination records	REQ	3					0	0
	b. Vaccine type	REQ	3				#vaccine types/# doses administered	0	0
	c. Vaccine lot number	REQ	3				# lot #'s/ # doses administered	0	0
	d. Vaccine manufacturer	REQ	3				# manufacturers/#doses administered	0	0
	e. Vaccine expiration dates	REQ	3				# exp dates/ # doses administered	0	0
ELEMENT B: Use of IIS for VFC Vaccine Management and Accountability: REPORTS TO BE RUN UTILIZING DATA CAPTURED AS DEFINED IN EL									
The IIS has the capacity to produce reports that document the appropriate use and handling of VFC vaccine. This information is used to support IIS activity as well as VFC and AFIX site vis information is used to assure that VFC vaccine is administered only to VFC eligible patients. In addition, this information is used to monitor vaccine accountability, i.e., vaccine wastage, trans recalls, and vaccine storage.									
1	VFC eligibility status, age groups and use of VFC vaccine, by vaccine type	REQ	3					0	0
2	Vaccine lot and dose administered reports to support vaccine accountability - both at provider and geographic level	REQ	3					0	0
3	Reconciliation functions and reports	REQ	3					0	0

STANDARD 1
VACCINE ORDERING AND INVENTORY MANAGEMENT

4	Identify expired lots or expiring lots in active inventory	**REQ**	**3**					0	**0**
5	Transfers of vaccines among sites	**REQ**	**3**					0	**0**
6	Vaccine wastage reports	**REQ**	**3**					0	**0**
7	Track vaccine lot numbers at the provider, local and state level	**REQ**	**3**					0	**0**
8	Generate a patient contact information report by lot number in event of a vaccine recall	**REQ**	**3**					0	**0**
9	Vaccine storage unit temperatures over specified time periods	**REC**	**2**					0	**0**
Element C- Vaccine Ordering and Distribution									
The IIS is used to generate forms and facilitate vaccine ordering and distribution to public and private providers.									
1	Generate a VFC order from the IIS	**REQ**	**3**					0	**0**
2	Order vaccine based on past usage (provider)	**REC**	**2**					0	**0**
3	Order frequency and timing (Economic Ordering Quantity) - order history of vaccine based on past usage behaviors of provider	**REC**	**2**				***# providers with ordering info/total # of providers***	0	**0**
4	Order dates of vaccines	**REQ**	**3**				***field complete/ # field records***	0	**0**
5	Delivery dates of vaccines	**REQ**	**3**				***field complete/ # field records***	0	**0**
6	Document vaccines purchased by funding source	**REQ**	**3**				***# lot #'s with documented funding source/# lot numbers***	0	**0**
7	Reconcile vaccine usage with order requested and shipped	**REQ**	**3**					0	**0**
8	Monitor lots due to expire or expired to see if re-distribution will be necessary	**REQ**	**3**					0	**0**

o the CDC and other authorities, as well as the
Comments/Definitions
K
Use name that corresponds with VFC pin, can be provider, facility, organization name. Exclude non-VFC providers from numerator and denominator.
If VTrckS required shipping field (27 character text field) is populated, count as 1 contact. Field may contain multiple data elements (e.g. first name, last name and title).
This includes street, city, state and zip.
#ship info = # providers facilities that have data in one or more fields that contain shipping information

The following items refer to elements captured at the inventory/lot level. Patient level details regarding doses administered appear in a following section.
When calculating Extent of Completeness for the fields in this section, consider limiting the age range for the query to 0-18 yrs of age.

Questions in this section apply only to administered vaccinations.
EMENT A its. As part of the VFC/AFIX site visits, this sfers in/transfers out, vaccine expiration, vaccine

Could be due to mfg recall or to provider-specific recall such as vaccine stored improperly
Public versus Private vaccine. Use active lot numbers only.

STANDARD 2

DATA QUALITY & PROVIDER PARTICIPATION IN IIS, DATA TIMELINESS, DATA ACCURACY, DATA COMPLETENESS

Definition: The IIS systematically manages provider enrollment, data submission, and data quality including timeliness, accuracy and completeness.

