



Bidirectional Onboarding for Health Plans

DSHS

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

>> Rodriguez: Closed captioning for this presentation is available at the following link: <https://tcc.1capapp.com/event/dshs/>. The link will also be available in the chat. Today, we will be discussing HL7 Data Exchange On-Boarding for Health Plans with the Texas Immunization Registry. Hello, everyone. My name is Yiuliana Rodriguez. I'll be the main presenter today. I am an Interface Analyst with the Texas Immunization Registry.

Joining us for a brief question and answer session after the main presentation is Eunice Mbungkah, a Program Specialist. At the bottom of the screen, you'll see the option for submitting questions. Please submit your questions there so we can address and answer those questions once the presentation is over.

This presentation will cover requirements and processes for onboarding with HL7 data exchange with the Texas Immunization Registry. Next week, we'll be hosting a presentation by Blue Cross/Blue Shield where they will review the onboarding process from the perspective of a health plan that has successfully on-boarded for HL7 data exchange with the registry.

The topics we'll be covering in today's webinar include the differences with HL7 data exchange versus the current IHQ process, the on-boarding process, including the Bidirectional Readiness Checklist, the Bidirectional ROI, testing, and production. And we'll review some of the resources that are available to you right now.

We use abbreviations and acronyms for some of the terminology in this presentation, so let's review what these mean. BiDX, or bidex, is the short term for Bidirectional Data Exchange. This phase is synonymous with HL7 data exchange for Health Plans. Registry is the short term for the Texas Immunization Registry. Orgs refers to any provider, healthcare entity, or other organization that participates with the registry.

EHR stands for Electronic Health Records system and will be used interchangeable for any records program you use to request and store immunization records. And POC will mean your organization's Point of Contact registered with ImmTrac2. And with that out of the way, let's begin.



Let's begin by reviewing the difference between your current IHQ process and the HL7 data exchange process. Currently, you send IHQ files to the registry. IHQ files are plain text files that use precise spacing to format their record requests. These files are sent to the registry via an FTP connection. IHQ files are sent in batches containing hundreds or even thousands of record requests each. Typically, these files are sent quarterly or annually.

IHQ files undergo a long and resource-intensive processing time at the registry. It usually takes weeks or sometimes even months for an IHQ file to be processed. Once the IHQ file finishes processing, an IHR response file containing the requested immunization records is returned via your FTP connection. One last thing to note about IHQ files is that they use a format that is no longer being actively updated and is already becoming outdated.

With the HL7 data exchange process, you'll send record requests in messages that use CDC's HL7 specification. HL7 is a set of international standards, curated by the CDC for use in America, for the transfer of clinical and administrative data between software applications. You'll send record requests one at a time, and those requests will usually be done once a month or quarterly. The requested records will be sent back to your system in real time. No need to wait for an uncertain or long processing delay.

Now that we've reviewed what's new with HL7 data exchange, let's go over the on-boarding process. The first step in HL7 onboarding is reviewing the Bidirectional Readiness Checklist. The Bidirectional Readiness Checklist contains all the requirements that must be met by orgs and their EHR vendor to participate in HL7 data exchange with the registry. The document is available on the registry's Department of State Health Services (DSHS) website, www.immtrac.com, under the Forms and Documents information.

Orgs must review the checklist with their EHR vendor to ensure all requirements are met before contacting the registry about bidirectional data exchange. All requirements must be met before your organization is provided with the Registration of Intent for BiDX. The checklist assists you to make sure your organization is in good position to begin and streamlines the onboarding for BiDX with the registry.

Now let's discuss the requirements included in the checklist, beginning with the requirements that apply to all organizations. You must have an EHR or similar records software that meets these requirements. It must send bidirectional messages using a webservice connection, which allows exchange of patient and immunization data between your system and the registry in real time.

It must send messages using HL7 version 2.5.1, release 1.5. HL7 is the gold standard for electronic health records messaging and is overseen by the Centers for Disease Control and Prevention (CDC). Your EHR must be up to date with all relevant system and hardware upgrades. This is particularly important because BiDX testing is time-sensitive, and all upgrades must be in place before approving for onboarding for BiDX.

If your EHR is not ready during BiDX testing, you may be removed from onboarding with the registry and must wait for a later opportunity to onboard. Do note, the registry staff do ask the org if all these items are met prior to approving an org for onboarding to mitigate and identify any barriers. Because these requirements all depend on the status of your EHR, you must speak with your EHR vendor or similar IT support to make sure you meet each requirement.

