



AIRA
AMERICAN IMMUNIZATION
REGISTRY ASSOCIATION

Discovery Session: Data at Rest, Quality in Motion — Real- World Stories from Jurisdictions

October 27, 2025
4:00 p.m. ET



Today's Presenters

- **Dr. Prageet Kaang**, Director – Interoperability Unit, Texas
- **Dr. David Walker**, Lead IIS Data Analyst, Texas
- **Valentin Šoštarić**, Immunization Data Systems Chief, Arizona





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**Texas Department of State
Health Services**

Data At Rest (DAR)

Dr. Prageet Kaang, Director, Interoperability Unit
Texas Immunization Registry



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Agenda

- What is Data At Rest (DAR)?
- Concepts Measured in DAR
- Participation in DAR
- Measures in DAR
- Focus Area for Texas IIS
- DAR Comparison
- Utilization of DAR to Improve Data Quality
- Resources

Data at Rest



The Measurement and Improvement (M&I) Initiative by American Immunization Registry Association (AIRA), aims to enhance data quality within Immunization Information Systems (IIS) in alignment with Centers for Diseases Control and Prevention (CDC)s Functional Standards.



Data at Rest (DAR) content area within the M&I Initiative, is the measurement of data residing in the immunization information system (IIS) database regardless of how it arrived there.



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Concepts Measured

- **Completeness:** This refers to the degree to which complete information in a dataset, record, or individual data element is captured within the IIS, indicating the proportion of data that is complete compared to maximum potential.
- **Validity:** This indicates how well the data adheres to the required syntax (format, type, range) according to their definitions, or how closely they align with the expected rules of the IIS.
- **Timeliness:** This is the time span between when a real-world event occurs and when it is recorded in the IIS, reflecting the delay between an event (vaccination or birth) and when the record is processed and made available in the system.



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Participation in DAR

Project Initiation

Submit participation interest to AIRA

Complete Data at Rest Partner Agreement if required by your IIS

Data Extraction

IIS extract all children data residing in their jurisdiction born in the two most recent calendar years

Data Transformation

IIS to configure and run an AIRA-supplied command line tool against the extracted patient and immunization file. The tool produces an Aggregate Detection File (ADF) containing counts of the data quality detections



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Participation in DAR Continued

Data Loading

IIS upload the ADF into AART for further analysis

Data Analysis

AIRA analyzes and produces individualized reports for the IIS to review

Data Quality Improvement

Use the DAR report to plan/implement data quality initiatives



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Measures of DAR

	Testing and Discovery Indicators	Assessment Indicators
Completeness	24	24
Validity	23	20
Timeliness	8	1



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Examples of Patient Completeness

Measure Name	Numerator	Denominator	Expectation
Patient first name is present	Total number of patient records with a first name present	Total number of patient records extracted	> 99.0%
Patient birth date is present	Total number of patient records with a birth date present	Total number of patient records extracted	> 99.0%
Patient address street is present	Total number of patient records with the street component (e.g., address line 1) of an address present	Total number of patient records extracted	> 85.0%
Patient race is present	Total number of patient records with a race present	Total number of patient records extracted	> 95.0%
Patient email address is present	Total number of patient records with an email present	Total number of patient records extracted	>90.0%



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Examples of Validity Measures

Measure Name	Numerator	Denominator	Expectation
Vaccine administration date is before birth date	Total number of vaccination event records where the administration date is before the patient's birth date	Total number of vaccination event records extracted where both administration date and patient birth date are present	<1%
Vaccine lot number has an invalid prefix	Total number of administered (i.e., 00) vaccination event records where vaccine lot number is present but with an invalid value at the beginning of the lot number	Total number of administered (i.e., 00) vaccination event records extracted where lot number is present	<1%
Vaccine manufacturer is unrecognized	Total number of vaccination event records where manufacturer code (MVX) is present but is not a value on CDC's MVX code set list	Total number of vaccination event records where manufacturer code is present	< 1%

<https://www.immregistries.org/data-at-rest>



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Examples of Timeliness Measures

Measure Name	Numerator	Denominator	Expectation
Administered vaccination events are entered into the IIS within one calendar day from administration date	Total number of administered (i.e., 00) vaccination event records where vaccine administration date and system entry date into the IIS are less than or equal to one day of each other	Total number of administered (i.e., 00) vaccination event record	> 95.0%



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Benefits of DAR Participation



TOOL TO ASSESS AND MONITOR
DATA QUALITY



AIDS IN IDENTIFICATION OF
PRIORITY AREAS FOR DATA QUALITY
INITIATIVES



PRODUCE ACTIONABLE REPORTS ON
DATA COMPLETENESS, VALIDITY
AND TIMELINESS BY PROVIDER SITE



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Texas IIS DAR Report Focus Areas



Focus Area for Texas IIS

Completeness:
Patient Email
and Phone

Completeness:
Vaccine Lot
Expiration Date

Completeness:
Vaccine
Eligibility Code

Completeness:
Vaccine Funding
Sources

Validity: Vaccine
Lot Number

Timeliness of
Reporting



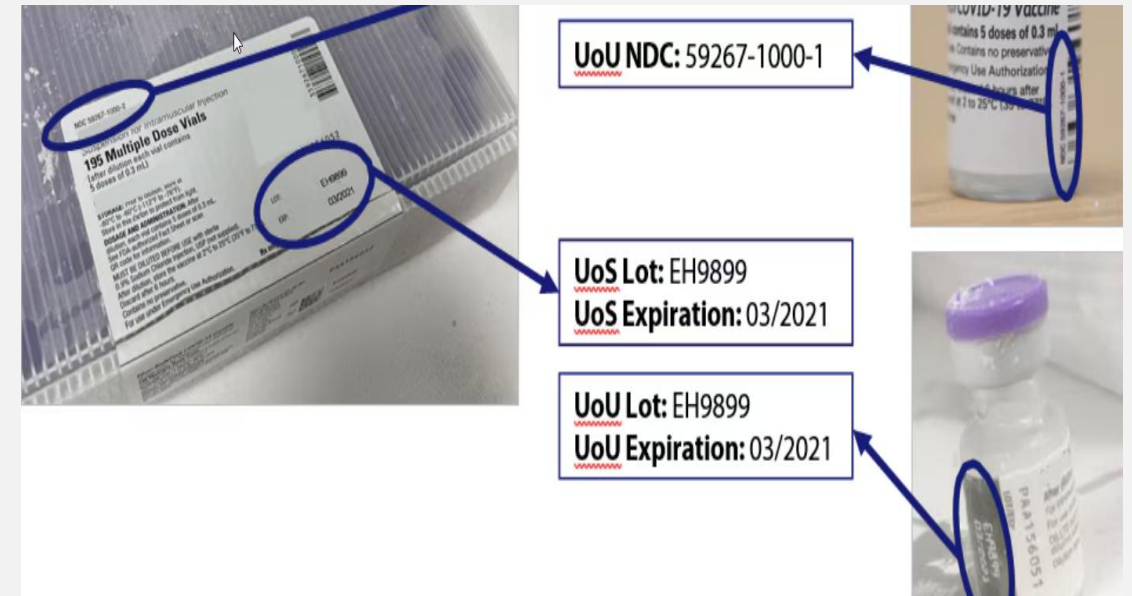
Incorrect Vaccine Lot Format and Vaccine Lot Expiration Date



Vaccine Lot Number

The lot number is the number printed on the label attached to the container holding the substance and on the packaging which houses the container.

