

## Texas Immunization Registry Bidirectional Onboarding

**Texas Immunization Registry** 

## Agenda

- Overview
- Registration
- Preparation
- Testing
- Go Live
- Data Exchange Resources



#### **Definitions**

Syntropi - Texas DSHS Immunization Program Portal

**BiDX** – Bidirectional data exchange via web services

Orgs – Organizations, specifically parent or standalone sites in ImmTrac2

Org POC – Organization point of contact as listed in ImmTrac2

Org PRC – Organizations primary registry contact list in ImmTrac2

**VXU** – Unsolicited Vaccine Update Message

**QBP** – Query by Parameter Message



#### **Objectives**

- Navigate to the "DX" Bidirectional data exchange module in Syntropi
- Complete and submit an electronic Bidirectional registration of intent
- Perform pre-testing
- Establish a Bidirectional interface with the training ImmTrac2 environment
- Pass testing with a > 90% success rate
- Promote Bidirectional data exchange in the production ImmTrac2 environment



## Overview

#### **Benefits of BiDX Onboarding**

#### Allows parent or standalone orgs to:

- Onboard using streamlined process
- Use existing Syntropi registration to indicate interest in BiDX onboarding
- Submit registration of intent electronically
- Submit test messages for HL7 message validation
- Download test and production WSDL to connect with the registry
- Receive auto-generated data quality metrics and reports

Electronic health records (EHR) vendors able to track providers' status



#### Accessing BiDX Onboarding

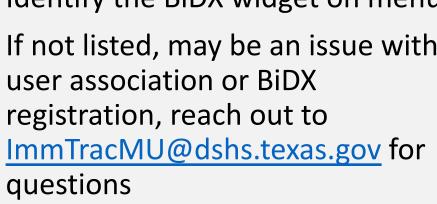
Only accessible once registration is approved by DSHS

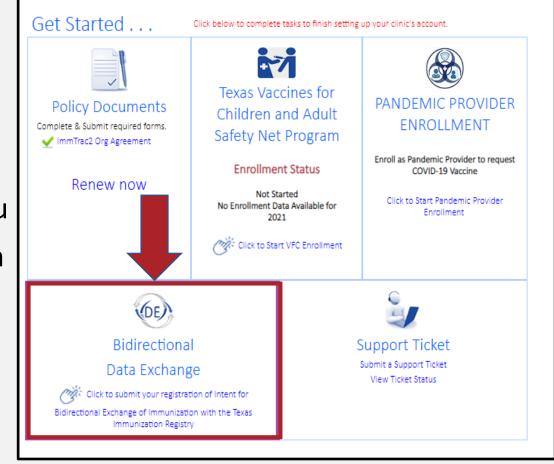
Login to HHS Enterprise Portal.

Select the Syntropi – CRC option under Applications

Identify the BiDX widget on menu

If not listed, may be an issue with user association or BiDX registration, reach out to ImmTracMU@dshs.texas.gov for







#### Steps for BiDX Onboarding

- 1. Registration
- 2. Preparation, Message Pre-Testing
- 3. Preparation, Connectivity & Transport
- 4. Pre-Production Testing, Message Validation
- 5. Pre-Production Testing, Data Quality Review
- 6.Go-Live, Connectivity & Transport



## Step 1: Registration

Step 1

Registration

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Pre-Prod Test,

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Pre-Prod Test, Data Quality Review Step 3

Preparation,
Connectivity &
Transport

Step 6

Go-Live, Connectivity & Transport

#### Site Agreement (1 of 3)

#### Required items to be completed in Step 1:

- Fill out and sign the Registration of Intent (ROI) for BiDX.
- Indicate whether your org will be a parent site with associated child sites, or a standalone site
- Review your orgs point of contact.
- Indicate how your org will submit registry consent.



## Site Agreement (2 of 3)

#### **Organization Relationship Status**

Will your organization report or submit for multiple locations/facilities?





#### **Contacts**

• Review your organization's Point of Contact.

#### Organization Point of Contact

When the Registration of Intent is received by the Texas Immunization Registry, the person listed below will receive an email with instructions on how to complete the onboarding process for bidirectional data exchange.

Note: The person listed must be an employee of the facility indicated above.

