AIRA
AMERICAN IMMUNIZATION REGISTRY ASSOCIATION

Data at Rest

Extract Specification

Updated December 2023

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Data at Rest Extract Specification

Introduction

This extract specification describes the data elements necessary to extract from an IIS for Data at Rest. This extract specification is built from the Flat File Format Specification. Reviewing and understanding that Flat File Format Specification is important to successfully formatting the files.

Extract Cohort

The extract should include all patients (and all their associated immunization records) provided they meet the following criteria:

1. The patient's DOB is on or after January 1, 2022 and on or before December 31, 2023.
2. The patient is known to reside in the jurisdiction.
3. The patient received an immunization from a provider organization within the jurisdiction, but the address is unknown.
4. The patient's address is unknown and the IIS has never received vaccination information for the patient.

This extract should NOT include:

1. Patients who are not active at the jurisdictional level (e.g., inactive, deceased).
2. Patients who do not consent to be in the registry or do not consent to share their records.

Patient Extract File

This extract further defines the values and data selection expectations from the base Data at Rest Extract Specification. The resulting file shall meet the technical requirements defined in the base document.

Table 1: Patient Data Elements

	Data Element Name	Format	Definition	Extract Guidance	Value Set
1	IIS Patient ID	String	Unique ID for this patient within this extract file.	This may or may not be the actual IIS Patient ID within the IIS DB. A unique value is required within this extract file.	
2	Patient Name – First	String	The patient's first name.	Populate with either **[[VP]]** (Value Present) or **[[NP]]** (Value Not Present)	
3	Patient Name – Middle	String	The patient's middle name.	Populate with either **[[VP]]** or **[[NP]]**	
4	Patient Name – Last	String	The patient's last name.	Populate with either **[[VP]]** or **[[NP]]**	
5	Mother's Maiden Name	String	The last name under which the mother was born (i.e., before marriage).	This should be the mother's maiden name and not inferred or implied from a responsible person value unless it is explicitly known to be the mother's maiden name. Populate with either **[[VP]]** or **[[NP]]**	
6	Mother's Name – First	String	The first name of the patient's mother.	This can either be from an explicit Mother's name field or a responsible person where the relationship to the	

				patient is "Mother". Populate with either **[[VP]]** or **[[NP]]**	
7	Mother's Name – Middle	String	The middle name of the patient's mother.	Default this field to **[[EX]]** (Excluded) for all records.	
8	Mother's Name – Last	String	The last name of the patient's mother.	This can either be from an explicit Mother's name field or a responsible person where the relationship to the patient is "Mother". Populate with either **[[VP]]** or **[[NP]]**	
9	Patient Date of Birth	YYYY-MM-DD	The patient's date of birth.	Populate with actual value from DB.	
10	Patient Gender	String	The patient's gender.	Populate with either **[[VP]]** or **[[NP]]**	
11	Patient Address – Street	String	The street component of the patient's address.	This should be the address the IIS considers to be the most accurate address for the patient. Populate with either **[[VP]]** or **[[NP]]**	
12	Patient Address – City	String	The city component of the patient's address.	This should be the address the IIS considers to be the most accurate address for the patient. Populate with actual value from DB.	
13	Patient Address – State	String	The state component of the patient's address.	This should be the address the IIS considers to be the most accurate address for the patient. Populate with either **[[VP]]** or **[[NP]]**	

14	Patient Address – Country	String	The country component of the patient's address.	Default this field to **[[EX]]** for all records.	
15	Patient Address – Zip/postal	String	The zip code of the patient's address.	This should be the address the IIS considers to be the most accurate address for the patient. Populate with actual value from DB.	
16	Patient Race	String	The patient's race.	Populate with either **[[VP]]** or **[[NP]]**	
17	Patient Ethnicity	String	The ancestry of the patient.	Populate with either **[[VP]]** or **[[NP]]**	
18	Patient telephone number	String	The patient's phone number.	This can be a telephone for the patient or one of their responsible persons. Populate with either **[[VP]]** or **[[NP]]**	
19	Patient Email address	String	The patient's email address.	This can be a email for the patient or one of their responsible persons. Populate with either **[[VP]]** or **[[NP]]**	
20	Patient Primary Language	String	The patient's primary language	Default this field to **[[EX]]** for all records.	
21	Patient Alias Name: First	String	The first name of a patient's alternate or also-known-as name.	Default this field to **[[EX]]** for all records.	
22	Patient Alias Name: Middle	String	The middle name of a patient's alternate or also-known-as name.	Default this field to **[[EX]]** for all records.	

