

Immunization QBP and VXU Event Message Flow to the MS Public Health Immunization Registry

Version 3.0

Table of Contents

Document Purpose	2
Document Version	2
Http POST URL.....	3
Connection Security	3
MIIX User ID & Password	3
MIIX Message Requirements	3
Building the Http POST Message	4
Using Charset	4
Sequence exchange to public Health Diagram	5
Exchange Requirements	6
Vendor Exchange Example.....	7
NextGen Healthcare.....	7
Common Error Messages.....	8
Diagram of HTTPS Exchange	9

Document Purpose

This document is designed to facilitate the collection and dispersal of information regarding the MIIX Immunization Registry integration. The intended audience includes technology leadership, data providers, vendors (e.g. Medicity, EMR Vendors) and the Mississippi Department of Health Immunization Registry (MIIX).

Document Version

Author	Version	Date	Comments	Status
Jeremy Hill	2.0	5/1/2015	Added troubleshooting information	Approved
Groves Powers	3.0	7/13/2017	Updated URLs New connection specifications	Approved

Http POST URL

The MIIX Certification Gateway (TEST) is available via the following URL:

<https://certimmunizations.ms-hin.net/HttpPostForwarder/>

The MIIX Production Gateway (PROD) is available via the following URL:

<https://immunizations.ms-hin.net/HttpPostForwarder/>

NOTE: A User ID, Password and Facility name are required for connection. Refer to section “Building the Http POST Message” for more information on constructing the URL.

For questions regarding connecting to the gateway, please contact MS-HIN at 601.977.8192 or via email: info@ms-hin.ms.gov.

Connection Security

MS-HIN has disabled SSL in favor of TLS for inbound connections. While prior versions of the Immunization Gateway supported TLS 1.0, this cryptographic protocol is no longer supported. All connections to MIIX must utilize either TLS 1.1 or 1.2.

MIIX User ID & Password

Each Facility/practice must complete the *MIIX User Agreement* located on the MSDH website, here: http://www.msdh.state.ms.us/msdhsite/_static/31,0,136.html. Upon completion, please return the *MIIX User Agreement* to the MSDH Immunization Program, Attention: Registry Coordinator. Once all MIIX documentation has been accepted, a User ID and Password will be assigned by the MIIX Registry Team.

MIIX Message Requirements

The Mississippi Immunization Registry has specific requirements field requirements for the HL7 message contents. The HL7 interface supports CDC standard immunization messages and is the recommended format for submitting immunization data to MIIX.

The Immunization guide may be found, here:

<http://www.msdh.state.ms.us/msdhsite/index.cfm/14,0,71,502,html>

A sample message is provided below for additional guidance:

```
MSH|^~\&|PRIMESUITE|1234^The Interop Family Clinic|Mississippi
Immunization|20131119132512||VXU^V04|Interop Clinic|P|2.5.1|||AL
PID|||101639^AMR||Duck^Donald|Duck^Momma|20130807|M||2106-3^white^h170005|195
Pond Water RD^^Jackson^MS^55555|(555) 555-5555|
(555) 555-5555|||||N^Not Hispanic or Latino^HL70189|||||N
PD1|||The Interop Family Clinic^1234|^Doo^Scooby^RN
NK1|63508|Duck^Papa|FTH
PV1|1|||||||V02
```

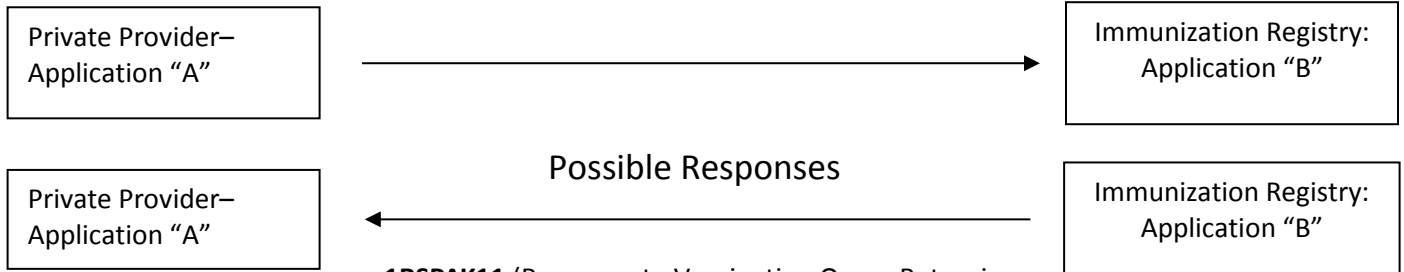
[Continued, Next Page]