Finishing up the requirements that apply to all organizations, your organization must be registered with ImmTrac2. If you have multiple sites, each site must be registered separately. All your sites must also have up-to-date site agreements. Remember site agreements must be renewed at least once every two years. The site agreements allow your organization to maintain access to its data exchange account.

If you have multiple sites, your parent and child (or headquarters and sub-site) relationships must all be up to date and accurate in ImmTrac2. If you have any questions about registration or renewals, we offer comprehensive guides for both on our DSHS website. Please be aware that once approved for onboarding for BiDX, the BiDX testing is time-sensitive.

For this reason, you should begin planning for and preparing as many of your resources in advance as possible. Designate a subject matter expert who will oversee the BiDX project for your organization now. Begin identifying any additional testing participants you need. Testing participants must be able to dedicate at least one full week to the testing.

Be sure your EHR (or similar software) has technical resources identified and available. Again, the idea behind the checklist and the prerequisites is to streamline your organization's onboarding. You should begin to analyze your organization's workflows and plan for how things will change from your current operations. Internally and with your EHR vendor, ask, "How will we monitor the BiDX connection and address any data quality errors?" And, "How will we train and prepare staff for the change?"

Once you've been approved for HI7 onboarding, you'll be sent the Bidirectional Registration of Intent, or ROI. So, what is the Bidirectional Registration of Intent? The ROI is a form that allows organizations like yours to inform the registry that they are ready to begin participating in real-time bidirectional data exchange. It captures key information about your organization and EHR vendor, such as the names of individuals that will participate in testing your new interface.

It also allows you to identify which bidirectional features your organization will use. Importantly, the ROI also provides for your organization's agreement to follow all registry policies for data exchange. The bidirectional ROI is an entirely new form. If you previously participated in unidirectional (also known as batch file) data exchange, the ROI you submitted back then does not apply to bidirectional data exchange.

You will need to submit a new ROI. The bidirectional ROI must be completed and signed by an authorized representative of your organization's parent or stand-alone site. It is entirely up to your organization to decide who that individual is for you, and it should be someone who will also participate in setting up and testing your new interface.

Now let's review how your organization needs to complete the bidirectional ROI. The bidirectional ROI has six sections that must be completed: organization information, primary contact person, secondary contact person, bidirectional exchange readiness, query and reporting immunizations, and the electronic signature.

Organization Information: in this section, you'll be identifying and describing your organization. You'll begin by providing the name and address of your organization. If your organization has multiple sites, this will be the name and address of your parent site or headquarters.

One of the pieces of information you will need to provide is the site's TXIIS ID number. If you are unsure of what the TXIIS ID number is, or which site is your parent site, contact the registry for support, and we can provide you with that information.

Next, you'll say if you plan to report for multiple facilities. This is a simple yes or no question. If your organization is stand-alone and doesn't have any other sites, then your answer should be no. If, however, you do have multiple sites that are linked to each other in ImmTrac2, then your answer should be yes.



The next section of the ROI is the primary contact person. You'll need to provide the name and contact information for the main person from your organization that will be leading your BiDX setup. This person must be an employee of your organization, meaning that they do not work for your EHR vendor or any other third-party IT support; and they must actively participate in all BiDX setup activity with the registry. Ideally, this person should be the registered point of contact that was identified on your last ImmTrac2 site agreement.

Next, you'll identify the secondary contact person. This is the individual who will act as a backup for the primary contact person. This person must be an employee of your organization, participate in all BiDX setup, and be ready to take lead of the project if your primary contact person becomes unavailable for any reason. A good choice for this role might be the individual that was identified as your primary registry contact in your last ImmTrac2 Site Agreement. If this is the same person as the POC, then consider who else within your organization would be a good choice for this role.

The next two sections cover your readiness for bidirectional data exchange and which features you plan to use. The readiness section asks a number of questions about your technical capabilities. You will likely want to review with your EHR vendor before answering them. The first question is, "Are you currently sending HL7 files to the registry?"

If you are participating in unidirectional batch file data exchange, then your answer to this question should likely be "yes". Otherwise, answer "no". Is your facility and EHR ready to participate in BiDX? You should only answer yes if you have all the necessary technical capabilities for BiDX in place, your EHR has all of the necessary updates installed, and you are able to send and receive SOAP messages. If, for any reason, your answer would be no, hold off on submitting your ROI until you can truthfully answer yes.