First Name	Last Name	Title	Phone Number	Email
Fred	Sproutz	Manager	(123) 123-1234	FredS@sproutcare.com



## Site Agreement (3 of 3)

#### **Contact Information**

- 1. Primary Data Exchange Contact
- 2. Secondary Data Exchange Contact
- 3. Information Technology Contact

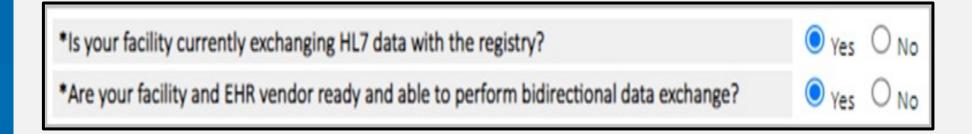
**Note**: Contacts must be different people with unique email addresses



#### Registration of Intent (1 of 7)

#### Readiness

- Confirm whether your org is currently submitting data to ImmTrac2
- Confirm whether your org and associated EHR is capable of bidirectional data exchange

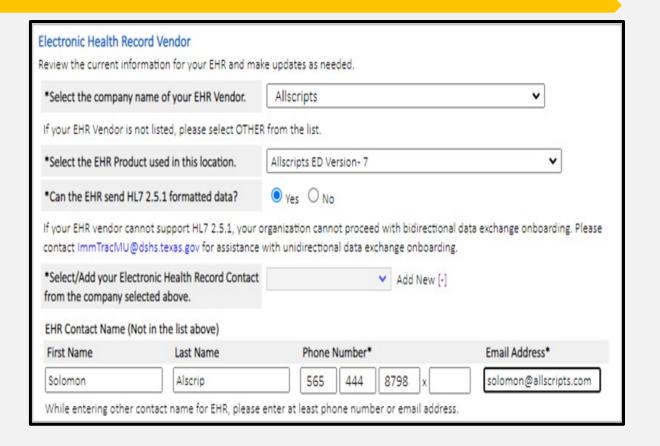




#### Registration of Intent (2 of 7)

#### **EHR Vendor**

 Fill in details for your EHR solution, including whether they can send HL7 2.5.1 formatted data

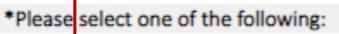




#### Registration of Intent (3 of 7)

#### **Authorization to Release Credentials**

Authorize the registry (ImmTrac2) to release your credentials to your EHR vendor.





authorize the registry to release the BIDX credentials to the EHR Vendor.



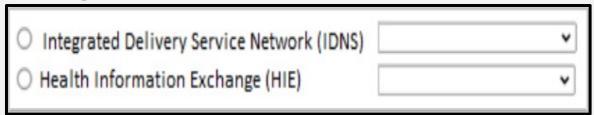
No I DO NOT authorize the registry to release the BIDX credentials to the EHR Vendor.



#### Registration of Intent (4 of 7)

#### 3<sup>rd</sup> Party Data Aggregation

Will your organization connect to ImmTrac2 via a 3<sup>rd</sup> party aggregation bridge?



**Note**: A data aggregation bridge acts as a connection to ImmTrac2 where data is sent from your organization's EHR solution to the data bridge and forwarded to ImmTrac2.

**Examples**: CDC Immunization Gateway (IZ Gateway), Iron Bridge, or Health Information Exchange (HIE).



#### Registration of Intent (5 of 7)

#### **Data Exchange Method**

- Update Only (only sending immunization date)
- Query Only (look up/search immunization data) or
- Update and Query (both send and receive immunization data)

\*Which method will your facility (through your EHR Vendor) use for bidirectional data exchange? Update and Query



 Note: Your organization must be able to perform bidirectional exchange formatted in HL7 2.5.1 to proceed with onboarding. Contact ImmTracMU@dshs.texas.gov for assistance with unidirectional data exchange onboarding.



## Registration of Intent (6 of 7)

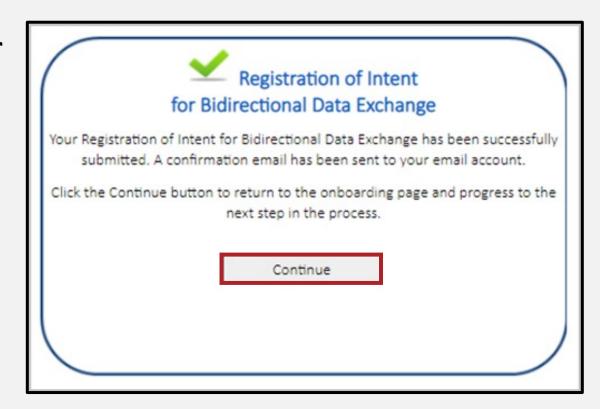
- Review your information
- Check the box to verify that you are authorized to sign for your organization
- Click the **Edit** button to return and revise it, or **Sign & Submit** to proceed.
- On the next screen check the box to sign electronically, click the Submit button





## Registration of Intent (7 of 7)

- After submitting your registration of intent, you will receive a confirmation message
- Select "Continue"