Objective: The IIS program staff use the IIS for provider enrollment and monitoring provider activity including submission rate and data quality.

		Required/ Recommended/ Optional	Weight (based on importance 3=REQ, 2=REC, 1=OPT)	IIS Functionality - Yes =1; No = 0	Required by IIS - Yes = 1; No =0	Extent of Completeness - % of fields populated	Suggested Numerator/ Denominator	Score	Weighted Score	Comments/Definitions
A	B	C	D	E	F	G	H	I	J	K
ELEMENT A: Provider Recruitment and Enrollment The program uses the IIS to manage the provider enrollment process										
1	The IIS has a provider enrollment module or screens with the following data elements (fields):									
	A. Name of medical organization	REQ	3				***# names/ # active orgs in IIS***	0	**0**	Definition of medical organization: Business entity under which multiple sites or facilities may exist.
	i. Address - street, city, state, zip	REQ	3				***#addresses/ # active orgs in IIS***	0	**0**	All components of address must be present to count as complete.
	ii. County	REQ	3				***#counties recorded/# active orgs in IIS***	0	**0**	County, district or parish of organization's main office
	iii. Phone-area code and number	REQ	3				***#phone/ # active orgs in sys***	0	**0**	Count any phone number recorded for organization.
	iv. Email	REC	2				***# emails/ # active orgs in IIS***	0	**0**	Email address of organization contact
	v. Medical Organization Administrator or Contact	REC	2				***# contacts/ # active orgs in IIS***	0	**0**	Either first name or last name or both names counts as complete.
	B. Name of site/facility	REQ	3				***# site-facility names/# active site-facilities in IIS***	0	**0**	Definition of site/facility: separate physical locations within or under a medical organization.

STANDARD 2									
DATA QUALITY & PROVIDER PARTICIPATION IN IIS, DATA TIMELINESS, DATA ACCURACY, DATA COMPLETENESS									
i. Site Address- street, city, state, zip	**REQ**	**3**				***# site-facility addresses / # active site-facilities***	0	**0**	All components of address must be present to count as complete.
ii. County	**REQ**	**3**				***# site-facility counties/# active site-facilities***	0	**0**	County, district or parish of organization's main office
iii. Site Phone - area code and number	**REQ**	**3**				***# site ph-fx / # active site-facilities***	0	**0**	
iv.Site email	**REC**	**2**				***# site emails / # active site-facilities***	0	**0**	Email address of site contact.
v. Site administrator or contact	**REQ**	**3**				***# site contacts/ # active site-facilities***	0	**0**	Either first name or last name or both names counts as complete.
vi. VFC provider ID when enrolled in VFC	**REQ**	**3**				***# site VFC Ids / # active site-facilities in IIS that are enrolled in VFC***	0	**0**	Denominator includes only providers who participate in state's VFC program. Numerator includes their VFC PIN or ID number.
C. First and last names of Health Care Providers (i.e., Primary Care Providers)	**OPT**	**1**				***#HC provider names/# of active HC providers in IIS***	0	**0**	Must have both first and last names to count as complete. Include Physicians, Nurse practitioners, other licensed health care professionals within the organization that provide patient care that includes immunization.
i. Credentials (MD, ARNP, RN, DO, etc)	**OPT**	**1**				***# cred/ # active HC providers***	0	**0**	Examples of credentials are MD, RN, LPN, LVN, MA, may vary by SIIS.
ii. Medical License #	**OPT**	**1**				***# licenses/ # active HC providers***	0	**0**	
iii. National Provider ID (NPI)	**OPT**	**1**				***# Prov IDs/ # active HC providers***	0	**0**	
D. First and last names of users who do data entry	**REQ**	**3**				***# user accounts with both first and last names/# active user accounts***	0	**0**	Must have both first and last name of user to count as complete.