Which method of BiDX will your organization use? This is the question where you identify which BiDX features you will use. Your options are query only, or query and reporting. You'll choose query only. Query only allows your organization to request records and forecasts from the registry in real time. Your organization would NOT be able to report new or historical immunization records to the registry. Query only should only be chosen by organizations that do not administer immunizations, like some schools or health plans.



The final section of the bidirectional ROI is the Electronic Signature. The ROI may be signed electronically, or printed, signed, and then scanned as a PDF. The ROI should be signed by the primary contact person or another individual authorized to do so by your organization. This signature secures your confirmation that the information provided is accurate and your organization's agreement to follow all registry policies for data exchange. The finalized and signed ROI must be emailed to ImmTracMU@dshs.texas.gov.

Once received, the registry will begin processing your signed ROI. Processing is typically completed within 3-4 business days. The registry may reach out to your primary contact person with follow-up questions, so they should be prepared for communication. Once the ROI has been processed, the registry will reach out to the primary contact person to provide them with instructions on the next steps and timeframes for testing.

Once you've received the ROI, it will also be time to prepare for testing. Bidirectional data exchange testing ensures that your connection to the registry is set up and working correctly, your HL7 messages are formatted correctly to successfully request records, your EHR is working the way you expect, and your workflows are ready for BiDX. Your goal during bidirectional data exchange testing is to complete all testing scenarios without errors.

In order to begin testing, your organization will need to identify your BiDX testing team. Your team must consist of a mix of staff from both your organization and your EHR vendor. Your EHR vendor cannot conduct all of the testing for you, nor should you attempt to test without your EHR vendor's involvement. This is a joint effort. Your team should include subject matter experts, often called SMEs, who are familiar with your EHR and immunization documentation.

This team must be available for 1 week of testing. This includes availability to run test scenarios, troubleshoot, and attend any meetings that may be needed. You must also identify who on your team will need access to view records in ImmTrac2 Test. This will likely include your SMEs. You will need to share this information with the registry so that their testing accounts can be set up.

In addition to identifying your testing team, you must also ensure that your EHR is fully prepared for testing BiDX functionality. All necessary updates are in place, and new hardware needed has been installed, and the interface settings are ready to be configured. Once your team has been identified and you've confirmed that your EHR is ready to go, the registry will provide you with a number of resources for testing.



Your webservice credentials for testing will be sent to your POC. This includes the webservice URL for connecting to the registry's testing environment. Your EHR will need to configure your interface settings with this information. Individual ImmTrac2 test account information will be sent to the people you identified as needing access. Your entire testing team will be sent the test plan and the test patient list.

The test plan contains a list of all scenarios that must be tested by your organization. Each scenario must be completed successfully at least once. The test patient list contains a list of specific patients you will use for testing. QBP-only organizations will be provided a full list of patients needed for testing.

Now let's discuss the types of test scenarios you will encounter. And one quick note before we begin. While the registry will provide you with a list of testing scenarios that must be completed, your organization is free to conduct any additional testing you feel is necessary during your testing window. The first test all orgs will be asked to perform is a connection test. A connection test is a simple test where your EHR will send a single message to confirm that your EHR is able to connect to the registry, and your webservice credentials are correct.

Next, you'll begin QBP, or query, testing. During the QBP testing, you will send query messages for each of your test scenarios. You'll then review the response you received from the registry for any errors. You'll review the records that were received in your EHR to ensure they look correct, and then you will compare those results to what is recorded in ImmTrac2 Test.

For troubleshooting, the most useful tool at your disposal is the Data Exchange Error Guide. The guide contains a complete list of all errors returned by the registry, and an explanation of what each means. The guide also suggests solutions to many common errors. Once you understand the error you are receiving, the first step you should often take is to review your documentation and double check the scenario you are running to make sure there are no errors in how you performed the test.

You should also review all errors with your EHR vendor. There may be changes they can make that you do not have access to. Finally, if you and your EHR vendor are unable to resolve an error, contact the registry for assistance.



And now we'll cover how to complete testing. As you draw near the end of your testing, your organization should begin planning your intended "go-live" date. That is the day you plan to begin requesting real patient records from ImmTrac2 via BiDX. Communicate this goal with the registry. The registry will need to know how many records you plan to request when you first go live, and how many records you will request on average after that.

