

HL7 On-boarding

Objectives: At the completion of this section, the learner will know the:

- HL7 on-boarding process prerequisites
- Three phases of the on-boarding process
- Maintenance requirement for sustaining an HL7 interface with ImmPRINT

In order to have an HL7 interface with ImmPRINT, sites must meet certain criteria. These criteria include: prerequisites, the three phases of on-boarding, and the maintenance requirement to sustain an HL7 interface. This process is available and detailed in the “ImmPRINT On-boarding Roadmap”

<file:///C:/Users/im1pthom/Desktop/OnboardingRoadmap02.02.2018.pdf>. Sites can also use the following checklist as a tool and resource to navigate the on-boarding process.

Registration	HL7 Interface Interest Email	Testing	Pilot	Production-GO LIVE
<input type="checkbox"/> Complete ImmPRINT Site Enrollment Agreement (SEA).	<input type="checkbox"/> Notify ImmPRINT about the HL7 interface interest by sending email at imprint@adph.state.al.us with primary poc details (name, email, and phone), site details (name and address), and the EHR details (ehr product and contact name, email, and phone).	<input type="checkbox"/> If your EHR is still in Testing with ImmPRINT, wait for your EHR to pass the Testing.	<input type="checkbox"/> Share the pilot connectivity credentials provided by ImmPRINT with your EHR.	<input type="checkbox"/> Share the production connectivity credentials provided by ImmPRINT with your EHR.
<input type="checkbox"/> Complete ADPH Security Portal Meaningful Use Registration.			<input type="checkbox"/> Wait for your EHR to establish Pilot connection.	<input type="checkbox"/> Participate in a Production Kick Off Call.
			<input type="checkbox"/> Participate in Immunization Data Transmission Demo Session	<input type="checkbox"/> Maintain ongoing submission of live quality data.
			<input type="checkbox"/> Maintain ongoing submission of live quality data in Pilot.	<input type="checkbox"/> Review and correct errors.
			<input type="checkbox"/> Review and correct errors.	
			<input type="checkbox"/> Wait for approval for Production-GO LIVE from ImmPRINT.	



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Prerequisites

Like any other ImmPRINT site, the first steps to establishing an HL7 interface is completing the Site Enrollment Agreement (SEA) and identifying a site administrator (SA) and users. Please refer to the ImmPRINT Basics section of the manual on details and further instructions on these topics.

The primary difference between HL7 sites and non-HL7 ImmPRINT sites is the role the practice's electronic health record (EHR) system plays in submitting data to the registry. All HL7 sites must have an EHR system. The Alabama Department of Public Health (ADPH) does not suggest or make recommendations on which EHR product a site should use. The selection of an EHR product is based on the needs and means of each individual site. However, below are questions we advise sites to ask their current or potential EHR vendor to ensure it is compatible to meeting ImmPRINT's HL7 standards.

EHR Vendor Questions

- Has the EHR passed Testing and signed a Data Sharing Agreement (DSA) with ImmPRINT? ImmPRINT's DSA can be viewed at <http://www.alabamapublichealth.gov/immunization/assets/immprintdsa050117.pdf>. A list of EHR vendors with a signed DSA with ImmPRINT can be viewed <http://www.alabamapublichealth.gov/immunization/immprint.html>.
- Can the EHR product send messages in real-time? ImmPRINT defines real-time messages as those received into the system in 8 seconds or less after being sent.
- What is the estimated time lag for data transmission? ImmPRINT requires real time transmission.



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- Does the EHR product have bidirectional functionality?
- Can the product send delete messages?
- If needed, can the EHR transmit all the vaccine records present in the EHR prior to the interface setup?

Again, these questions are what we recommend sites ask their EHR vendor in regards to transmitting data directly to ImmPRINT. These questions can only be answered by the vendor, as neither ImmPRINT nor the HL7 teams can attest to an EHR's product functionality or capability.

All sites must register in the ADPH Security Portal/Meaningful Use (MU) at <https://dph.state.al.us/adphsec/Login.aspx>. Neither the ImmPRINT nor HL7 teams are a part of the ADPH Security Portal/MU team. Therefore, if you have issues or questions about registering in the portal, please contact the ADPH Security Portal/MU team <https://dph.state.al.us/adphsec/contacts.aspx> for assistance.

The final prerequisite to establishing an interface is to send an "HL7 Interface Email Notification" to ImmPRINT. To ensure your email gets routed to the HL7 team promptly, please follow these steps when compiling your interest email:

- The email's title/subject line should read: HL7 Interface Request
- The email's body should provide:
 1. Site name and address (**NOTE:** ImmPRINT recognizes sites according to their distinct physical address, and not by their organization affiliation. So, if the organization has several sites, information for each individual site must be provided)



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2. Primary point of contact details (name, phone, and email) for each site
3. The name and contact information for the staff member responsible for the on-boarding process
4. EHR Vendor Details (EHR product, vendor contact-name, email, phone)

➤ Send your email to imprint@adph.state.al.us.

An HL7 team member will follow-up with you to detail and discuss the information submitted, as well as the three phase on-boarding process.

On-boarding Process

The three phase on-boarding process includes: testing, pilot production, and production. It is important to remember that these phases also represent three different environments that do not communicate with each other. As sites progress through the on-boarding process, they will be using only one of the environments at a time. Both the site and EHR vendor have a role in these phases.