Sequence exchange to public Health Diagram

QBP^Q11

(Query for Vaccination Record)

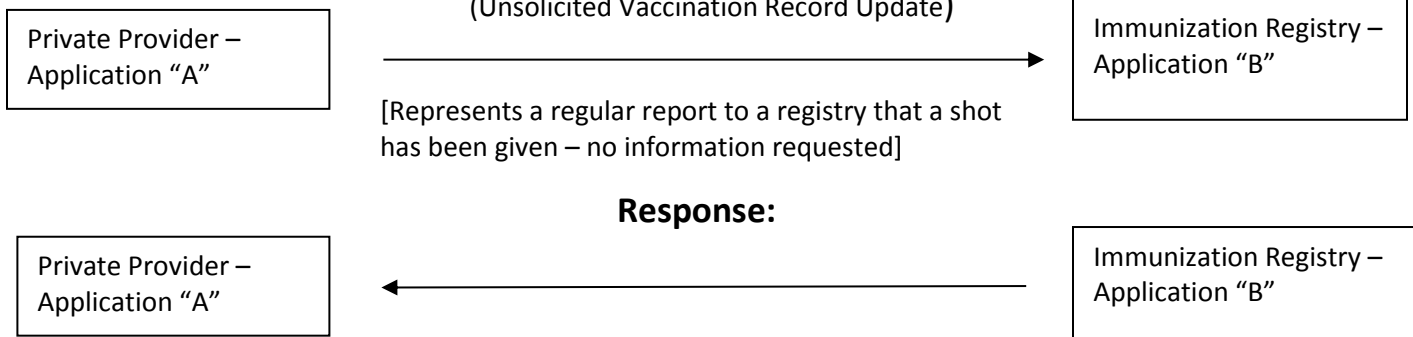
[Uses components in QRF-5 to match record]



- 1.RSP^K11** (Response to Vaccination Query Returning the Vaccination Record)
- 2. RSP^K22** (Response to Vaccination Query Returning Multiple PID Matches)
[Indicates several possible matches – No medical data returned]
- 3. RSP^K11** (General Acknowledgment)
[Receiving registry was able to receive the message. Can indicate errors]
- 4. QCK** (Query General Acknowledgment - no matching records)
[Receiving registry was not able to match patient]

VXU

(Unsolicited Vaccination Record Update)



[Represents a regular report to a registry that a shot has been given – no information requested]

ACK (General Acknowledgment)

[Receiving registry was able to receive the message. Can indicate errors]

Exchange Requirements

i. Message Payload Must Adhere to HL7 Version 2.5.1 Specification

Send records using the specifications outlined in *Implementation Guide for Immunization Data Transactions Using Health Level Seven (HL7) Standard Version 2.5.1*

ii. Transmission of Variable/Value Pairs via HTTP POST, Only

Ensure your connection is secured with TLS 1.1/1.2 encryption protocol, only.

iii. Required Fields

When transmitted, the HTTP POST payload must include the following fields, in order:

- USERID - Assigned by the MIIX Administrator
- PASSWORD - Assigned by the MIIX Administrator
- FACILITY – Assigned by the MIIX Administrator as required
- MESSAGEDATA - HL7 2.51 Message(s)

Required fields must be included in the prescribed order for processing: *USERID*, *PASSWORD*, *FACILITY* (as required), and *MESSAGE*.

NOTE: No testing may begin prior to issuance of User ID and Password to the participating organization.

iv. VXU Patient Identifier

Include your local patient identifier with all VXU messages.

