

Script for “Batch Data Exchange Testing” Webinar

Closed captioning for this presentation is available at the following link: <https://tcc.1capapp.com/event/dshs/>. This link will also be provided in the chat below.

Introductions:

Good afternoon everyone, my name is John Boggs I am an Interoperability Analyst with the Texas Immunization Registry and I will be your main presenter today.

I am joined by Yiuliana Rodriguez and Jonathan Patterson, both Interface Analyst with the Texas Immunization Registry.

For this presentation, if you have any questions, you will see the option for submitting questions at the bottom of your screen. Please submit your questions there and we will address and answer those questions once the presentation is complete.

Title Slide:

Today we will be reviewing the Data Exchange Testing process for Batch File Submission for the Texas Immunization Registry. This is the 4th step in establishing a data exchange connection with the Immunization Registry.

Overview:

During this presentation we will be discussing the following:

- What is Batch Data Exchange Testing?
- Requirements of data exchange testing?
- Sending Test files
- Registry Consent
- Reviewing Data Quality Reports and
- Completing the testing phase

What is Batch Data Exchange Testing? (1 of 2)

- Batch Data Exchange Testing is the final stage of preparation before your organization adds live patient data to the Texas Immunization Registry (TIR) via data exchange.
- Testing allows your organization to:
 - Make sure connection to the registry works correctly
 - Identifies and resolve any data quality and or technical issues.
 - Familiarize your organization with new processes of reporting and maintain data quality of your patient's immunizations records.
 - Identify any training needs for your staff members

What is Batch Data Exchange Testing? (2 of 2)

- During testing you will:
- Use your new batch data exchange account created by the registry for your organization.
- Send test patients along with immunization test files.
- Review and correct all data quality or technical issues found in your data quality reports provided by the registry, and
- Coordinate with your support teams, including your local IT, your electronic health record (EHR) vendor, and the registry's Interoperability Team.

Testing Objective:

Testing is an important role in establishing a data exchange connection with the registry. The testing processes are designed to set your organization up for success and assist your organization to achieve a high data quality standard.

- Your organization's objective during the testing phase is to send data to the registry that contain no errors.
- Testing is completed once this is successfully achieved by your organization. The goal is to work out any issues in testing so that once in production you do not experience the same issues later. Even If you

do experience issues within Production, your organization will be knowledgeable and equipped on how to resolve these issues.

- There is no definitive period for batch data exchange testing.
- Testing will continue until the testing objectives have been met by your organization.

Testing Requirements:

- Your EHR vendor must be capable of sending test files using Health Level Seven (HL7) version 2.5.1.
- A test file must be submitted at least once every 30 days, or your organization runs the risk of being dropped from testing. These test files must be aggregated into batch files.
- Your organizations test files must be a representation of your patient population and the types of immunizations you provide.

Sending Test Files:

- Coordinate with your EHR vendor, local IT support staff to create and send test files using one of the methods described in the Secure File Transfer Specifications guide found on our DSHS website.
- If your EHR vendor does not have the capability to support a direct data exchange connection, you may use the data exchange website to upload your files. These instructions can be found on our DSHS website under the Electronic Data Exchange Resource Guide beginning on page 18.
- Regardless of how your files are delivered to the registry, it is important that you familiarize yourself with the FTP website during the testing phase. Your organizations Point of Contact (POC) will need to access the FTP website to retrieve the response files from the registry. These files will be discussed later in this presentation.

Registry Consent (1 of 2):

- Remember that the Texas Immunization Registry is Opt-In only. Patients must complete and sign a registry consent form, and that consent must be added to the registry before the patient's immunizations are accepted by the registry.

- Missing registry consents are the most common reasons immunizations records are rejected when immunizations are sent through data exchange.
- During testing, your organization should continue adding registry consent and immunizations records through the ImmTrac2 website. Remember that while in the testing phase, no live patient data is added to ImmTrac2 via data exchange.
- It is possible for your EHR vendor to send registry consent via data exchange; however, this process requires additional setup and testing which will not be covered in this presentation.

Registry Consent (2 of 2):

- Additional cost from your EHR vendor may be involved for setting up consent via data exchange.
 - For this reason, many organizations opt to continue to add consents through the ImmTrac2 website even after data exchange testing has finished.
- Please keep in mind that it is your organizations responsibility on how registry consent is being captured and reported to the Texas Immunization Registry.

File Processing Overview (1 of 4):

- Within 24 hours of uploading a test file to the registry, those individuals identified in your Registration of Intent (ROI) will receive an acknowledgment email letting you know that the registry received your test file.
- The acknowledgment email does NOT mean that the file was processed or that it will be processed successfully. It is only an acknowledgement that a file was uploaded.
- Your organization may want to save copies of these acknowledgment emails to demonstrate your participation in Promoting Interoperability with the registry.