STANDARD 2										
DATA QUALITY & PROVIDER PARTICIPATION IN IIS, DATA TIMELINESS, DATA ACCURACY, DATA COMPLETENESS										
	i. Credentials (if they have)	OPT	1					0	**0**	Examples of credentials are MD, RN, LPN, LVN, MA, may vary by SIIS.
	iii. Security/access level and permissions	REQ	3					0	**0**	SIIS must have functionality to assign different levels of access and permission to users. System requires entry of access level. Specific permissions are optional to be assigned.
Element B: IIS Functionality for Data Exchange with Providers The IIS supports multiple provider data submission and exchange modalities										
1	Direct provider data entry into IIS	REQ	3					0	**0**	Through web-based interface
2	Electronic data submission (other than direct user entry)									
	A. Flat file format from billing or practice management system or Electronic Health Record system	OPT	1					0	**0**	Optional if already doing HL7: do not penalize if flat files not accepted but HL7 messages are. If not doing HL7, must be required.
	B. HL7 uni-directional, batch	REQ	3					0	**0**	IIS supports batch processing of HL7 vaccination update (VXU) messages.
	C. HL7 uni-directional, real time update	REQ	3					0	**0**	IIS supports real-time receipt of HL7 vaccination update (VXU) messages. Real-time is defined as the ability to receive a VXU message and return the appropriate HL7 acknowledgement immediately in reply using the transport method selected by the IIS. While the acknowledgement must be generated immediately, the final processing of the message data may or may not be real-time.
	D. HL7 bi-directional, real time	REC	2					0	**0**	IIS supports real-time queries for vaccination history via an HL7 query (VXQ and/or QBP) messages.
	E. HL7 bi-directional, batch update	OPT	1					0	**0**	IIS can send out HL7 vaccination update (VXU) messages to external systems, either in batches or real-time.
	F. HL7 bi-directional, query other IIS	OPT	1					0	**0**	IIS can send HL7 query (VXQ and/or QBP) messages to other IIS to request vaccination histories. This could be used for state-to-state or other cross-jurisdictional queries.
3	Data exchange via HIE									
	A. uni-directional	REC	2					0	**0**	
	B. bi-directional	REC	2					0	**0**	

STANDARD 2

DATA QUALITY & PROVIDER PARTICIPATION IN IIS, DATA TIMELINESS, DATA ACCURACY, DATA COMPLETENESS

Element C: Monitoring Provider Submission **(receives and processes immunization information within one month of vaccine administration)**

The IIS measures the timeliness and regularity of provider data submission

1	Produces Provider Participation & Submission Reports (measuring frequency & regularity of submissions)									
	A. Can run regular reports on number & proportion of provider sites enrolled in the IIS.	**REQ**	**3**					0	**0**	Use IISAR questions as the basis for this group of questions, but reports should be run monthly or quarterly depending on size of IIS
	B. Can run regular reports on number & proportion of provider sites submitting data to the IIS - xx% of enrolled provider sites have submitted data at least once over past 30/60/90 days.	**REQ**	**3**					0	**0**	Use IISAR questions as the basis for this group of questions, but reports should be run monthly or quarterly depending on size of IIS
	C. Can run reports of non-submitting providers to use for follow-up.	**REQ**	**3**					0	**0**	For example: reports could list providers who have submitted no data within past 30 days, 60 days, 90 days, etc
2	Has electronic and/or manual processes to assess the timeliness of data submission and follows up with data submitters to ensure compliance.	**REQ**	**3**					0	**0**	Timeliness of data submission can be measured per the IISAR - #/% of vaccines entering system within 7 days, 8-14 days, etc. - But should be run more frequently and at provider level for follow-up.
3	Produces reports that show mode of data entry by provider site.	**REC**	**2**					0	**0**	Determines whether mode of submission can be crosswalked to timeliness and frequency.

Element D: Data Quality Assurance REQUIRED **(promote accuracy and completeness of registry data)**

The Program uses the IIS to measure and monitor the accuracy and completeness of data in the IIS.