#### **Registration Status**

#### This screen reviews the registration status



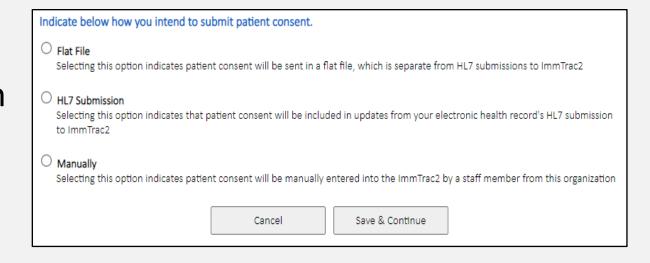


#### Consent Mode (1 of 3)

Indicate how your organization will submit registry

consent:

- Flat File
- HL7 Submission
- Manually





Texas Department of State Health Services

**Note**: Flat File and Manually reporting methods are not recommend for BiDX onboarding.

#### Consent Mode (2 of 3)

A patient's written consent (minor and adult) using an official DSHS registry consent form is required for inclusion of all data in the registry, except in the event of a publicly declared disaster. Written consent must be given by a parent or legal custodian if a patient is younger than 18 years of age. Official ImmTrac2 Consent Forms are available on our <a href="Department of State Health Services">Department of State Health Services</a> (DSHS) website:



Texas Department of State Health Services

**TXY** = ImmTrac2 Minor Consent (Age 0-18)

TXA = ImmTrac2 Adult Consent (Age 18+)

**TXD** = ImmTrac2 Disaster Retention Information Consent (All Ages)

#### Consent Mode (3 of 3)

- The signed registry consent form must be archived with the provider's office and in the patients' medical records after your organization has reported the registry consent to ImmTrac2 via one of the below methods.
  - Do **NOT** send (by fax, mail, or email) the signed registry consent forms to the registry for storage or processing.
- Please review the Texas Immunization <u>Registry –</u>
   <u>Consent Overview</u> to understand Texas' unique registry consent legislation and requirements.



# Step 2: Preparation, Message Pre-Testing

Step 1

Registration

Step 4

Pre-Prod Test,

Message

Validation

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Step 5

Pre-Prod Test, Data Quality Review Step 3

Preparation,
Connectivity &
Transport

Step 6

Go-Live, Connectivity & Transport

## Pre-Testing Overview (1 of 2)

Allows orgs to manually upload test HL7 messages for validation:

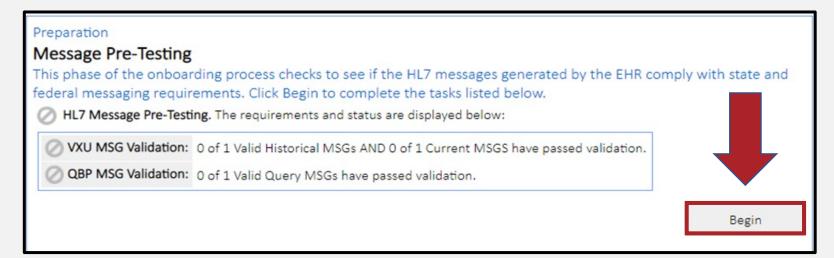
- HL7 2.5.1 required
- Validates check for compliance to TX and CDC HL7 standards
- Data is not submitted to ImmTrac2



## Pre-Testing Overview (2 of 2)

To pass, orgs must submit 1 error free of the following:

- Historical VXU
- New VXU
- QBP
  - Click the **Begin** button to start HL7 message pre-testing.

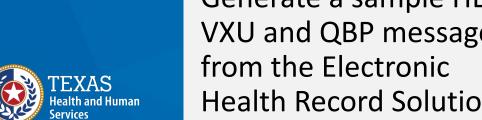


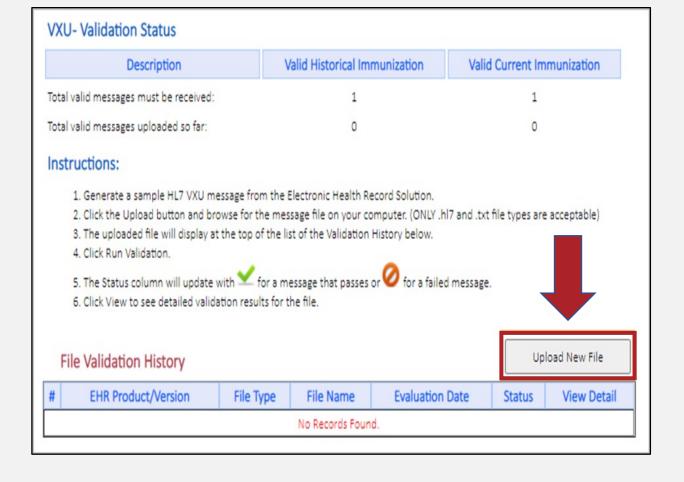


## Message Pre-Testing (1 of 10)

To pass pre-testing for VXU messages, your org must submit a valid **historical** immunization and a valid new immunization.

Generate a sample HL7 VXU and QBP message from the Electronic Health Record Solution.