The lot number is the connecting link between the Texas Immunization Registry and Vaccine Allocation and Ordering inventory system.



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DAR Lot Number Format Data

Measure	IIS Values	AIRA Expectation
Vaccine lot number has an invalid suffix	2.80%	<1.0%
Vaccine lot number contains at least one invalid character	1.50%	<1.0%

Lot Number Validation

- IIS implemented a new informational/warning error on 2/28/25 for immunizations submitted through data exchange with an incorrect formatted vaccine lot number
- Only alphanumeric characters and "-" are allowed
- Minimum of 4 characters



Lot Number Validation Continued

- Vaccination Lot Number cannot start with:
LOT, (P), MED, SKB, PMC, WSD, WAL
- Vaccination Lot Number cannot end with:
(P), -P, -S, -C, -H, -V, *, #, (S), MSD, HSP, SELECT, CP, VFC, STATE, CHIP, ADULT, ST-, PRIVATE, PED, UNINSURED, SPECIAL, OVER19, VMC, -COUNT, REAR, PENT, PENTACEL, DTAP, IPV, ACTH, HIB, PFF, FLU, BOOST, HAV, GARDASIL, ROTATEQ, PEDVAX, VARIVAX, PNEU, PNEUMOVAX, MMR, MENVEO, MENACTRA, FLU ZONE



Lot Number Validation Continued

Vaccination Lot Number cannot contain the text 'ICE3'.

Validation logic for lot numbers using the Message Quality Evaluation Tool:

<https://github.com/immregistries/mqe-validator/blob/development/src/main/java/org/immregistries/mqe-validator/engine/rules/vaccination/VaccinationAdministeredLotNumberIsValid.java>

List of invalid prefixes/suffixes/infixes:

<https://github.com/immregistries/mqe-validator/blob/development/src/main/java/org/immregistries/mqe-validator/engine/codes/LotNumberInvalidFixes.java>




Resolution

- Any 'new' immunization reported via data exchange with an incorrect lot number format will receive the following informational error.
- **IEE-527::Warning. The Lot number reported for the vaccine is in an incorrect format.**
- The immunization will be accepted and stored in the registry.
- To resolve the error, providers will need to resend the message with the correct lot number and include a "U" in the RXA-21 field. This will update the existing lot number for the vaccination.



Vaccine Lot Expiration Date

Texas IIS did not store lot expiration dates. As a result, vaccine lot expiration date was not stored and returned on Query By Parameter (QBP).



In September 2024, Texas IIS implemented a fix to store and return the vaccine lot expiration dates if the date was reported by the provider.



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Client Contact Information



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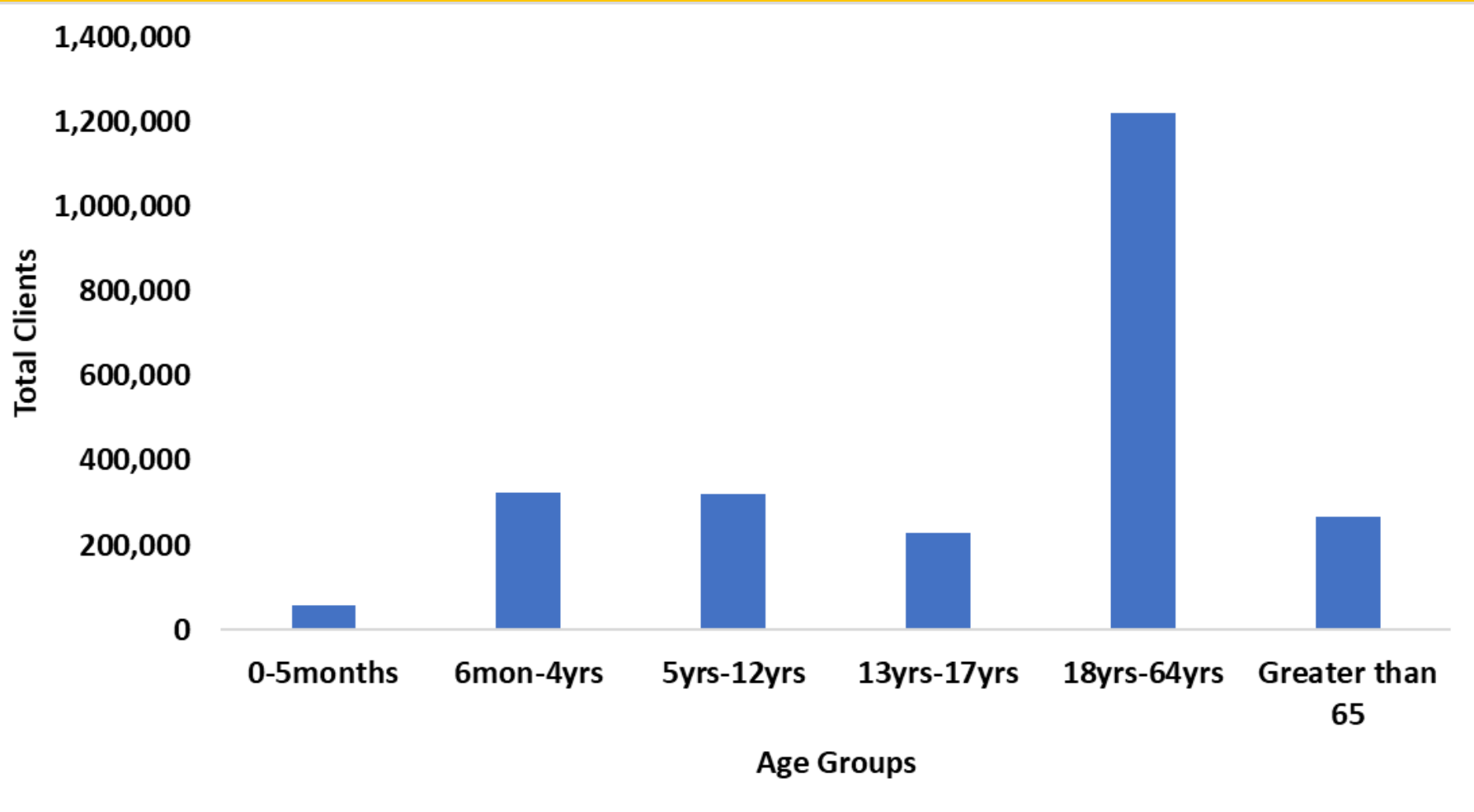
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Client Contact Information