23	Patient Alias Name: Last	String	The last name of a patient's alternate or also-known-as name.	Default this field to **[[EX]]** for all records.	
24	Responsible Person Name: First	String	The first name of the person responsible for the patient.	If at least one responsible person with a first name exists, populate with **[[VP]]**, otherwise populate with **[[NP]]**	
25	Responsible Person Name: Middle,	String	The middle name of the person responsible for the patient.	Default this field to **[[EX]]** for all records.	
26	Responsible Person Name: Last	String	The last name of the person responsible for the patient.	If at least one responsible person with a last name exists, populate with **[[VP]]**, otherwise populate with **[[NP]]**.	
27	Responsible Person Name: Relationship to Patient	String	The actual personal relationship that the responsible person has to the patient.	Default this field to **[[EX]]** for all records.	
28	Patient Multiple Birth Indicator	String	Whether the patient was part of a multiple birth (yes/no).	Default this field to **[[EX]]** for all records.	
29	Patient Birth Order	String	When a patient was part of a multiple birth a number is defined in this element (e.g., 1, 2, 3).	Default this field to **[[EX]]** for all records.	

30	Patient Birth State	String	State of the birthing facility location.	Default this field to **[[EX]]** for all records.	
31	Patient status indicator— provider level	String	The current active/inactive status of the patient in relation to the provider organization.	Default this field to **[[EX]]** for all records.	
32	Patient status— jurisdiction level	String	The patient/geographic jurisdiction status determined from address information when the patient's address within the jurisdiction is known.	Default this field to **[[EX]]** for all records.	
33	Record Creation Date	YYYY-MM-DD	The date this patient was created in the IIS.	Populate with actual value (no time component) from DB.	
34	Record Update Date	YYYY-MM-DD	The date this patient was last updated in the IIS.	Default this field to **[[EX]]** for all records.	

Vaccine Data Elements

The vaccine-related data elements to extract to the Vaccine Extract File are listed in the table below.

Note that all immunization records in the Vaccine Extract File shall have a corresponding patient record in the Patient Extract File (see section above). If an immunization record does not have a corresponding patient record in the immunizations will be noted and discarded from analysis.

Table 2: Vaccination Data Elements

	Data Element Name	Format	Definition	Extract Guidance	Value Set
1	IIS Patient ID	String	This is the IIS Patient ID from the Patient Extract File.		
2	IIS Vaccination Event ID	String	Unique ID for this vaccination event within this extract file.	This may or may not be the actual IIS Vaccination Event ID within the IIS Database. A unique value is required within this extract file.	
3	Reporting Group	String	This field will be used to group like submitted immunization records for analysis and reporting purposes.	For purpose of the Data at Rest project, this value should represent the entity that is viewed as the owner of this vaccination event (likely viewed as similar to the Responsible Organization in HL7). This value will be some form of an identifier that makes logical sense to the IIS performing the extract.	

4	Sending Organization	String	The identifier of the organization that connects to the IIS and submits the record. This may or may not be the same as the Responsible Organization or Administered At Location.	Default this field to **[[EX]]** for all records.	
5	Responsible Organization	String	The identifier of the organization that originated and is accountable for the content of the record. May be referenced as IIS-AO ID. This may or may not be the same as the Sending or Administered at Location.	Default this field to **[[EX]]** for all records.	
6	Administered at Location	String	The facility name/identifier of the facility that administered the immunization.	Populate with either **[[VP]]** or **[[NP]]**	
7	Vaccine Administering Provider	String	The name of the provider (person) administering the vaccination. Note that this "provider name" could include an actual name, or an ID	Populate with either **[[VP]]** or **[[NP]]**	
8	Vaccine Type (CVX)	String	The vaccine type of the vaccination event.	Populate with the CVX corresponding to the vaccination event. This can either be a direct extract or a	CVX