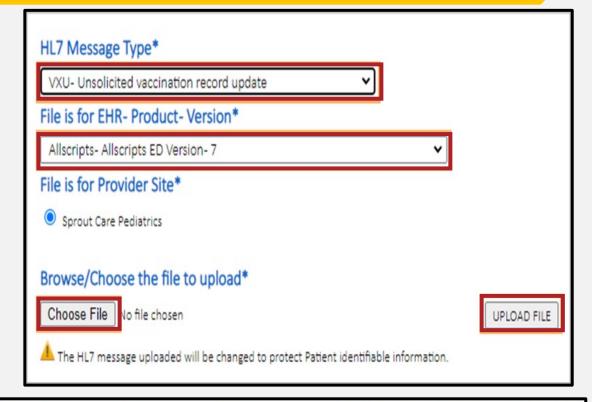




## Message Pre-Testing (2 of 10)

Once uploaded, the files are validated and identified with an overall PASS or FAIL

The file is further broken down to display which areas of the HL7 message need to be corrected







## Message Pre-Testing (3 of 10)

• The Status column will update with the message results

#### **Failed**

#	EHR Product/Version	File Type	File Name	Evaluation Date	Status	View Detail
1	Allscripts ED Version- 7	VXU	TxPerfCurrent072222.hl7	01 13 2023 14:14	0	View

#### **Passed**

#	EHR Product/Version	File Type	File Name	Evaluation Date	Status	View Detail
1	Allscripts ED Version- 7	VXU	TxPerfCurrent072222.hl7	01 13 2023 14:14	~	View

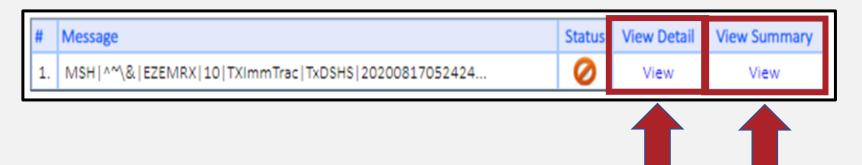


## Message Pre-Testing (4 of 10)

Select "View" to review detailed validation results for the file

#	EHR Product/Version	File Type	File Name	Evaluation Date	Status	View Detail
1	Allscripts ED Version- 7	VXU	TxPerfCurrent072222.hl7	01 13 2023 14:14	0	View

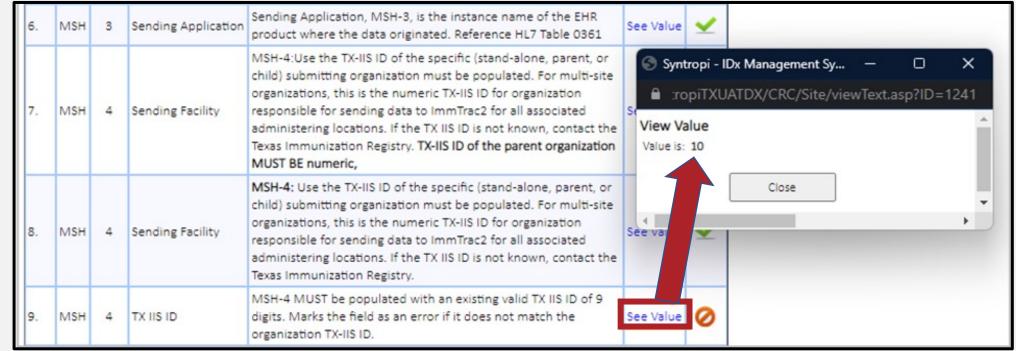
On the following screen, you can select to view the detailed view or the summary view





## Message Pre-Testing (5 of 10)

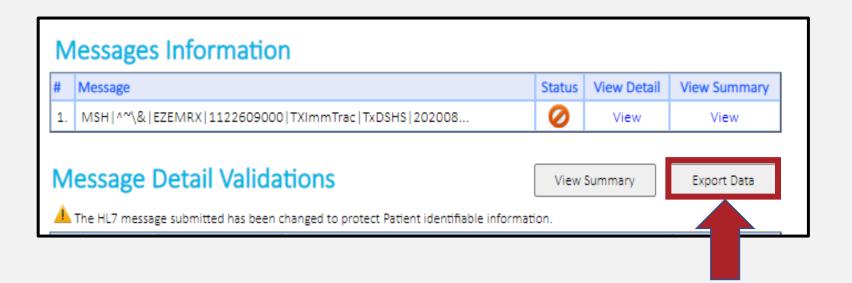
The detailed view allows you to see which segments passed validation, and to see the specific value entered for that field.





## Message Pre-Testing (6 of 10)

Click the **Export Data** button to download an annotated copy of the message.

