

NMSIIS HL7 Onboarding Checklist and Guide

Version History:

Version	Date	Notes
1.0	09/26/2023	K Cruz

Onboarding Checklist:

This checklist is intended as a resource for vaccine provider organizations to reference and complete on their own.

This checklist is for you if your organization falls into one of the categories below:

- Administers vaccines in New Mexico or would like to query patient immunization histories within our jurisdiction
- Already connected with the New Mexico Statewide Immunization Information System (NMSIIS) but is switching Electronic Health records (EHR) vendors or health IT systems
- Managed care organization looking to bulk query with HL7

An electronic interface between your organization’s EHR and NMSIIS supports on-going, real-time transfer of data between these systems. Once established, the interface connection supports the submission of immunization record information from the provider organization to NMSIIS. It can also support querying NMSIIS for patient immunization histories and forecasts, without leaving the EHR/health IT system workflow.

If you are interested in data exchange with NMSIIS, work with your technical vendor to review and complete the steps below to ensure your system is capable of electronic exchange with NMSIIS and your organization is prepared for the onboarding process.

If you have any questions, please reach out to the NMSIIS interoperability team.

- 1.** Reach out to the NMSIIS team at (833) 882-6454 or NMSIIS.Access@doh.nm.gov to begin the process of becoming a data exchange participant
- 2.** The NMSIIS Data Exchange (DX) Coordinator will provide you with the following required documents to complete and return:
 - o NMSIIS Organization Agreement (if necessary)
 - o NMSIIS User Agreement (if necessary)
 - o Provider and EHR Information Sheet

***Note:** If there is more than one location that will be onboarding for data exchange, you will need to complete a form for each location.
- 3.** The NMSIIS DX Coordinator will process all required documentation and send a secure email to the participating location and EHR vendor point of contact. This email will also include:
 - o Interface access credentials (Facility ID and Pin #) via
 - o URL for submitting test data to NMSIIS
 - o NMSIIS HL7 Transmission Guide

- NMSIIS HL7 Error Troubleshooting Guide.
- **4.** Your EHR will “map” the required access into their interface and submit messages to our User Acceptance Testing (UAT) site
- **5.** The “testing phase” will occur until all requirements have been met. The NMSIIS DX Coordinator will respond with feedback on any errors or corrections necessary to ensure successful test messages and good data quality.
 - A minimum of 20 successful messages and/or queries must be sent to the UAT site
 - Testing should include a variety of messages
 - ***Note:** *NMSIIS does not provide test data or test cases*
- **6.** Once any identified errors have been corrected, your interface connection will move from the test environment to the NMSIIS production site.
 - The NMSIIS DX Coordinator will provide the Production URL and a “Go Live” date will be set for the transition to occur.
 - Please use the same credentials during the test and production phases.
- **7.** Ongoing monitoring of the location will occur. Should any of the message be rejected, the NMSIIS DX Coordinator will notify the provider and/or EHR vendor.
 - **Please note that at this point, manual entry into NMSIIS will no longer be allowed.** All information from the provider location should come be entered into the EHR and then will automatically be submitted to NMSIIS via automated data exchange.

HL7 Onboarding Guide:

Purpose: Process and activities for vaccine provider organizations to establish and test electronic data interface with the New Mexico Statewide Immunization Information System (NMSIIS).

Definitions:

ACK: Acknowledgement

Bidirectional Data Exchange: Two-way communication of data between entities. For the purposes of immunization data exchange, it is the two-way communication of data between a vaccine provider/EHR and the IIS. The provider can submit patient and vaccination data to the IIS and they can also query the IIS for existing patient or vaccination data to travel back to the provider's EMR or EHR. Bidirectional data exchange is beneficial to ensure both data sets are as current and complete as possible.

EHR: Electronic Health Record (EHR) is a digital version of a patient's paper chart. EHRs are real-time, patient-centered records that make information available instantly and securely to authorized users

EMR: Electronic Medical Records (EMRs) are a digital version of the paper charts in the clinician's office. An EMR contains the medical and treatment history of the patients in one practice

HL7: Health Level 7 (HL7) and it is a set of clinical standards and messaging formats that provide a framework for the management, integration, exchange, and retrieval of electronic information across different healthcare systems. Current standard for HL7 is v2.5.1.