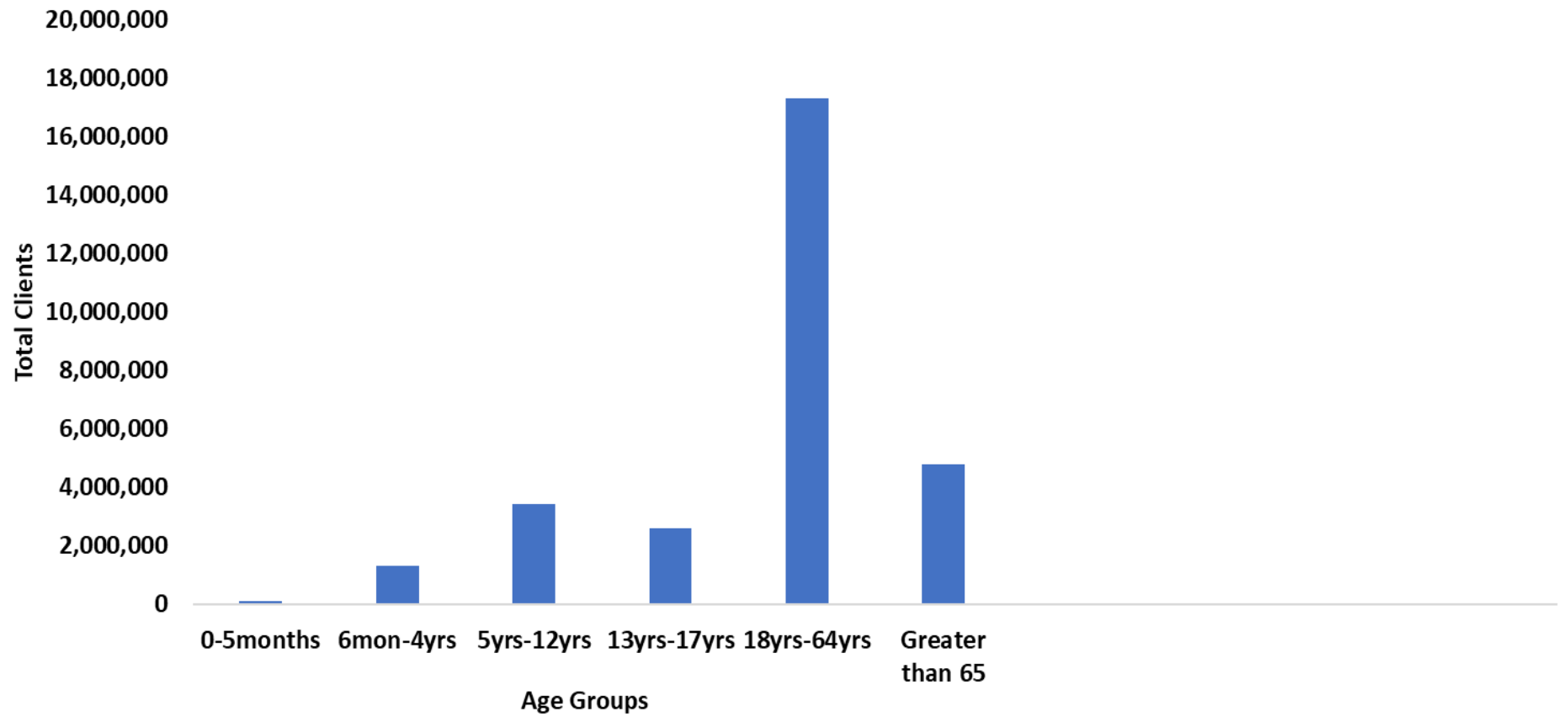
- **Effective Communication:** Accurate and complete client information ensures that registry staff can reach clients for important updates, notifications and for sending reminder/recalls.
- **Data Integrity:** Ensures registry data is accurate and reliable, which is vital for analytics.
- **Client Matching:** Client phone number is a field used for client matching process in Elastic Search.



Missing/Invalid Phone Data



Missing/Invalid Email Data



Resolution Strategy



IIS will implement a new informational/warning error for any new client record submitted through DX which is missing a phone number.



IIS conducted outreach to providers who do not report a valid phone number and email address.

Outreach Plan

IIS began outreach to organizations in San Antonio and Houston starting April 2025.

Client data was grouped at the organizational level. Line level reports were provided in secure FTP folders.

Data included a line list of clients who have received a vaccination in the last 5 years and are missing contact information (email or phone number or both).



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Vaccine Eligibility Code Reporting



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Reporting Vaccine Eligibility to Texas IIS

Texas IIS rejects the immunization if OBX 5.1 is not populated with a vaccine eligibility code.

Texas IIS gives an informational error if the age at vaccination is inconsistent with vaccine eligibility code.

Texas IIS does not reject immunizations if providers do not submit the OBX segment.



IIS Outreach Efforts

- Texas IIS staff conducted multiple rounds of outreach to providers who did not report vaccine eligibility codes for immunizations. Provided customized reports in the secure FTP folder.
- As a result of the outreach, there has been an increase in reporting of vaccine eligibility codes from 77.8% in May 2022 to 92% in October 2025.

May 2025, IIS was at 90.50% (Expected=95%)
October 2025, IIS is at 92% (Expected=95%)



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Vaccine Funding Source

1.24 Vaccine funding source code is present




The IIS result is: 0%



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Resolution

As a part of Nov 7, 2025, deployment, IIS will start accepting and storing funding codes.



IIS added a validation on the funding source codes that can be accepted. In addition, added a validation for the crosswalk between funding and vaccine eligibility codes.



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Reporting Latency



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Timeliness

- The amount of time between the occurrence of the real-world event and its documentation in the IIS. It is the time lag between the date of vaccination and the date the record is received by the IIS.
- The IIS Data Quality Blueprint suggests 95% of vaccination events should be recorded in the IIS within 1 day.
- Texas Health and Safety Code Sec. 161.007-161.009 requires all medical providers and payors to report all immunizations administered to clients who are 17 years of age and younger to ImmTrac2 within 30 days of administration of the vaccine.