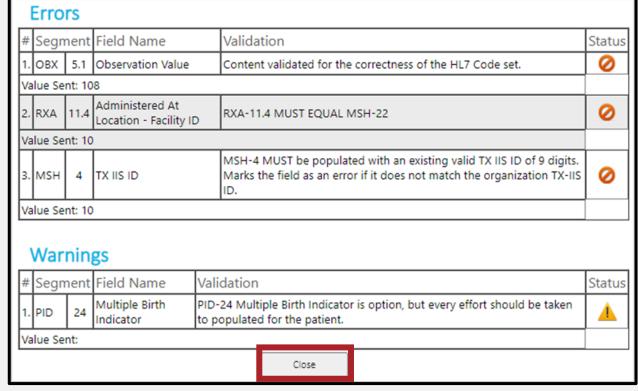




## Message Pre-Testing (7 of 10)

The summary view gives a high-level view of the message's status broken down into errors and warnings. Passing segments are not

Select "Close" to return and upload more messages.

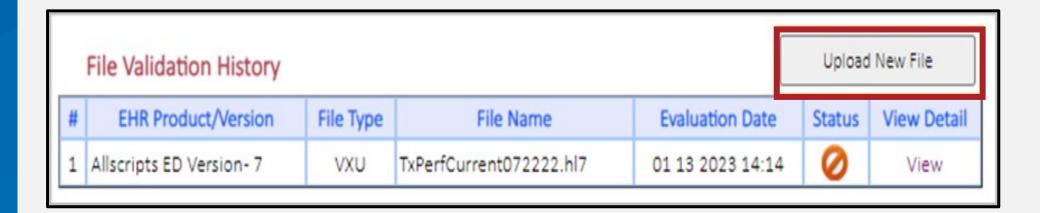






## Message Pre-Testing (8 of 10)

To pass pre-testing for QBP messages, your org must submit a valid query message



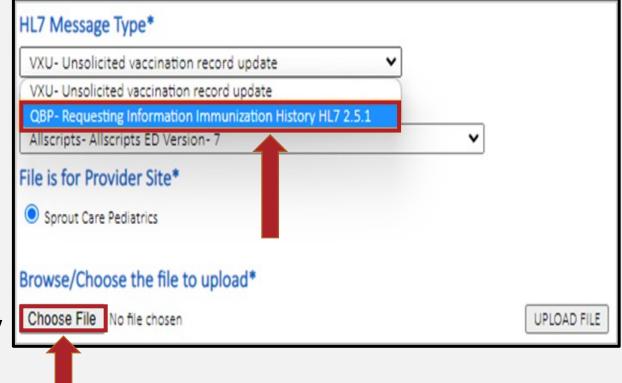


## Message Pre-Testing (9 of 10)

Change the message type from **VXU** to **QBP** 

Select "Choose File" and upload the QBP message to test

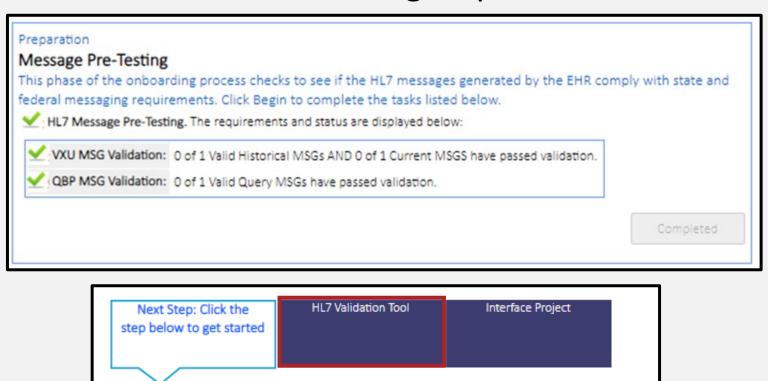
Note: The options to view detailed or summary information about the validation work the same way as for VXU messages.





## Message Pre-Testing (10 of 10)

Once both message type requirements are passed, proceed to the next onboarding step.