1	Monitor, improve, and ensure accuracy of data in the IIS:									
	A. IIS has functionality to prevent data quality errors on incoming data (before it's loaded or entered into the IIS).	**REQ**	**3**					0	**0**	Examples: ability to prevent submission of vaccine with date of administration prior to date of birth; can prevent entry of bogus names (baby boy, baby girl, etc); see IISAR Illogical Data Elements for other examples.
	i. IIS has functionality in user interface to prevent/warn about data quality errors on incoming data.	**REC**	**2**					0	**0**	
	ii. IIS provides test script for initial load and validation prior to regular submission.	**REC**	**2**					0	**0**	
	B. IIS has functionality to identify and report possible errors and/or warnings as data is loaded into the IIS.	**REQ**	**3**					0	**0**	For example: vaccine type should match an administration route; see IISAR validation steps on incoming data for more examples.

STANDARD 2										
DATA QUALITY & PROVIDER PARTICIPATION IN IIS, DATA TIMELINESS, DATA ACCURACY, DATA COMPLETENESS										
	i. IIS identifies possible duplicate patients while searching and creating new records.	REQ	3					0	**0**	
	ii. IIS identifies possible duplicate vaccination records.	REC	2					0	**0**	
	iii. IIS can identify patients with vaccine dates before date of birth in system.	REC	2					0	**0**	
	C. IIS can generate reports to identify data quality issues on existing data in the IIS.	REQ	3					0	**0**	
	i. IIS has algorithms/reports to identify possible duplicate patients.	REC	2					0	**0**	ex. IISAR Q52 and Q53.
	ii. IIS has report capability to identify possible duplicate vaccinations.	REC	2					0	**0**	ex. IISAR Q52 and Q53.
	iii. IIS can generate reports to identify patients with inappropriate aged vaccinations.	REC	2					0	**0**	
	D. IIS has tools and processes to minimize duplicate patient and vaccination records.									
	i. The IIS can regularly evaluate incoming and existing immunization information to identify, prevent, and resolve duplicate patient records.	REC	2					0	**0**	
	ii. The IIS can regularly evaluate incoming and existing immunization information to identify, prevent, and resolve duplicate vaccination events.	REC	2					0	**0**	
2	Ensure and monitor completeness of data in the IIS.									
	A. IIS includes specific data elements for editing/creating patient and vaccination records in accordance with the NVAC core data elements.									NVAC: http://www.cdc.gov/vaccines/programs/iis/core-data-elements.html; Use active patient records and their associated vaccination records only.
	i. IIS requires patient name for patient demographics to be created.	REQ	3				***# names/ # records***	0	**0**	
	ii. IIS requires patient DOB for patient demographics to be created.	REQ	3				***# DOB/# records***	0	**0**	
	iii. IIS requires patient sex/gender for patient demographics to be created.	REQ	3				***# sex/# records***	0	**0**	
	iv. IIS requires race for patient demographics to be created/edited.	REQ	3				***# race/# records***	0	**0**	
	v. IIS requires ethnicity for patient demographics to be created/edited.	REQ	3				***# ethnicity/# records***	0	**0**	
	vi. IIS requires patient birth order for patient demographics to be created/edited.	REQ	3				***#birth order/# records***	0	**0**	