Reporting Latency data

Time between Vaccination and Reporting Date	Total Immunizations	Percentage
Within 1 Day	5,414,856	56.81%
Between 1 and 3 days	2,660,545	27.92%
Between 3 and 14 days	1,050,451	11.02%
Between 14 and 30 days	180,123	1.89%
After 30 Days	224,783	2.36%



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Data is from January-September 2025. All age groups included

Resolution Strategy



IIS conducts outreach to Texas Vaccine for Children Program providers who do not report or report less than 50% of doses.



Analyze data on non-TVFC providers with high reporting latency.



Group organizations by common vendors and conduct outreach.



Identify barriers to reporting timely.



Create recommendations and communicate to providers.

DAR Comparison



Comparison of DAR 2024 and 2025

Measures	DAR 2024	DAR 2025	Expectation	Status
Completeness: Patient phone number is present	85%	86.60%	>90%	Do not meet
Completeness: Patient ethnicity is present	90.5%	90.7%	>95%	Do not meet
Completeness: Patient email is present	1.70%	31.80%	>90%	Do not meet
Completeness: Vaccine lot expiration date is present	0%	29.30%	>99%	Do not meet
Completeness: Vaccine eligibility code is present	83%	92%	>99%	Do not meet
Completeness: Vaccine Funding Source is present	0%	0%	>99%	Do not meet
Validity: Vaccine administration code was administered at an improbable age	4.10%	<1%	<1%	Met
Validity: Vaccine lot number has an invalid suffix	2.80%	1%	<1%	Met
Validity: Vaccine lot number contains at least one invalid character	1.50%	0%	<1%	Met
Timeliness: Administered vaccination events are entered into the IIS within one (1) clinical day from administration date	66.10%	68.60%	>95%	Do not meet



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Utilization of DAR to Improve Data Quality



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IDENTIFICATION
OF THE ISSUE

PRIORTIZE
AREAS OF
CONCERN

PLAN AND
CONDUCT
ANALYSIS

EXAMINE
RESULTS AND
PLAN FOR
RESOLUTION

IMPLEMENT
RESOLUTION
PLAN

RE-EVALUATE



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Resources

Measures and Tests for Assessment

Data at Rest: <https://www.immregistries.org/data-at-rest>

ImmTrac2@dshs.texas.gov

- Access, site registrations or renewals, ImmTrac2 user changes, registry trainings, or publications.

ImmTracMU@dshs.texas.gov

- Data exchange questions, promoting interoperability, or data quality reports.



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Thank You!

The logo is a circular emblem on the left side of the slide. It features a central sun with rays, surrounded by various symbols including a cactus, a mountain, a river, and a hand. The entire logo is rendered in a light teal color against a darker teal background.

ARIZONA

— DEPARTMENT OF —
HEALTH SERVICES

DAR DQ Report Assessment and distribution through the AZ Report Suite

Valentin Sostaric | Immunizations Data Systems Chief
Arizona Department of Health Services

Background

Code Review and Improvement

Data Extraction and Transformation

Data Upload and Download

Building the DAR DQ Assessment Reports and Distribution





IT ALL STARTED WHEN...





Measurement of data residing in the IIS database regardless of how it arrived there.

- 24 Completeness
- 20 Validity
- 1 Timeliness

Review/Refine the SQL code and extract the data from the IIS into a predefined flat file format.

Extract Files:

- Patients File - 203k records
- Vaccinations File - 2.2M records



Transform the patient and immunization data into a summary of data quality indicators.

STEP 1

Code
Improvement

STEP 2

Data
Extraction

STEP 3

Data
Transformation

STEP 4

Data Upload &
Download

STEP 5

Building the
Report

STEP 6

Report
Distribution

Run the Command Line Tool

Review results



```
C:\WINDOWS\system32\cmd.exe

[=====] / 52.82% (159/301)(Estimated Remaining Processi
[=====] ? 59.14% (178/301)(Estimated Remaining Processi
[=====] \ 66.11% (199/301)(Estimated Remaining Processi
[=====] | 71.76% (216/301)(Estimated Remaining Processi
[=====] / 75.08% (226/301)(Estimated Remaining Processi
[=====] ? 79.73% (240/301)(Estimated Remaining Processi
[=====] \ 87.71% (264/301)(Estimated Remaining Processi
[=====] | 96.68% (291/301)(Estimated Remaining Processi
[=====] / 100.0% (301/301)(Estimated Remaining Processi

ng Time 0 min, 0 sec)
Analysis Finished - Exporting Results
Results Exported - END

=====+
|=====+ RESULTS =====+
=====+

We have been able to successfully parse your patient and immunization file, but you're not out of the woods yet!
Please review the darq-analysis/summary/index.html file to verify the following sections
1) Summary Counts: These should reflect counts of the data you extracted.
2) Issues: All issues should be resolved it all possible.
3) Age Groups: These should reflect the distribution of your age cohorts.
4) Extraction Completeness: The percentages by field name reflect the data you extracted.

Once you have verified the above information, please log into AART and upload your "darq-analysis/ADF.data" file
Please save your "darq-analysis" folder and data. You'll utilize this later on.
Please email AIRA at aart@immregistries.org if you have any questions or need assistance.

Press any key to continue . . .
```

Metadata

CLI Version	3.1.0
CLI Build Date	03-10-2025
MQE Version	2022.9-BETA
Total Analysis Time	04 hours 16 minutes 21 seconds 79 milliseconds

Extraction Completeness

Element	Valued %	Excluded %	Not Collected %	Not Extracted %	Value Present %	Value Not Present %
Patient - Mother's Name - Last Name	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	100.00 %
Patient - Responsible Party - Name - Middle Name	0.00 %	100.00 %	0.00 %	0.00 %	0.00 %	0.00 %
Patient - Address - State	0.00 %	0.00 %	0.00 %	0.00 %	99.46 %	0.54 %
Vaccination - Responsible Organization	0.00 %	100.00 %	0.00 %	0.00 %	0.00 %	0.00 %
Patient - Email Address	0.00 %	0.00 %	0.00 %	0.00 %	27.62 %	72.38 %
Patient - Ethnicity Code	0.00 %	0.00 %	0.00 %	0.00 %	89.19 %	10.81 %
Vaccination - Vaccine VIS - Presented Date	0.00 %	100.00 %	0.00 %	0.00 %	0.00 %	0.00 %
Patient - Name - Middle Name	0.00 %	0.00 %	0.00 %	0.00 %	70.19 %	29.81 %
Vaccination - Administered at Location	0.00 %	0.00 %	0.00 %	0.00 %	97.24 %	2.76 %

Reporting Groups

Value	Hash
-------	------

STEP 1

Code Improvement

STEP 2

Data Extraction

STEP 3

Data Transformation

STEP 4

Data Upload & Download

STEP 5

Building the Report

STEP 6

Report Distribution

STEP 1

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Report
Distribution

Assessment

Testing & Discovery

My Peers

More AART Info



DAR

2025



Upload New DAR Aggregate
Detections File Here

Assessment

Testing & Discovery


My Peers


More AART Info

About the Assessment Report

Test Case Outcomes

qDAR


 qDAR Dashboard

 qDAR Report

NIST Data At Rest Quality Analysis Tool (qDAR) v4.1.2

[Home](#) [Download](#) [Dashboard](#) [Upload File](#) [Configurations](#) [Report Templates](#)

[<](#)  [Dashboard](#)

 [Upload Aggregate Detections File](#)

No File Selected (Drop Or Click Here)

Name

IIS

Upload

AIRA reviews the data file and generates IIS wide and provider reports for M&I T&D and M&I Assessment in the NIST - qDAR.