				translation if CVX codes are not stored directly with the vaccination event record.	
9	Vaccine Type (NDC)	String	The vaccine type of the vaccination event.	Populate with the NDC corresponding to the vaccination event. This can either be a direct extract or a translation if NDC codes are not stored directly with the vaccination event record. This must be the actual NDC used during recording the vaccination event or it should be left blank. Do not populate with a possible NDC if one was not used during recording the vaccination event.	NDC
10	Vaccine Administration Date	YYYY-MM-DD	The date the vaccination event occurred.	Populate with the actual value from the DB.	
11	Vaccine Manufacturer	String	The manufacturer of the vaccine that was administered.	Populate with the MVX. This could have been received directly as an MVX code or translated from an NDC. If neither were submitted, then this field should remain blank.	MVX
12	Vaccine Lot Number	String	The lot number of the vaccine administered.	Populate with the actual value from the DB.	

13	Vaccination Event Record Type	String	Indicates whether the vaccination event is based on a historical record or was given by the administered at location.	Populate with table NIP001 value.	NIP001
14	Vaccine Route of Administration	String	The route of administration	Populate with the either HL7-defined table 0162 or NCIT value when route is present	HL7-defined table 0162 or NCIT
15	Vaccine Site of Administration	String	The anatomical site where the vaccine was given.	Populate with HL7-defined table 0163 value when site is present.	HL7-defined table 0163
16	Vaccine Expiration Date	YYYY-MM-DD	The expiration date of the vaccine administered.	Populate with actual value from the DB.	
17	Vaccine Dose Volume	String	The amount of vaccine administered (e.g., .5).	Populate with either **[[VP]]** or **[[NP]]** Note all volumes will be assumed to be mL. If actual mL are not captured in the IIS, then this field should be set to **[[NC]]** (Not Collected) for all records.	
18	Ordering Provider	String	The identifier of the provider (person) ordering the immunization. Note: this "provider name" could include an actual name, or an ID. May also be	Default this field to **[[EX]]** for all records.	

			referenced as the prescriber ordering provider Identifier.		
19	Completion Status	String	Indicates if the vaccination event was successfully administered.	Default this field to **[[EX]]** for all records.	HL7-defined table 0322
20	Dose Level Eligibility	String	The program that should pay for a given immunization, based on the characteristics of the patient and the type of vaccine administered.	Populate with User-defined table 0064 table value.	User defined table 0064
21	Vaccine Funding Source (Dose Level Public/Private Indicator)	String	The funding source of the vaccine administered. That is, was the vaccine administered purchased as publicly funded, privately funded, or with other jurisdiction specific funding.	Populate with PHVS_ImmunizationFundingSource_IIS value	PHVS_ImmunizationFundingSource_IIS (2.16.840.1.114222.4.11.3287)
22	VIS - Identifier	String	The VIS GDTI document code	Default this field to **[[EX]]** for all records.	VIS GDTI
23	VIS - Publication Date	YYYY-MM-DD	The publication date of the Vaccine Information Statement.	Default this field to **[[EX]]** for all records.	
24	VIS – Given Date	YYYY-MM-DD	The date the VIS information was provided to the patient.	Default this field to **[[EX]]** for all records.	
25	Record Creation Date	YYYY-MM-DD	The date this vaccination event was created in the IIS.	Populate with actual value (no time component) from DB.	

26	Record Update Date	YYYY-MM-DD	The date this vaccination event was last updated in the IIS.	Default this field to **[[EX]]** for all records.	

Change History

Version	Date	Author	Change
0.2	02/24/2020	E. Larson	Updated keyword syntax to new shorter format (e.g., changed [[EXTRACTED]] to [[EX]]
0.3	3/9/2020	E. Larson	1) Field 18 (Ordering Provider) in the immunization file was missing Extract Guidance. Added that this field should be populated with [[EX]] for all records.
0.4	11/01/2021	A. Diallo	Updated birth cohort
1.0	10/27/2022	E. Larson	1. Updated birth cohort 2. Field 18 (Patient telephone number) Added additional extract guidance. 3. Field 19 (Patient Email Address) Added additional extract guidance. 4. Field 24 (Responsible Person Name: First) Changed extract from defaulting all records with a value of [[EX]] to using either the value [[VP]] or [[NP]] with extract guidance. 5. Field 26 (Responsible Person Name: Last) Changed extract from defaulting a value of [[EX]] to using either the value [[VP]] or [[NP]] with extract guidance.
1.1	11/30/2023	E. Larson	6. Updated birth cohort and added a Table of Contents.