The registry will need this information before approving your go-live date. Once you have successfully completed all of your test scenarios, you will contact the registry to request review and provide a complete list of your testing results for each scenario. The registry will then validate your test results. If the registry is satisfied, your team will then be notified that you have successfully completed testing.

Once you've finished testing and agreed to a go-live date, you'll be ready to go into production. So, what is BiDX production? Production is the final stage of bidirectional data exchange. When you are in production, your BiDX connection with the registry is live. You will be requesting real records from the registry in real time. There will be no more need for any test records. You will have a continuous, live connection to request records whenever you need.

In order to set up your live connection for production, you will need a new set of production webservice credentials. Your production credentials will be securely emailed to the registered point of contact. This email will also include the production webservice URL for your interface team. At the same time, all of your testing credentials will be disabled. This includes any individual ImmTrac2 testing accounts.

Confirm your "go-live" date with the registry and communicate if the date changes for any reason. When you go live, you will begin your first "batch load" record request on your go-live date. This will be a full request for all of your members. Begin sending ongoing record requests as needed. The registry typically requests that you break up your requests monthly or quarterly instead of annually to even out the impact of your record requests.

From this point on, the registry will send you back the records you request in real time. Your organization will be responsible for regularly monitoring and maintaining your BiDX connection and messages. Regularly monitor your BiDX activity. Make sure messages are being successfully sent and received by your EHR. Have a process for reviewing and addressing any errors returned from the registry. If you ever need assistance addressing errors, please reach out to the registry for help.



Now let's finish by reviewing some of the resources that are available to you from the registry. The ImmTrac2 website is where you can submit and check the status of your site registrations and renewals. The DSHS website is where you can find all of our latest announcements, our contact information, and a wide variety of documents and training materials to assist you with using our system.

Related resource guides include The Informational Guide on Bidirectional Data Exchange, stock number 11-15957 -- describes the process of establishing and maintaining a bidirectional data exchange connection with the registry. The Bidirectional Readiness Checklist, stock number 11-15235, is the document we reviewed earlier in this presentation. It lists all of the requirements you'll need to meet to begin HL7 data exchange with the registry.

The Texas Immunization Registry HL7 2.5.1 Implementation Guide, stock number 11-14872, contains detailed descriptions of the HL7 customizations needed to transmit HL7 records to the registry. This document is intended to be used as a companion to the CDC's standard HL7 2.5.1 implementation guide. The HL7 2.5.1 Error Guide, stock number 11-15703, which provides guidance on all the data quality errors our system produces, and detailed instructions on how to resolve the 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 our DSHS Texas Immunization Registry website. All of these documents and more can be found on our forms page at www.dshs.texas.gov/immunize/immtrac/forms.shtm.

You can request support by emailing the Texas Immunization Registry. The registry has two email addresses. Email us at ImmTrac2@dshs.texas.gov for questions about ImmTrac2 access, site registration and renewals, adding or removing users, training, or publications. Email us at ImmTracMU@dshs.texas.gov for questions on data exchange, promoting interoperability, or data quality reports.

This concludes our presentation on HL7 data exchange. Thank you, from the Texas Immunization Registry. As mentioned earlier, next week we'll be hosting a presentation by Blue Cross/Blue Shield, where they'll review the onboarding process from the perspective of a health plan that has successfully onboarded for HL7 data exchange with the registry. If you haven't already, be sure to register for that presentation. With the remaining time, we'll begin answering some of the questions you submitted during the presentation.



>> Mbungkah: The first question, we would like to know details and examples of SOAP messages, authentication details, and anything else. What can be the frequency schedule for sharing messages via webservices? For example, can we send member data via webservices monthly, once?

>> Rodriguez: So, the frequency would be based on your organization. You can send it monthly, annually, or bi-annually, I believe. And as far as examples for testing, those are released once you begin testing.

>> Mbungkah: Another question, why do health plans need an EHR vendor? It is my understanding health plans will only be requesting data from the registry. And you are correct. Health plans don't necessarily need an EHR vendor, but you need to make sure that you have the bidirectional capabilities to query our system in real time. So, some health plans do have EHR vendors, some do not.

If you're one of the organizations that do not, you just need to make sure that you still have the ability to query our system in real time using SOAP. I don't see any more questions. We'll give it a few more seconds just to see if any other questions come in. Okay. Someone says they have questions. I think they're typing. We'll give them a few minutes.

