Pennsylvania Immunization Electronic Registry System (PIERS) HL7 Testing FAQ:

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Document Purpose

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The Pennsylvania Immunization Registry is excited to announce our upcoming transition to a new Immunization Information System (IIS), named Pennsylvania Immunization Electronic Registry System (PIERS). We are on target for implementation in January 2024.

PIERS will utilize WebIZ™ which is a web-based, database-driven immunization registry developed by Envision Technology Partners, a trusted company with over 20 years of experience in public health and technology. The platform is recognized as a leading IIS. WebIZ™ is currently utilized by 19 jurisdictions in the United States, including PhilaVax, the Philadelphia Department of Public Health's IIS. It was designed to meet the national standards for effective tracking and administration of immunizations in the public health setting.

Testing the new system and HL7 connection is critical to ensure that all providers transition to the new system seamlessly. We are excited to welcome you to the HL7 testing phase prior to onboarding in production in January 2024.

The HL7 Testing FAQ provides questions and answers to frequently asked questions over the course of PIERS HL7 Testing, Onboarding, and Implementation.

Glossary and Acronyms

Glossary

Term/Acronym	Definition
EHR	Electronic Health Record
EMR	Electronic Medical Record
Envision	PIERS Vendor
Facility	Any provider, healthcare entity, or other organization that participates with the Registry
PIERS	Pennsylvania Immunization Electronic Registry System
PII	Personally Identifiable Information
WebIZ	PIERS IIS Application
QBP	Query By Parameter
VXU	Unsolicited Vaccination Record Update

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Frequently Asked Questions

1: Did we receive facility codes for Testing HL7 Submissions?

Facility Codes for PIERS are the same as existing PA SIIS Clinic Codes reformatted to be 8 characters in length and include a preceding 'PA' followed by leading zeroes. For Example: a facility with the existing SIIS facility code of '1234' would submit testing messages to PIERS with the facility code 'PA001234'. Further examples are outlined in the HL7 Testing Guide Document that was included with the kickoff email sent to providers in September.

2: Is my facility required to participate in HL7 Testing?

If you plan to utilize HL7 messages to the state in the future, then yes, testing and onboarding are required. If you do not plan to transact information with the state via HL7, then no, testing and onboarding are not required.

3: What is the endpoint for HL7 connectivity for onboarding?

The correct endpoint for the PIERS QA environment is:
https://vaccines.health.beta.pa.gov/hl7engine_qa/CDC/V1/IISService.svc

4: When is Go-Live for the new PIERS System?

Go-live for the new system is set for January 17, 2024.

5: Will the new PIERS system require different HL7 credentials?

For HL7, the PIERS system will utilize the same credentials as SIIS.

6: Do all vaccinations administered at the same time need to be included in the same message, or are we able to split them into separate messages?

The system is capable of processing individual messages without creating duplicate patients. It is possible to split up messages if you prefer.

7: Does our IP need to be whitelisted to submit messages to PIERS?

No, we do not currently block IP addresses from the PIERS HL7 endpoint. If you experience issues with the endpoint accepting messages, please reach out to your registry specialist for assistance.

8: I didn't receive introductory information and credentials for PIERS HL7 Testing, who do I reach out to?

Please check with relevant staff within your organization to confirm that it has not been sent. If not, please reach out to the PIERS support resource account at RA-DHPIERSSUPPORT@pa.gov and include your SIIS Clinic Name and Clinic ID.

9: Is there any expectation of when HL7 Message Testing needs to be completed?

The hard deadline is January 10, 2024. We encourage all facilities to complete testing as soon as possible to ensure a smooth transition and minimal disruption when we officially activate the new system.

10: Will there be a parent facility code for a practice with multiple locations?

Yes, the currently existing hierarchy for facilities with parent-child relationships is being directly migrated to PIERS. Parent-Child relationships will be expressed in PIERS in the same way as they are in SIIS. The primary difference will be in the new format for facility codes outlined in the testing guide.

11: Will there be a parent facility code for a practice with multiple locations?

Yes, the currently existing hierarchy for facilities with parent-child relationships is being directly migrated to PIERS. Parent-Child relationships will be expressed in PIERS in the same way as they are in SIIS. The primary difference will be in the new format for facility codes outlined in the testing guide.

12: Can we send production data to the test environment and request that the program removes it?

No. Please do not send any production data/PII to any test environment operated by the department.

13: What happens if we do not complete testing by the time the new system goes live?

In this case, providers will be able to queue their messages until testing is complete. Queued messages must be formatted correctly for PIERS (outlined in the HL7 Testing Guide).

14: Is this required? Do we need to connect to the new immunization registry?

No. Participation in Pennsylvania's immunization registry is voluntary. If you do not wish to participate in the registry, or if you would like to delay participation, please simply inform your registry specialist that you are not interested in testing/participating.