File Processing Overview (2 of 4):

- Test files are usually processed within 5 business days of being received by the registry.

- Once a file is processed, the results are then returned to the following files in your FTP account:
- Data Quality Analysis reports (also known as DQA reports) will be placed into the DQA-Report's folder.
- DQA's are error reports for individual records found within your test files. Remember that your test files are batches that may contain multiple patient's records. The DQA reports are your most valuable tool used for reviewing your data quality. This file will be reviewed in more detail later in this presentation.

File Processing Overview (3 of 4):

- Consent notification files (called CNFs) will be in your Receive folder of your FTP account. CNFs contain the registry consent status of each patient within your test file. They can be a useful tool for reviewing your organization's consent workflow.
- Your Response files will also be in the Receive folder. Response files are an HL7 coded version of the DQA Report. Some EHR's can use these to display errors within the EHR itself.
- Please keep in mind that your organization will NOT receive an email notification when test files finish processing. This is one reason your organization should check its data exchange website on a routine basis.

File Processing Overview (4 of 4)

- Certain errors, including incorrect file naming conventions, file structures or blank files, will result in the test file being rejected entirely before it can be processed by the registry.
- In these cases, a second email is sent to notify those individuals on your contact list of the rejection errors.
- The rejected file is in the Accepted folder of the FTP website with ". invalid" added to the end of the file name.
- For assistance with rejected test files, please contact the registry.

Reviewing Data Quality Reports (1 of 8)

- A user from your organization should access the FTP website at least once a week to download and review new DQA reports. To download the new DQAs, navigate to the DQA folder, click the box next to the files and then select 'Download' at the top of the page.
- DQAs should be opened using an advanced text editor such as Notepad++ or Programmer's File Editor (PFE). These programs are not provided or supported by the registry. Contact your local IT for support with these programs.

Reviewing Data Quality Reports (2 of 8)

DQA reports use the following structure:

- First, you will see an HL7 Message. HL7 messages can be a little difficult to read, but with a little practice you can learn to identify which patient and immunizations a message is for.
- Next, you will see any Rejection errors for that message that prevent part or all the message from being accepted.
- Finally, you will see any Informational Errors for that message which may indicate problems with the data quality of your messages.

This structure will repeat for each message that had an error

- Errors have an error code number followed by a brief description
- For example: CLR-100. Client rejected. No existing consent on file.

Reviewing Data Quality Reports (3 of 8)

- As mentioned, the first section of the DQA report you will see is a copy of one of the HL7 messages your organization sent.
- An HL7 message contains one patient's information and any immunizations your organization reported for that patient. Each test file you send can have multiple HL7 messages.
- HL7 messages look like a block of words and numbers separated by vertical lines. The patient's name can be found in the line beginning with the letters 'PID.'

- Information about the order given for immunizations can be found in the line beginning 'ORC.'
- The names of the immunizations reported can be found in the lines beginning with the letters 'RXA' There can be multiple 'RXA' lines; one for each immunization reported for that patient.

Reviewing Data Quality Reports (4 of 8)

- Below the HL7 message you will see any errors that resulted in the client's record being rejected.
- These errors all have a code beginning with the letters 'CLR'
- For example: Missing demographics, such as the client's name or address will result in a client rejection error.
- Client rejection errors prevent any of that patient's records from being accepted.

Reviewing Data Quality Reports (5 of 8)

- Any errors that resulted in a specific immunization record being rejected are listed next.
- These errors all have a code beginning with the letters 'IMR.'
- For example: Missing manufacturer information for newly administered immunizations
- Immunization rejection errors prevent that specific immunization record from being accepted. Other immunizations in the same message may have still been accepted.

Reviewing Data Quality Reports (6 of 8)

- Any non-critical data quality errors (called Informational Errors) are listed last.
- These errors all have a code beginning with the letters 'IEE'
- Most Informational errors are related to problems in HL7 formatting.
- Informational error does not prevent records from being accepted but must still be addressed to improve data quality.

Reviewing Data Quality Reports (7 of 8)

- ALL errors, including rejection errors and informational errors, must be corrected before the testing phase can be completed.
- A complete list of all errors along with a brief description of what each error means and instructions for correcting the errors can be found in the *Texas Immunization Registry HL7 2.5.1 Error Guide* available on the DSHS website.
- You should contact your EHR vendor to correct most of errors you encounter.
- If your EHR vendor cannot correct the error or is unsure about the error, contact the registry for assistance.