STEP 1

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NIST Data At Rest Quality Analysis Tool (qDAR) v4.1.2

Home Download Dashboard Upload File Configurations Report Templates

Valentin Sostaric AART Merge Files

Dashboard

IIS AZ ASIIS Aggregate Detections Files Your ADF Merge Jobs Published Reports 27

Name	File	Published By	Published On	Template	Actions
2025 Discovery Non-VFC Provider Breakdown AZ ASIIS	ASIIS-2025-NonVFC	admin	05-13-2025 07:45	M&I T&D Provider Breakdown	View Report
2025 Discovery Non-VFC IIS Wide AZ ASIIS	ASIIS-2025-NonVFC	admin	05-13-2025 07:44	M&I T&D IIS Wide	View Report
2025 Discovery VFC IIS Wide AZ ASIIS	ASIIS-2025-VFC	admin	05-13-2025 07:39	M&I T&D IIS Wide	View Report
2025 Discovery VFC Provider Breakdown AZ ASIIS	ASIIS-2025-VFC	admin	05-13-2025 07:38	M&I T&D Provider Breakdown	View Report
2025 Assessment Provider Breakdown AZ ASIIS	ASIIS-2025-ALLIIS	admin	05-13-2025 06:40	M&I Assessment Provider Breakdown	View Report
2025 Discovery IIS Wide AZ ASIIS	ASIIS-2025-ALLIIS	admin	05-13-2025 06:36	M&I T&D IIS Wide	View Report
2025 Discovery Provider Breakdown AZ ASIIS	ASIIS-2025-ALLIIS	admin	05-13-2025 06:33	M&I T&D Provider Breakdown	View Report
2025 Assessment IIS Wide AZ ASIIS	ASIIS-2025-ALLIIS	admin	05-13-2025 06:30	M&I Assessment IIS Wide	View Report



Upload the provider hash file to NIST qDAR

Export Merged Tables to a CSV file

Using Python we split the results into VFC and Non VFC providers

Choose Reporting Group Hash File (CSV)

Export Tables

Export All Tables (ZIP)

Export Merged Tables (CSV)



STEP 1

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Report
Distribution

Import the CSV file to Google Sheets



Create a dashboard in Power BI and a report in Power BI Report Builder



Create a job in Power Automate



STEP 1

Code
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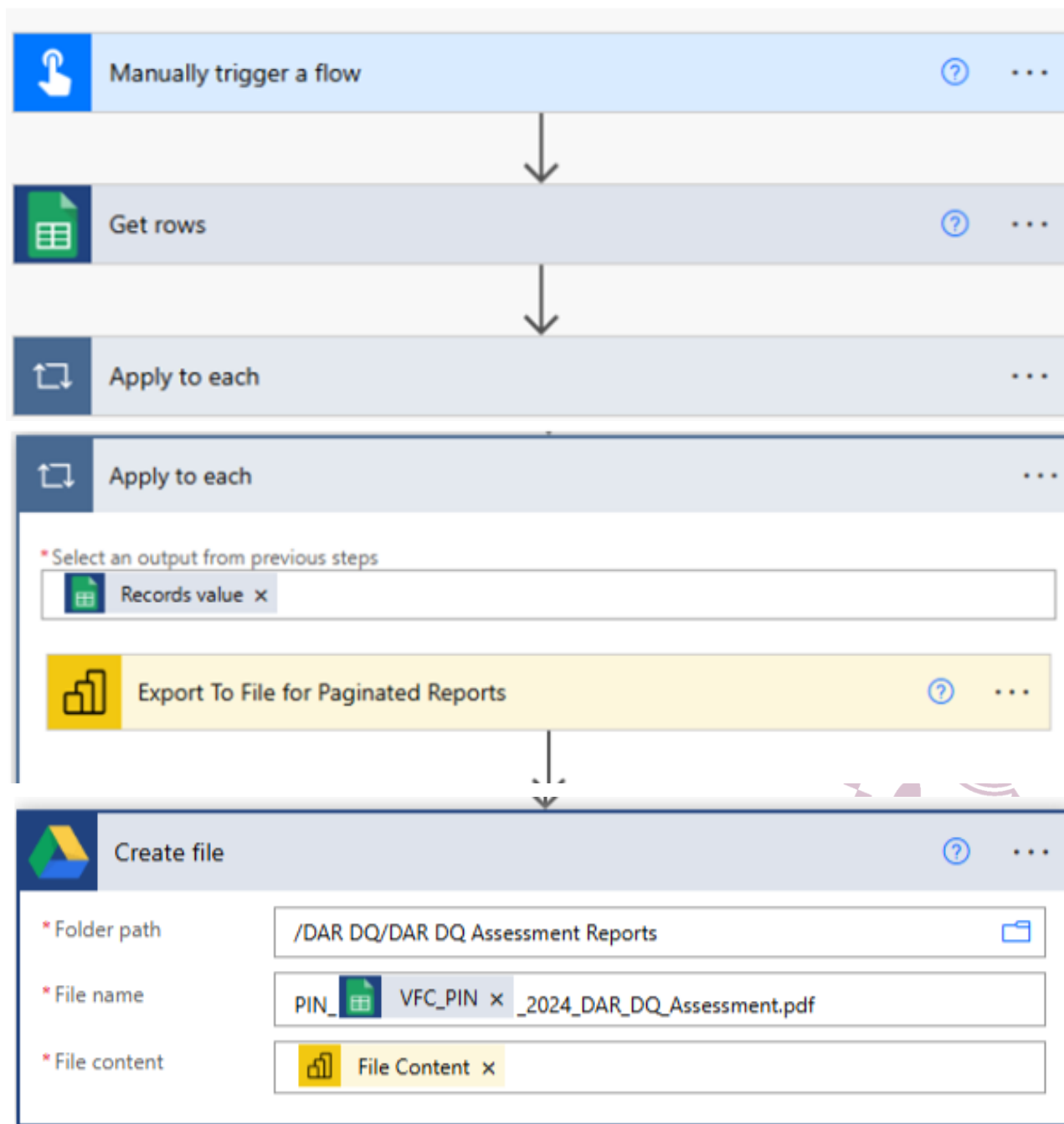
Data Upload &
Download