STANDARD 2										
DATA QUALITY & PROVIDER PARTICIPATION IN IIS, DATA TIMELINESS, DATA ACCURACY, DATA COMPLETENESS										
	vii. IIS requires birth state/country for patient demographics to be created/edited.	REQ	3				*# birth state/# records*	0	**0**	
	viii. IIS requires entry of parent/guardian name for patient demographics to be created/edited.	REQ	3				*# guardian/# records*	0	**0**	
	ix. IIS requires vaccine type for both historical and administered vaccination events.	REQ	3				*#vaccine type/# doses admin*	0	**0**	
	x. IIS requires date of administration for both historical and administered vaccination events.	REQ	3				*#vaccination date/# doses admin*	0	**0**	
	xi. IIS requires vaccine manufacturer for administered vaccination events.	REQ	3				*#manufacturer/# doses admin*	0	**0**	
	xii. IIS requires vaccine lot number for administered vaccination events.	REQ	3				*#lot number/#doses admin*	0	**0**	
	xiii. IIS recommends entry of address for patient demographics to be created.	REC	2				*# address/# records*	0	**0**	
	xiv. IIS recommends entry of phone for patient demographics to be created.	REC	2				*# phone/# records*	0	**0**	
	xv. IIS recommends entry or calculation of vaccine dose number	REC	2					0	**0**	
	xvi. IIS recommends entry of vaccine expiration date for administered vaccination events.	REC	2				*# exp date/# doses admin*	0	**0**	
	xvii. IIS recommends entry of injection site and route of administration for administered vaccination events.	REC	2				*# site-route/# doses admin*	0	**0**	
	xviii. IIS recommends entry of vaccine provider for administered vaccination events.	REC	2				*#vax provider/# doses admin*	0	**0**	
	xix. IIS supports differentiation of administered and historical vaccinations through use of a historical vaccination flag indicator.	REC	2					0	**0**	
	xx. IIS recommends entry of VFC eligibility for patient demographics to be created.	REC	2				*# patient VFC/# records*	0	**0**	
	xxi. IIS recommends entry of VFC eligibility for recording administered vaccination events.	REC	2				*# vax VFC/# doses admin*	0	**0**	
	xxii. IIS offers a "history of varicella" disease indicator.	REC	2					0	**0**	
	xxiii. IIS includes patient status indicators that include active, inactive, MOGE and other classifications.	REC	2					0	**0**	
	xxiv. IIS includes option to document patient alias when recording patient demographics.	OPT	1					0	**0**	

STANDARD 2

DATA QUALITY & PROVIDER PARTICIPATION IN IIS, DATA TIMELINESS, DATA ACCURACY, DATA COMPLETENESS

	xxv. IIS includes option to document patient birthing facility when recording patient demographics.	OPT	1					0	**0**	
	xxvi. IIS includes option to document patient SSN when recording patient demographics.	OPT	1				***# patient SSN/# records***	0	**0**	
	xxvii. IIS includes option to document patient primary language preference.	OPT	1				***# language/# records***	0	**0**	
	xxviii. IIS includes option to document patient birth registration number when recording patient demographics..	OPT	1					0	**0**	
	xxix. IIS includes option to document patient Medicaid number.	OPT	1					0	**0**	
	xxx. IIS includes option to record alternate parent/guardian name and contact information.	OPT	1					0	**0**	
	xxxi. IIS includes option to document parent/guardian SSN.	OPT	1				***# guard SSN/# records***	0	**0**	
	B. IIS generates reports to identify records with missing or inadequate data (based on data elements).	REQ	3					0	**0**	
	C. IIS can generate reports to identify patients records with incomplete vaccine series.	REQ	3					0	**0**	
	i. IIS can identify lists of patients incomplete for immunizations by provider or geographical area.	REC	2					0	**0**	
Element E: Provider Level Functionality of IIS - refers to user interface functionality and availability to be run by providers.										
1	IIS can generate reports by provider site									
	A. IIS can generate immunization coverage rates by provider site	REQ	3					0	**0**	
	B. IIS can generate doses administered reports by provider site	REQ	3					0	**0**	
	C. IIS can determine routine immunizations needed based on a forecasting algorithm	REQ	3					0	**0**	
	D. IIS can generate reminder/recall notifications for individuals that are due/late for immunizations	REQ	3					0	**0**	
							TOTAL SCORE	**0**	**0**	

STANDARD 3

POPULATION ASSESSMENT

Definition: The IIS systematically collects immunization histories and calculates vaccine coverage rates across age groups from birth through adulthood.

Objective: The Program uses information in the IIS to identify and monitor groups of under-immunized children, adolescents, and adults at higher risk for VPDs.