# Step 3: Preparation, Connectivity & Transport



Registration

### Step 4

Pre-Prod Test,

Message

Validation

#### Step 2

Preparation,
Message PreTest

### Step 5

Pre-Prod Test, Data Quality Review

### Step 3

Preparation,
Connectivity &
Transport

### Step 6

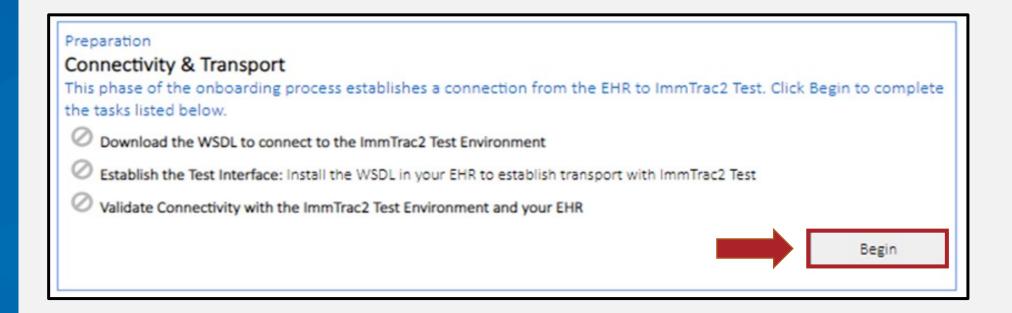
Go-Live, Connectivity & Transport



Preparation, Connectivity & Transport

### Prep Connectivity & Transport (1 of 3)

• Select "Begin" button to start

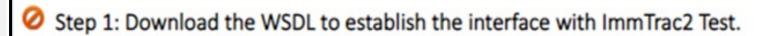




#### Preparation, Connectivity & Transport

### Prep Connectivity & Transport (2 of 3)

Select the link to download the Test WSDL file to set up your test connection to the ImmTrac2 Test environment.



- Instructions:
  - Click the link below to download the WSDL. It is pre-populated with the username and password to authenticate with ImmTrac2 Test. Download Test WSDL
  - 2. Configure your Electronic Health Record server with the downloaded Test WSDL.
- This step will be marked passed upon download of the WSDL.



#### Preparation, Connectivity & Transport

### Prep Connectivity & Transport (3 of 3)

To establish a test interface, configure your EHR with the WSDL settings, then begin submitting HL7 test messages

#### **Credentials include:**

- Username (Import Code)
- Facility ID (Org Code)
- Password



# Step 4: Pre-Production Testing, Message Validation

Step 1

Registration

Step 4

Pre-Prod Test,

Message

Validation

Step 2

Preparation,
Message PreTest

Step 5

Pre-Prod Test, Data Quality Review Step 3

Preparation,
Connectivity &
Transport

Step 6

Go-Live, Connectivity & Transport Pre-Prod Test, Message Validation

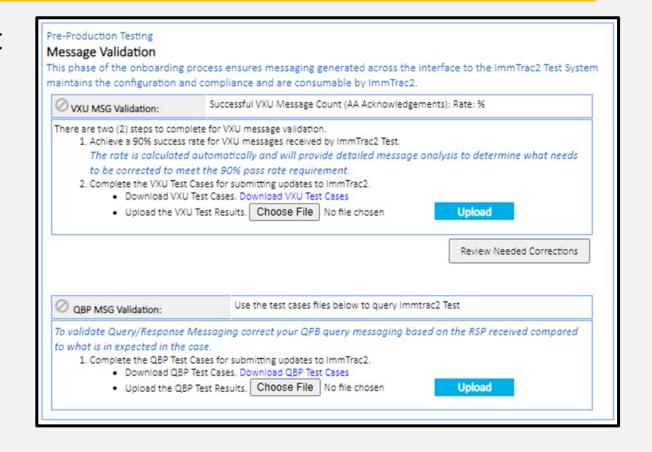
### **Pre-Production Testing (1 of 2)**

Download the VXU Test Cases document

Complete the Test Cases form

**Choose File** then the **Upload** option to submit the document

Once completed select



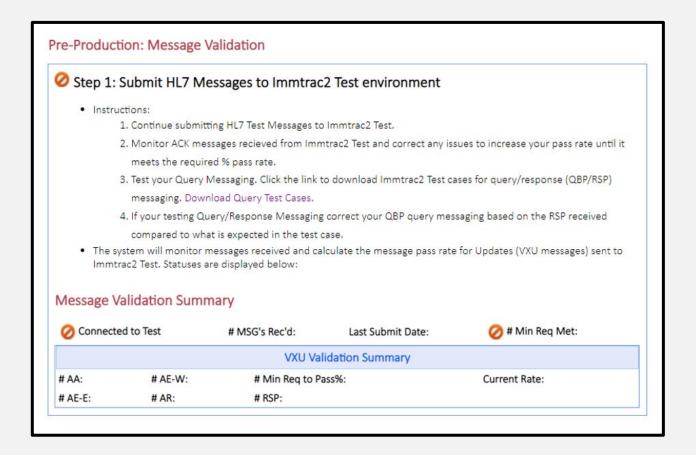


# Pre-Prod Test, Message Validation

### **Pre-Production Testing (2 of 2)**

- Identify if test messages PASS or FAIL based on ACK response
- Org must meet a 90% success rate to PASS
- Review ACK response in EHR interface.