Can we get a sample SOAP message for inbound and outbound processes?

>> Rodriguez: If you go on our DSHS website, the bidirectional . . . I forget which one it is.

>> Mbungkah: Readiness checklist.

>> Rodriguez: The information guide on bidirectional data exchange will show a sample of a SOAP message.

>> Mbungkah: Where can the requirements be found for health plans who do not have an EHR vendor?

>> Rodriguez: Again, the requirements would be the same. So, you would use that bidirectional readiness checklist.

>> Mbungkah: Yeah, so I think they're referring to the specs. You would need to utilize the CDC specs for HL7 2.5.1, as well as our implementation guide we have on our website. I can definitely link those below in the chat here shortly as well. What is the last date to implement BiDX?

>> Rodriguez: That would be June 1st.

>> Mbungkah: And that is for IHQ submitters. We'll give it a few more seconds to see if any additional questions come in. Someone else is asking

for a moment to type, so we'll give it a few more minutes. And again, as Yiuliana stated, we will be having another webinar next week with Blue Cross/Blue Shield, where they will be able to provide more guidance on how the testing process was for them, and they'll be able to answer a lot more technical questions for you guys as well.

My health plan is part of the hospital system. While we are two separate entities, can we share BiDX?

>> Rodriguez: So that depends. If you are a parent/child relationship, yes. If you are separate entities, then no. You would have to each have y'all's own BiDX.

>> Mbungkah: And then someone is asking to post the link below for next week's presentation. I will post it below for the URL for where you can register in a few minutes. Someone is saying that one of the guides that we listed on the page does not exist. Yiuliana, can you go back to your slide real quick that contains the numbers for the guides? Yes.

That's our implementation guide. Let me check on that real quick. So, it should be 97. Sorry. On there for the implementation guide, it should be a 9 instead of a 8. So, thank you for catching that. We'll make that edit as well on our end. Someone is asking -- let me see. Is there any deadlines or requirements to migrate from unidirectional to bidirectional?

>> Rodriguez: So, for IHQ submitters, the registry will stop processing your IHQ files at the beginning of next month. So, we are asking health plans, if they are able to, to go ahead and inquire about onboarding for BiDX, because we won't be processing your files anymore next month. And as far as for hospitals or clinics, we do not have a timeframe.

>> Mbungkah: Will there be a format for interoperability? There's no requirement to use FIRE. Our requirement is for organizations to be able to use HL7 2.5.1, so there has been no talk at the moment of using FIRE or making that a requirement for now. I'm going to be pasting below a link for next week's webinar, so you can register on there. We have webinars on the 17th, 24th, and 28th, and that is all with Blue Cross/Blue Shield.

And then someone is asking for technical documents giving details on making webservice calls and reading responses. So, if you would like to email us at the ImmTracMU@dshs.texas.gov, we can definitely provide you more. But our documentation is the same one that the CDC uses with no variance, really. The only variance would be with a few fails that you would utilize our ImmTrac2 as well.

Once you email us, we're going to provide you with links to the documentation guides on the website, and that of the CDC as well. Someone is asking if we can show the slide at the beginning that has the link for where they're able to get this presentation deck. I'm guessing they're referring to the transcript.

>> Rodriguez: Which slide?

>> Mbungkah: The very first slide.

>> Rodriguez: This one?

>> Mbungkah: I think it's talking about the link for the -- right there, closed captioning. And then another question is, if we submit monthly, can we switch frequency of submissions after June 1st if we are not ready?

>> Rodriguez: I believe so. Is that correct, Eunice?

>> Mbungkah: So, I'm thinking they're referring to IHQ submissions. Again, come June 1st, the registry will no longer process those files. So, organizations who transition to bidirectional will be able to query our system in real time, which means they can query the system every day if they need to. If you're an organization that just wants to have a specific date, like at the end of the month, you can do that as well. It's up to you and your organization what workflow works best for you.

And when will the transcript and presentation be available on the site?

>> Rodriguez: They're usually posted within a couple weeks.

>> Mbungkah: All righty. And that looks like it's the last question.

>> Rodriguez: Okay. Thank you, everybody, for joining our presentation. And we look forward to hosting our next one, next week. Thank you.

[End of Session, 1:50 p.m. CT]