		Required/ Recommended/ Optional	Weight (based on importance: 3=REQ, 2=REC, 1=OPT)	IIS Functionality - Yes =1; No = 0	Required by IIS - Yes = 1; No =0	Extent of Completeness - % of fields populated	Suggested Numerator/ Denominator	Score	Weighted Score	Comments / support documentation
A	B	C	D	E	F	G	H	I	J	K
ELEMENT A: Immunization Forecasting REQUIRED (Standard 8, Automatically determine the routine childhood immunizations needed, in compliance with current ACIP recommendations, when an individual presents for a scheduled immunization.)										
The IIS uses an ACIP compliant algorithm to calculate vaccine recommendations by age.										
1	The IIS conforms to the current ACIP recommendations and forecasts accurately for the following age groups and situations:									
	A. Children 0-18 years of age	REQ	3					0	**0**	
	B. All age groups birth to death	REC	2					0	**0**	
	C. Special patient conditions - can account for immune-compromised status and recorded contraindications	REC	2					0	**0**	
	D. Special vaccine situations - can modify forecast to allow for vaccine shortage (deferral), outbreak recommendations, compromised vaccine doses, etc.	REC	2					0	**0**	
	E. Defaults to catch up schedules when indicated	REQ	3					0	**0**	
2	The IIS routinely maintains the algorithm in conformity to new ACIP recommendations - can adjust forecast in timely manner after ACIP and CDC official approval	REQ	3					0	**0**	Timely manner is defined as a period of less than 90 days from the date of MMWR publication.
3	Produces person-specific evaluation and forecast of vaccines needed per ACIP schedule at the provider level in real-time.	REQ	3					0	**0**	
4	The algorithm assesses each immunization record and provides an appropriate forecast.									
	A. based on immunizations given	REQ	3					0	**0**	
	B. based upon contraindications	REC	2					0	**0**	
	C. based upon high risk status	REC	2					0	**0**	

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5	The IIS has a process for reforecasting the entire database if and when needed.	**REQ**	**3**					0	**0**	
6	State specific requirements (school, child care)	**REC**	**2**					0	**0**	
ELEMENT B: Basic Data for Population Assessment REQUIRED (based on Core Data Items, 2009) The IIS includes the following demographic and geographic information in searchable data fields which can be used for population assessment purposes:										
1	Date of birth	**REQ**	**3**				***# DOB/ # active records***	0	**0**	Count of patient records in all of Element B should include "active" records only. Records inactivated at jurisdictional level should be excluded from both numerator and denominator.
2	Sex	**REQ**	**3**				***# sex / # active records***	0	**0**	
3	Race	**REQ**	**3**				***# race/ # active records***	0	**0**	
4	Ethnicity	**REQ**	**3**				***# ethnicity/# active records***	0	**0**	
5	Insurance status	**REC**	**2**				***# status/ # active records***	0	**0**	
6	Patients are tied to a specific site/facility	**REQ**	**3**				***# records with site-facility/ # of active records***	0	**0**	Ability to link the patient to the facility/site.
7	Patients are tied to a specific physician or vaccinator	**REQ**	**3**				***# records with physician-vaccinator/ # of active records***	0	**0**	Ability to link the patient to individual provider.
8	WIC	**REC**	**2**					0	**0**	
9	Healthcare worker	**REC**	**2**					0	**0**	IIS offers a healthcare worker indicator. For example, does IIS have an indicator of priority group for pandemics such as the H1N1?
10	Patient street address	**REQ**	**3**				***#street/# active records***	0	**0**	Use patient's primary address when responding and performing the calculations.
11	Patient city address	**REQ**	**3**				***#city/# active records***	0	**0**	Use patient's primary address when responding and performing the calculations.
12	Patient state address	**REQ**	**3**				***#state/# active records***	0	**0**	Use patient's primary address when responding and performing the calculations.
13	Patient Zip code	**REQ**	**3**				***# zips/# active records***	0	**0**	Use patient's primary address when responding and performing the calculations.
14	Patient county	**REQ**	**3**				***#county/# active records***	0	**0**	Use patient's primary address when responding and performing the calculations.