# Step 5: Pre-Production Testing, Data Quality Review

Step 1

Registration

Step 4

Pre-Prod Test,

Message

Validation

Step 2

Preparation,
Message PreTest

Step 5

Pre-Prod Test, Data Quality Review Step 3

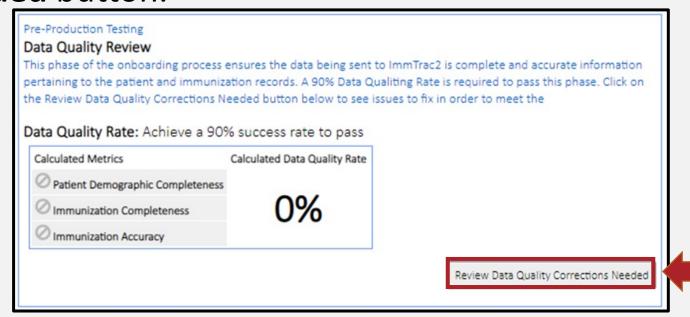
Preparation,
Connectivity &
Transport

Step 6

Go-Live, Connectivity & Transport

### **Review Corrections Needed**

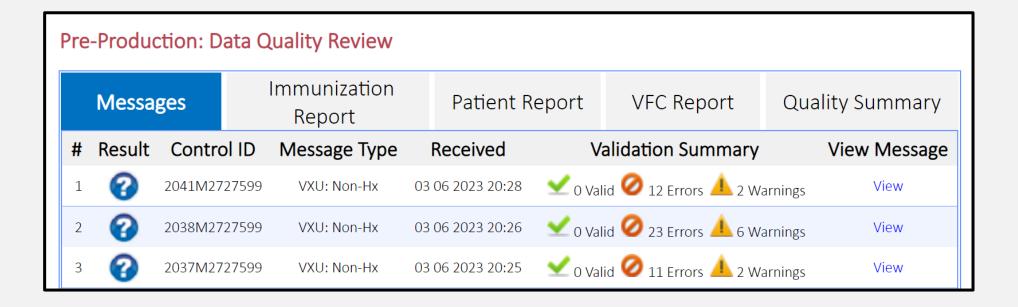
- Review the quality of your message stream.
- To begin, select the Review Data Quality Corrections
   Needed button.





# Messages Sent

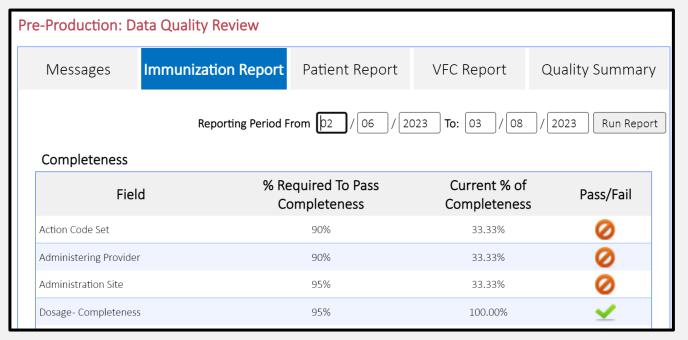
Messages: a list of the messages sent.





# Immunization Report (1 of 2)

**Immunization Report:** Completeness for immunizations given.





**Health Services** 

# Immunization Report (2 of 2)

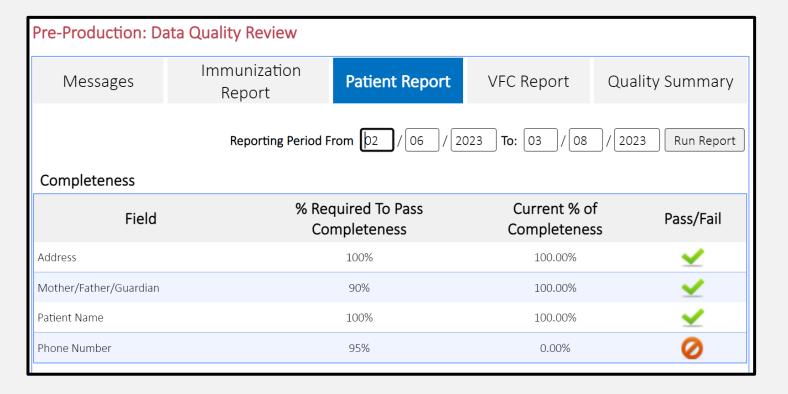
### Immunization Report: Accuracy for immunizations given.

