Meaningful Use Stage 3: Citywide Immunization Registry Reporting Checklist

Requirements for eligible hospitals (EHs) and eligible professionals (EPs) attesting to Meaningful Use (MU)* Stage 3 were updated in the 2019 final rule. Beginning 2019, all EPs and EHs are required to use 2015 edition certified electronic health record technology (CEHRT) to meet the requirements of the MU Programs. For a list of requirements and checklist items for MU Stage 3 compliance with the Citywide Immunization Registry (CIR), see the MU Checklist below.

* NOTE: The Electronic Health Record (EHR) Incentive Programs were renamed Promoting Interoperability Programs in April 2018. For consistency with New York State Meaningful Use Registration for Public Health (MURPH) System, the CIR will continue to refer to the program as MU.

To meet the MU Stage 3 Immunization Registry Reporting Measure through active engagement with the CIR, EPs and EHs must have registered intent to submit data within 60 days of the start of the EHR reporting period (continuous, 90-day period within the calendar year) and be in one of the following statuses at the end of their EHR reporting period:

- Active Engagement Option 1 (Completed Registration to Submit Data)
- Active Engagement Option 2 (Testing and Validation)
- Active Engagement Option 3 (Production)

To become actively engaged with the CIR, complete the following steps:

1. **DETERMINE ELIGIBILITY**
   - Is the site an immunizing provider site or hospital? **If not, please select a different measure.**
   - Is the site registered with the NYC CIR and does it have a facility code? If not, register your practice online (select the “Citywide Immunization Registry (CIR)” checkbox).
     - CIR facility code is a unique identifier (7 character alphanumeric code) that is required to identify immunizing sites that report data to the CIR. It is also used to verify Meaningful Use compliance.
   - The EHR must be certified. A complete list of certified products can be found at: chpl.healthit.gov/#/search

2. **MEANINGFUL USE REGISTRATION**
   - Verify that your practice/organization has registered intent to submit data in the Meaningful Use Registration for Public Health (MURPH) System on the Health Commerce System (HCS) website.
   - If you have already registered, you do not need to re-register this year.
   - For complete instructions on registering intent to submit data, visit the Meaningful Use Public Health Reporting Website.

3. **ONBOARDING**
   - Submit a Healthcare Provider Confidentiality Statement
   - Contact the EHR vendor and provide the EP’s or EH’s CIR Facility Code to have the site connected to the CIR HL7 Web Service
   - Email cir_interop@health.nyc to ensure immunization messages are being received successfully
     - When reaching out to the CIR, EPs and EHs should include their name/practice name, facility address, EHR Vendor and CIR Facility Code.
MEANINGFUL USE STAGE 3 CHECKLIST

To satisfy the Immunization Registry Reporting measure (Public Health Reporting Objective) for Stage 3, EPs and EHs located in New York City must be actively engaged with the CIR for submission of immunization data in HL7 version 2.5.1 via the HL7 Web Service and must have established a bidirectional interface used to generate QBP evaluated immunization history and forecast query messages (based on the CIR HL7 Web Service Implementation Guide (IG) v 1.5).

Electronic Health Record (EHR)
2015 edition certified EHR technology (CEHRT), for Transmission to Immunization Registries (170.315 (f)(1))

Reporting (VXU) 2.5.1
Based on a gap analysis conducted, data completeness and accuracy of the items below will be important for Meaningful Use Stage 3 compliance.

- Adult patient consent
- Vaccine funding source
- History of disease as evidence of immunity
- Serological evidence of immunity
- Substance lot number
- Substance expiration date
- Substance manufacturer name
- Next of kin
- Phone numbers
- NDC codes for newly administered immunizations

Querying (QBP) 2.5.1

- Querying for immunization history, forecasting and recommendations
- Specific querying site

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1 NDC codes are not included in the current CIR HL7 Web Service Implementation Guide v 1.5. However, submission of NDC codes for newly administered vaccines is a Meaningful Use Stage 3 requirement. Technical guidance around submission of these values is included in this document.

2 Querying site is not included in the current CIR HL7 Web Service Implementation Guide v 1.5. Data exchange partners should start sending (or start making plans to send) this information.
The following pages provide guidance regarding the NYC CIR MU Checklist items. For additional technical guidance, please refer to the CIR HL7 Web Service Implementation Guide (IG) v 1.5.

### Adult Patient Consent

New York State Law requires either verbal or written consent in order to report immunizations for patients 19 and older to the CIR. The following HL7 fields are required to report immunization data for patients 19 and over:

- PD1-12 Protection Indicator – PD1-12 must be valued with ‘N’ to indicate patient consent to report to the CIR. If the patient does not consent, PD1-12 must be valued with ‘Y’ and should be filtered from immunization reporting.
- PD1-13 Protection Indicator Effective Date – PD1-13 should be valued with the date patient gave an answer for consent to report to the CIR.