IIS: Immunization Information System (IIS), or immunization registry (for NM, this is called NMSIIS)

Onboarding: the process of integrating a new vaccine provider to the IIS or to the data exchange process

QBP: Vaccination Query

Query: Request for data from a vaccine provider/EHR to the IIS for existing patient or vaccination information

RSP: Vaccination Response

Unidirectional Data Exchange: Data shared in one direction. For the purposes of immunization data exchange, the data goes from the vaccine provider/EHR to the IIS only.

VXU: Vaccination Update

Onboarding Process:

The onboarding process involved four (4) main steps, outlined below. Each of these steps must be completed to successfully onboard and maintain a quality interface with NMSIIS. The time spent on each step will vary by provider based on the speed and success of their communication and testing.



Step 1: Complete readiness activities to prepare for onboarding and data exchange with NMSIIS including completed the required documentation and establishing communication with the NMSIIS DX Coordinator.

Step 2: Establish connectivity between the EHR/Health IT System and the NMSIIS UAT environment for testing. This includes receiving the credentials to connect with NMSIIS, mapping the URL and connection, submitting test data and troubleshooting to resolve any issues identified.

Step 3: After successful testing, set a “Go Live” date to move to the NMSIIS production environment. Begin submitting data to the production environment and troubleshooting any issues as needed.

Step 4: Conduct on-going monitoring of the interface. Address and troubleshoot any issues, as needed.

Query Only:

A query only interface may be developed to support facilities that don’t administer vaccines but need access to patient histories and vaccine forecasts (i.e. schools). The connection is supported through query and response (QBP/RSP) messaging. The onboarding process is similar to that of a data submission provider but may be shortened as testing processes are less extensive.

HEDIS:

The Healthcare Effectiveness Data and Information Set (HEDIS) is a collection of standardized performance measures for managed care organizations. The HEDIS query in NMSIIS can be run by any provider that creates a patient (or student) roster according to the HEDIS file specifications. The report runs overnight, and the export is a CSV file. All known immunizations for a patient will be provided in response to each request that results in a single record from the IIS, with one vaccination per line.

Changes to EHR Vendor:

If a provider location that is participating in data exchange with NMSIIS is changing EHR vendors, they must notify the NMSIIS DX Coordinator. The credentials for the location will remain unchanged and will be provided to the new EHR vendor. A date for the changeover will be set and additional monitoring will occur.

Annual Requirement:

Each year in March, **every** provider location participating in data exchange with NMSIIS **must** complete the Provider and EHR Information Sheet and return it to the Immunization Program via email (NMSIIS.Access@doh.nm.gov). This is to ensure that the Immunization Program has current, valid points of contact for all provider locations participating in data exchange with NMSIIS.

Data Exchange Providers that Utilize Rhapsody vs. “Point to Point”

There are currently two “types” of data exchange providers that communicate with NMSIIS. For the first type of vaccine provider, the data is sent from the provider/vendor, and then flows through Rhapsody, which is a web-based application. After making its way through Rhapsody, the data lands in NMSIIS on the patient’s records. The same process occurs for queries made to NMSIIS from the provider or vendor.

The second type of vaccine provider are called “point to point” providers and when the data is entered into the provider’s EHR, it bypasses Rhapsody and lands directly in the NMSIIS system. The only providers that are currently on this type of P2P process are the ones that utilize Athena or Greenway as their EHR vendor.

Outages and Server Downtime:

Occasionally, there is planned or unplanned outages, downtime, or connectivity issues with the Rhapsody and/or NMSIIS system. When this occurs, please notify the NMSIIS team immediately and we will begin to troubleshoot the issue. While the issue occurs, our team will communicate with all providers on the situation as well as estimated time for resolution.

Contact US

NMSIIS Help Desk:	(833) 882-6454
NMSIIS Access Email:	NMSIIS.Access@doh.nm.gov
NMSIIS Website:	https://www.nmhealth.org/about/phd/idb/imp/siis/
NMSIIS Data Exchange Webpage:	https://www.nmhealth.org/about/phd/idb/imp/siis/dte/