Accuracy		
Field	Description	Issue Accuracy Score
Administered Date After DOB	Administered Date is after patient's DOB as expected	100.00%
Administration Route	Administration Route, RXR-1, is Required and Populated	33.33%
Age Range	Percentage of Records submitted where the vaccine is given within recommended age range	33.33%
Body Site	Body site is valid.	33.33%
Dosage- Accuracy	Validates that the administered dosage matches the accepted amount.	33.33%
Licensure Date	Vaccination administered within vaccine's licensure start and end dates	33.33%
Lot ID- Accuracy	Substance Lot Number is contains a valid lot number format for manufacturer.	0.00%



### **Patient Report**

### Patient Report: completeness for patient data.

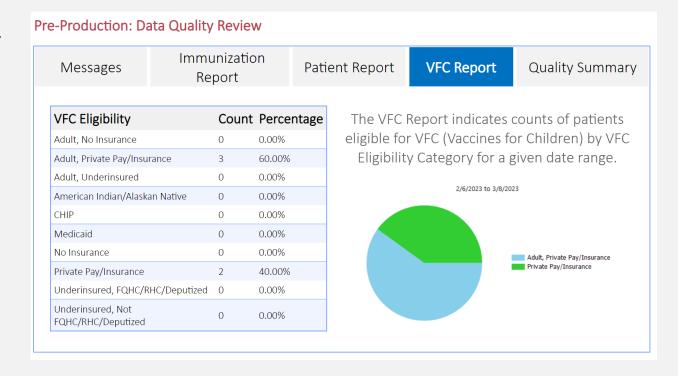




**Health Services** 

## **VFC** Report

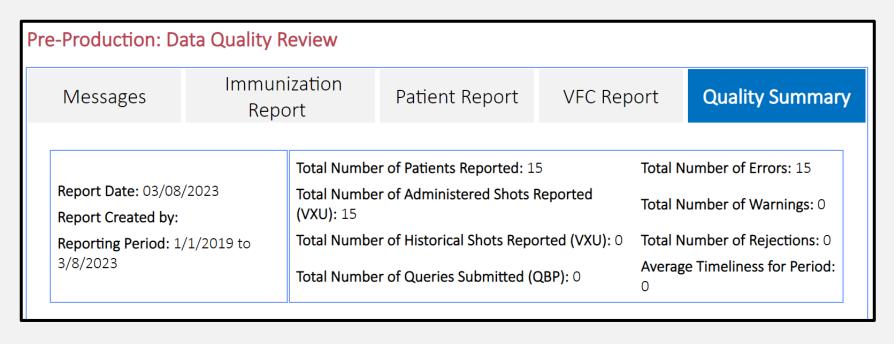
VFC Report: tallies by eligibility category





# Data Quality Summary (1 of 2)

### Quality Summary: overall message quality trends.





# Data Quality Summary (2 of 2)

- Testing focused on data quality metrics:
  - Patient completeness.
  - Immunization completeness.
  - Immunization Accuracy.
- Organizations must:
  - Submit test messages.
  - Review for gaps in completeness and accuracy.
  - Meet a 90% pass rate.



# Step 6: Go Live, Connectivity & Transport

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Go-Live, Connectivity & Transport

# Go-Live, Connectivity & Transport

# Go Live (1 of 3)

#### Allows org to:

- Connect with the registry's Interoperability Team for a go live meeting
- Download production web service credentials
- Connect to registry's production environment

# Go Live Connectivity & Transport In this phase of the onboarding process the data submission from the EHR will be transitioned from sending data to the ImmTrac2 Test System to the ImmTrac2 Production System. Go Live- Not Started. Download ImmTrac2 Production WSDL Production Interface Validation Previous Phase Must be Completed



#### Go-Live, Connectivity & Transport

# Go Live (2 of 3)

### Go live meeting will include:

- Org, DX Contacts, IT Support, registry's Interoperability Team and EHR vendor
- Discussions on anticipated go-live date
- Addressing any outstanding questions from Org



#### Go-Live, Connectivity & Transport

# Go Live (3 of 3)

### Onboarded organizations will:

- Download and share production WSDL and credentials with EHR vendor to establish an interface
- Establish a successful connection to ImmTrac2 production environment
- Initiate formal submission of patient and immunization data
- Submit real patient and immunization HL7 messages to ImmTrac2 production environment



# Data Exchange Resources

Support is available.

# **Live Support**

### **Interoperability Team**

• Phone: 800-348-9158, Option 3

Email: <u>ImmTracMU@dshs.texas.gov</u>

• Hours: Monday – Friday, 8:00 a.m. to 4:30 p.m.



### Forms & Documents

- Available on <a href="https://www.dshs.texas.gov/immunization-unit/immtrac2-texas-immunization-registry/immtrac2-forms-documents">https://www.dshs.texas.gov/immunization-unit/immtrac2-texas-immunization-registry/immtrac2-forms-documents</a>
- Texas Immunization Registry HL7 2.5.1 Implementation Guide (Stock # 11-14972)
- Texas Immunization Registry HL7 2.5.1 Error Guide (Stock # 11-15703)
- Affirmation of Registry Consent via Health Level Seven (Stock # 11-15773)





Texas Department of State Health Services

## Thank You!

From the Texas Immunization Registry