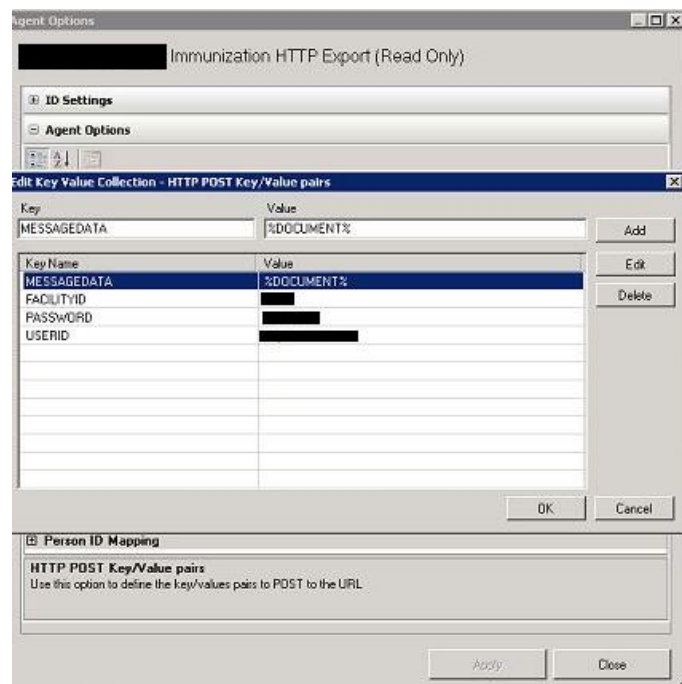
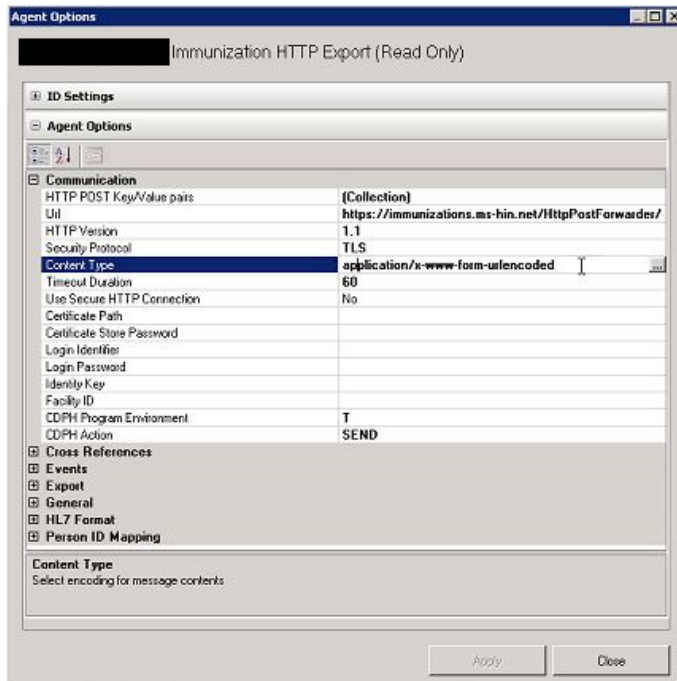
v. QBP Search Criteria

- Patient Identification as one of the following: *State Registry ID*, *Regional Registry ID*, *Local Patient ID/MRN*, *Social Security*, or *Medicaid ID*, or,
- Combination of *Patient First Name*, *Last Name*, and *Date of Birth*.

Vendor Exchange Example

NextGen Healthcare

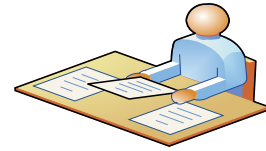
The following screenshots from Rosetta provide configuration guidance:



Common Error Messages

Error Message	Possible Solution
<p>HTTP 400: <i>The remote server returned an error: (400) Bad Request</i></p>	<p>This error is most often caused by a malformed URL. Check the URL and try again.</p>
<p>HTTP 500: <i>(500) Internal Server Error</i></p>	<p>This error may originate from either the MS-HIN Gateway or the MIIX Immunizations Registry. This is often an error in the message format which precluded processing. Verify message payload and try again.</p>

Diagram of HTTPS Exchange



Contributing Practice QBP and VXU