STEP 5

Building the
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STEP 6

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Distribution



DAR DQ Assessment Report Standard Work

STEP 1

Code Improvement

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Data Extraction

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Report Distribution

Dec 18, 2024 / 7:30 PM

Aug 5, 2025 / 7:30 PM - Revision 1

Documents and Links

- <https://trello.com/c/rLQP2VJv>

Steps to generate data

1. Review and implement updates to the query and Python scripts that generate the DAR files
2. Run the Python scripts to generate the DAR input files
3. Download the latest DAR CLI from AIRA

Data at Rest Data Quality Assessment Report

Thursday, January 9, 2025

8:01 PM

Arizona State Immunization Information System

Evaluated Cohort
Patients born:
01/01/2022 - 12/31/2023
Assessment Date:
December 2024

ASIIS

Background:

Purpose:

This assessment report **DOES NOT** evaluate the data quality of HL7 messages, coverage reports or inventory management.

Actions for providers:

Definitions:

- **Completeness • Validity • Timeliness**
- **Completeness and Timeliness Evaluation Criteria**
- **Validity Evaluation Criteria: Percentage Less Than Threshold**

Data at Rest Data Quality Assessment Report

Thursday, January 9, 2025

8:01 PM

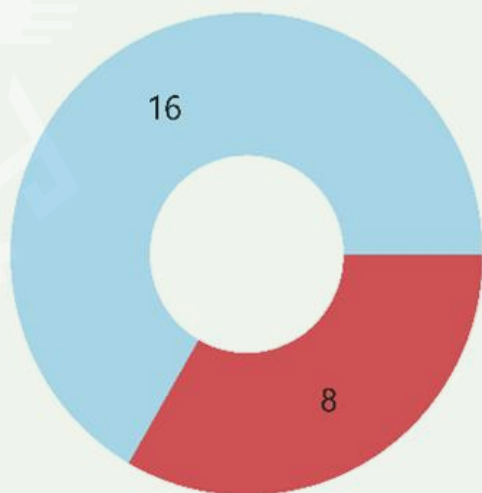
Evaluated 193986 patient record(s) and 2428982 vaccination record(s) in ASIIS.

