DSHS
Batch Data Exchange Testing
February 26, 2020
1:00 p.m. CT

>> The broadcast is now starting. All attendees are in listen-only mode.

>> Boggs: Good afternoon everyone, my name is John Boggs, a Program Specialist with the Texas Immunization Registry, and I will be your main presenter today. I am joined by Yiuliana Rodriguez, 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.

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. 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? Batch Data Exchange Testing is the final stage of preparation before your organization adds live patient data to the Texas Immunization Registry, referred to as TIR, via data exchange. Testing allows your organization to make sure connection to the registry works correctly, identify 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, and identify any training needs for your staff members.

Also, during the 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 report provided by the registry, and coordinate with your support teams, including your local IT, your electronic health record or 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 contains 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 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 organization's 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 organization's Point of Contact, or 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 -- 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 immunization records are rejected when immunizations are sent through data exchange.

During testing, your organization should continue adding registry consent and immunization 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.

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 consent through the ImmTrac2 website even after data exchange testing has finished. Please keep in mind that it is your organization's responsibility on how registry consent is being captured and reported to the Texas Immunization Registry.

File processing -- within 24 hours of uploading a test file to the registry, those individuals identified in your Registration of Intent, or ROI, will receive an acknowledgment email letting you know that the registry received your test file. This acknowledgment email does NOT mean that the file was

processed or that it will be processed successfully. It is only an acknowledgment 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.

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-Reports folder. DQAs are error reports for individual records found within your test files. Remember that your test files are batches that may contain multiple patient 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.

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 EHRs 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.

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 -- 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. These programs are not provided or supported by the registry. Contact your local IT for support

with these programs.

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 of 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.

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.

Below the HL7 message, you will see any errors that resulted in the client 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.

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.

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 errors do not prevent records from being accepted, but must still be addressed to improve data quality.

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 the errors you encounter. If your EHR vendor cannot correct the error or is unsure about the error, contact the registry for assistance.

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 workflow 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 -- 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 a 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.

At this point, you will 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 into production. We will discuss production and ongoing 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.

Resource 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 those errors. This resource should be one of the primary go-to tools in your data exchange toolbox. These guides and more can be found on the DSHS website.

We also offer 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.

Some available contact information for our websites -- the first website is the ImmTrac2 website, which is primarily used by health care organizations like yours. This site is where organizations 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 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 also order registry publications or posters, or locate the resources we discussed earlier. This website has so much information. Go check it out.

Customer service support line -- to reach us here at the Texas Immunization Registry, you can contact Customer Support by phone by calling 1-800-348-9158. For assistance for the public (such as requesting immunizations), choose option 1. For assistance with the ImmTrac2 website (including access), you would choose option 2. For assistance with data exchange or to reach the Interoperability Team, you would 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.

Another way to contact us is by email. The registry has two email addresses. For questions about ImmTrac2 access, site registrations or renewals, trainings, or publications, you can email us at ImmTrac2@dshs.texas.gov. For any questions related to data exchange, data quality or promoting interoperability, you can email us at ImmTracMU@dshs.texas.gov.

This concludes our presentation on Data Exchange Testing. Thank you. The next scheduled presentation, we'll hold on Monday March 8th and Friday March 12th, which will cover Bidirectional Testing. We will now open the floor up to any questions that you have.

>> Rodriguez: We don't have any questions to be answered. We can hold off for a minute or so and see if any come in. So, the first question is, where -- when I try to upload to FTP, I get an error message that says I do not have permission.
>> Boggs: Sure. So, the permissions issue is a common error that's seen. So, you want to make sure that you're actually in the HL7 drop-off folder before you attempt to upload any files.

If you're not in that folder, or in that file, then you will get that error message for the permissions, because the system will not allow you to upload to the root folder.

>> Rodriguez: Okay. The second question is, is the FTP to be used instead of manually entering data in ImmTrac2, or is it in addition?

>> Boggs: If you have an EHR vendor and you're able to load files, we recommend going through your EHR vendor.

>> Rodriguez: Next question is, hi. Should the files be submitted for each patient, or is it a batch file? One file has multiple patients?

>> Boggs: Yeah, so the batch file, it's actually multiple patients. So your EHR vendor is going to have a designated date to upload batches.

>> Rodriguez: The next one is, there has to be a consent, otherwise it will be rejected? I'm not sure what that question regards. Oh. Yes. So, if there is no consent on file, the immunization will be rejected. I believe that's what she's referring to. The next question is, once we do our corrections, do we resubmit the file, or just leave it? It is recommended that you resubmit the file once the corrections have been completed.

The next question is, is there a training video on how to enter the batch files as well as batch file testing?

>> Boggs: There is documentation on how -- within our website that will explain on how to go into the FTP account and to upload a file. And I believe there is a training video out.

>> Rodriguez: If we have multiple sites, can we use one site credential and submit other site files as well?

>> Boggs: So, if you have what we call subsites, the majority of the time, everything will be reported. The parent will use their FTP account and upload the files for all your locations that are associated to that parent site.

>> Rodriguez: I read that during the disaster, COVID-19 vaccines do not require a consent. That is correct. COVID vaccines do not require a consent. You should not receive that error when reporting COVID-19. Do you have an option to support real-time HL7 submission as opposed to batch? We do have an option. It's called our bidrectional. If you would -- there is a checklist currently listed on our DSHS website. And when your organization is ready to move to bidrectional, you would have to email ImmTracMU and request the ROI.

Next question is, when we submit the files, do we send the entire batch file again? No. You would only send the immunizations that were rejected and had been corrected. Next question is, from the consent, are we supposed to be sending or faxing somewhere? So, if your organization is obtaining consent,

you do not send or fax it. The organization is supposed to retain that consent. And if you are reporting via bidrectional or FTP, just send the consent via the flat file, affirmation file.