Phase 1: Testing

EHR vendors are responsible for the testing phase, but testing is required only once per EHR product. Refer to Appendix A (pgs. 4-5) of the ImmPRINT On-boarding Roadmap <http://www.alabamapublichealth.gov/immunization/assets/OnboardingRoadmap02.02.2018.pdf> for details on the testing phase. Only after successful completion of EHR testing will associated sites be permitted to proceed to phase two. Please contact your EHR vendor and inquire about their testing status with ImmPRINT.



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Phase 2: Pilot Production

The Pilot Production phase involves the site submitting patient data to ImmPRINT's "Pilot" environment. This allows the HL7 team to monitor a site's data more closely for quality and errors. Again, ImmPRINT recognizes sites according to their distinct physical address, and not by their organization affiliation. Therefore, each individual site under a shared organization **MUST** complete the Pilot phase. Sites will be served on a "First come, first serve" basis. ImmPRINT's HL7 team will provide Pilot Connectivity Credentials to the site through the ADPH Security Portal. The site must then share the credentials with their EHR vendor, as ImmPRINT **will not** provide credentials to any vendor. The vendor must establish the real-time connection to ImmPRINT Pilot, and notify both ImmPRINT and the provider when the connection is established. Site and vendor staff who are responsible for monitoring the data feed during the pilot phase must register with ImmPRINT Pilot by creating a new user account at <https://siis.state.al.us/ImmPRINTPilotProd/Login/login.aspx>. Remember the Pilot environment is separate from the testing and production environments. The Pilot environment has a green banner and blinking red box around "Pilot". Once all of this is in place, both the site and vendor must participate in an Immunization Transmission Demo Session.



The Immunization Transmission Demo Session is an online conference call between the EHR vendor, site staff, and an ImmPRINT HL7 team member(s). The site staff must



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demonstrate how their EHR will capture and transmit immunization information to the registry. During this call, the site will have to share their EHR screen while entering real patient immunization data (historical and administered) in the EHR. The Pilot environment only accepts real patient data. In preparation for the demo session, site staff must set aside a minimum of three undocumented vaccinations that will be used during the live demo session. Therefore, the first time the site staff will be documenting these vaccines will be during the demo session. These vaccines must be a combination of both historical and administered vaccinations. The vaccinations can be for the same or different patients. Although not required, we recommend that the vaccinations be of different vaccine types. It is to the sites discretion to determine when they will have the minimum five vaccines ready for the demo session, as they know their clinic's patient flow and practices. During the demo session, ImmPRINT will confirm and address any errors that occur during data transmission. Lastly, the site and vendor will be educated on the various HL7 Reports. Please see the Report section of this manual for further details about the required HL7 reports.

After successful completion of the demo session, the site will be officially placed in Pilot. Pilot duration is usually 30-90 days. The pilot phase may extend beyond 90 days depending on the data quality. The site needs to achieve and continue to adhere to the established data quality criteria before moving to Production -Go Live. Criteria for data quality include

- Sites that report “large volume” of data (e.g., large Pediatric Clinics) must maintain $\leq 10\%$ data errors, $< 15\%$ warnings, and 0 technical errors.



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- Sites that report “small volume” of data (e.g., Internal Medicines) must maintain $\leq 5\%$ data errors, $< 25\%$ warnings, and 0 technical errors.

Phase 3: Production-Go Live

Only after a site successfully demonstrates the defined data quality standards will it move to the third a final on-boarding phase, Production-Go Live. In this phase, sites will begin transmitting data to the ImmPRINT registry, or the Production environment. ImmPRINT will provide Production Connectivity Credentials to the site through the ADPH Security Portal. Again, the site is responsible for sharing those credentials with their vendor. The vendor must establish the real-time connectivity to the registry, and notify ImmPRINT and the site upon establishing the connection. The EHR vendor is expected to send Pilot data to Production once given approval by the ImmPRINT/HL7 team. In order to monitor the data in ImmPRINT, both the identified site and vendor staff must register as users in ImmPRINT-Production. Production is a separate environment from testing and pilot, as the production environment has a blue banner.



Lastly, a Production Kick off Call will be scheduled, and the applicable site and vendor staff are required to attend. The Production Kick off Call is a short 15 minute session to answer any questions about ImmPRINT/HL7 and establish points of contact for ImmPRINT, ADPH Immunization field staff, the site, and the vendor. After completion of the



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call, the site will officially be transmitting data into the registry. As with the Pilot environment, sites must **ONLY** transmit real patient data into ImmPRINT.

Maintenance

Even though a site has moved into production, ongoing transmission and monitoring of data is expected from the site and vendor. If any inaccuracies or issues are found, vendor and site staff should notify ImmPRINT immediately to work through the issue. ImmPRINT will also monitor the data on a periodic basis and notify site and vendor staff regarding the errors or issues. Sites failing to resolve the issues or errors in a timely manner may be reverted to the Pilot environment. Also if there any changes to the site's name, location, and/or contact information, it should be reported to ImmPRINT promptly immp rint@adph.state.al.us. If at any time the site has decided to switch to a different EHR vendor, it is the site's responsibility to notify ImmPRINT by submitting a "Provider Guidelines for Switching Vendor" form <http://www.alabamapublichealth.gov/immunization/assets/switchingvendorguidelines.pdf> to immp rint@adph.state.al.us.



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