Completeness

Evaluation Criteria
Percentage Greater Than **Threshold**

Detections

■ FAIL ■ PASS



■ PERCENTAGE ■ THRESHOLD VALUE



Evaluation Criteria

Validity

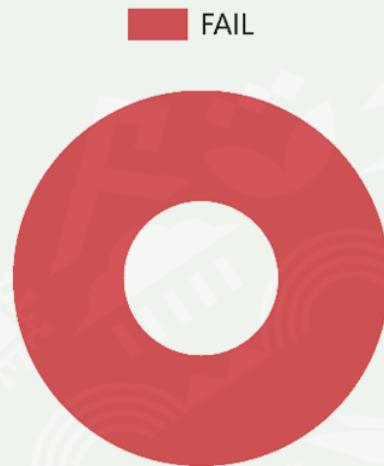
Detections



No Data Available

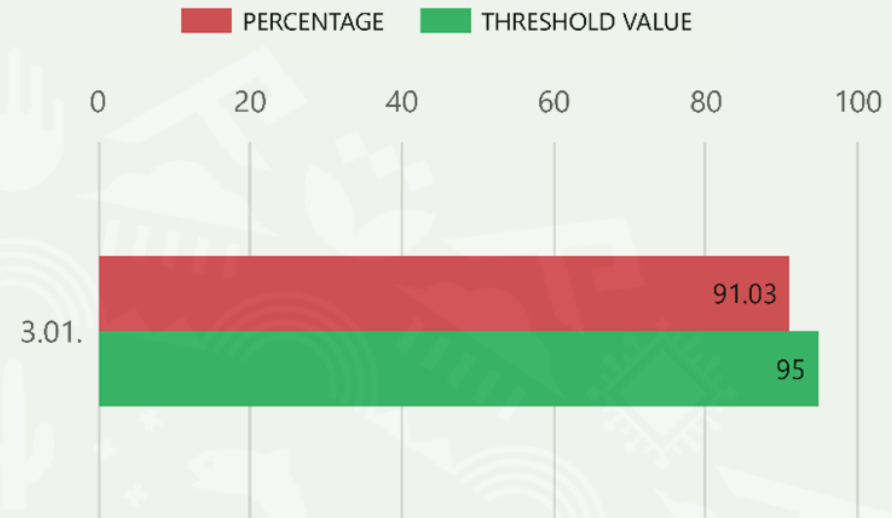
Timeliness

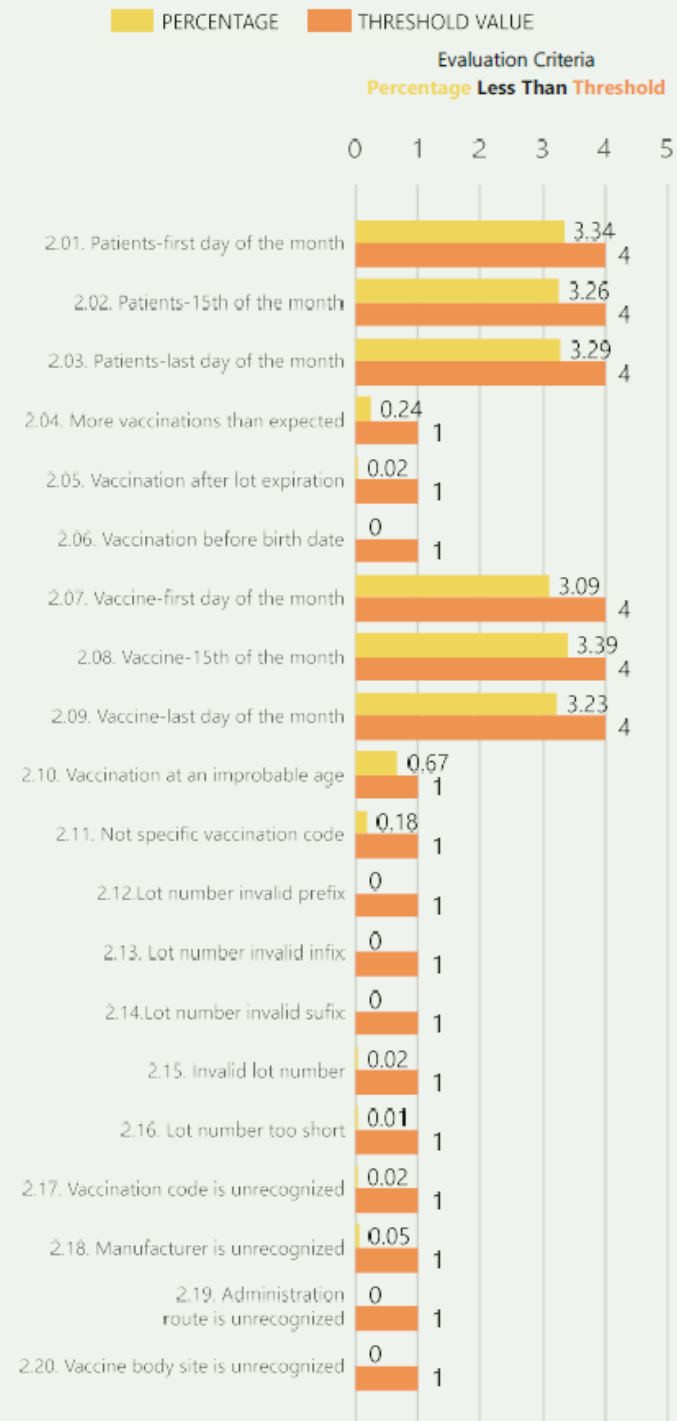
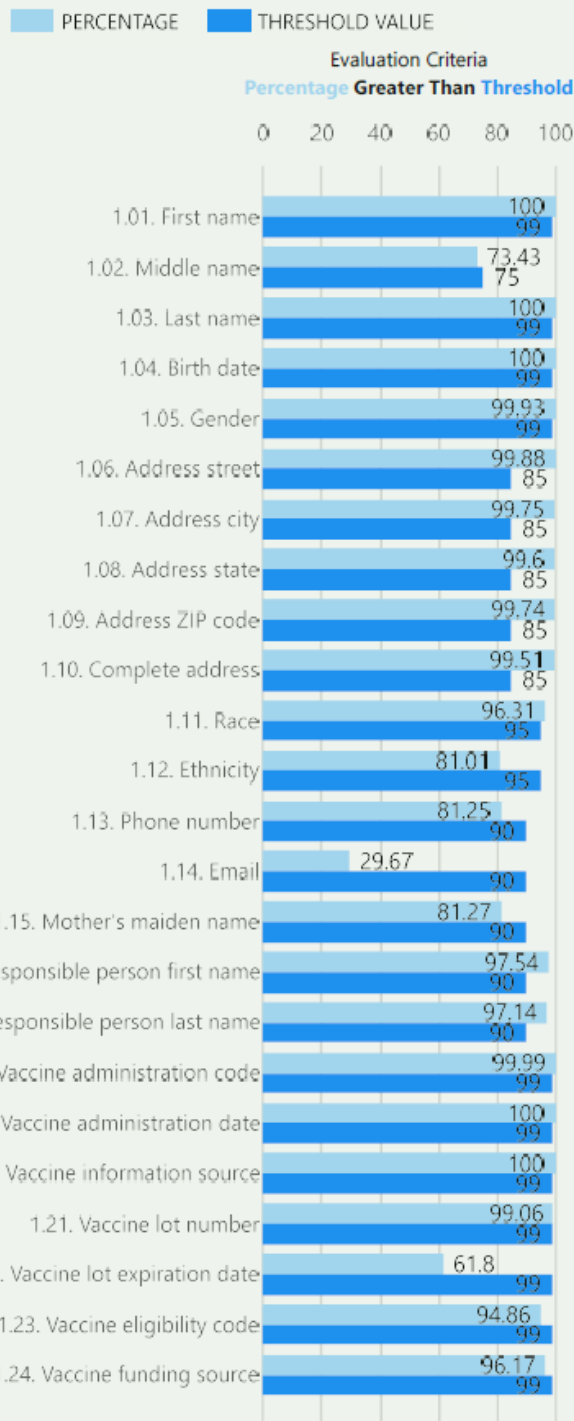
Detections



3.01. Entered within one calendar day

Evaluation Criteria
Percentage Greater Than Threshold







I took some time to look at the report and honestly this is something a data person would love....I can see the value in it for someone who has a lot of time to look at and evaluate it.

The Quality Assessment Report did take me a minute to digest there is a LOT of information here but as I pondered it and understood it better it's very easy to read and help me figure out where I might need to focus in to help teams be more successful.

I do think initially people are not going to read the first page – I will tell you that I looked past it initially just because it has a lot of words. However as I started having questions I found that I could go back up to that page and read about that section and get my questions answered. So again I'm not sure that there is much you can change there but initially people will not necessarily like that first page.

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Report
Distribution



Dear Vaccines For Children (VFC) Provider,

Thank you for all that you do to keep the children in Arizona up-to-date on their immunizations.

The Arizona Immunization Provider Report Suite, launched by the Bureau of Immunization Services (BIZS), enables providers to review VFC vaccinations recorded in ASIIS, data quality, and HL7 Interface reports. Updates will be provided *quarterly*.

The link is unique to Test Facility with VFC Pin BIZS, and can be shared with VFC staff at your facility. **Your Survey Login Code is BIZS.**

[Click here to go to Arizona Immunization Provider Report Suite.](#)

Or you can access it by scanning the QR code with a device equipped with a QR code reader app.



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Arizona Immunization Provider Report Suite

Bureau of Immunization Services (BIZS)

Email: ArizonaVFC@azdhs.gov | Phone: (602) 364-3642 | Fax: (602) 364-3276



VFC PIN TEST - Test Facility

The Arizona Immunization Provider Report Suite allows providers to review VFC vaccinations recorded in ASIIS, data quality, and HL7 Interface reports, with quarterly updates.

Select the report you would like to review

Dose Accountability Report Cards

HL7 Interface Reports

Data Quality Reports

reset

Data Quality Report Card

DARDQ-page-v7.2

1 / 3 | - 100% + | [Icons]

ARIZONA
DEPARTMENT OF
HEALTH SERVICES

**VFC PIN
TEST**

Organization (IRMS) ID
99999

Facility ID
99999

Organization (IRMS) Name
TEST

Facility Name
TEST

Thursday, January 16, 2025
8:06 PM

Evaluated Cohort
Patients born:
01/01/2022 - 12/31/2023
Assessment Date:
December 2024