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POPULATION ASSESSMENT										
15	Patient phone number	**REC**	**2**				***# phone numbers/ # active records***	0	**0**	
16	Educational Level e.g. grade school, college	**REC**	**2**				***# ed fields/ # active records***	0	**0**	
17	Contraindications	**REQ**	**3**					0	**0**	
18	Exemption status & type of exemption (religious, philos)	**REC**	**2**					0	**0**	
19	Disease Hx (e.g. Chicken Pox, Measles)	**REQ**	**3**					0	**0**	A patient may have more than one history of disease recorded (though varicella is the primary one). Only count each patient once even if they multiple History of Disease.
20	Confirmed Immunity (e.g. serologic confirmation-titer)	**REQ**	**3**					0	**0**	A patient may have more than one type of immunity recorded. Only count each patient once even if they multiple Confirmed Immunities.
ELEMENT C: Immunization Coverage Assessments REQUIRED (Standard 10, Automatically produce immunization coverage reports by provider, age groups, and geographic areas) The program uses the IIS to calculate immunization coverage rates by age, race/ethnicity										
1	Validates school and childcare reports in accordance with school and childcare immunization laws.	**REC**	**2**					0	**0**	
2	Assesses immunization coverage in geographic areas.	**REQ**	**3**					0	**0**	Require minimum granularity at county level. Recommend granularity at zip code and census tract area.
3	Assesses immunization coverage in specific populations									
	A. STD clinic clients	**REC**	**2**					0	**0**	
	B. HIV infected population	**REC**	**2**					0	**0**	
	C. Correctional residents	**REC**	**2**					0	**0**	
	D. Nursing homes residents	**REC**	**2**					0	**0**	
	E. Health care workers	**REC**	**2**					0	**0**	
	F. Other high risk populations (e.g. pregnant women, specific age groups)	**REC**	**2**					0	**0**	
	G. Site-Facility specific coverage rate	**REQ**	**3**					0	**0**	site specific
	H. Clinic system coverage report	**REQ**	**3**					0	**0**	medical organization specific
	I. Health Care Provider specific coverage rate	**REC**	**2**					0	**0**	practitioner specific level
	J. Generates coverage rates for schools, childcare facilities and colleges.	**REC**	**2**					0	**0**	
	K. Ability to run custom coverage reports	**REQ**	**3**					0	**0**	

STANDARD 3

POPULATION ASSESSMENT

ELEMENT D: Annual CDC Reporting --

The Program systematically uses the IIS to produce the annual CDC report estimating immunization coverage and exemption rates of children entering kindergarten and in childcare facilities.

1	The IIS maintains information on children exempted from immunizations based on applicable State Law	**REC**	**2**					0	**0**	
2	The IIS can produce reports based on age	**REC**	**2**					0	**0**	
	A. The IIS can produce reports for kindergarten	**REC**	**2**					0	**0**	
	B. The IIS can produce reports for childcare	**REC**	**2**					0	**0**	
3	The IIS can produce reports based on type of facility (e.g. hospitals, FQHC, private provider practice)	**REC**	**2**					0	**0**	

ELEMENT E: Program Support --

The IIS provides reports to the program for monitoring and assessment.

1	Estimating vaccine coverage among infants, children, adolescents and adults.									
	A. By individual vaccine type	**REQ**	**3**					0	**0**	
	B. By vaccine series	**REQ**	**3**					0	**0**	
2	Trends in coverage rates for geographical areas.	**REC**	**2**					0	**0**	
3	Trends in coverage rates for childcare facilities	**REC**	**2**					0	**0**	
4	Trends in coverage rates for schools	**REC**	**2**					0	**0**	
5	Trends in coverage rates for WIC participants	**OPT**	**1**					0	**0**	
							TOTAL SCORE	**0**	**0**	