15: Are there any further changes required after testing is complete?

Once testing is complete and the new system is live, you will need to adjust the endpoint to the production environment. This address will be provided closer to the go-live date.

16: Will we be able to query patient records during the week that SIIS is down, and PIERS is not yet live (Jan 10 – Jan 17)?

No. The SIIS web application will be available to view patient records, but HL7 querying will be deactivated during this time. We recommend that providers query patient records via HL7 ahead of time for the week of Jan 10 – 17, please perform these queries beforehand.

17: We are using HTTPS Post, do we need to switch to SOAP in order to submit HL7 message transport?

I've included a high level definition below of how the SOAP can by used over any transport protocol, like HTTPS. So there is no decision between using SOAP or HTTPS Post as Post is how they will send the SOAP.

The Simple Object Access Protocol (SOAP) is a lightweight information exchange protocol that uses XML as a message structure. SOAP can be used for communication between systems regardless of programming language, and it can be used over any transport protocol (e.g. TCP, HTTP, SMTP). 3 This reference focuses on SOAP version 1.2, which differs from SOAP 1.1 in certain cases of syntax and semantics. For more on the differences between the two versions, visit (https://www.w3.org/TR/soap12-part0/%23l4697#L4697).

18: Additional information regarding PIERS response codes in ACK messages

The following acknowledgment codes are the standard message result codes returned in the MSA segment. Please refer to the table for what these codes indicate. These codes inform the sender of the general message health/comprehensiveness.

Value	Description	Comment
AA	Original Mode: Application Accept *Enhanced mode not supported.*	Indicates the message was accepted and processed, and no errors or warnings were generated.
AE	Original Mode: Application Error *Enhanced mode not supported.*	Indicates the message was accepted and processed, but one or more errors or warnings were generated.
AR	Original Mode: Application Reject *Enhanced mode not supported.*	Indicates one or more significant errors occurred and the message was rejected (i.e., it was not processed by the IIS). This is reserved for one of four cases: Unsupported Message Type, Unsupported Event code, Unsupported Processing ID and/or Unable to process for reasons unrelated to format or content.

The following custom ACK codes are communicated back via the ZSA segment and offer further clarity into errors.

- AA Application Accept – Good message with no problems. Mirrors the definition of AA in HL70008
- AI Application Information - One or more ERR segments returned with at most a severity of I for Information
- AW Application Warning – One or more ERR segments returned with at most a severity of W for Warning
- AE Application Error – One or more ERR segments returned with at most a severity of E for Error
- AF Application Fail – Message Failed to execute. This occurs for critical errors which prevent the message from being able to execute. For example, missing patient name, missing/invalid DOB, etc.
- AR Application Reject - this mirrors the definition of AR in HL70008.

19: if a blank is sent in NK1:3, does the whole message fail or just that field?

Sending in as blank will not fail the entire message. The patient and immunization will process, and the next of kin information will still be saved in Patient Contacts as relationship type: Other

20: Are Client-side certificates required?

We do not require any certificates on the client side.

In technical terms, there are no client certificates, or mTLS.

Providers will need to trust our site (HTTPS) and supply a username and password in the request to the CDC WSDL endpoint.

21: Is Funding source required in VXUs?

If sending an administration, including funding source is highly recommended. A submission without a funding source will still be accepted but will return an informational warning indicating the missing field.

22: What should Providers plan to do with HL7 messages for the week that SIIS will be inactive before the PIERS go-live date?

Please query patient records ahead of time based on your appointment schedule. For vaccine administrations, please queue all messages in preparation for activation of the PIERS production endpoint. Please ensure that all messages queued are in the correct format to be processed by PIERS following go-live.

23: Clarification on QBP Testing Step 3 – Multi-Patient Expected returns.

The expected results will be dependent on how you are currently handling multi-patient results with PA SIIS. Providers should plan to test functionality in accordance with their current EMR capabilities. If it is not part of your process to perform a second step when multiple patients are returned, then we do not expect you to test this step. If you plan to skip this step, please inform the registry specialist reviewing your submissions.

24: PIERS web application training and registration questions.

For questions related to the PIERS web application, please reach out to the PIERS support resource account.

25: What is the PIERS WSDL endpoint?

https://vaccines.health.pa.gov/hl7engine_prod/Cdc.aspx?WSDL

26: Should a facility throttle the volume of messages that it sends to PIERS?

We ask providers to keep any active throttling of HL7 messages that providers are utilizing with PIERS. If you are currently throttling the message volume that you send to SIIS, please keep that in place. We do not expect issues with PIERS being able to process high volumes of messages, but we would like to minimize any potential issue with a high volume of messages at go-live.