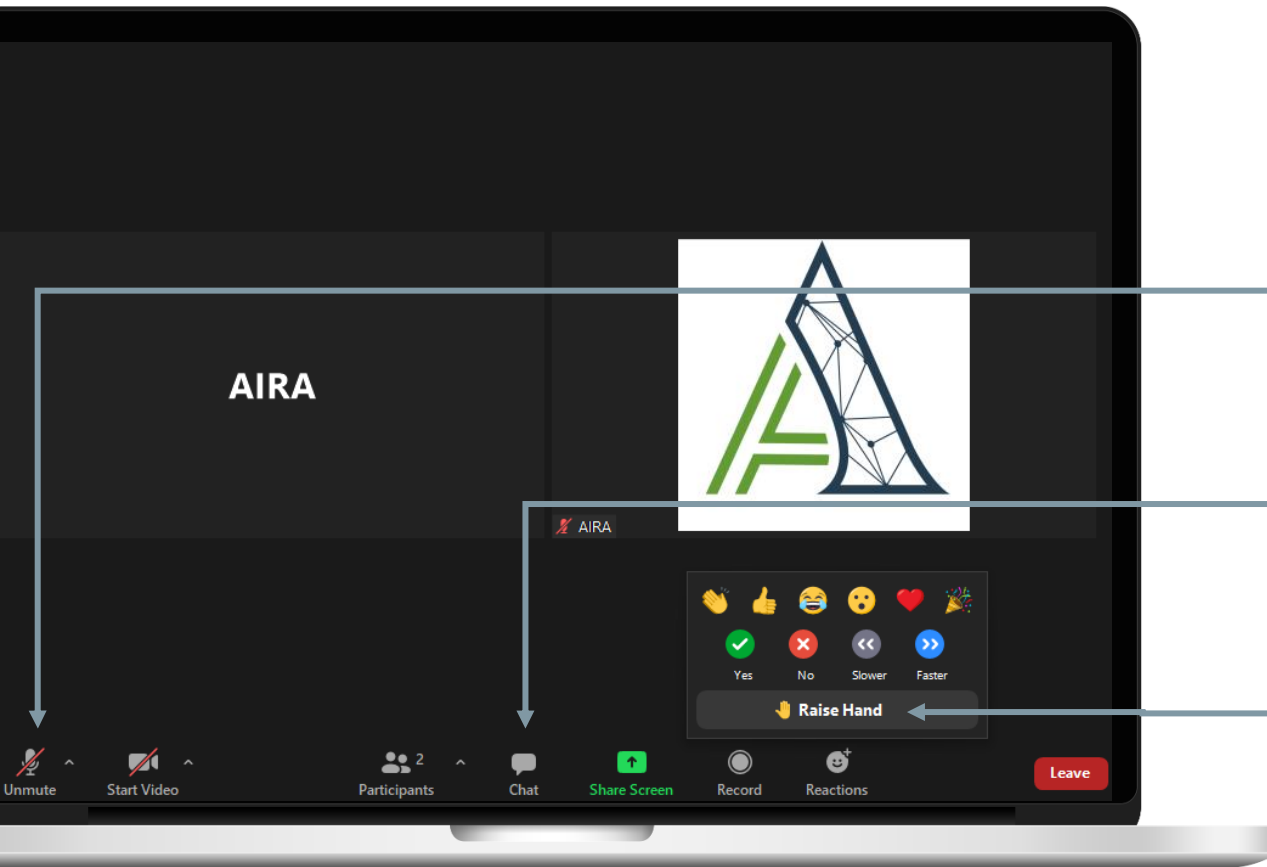


THANK
YOU!



Valentin Sostaric | Immunization Data Systems Chief
Arizona Department of Health Services

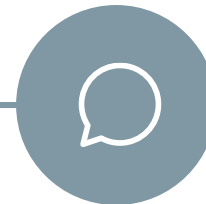
Question & Answer



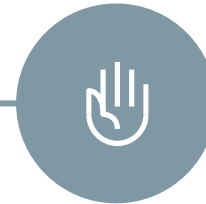
How do I ask a question?



Select the unmute icon and ask your question verbally.



Select the chat icon and type your question into the chat box.



Select the reactions icon, select "Raise Hand," and you will be called on.



IIS Data Analyst Forum (IDAF)

- Online forum
- Chat in real-time with others who work with immunization data
- Post burning questions
- Share your experiences
- Post anonymously, if desired
- Receive notifications of new activity



Join IDAF
here!

See what the
buzz is about!



Technical Advisory Bulletins (TABs)

- Support HL7 2.5.1 immunization messaging
- Build on and clarify specifications in the *HL7 v2.5.1 Implementation Guide for Immunization Messaging, Release 1.5 and Addendum, October 2018*
- Each TAB addresses a specific topic

Use TABs to support the development and maintenance of HL7 exchange capabilities and interfaces, working with exchange partners as needed to test/confirm changes



Newly Published TABs

- **Clinical Decision Support (CDS) in RSP Alignment**

Updated specifications for encoding Clinical Decision Support (CDS) information in HL7 v2.5.1 query response (RSP) messages refine how immunization evaluations and forecasts are represented, reducing variability and improving consistency across IIS implementations. Updates include standardized grouping of forecast data under a single order group, constrained LOINC-based OBX codes for evaluations and forecasts, and suggested use of LOINC 59783-1 answer codes to indicate immunization status. These specifications promote interoperability, ensuring clarity in transmission of CDS results between IIS and clinical systems.

- **Patient Name (PID-5) Updates to Support Patient Matching**

Updated specifications for representing patient names in HL7 v2.5.1 messages, to support interoperability and patient matching across systems. The guidance clarifies required, recommended, and optional name type codes within the HL70200 value set such as 'L' (official registry name), 'M' (maiden name), 'N' (preferred/nickname), and 'NB' (newborn) and defines data type specifications for required and recommended codes. Updates include specifications for transmission of legal name, newborn name, and preservation of spaces, hyphens, and special characters. Specifications for transliteration of special characters are also included.



Additional TABs Coming Soon

Technical Advisory Bulletins (TAB) Resources

Issued on July 15, 2025 by AIRA



OPEN RESOURCE:

[↓ TAB Overview](#)

[↓ TAB Query Response Flexibility](#)

[↓ TAB Additional "Unknown" Race and Ethnicity Codes](#)

[↓ TAB Scenarios for Updates and Queries](#)

[↓ TAB System Entry Date/Time \(RXA-22\)](#)

[↓ TAB Messaging Phone and Email](#)

[↓ TAB Returning IIS Patient Immunization Record Information](#)

[↓ TAB Messaging Non-patient Person Names in HL7](#)

[↓ TAB Submission of Self-Administered FluMist Vaccine to IIS](#)

[↓ TAB CDS in RSP Alignment](#)

[↓ TAB Patient Name \(PID-5\) Updates to Support Patient Matching](#)

Available at
<https://repository.immregistries.org/resource/tab-resources>

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The technical advisory bulletins (TAB) intend to provide additional clarity on national specifications to support the interoperability of immunization information between systems. These documents build on and further clarify specifications in the HL7 v2.5.1 Implementation Guide (IG) for Immunization Messaging, Release 1.5 and Addendum, October 2018 (National IG).





Thank you to our presenters, and thanks to all of you for joining us!

Please complete a brief evaluation survey.

The next Discovery Session
will be on **November 17, 2025**