Reviewing Data Quality Reports (8 of 8)

- Not all errors can be corrected by your EHR vendor or the registry. Some errors may be due to gaps in your organization's documentation.
- Your organization may need to adjust documentation workflows to ensure that all required information, such as immunization manufacturers, is captured and sent to the registry. This includes affirming registry consent.
- Your Organization will continue submitting test files, reviewing DQA reports, and addressing errors until all errors have been corrected.

Completing Testing (1 of 2)

To complete the testing phase:

- Your organization must submit three to five consecutive test files that return **NO** errors in the DQA report.
- Once your organizations have done this, contact the registry and request review for promotion to production.
- The registry does not actively monitor most test files, so it is important that your organization is proactive in requesting promotion to production once you believe you have met the requirements to finish testing.

Completing Testing (2 of 2)

At this point, you have successfully completed testing!

- Once the registry has reviewed your testing files and is satisfied that your organization has met the requirements to finish testing, your data exchange account will be promoted to production.
- Your organization's contacts will receive an email announcing your promotion once this happens.
- Your organization should contact your EHR vendor to make sure they are aware that you have entered production.
- We will discuss Production and On-going Submission of records more in the next presentation.

TIPS Report

- One final note about testing, your testing activity may be reflected on the TIPS (Texas Immunization Provider Summary) report.
- You should disregard the Data Exchange Activity section of your TIPS report for the period of your data exchange testing.

Resources: Trainings

Various resources are available to you for assistance with the registry.

- We offer in-person trainings through our local or regional health departments in your area. Staff from these health departments can come to your facilities to provide an overview on how to use ImmTrac2, add patients as registry clients and looking up patients to determine if they are registry clients. To set up in-person trainings for ImmTrac2, contact us and we can get that request out to your local health department. Do note that our local and regional staff do not provide trainings on data exchange, those specialized trainings are limited to the Interoperability Team.
- We also have a library of online training videos available on the DSHS Texas Immunization Registry website. These videos are a great resource for visual learners or for staff needing refreshers on ImmTrac2 features or functions.

Resources: Guides

Another resource option available to you are guides that provide an overview and instruction on several topics. Some of the guides available that may assist you with the steps covered today include:

- The Electronic Data Exchange Resource Guide, (stock #11-15231) -- this provides detailed steps and information on the six steps to establish a data exchange connection with the registry,
- Data Quality Guide, (stock #11-15232) - this provides guidance on the most common data quality issues organizations face and how to correct them, and lastly,
- The HL7 2.5.1 Error Guide (stock #11-15703) – this provides guidance on all the data quality errors that our system produces and detailed instruction on how to resolve the errors. This resource should be one of the primaries go to tools in your data exchange toolbox.

These guides and more can be found on the DSHS Texas Immunization Registry website.

Resources: Live Support

Finally, the last resource available is live support!

- Our customer support staff are available to assist you Monday through Friday, 8 AM to 4:30 PM central time.

Unfortunately, our phone lines are currently unavailable at the time of this recording due to many of our staff working remotely.

Contact Information: Websites

To find more information on the Texas Immunization Registry you can visit one of our websites.

- The first website is the ImmTrac2 website, which is primarily used by health care organization, like yours. This site is where organization can get registered to gain access to ImmTrac2 and once granted access you can look up registry client information, run reports, add immunizations and so much more.

- The second website is the DSHS Texas Immunization Registry website, our public facing website. This site is available to all to get more information on how to opt-in or sign up to be a registry client, information on how to get a copy of your immunization records, organizations can order registry publications or posters or locate the resources we discussed earlier. The website has so much information, go check it out!

Contact Information: Customer Support Line

- To reach us here at the Texas Immunization Registry you can contact Customer Support by phone calling 1-800-348-9158.
- For assistance for the public (such as requesting immunization records), choose option 1.
- For assistance with the ImmTrac2 website (including access), choose option 2.
- For assistance with data exchange or to reach the Interoperability Team, choose option 3.
- For assistance with site registrations or renewals, choose option 4.

Again, our phone lines are currently unavailable at the time of this recording due to most of our staff working remotely

Contact Information: Emails

You can also contact the Texas Immunization Registry by email. The registry has two email addresses.

- For questions about ImmTrac2 access, site registrations or renewals, training, or publications, email us at ImmTrac2@dshs.Texas.gov.
- For any questions related to data exchange, data quality or Promoting Interoperability, email us at ImmTracMU@dshs.Texas.gov

Thank You!

This concludes our presentation on Data Exchange Testing. Thank you.

The next scheduled presentation, which will hold on Monday March 8th and Friday March 12th, will cover Bidirectional Testing.

Q&A

We will now begin with the Q & A portion.