The next question is, if it's a batch file, to submit for the DSHS segments? For the specifications on our DSHS website we do have an HL7 specification in regards to what to send in those two segments.

Next question is, clarification. COVID-19 vaccines don't require ImmTrac consent, since it's considered a disaster. Will this affect the FTP upload? No, it will not. You won't receive a CLR-100 and the vaccine should retain in ImmTrac without consent.

Next, is there a consent of umbrella ID or a single ID for an organization along with a location-specific ID for the real-time/bidrectional exchange?

>> Boggs: Will you repeat that one more time?

>> Rodriguez: Yeah. Is there a consent umbrella ID or a single ID for the organization along with location-specific IDs for the real-time/bidrectional exchange?

>> Boggs: So, the parent site's going to be the one submitting the data, whether it's the FTP or through real time. Everything is going to be designated by your TX IIS ID number. And that's going to distinguish where the vaccines are given.

>> Rodriguez: Next question is, is there anyone that can help me with an error message that states that I do not have permission? I am uploading to the HL7 correctly. I have emailed several times and I get the same response, but the error message is the same. And I believe she's referring to the permission denied question again.

>> Boggs: Yeah, if you're in the correct folder, the HL7 drop-off folder and you're still getting that permissions error, please send an email to ImmTracMU@dshs.texas.gov and one of our interface analysts will be in contact with you.

>> Rodriguez: The next question is how are we supposed to send the correct HL7 files if they were sent in already? Won't it give us a duplicate file?

>> Boggs: That's a good question. You can't use the exact same naming convention. We recommend putting A, B, or C at the end of that, of your file so that way it just kind of -- it won't necessarily throw the system off, but it won't have the system recognize it as having the exact same naming convention. Or if your EHR vendor can submit it as a different file name, a file name that will have a different Julian date on there.

>> Rodriguez: Next question is, we are making changes to our HL7 and would like to turn on testing again. Is there a process to do that?

>> Boggs: Could you repeat the question?

>> Rodriguez: We are making changes to our HL7 and would like to turn on testing again. Is there a process to do that?

>> Boggs: So, if your organization hasn't went into production status and are still within testing, you can submit the data over to the registry. And once you submit three to five connective files for us to review, then you can send an email to us and ask us to review those.

>> Rodriguez: And then if your organization is currently in production and would like to test files, you can also email ImmTracMU and request a box folder to be created. And then you would drop your testing files into the sandbox folder. And those files are manually processed.

Next question is, do you have a step-by-step guide for electronic reporting?

>> Boggs: We do have documentation that's out there on the DSHS website under the Texas Immunization Registry.

>> Rodriguez: Next question is, if we have registered as individual sites in the beginning, but if we would like to roll them up under one umbrella, what is the process?

>> Boggs: What you would need to do first is designate one location that's going to be your parent organization. Now, if those -- all your locations are submitting data to the registry, it's a bit more detailed of what needs to be done. And that's something that we can talk with you about. But more or less, what you would want to do is figure out which location you want as a parent site, and then for each of those subsites that you have out there, you would need to do a site renewal and designate those locations as subsites and indicate your parent organization that they need to be associated to.

>> Rodriguez: And then for questions in regards to obtaining information and finding these training videos, they can all be found on our DSHS website under the immunization tab. It looks like Carmen has several questions. You can just please email ImmTracMU with your questions and just put on a subject related to webinar and they will be answered accordingly.

Next question is, how many patients do we need to use for the test batch?

>> Boggs: So there's really no set number. I recommend usually about three to five, just as the same thing with the test files itself. So you can have two patients per file if you want to do that, where you can -- it's primarily up to the organization itself.

>> Rodriguez: Okay. The next question is, can we talk to someone about -- someone from the bidrectional team about real-time submission, or is there a training material online? So, currently we do have a bidrectional guide that's, again, on

our DSHS website under bidrectional. And if you would like to request a meeting, you can also email ImmTracMU with your organization TX IIS ID and then just put bidrectional question on there.

It looks like those are all the questions. Oh, here comes one more. Does your bidrectional support/real-time submission web service -- yes. So, bidrectional, we use web service and SOAP. Is there a separate registration process for the bidrectional exchange? Yes. When an organization wants to move forward to bidrectional, they need to email the ImmTracMU. And once they've gone through the checklist, they will be sent an ROI that needs to be completed before onboarding to bidrectional.

What does ROI stand for? Registration of intent. The next question is, we submitted files for September that are not showing up. Is there an ETA when we will have them caught up?

>> Boggs: You should have already received your files back if you submitted them in September. If you want to send us an email and let us know the file name of them, that way we can take a look and see if there's anything that might have come up on our side, or if it's also showing up as invalid or anything that would prevent them from being processed. We can definitely take a look at those.

>> Rodriguez: Next question is, what does PID stand for?

>> Boggs: That's going to be for patient information.

>> Rodriguez: The next question, how do we register for bidrectional training? So, we currently don't have anywhere where you can register for bidrectional training. If you're interested in bidrectional, we do have a lot of resources on our DSHS website. Next question is, where can we get web service real-time integration information, such as the WSDL? That is not until after your organization completes the ROI. And then we would release that information to your organization. Okay. I think those are all the questions, John, if you want to close out.

>> Boggs: Sure. We thank you so much for joining us today. If you do have any questions after this is done, please submit them to the ImmTracMU and we'll be glad to answer anything that you have. Thank you so much for joining. You all have a good day.

[End of Session, 1:39 p.m. CT]