**CIR IG reference:**

pgs. 31-33

**See HL7 Example:**

```hl7
PID|1||12345^^^TEST^MR||PATIENT^ADULT^^^^L^^^^^^|19750516|F|2106-3^White^HL70005|240 W ADULT ST ^^ADULTVILLE^NY^1000^USA
PD1|||ORGANIZATION NAME^^1234| | | | | | | |N|20170530| |
```

### Vaccine Funding Source

In addition to reporting the VFC Eligibility, data exchange partners participating in the VFC program are required to report the funding source of each newly administered vaccine for patients 18 years and younger. Below are the values the CIR accepts for Vaccine Funding Source:

<table>
<thead>
<tr>
<th>OBX-3 HL7 VALUE</th>
<th>DESCRIPTION</th>
<th>OBX-5 HL7 VALUE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>30963-3</td>
<td>Vaccine Funding Source</td>
<td>PHC70</td>
<td>Private vaccine stock used was privately funded</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VXC50</td>
<td>Public vaccine stock used was publicly funded</td>
</tr>
</tbody>
</table>

**CIR IG Reference:**

pg. 55

**See HL7 Example:**

```hl7
OBX|2|CE|30963-3^VACCINE FUNDING SOURCE^LN|1|VXC50^Publicly funded vaccine stock^CDCPHINVS
VFC^CDCPHINVS| | | | | | |20180315| | |VXC40^Eligibility captured at the Immunization level^CDCPHINVS
```
History of Disease as Evidence of Immunity

History of disease as evidence of immunity indicates that a person has been diagnosed with a particular disease. Below are the values the CIR accepts for history of disease as evidence of immunity:

<table>
<thead>
<tr>
<th>OBX-3 HL7 VALUE</th>
<th>DESCRIPTION</th>
<th>OBX-5 HL7 VALUE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>59784-9</td>
<td>History of Disease as Evidence of Immunity</td>
<td>38907003^History Of Varicella Infection</td>
<td>History of varicella infection</td>
</tr>
</tbody>
</table>

CIR IG reference: pgs. 53 and 55

See HL7 Example:
RXA|0|1|20121011||998^No vaccine administered^CVX|999|||^^^8000N70|||NA|A|
OBX|1|CE|59784-9^Disease with presumed immunity^LN |1|58907003^HISTORY OF VARICELLA INFECTION^SCT| | | |F|| |20121201|

Serological Evidence of Immunity

Serological evidence of immunity indicates serology confirmed immunity to a particular disease. Below are the values the CIR accepts for serological evidence of immunity:

<table>
<thead>
<tr>
<th>OBX-3 HL7 VALUE</th>
<th>DESCRIPTION</th>
<th>OBX-5 HL7 VALUE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>75505-8</td>
<td>Serological Evidence of Immunity</td>
<td>278971009^Hepatitis A immune</td>
<td>Serology confirmed hepatitis A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>271511000^Hepatitis B immune</td>
<td>Serology confirmed hepatitis B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>371111005^Measles immune</td>
<td>Serology confirmed measles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>371112003^Mumps immune</td>
<td>Serology confirmed mumps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>278968001^Rubella immune</td>
<td>Serology confirmed rubella</td>
</tr>
<tr>
<td></td>
<td></td>
<td>371113008^Varicella immune</td>
<td>Serology confirmed varicella</td>
</tr>
</tbody>
</table>

CIR IG reference: pgs. 54 and 56

See HL7 Example:
RXA|0|1|20160223||998^no vaccine administered^CVX|999|||^^^8000N70|||NA|A|
OBX|1|CE|75505-8^Disease with presumed immunity^LN |1|278968001^Serology confirmed rubella^SCT| | | |F|| |20150315|
### Substance Lot Number, Expiration Date, and Manufacturer Name

The CIR will process and store the lot number (RXA-15), expiration date (RXA-16), and manufacturer name (RXA-17) of the vaccine administered. The lot number is critical for reporting and properly decrementing Vaccines for Children (VFC) program vaccines administered. For a list of current manufacturer codes, visit the [CDC’s website](https://www.cdc.gov).

**CIR IG reference:**

pgs. 49-50

**See HL7 Example:**

RXA|0|1|20180803|20180803|03^MMR^CVX|999||00^New immunization record^NIP001~24510^MMR^MED|12345^Doctor^Test^NYYA|NYYA9999Q99||N024701|20180909|MSD^ME

RCK^MVX|||CP|A

### Next of Kin

This segment should be used to communicate the name and contact information for the patient’s mother, father, and/or guardian. The CIR HL7 Web Service supports only the Mother (MTH), Father (FTH), and/or Guardian (GRD) relationship types in NK1-3: Relationships; any other values reported in this field will result in the entire NK-1 segment being disregarded.

**CIR IG reference:**

pg. 34 – 40

**See HL7 Example:**

NK1|1|NK1LName^MotherFName^^^^^L|MTH^Mother^HL70063|||PRN^PH^^212^5551212^~ORN^CP^927^5551313~^NET^X.400^NK1.Mthemail@isp.com|^WPN^PH^^212^7771212^497|||19781115

NK1|2|NK1LName^FatherFName^^^^^L|FTH^Father^HL70063|||PRN^PH^^212^5551212^~ORN^CP^927^5551414~^NET^X.400^NK1.Fthemail@isp.com|^WPN^PH^^212^3456789^101|||19750725

NK1|3|NK1LName^GuardianFName^^^^^L|GRD^Guardian^HL70063|||PRN^PH^^212^5551212^~ORN^CP^927^5551414~^NET^X.400^NK1.Grdemail@isp.com|^WPN^PH^^212^3456789^101|||19450110|
Phone Numbers

Phone numbers are important for both patient matching and use of CIR tools like reminder/recall. The CIR supports a single current home phone, personal cellular phone number, and personal email address per patient. The CIR accepts all of the following values for reporting patient (PID segment) and next of kin (NK1 segment) phone numbers.

<table>
<thead>
<tr>
<th>PID-13.2 or NK1-5.2 Telecom Use Code</th>
<th>Description</th>
<th>PID-13.3 or NK1-5.3 Telecom Equipment Type</th>
<th>Description</th>
<th>PID-13.4 or NK1-5.4 Email Address</th>
<th>PID-13.6 or NK1-5.6 Area Code</th>
<th>PID-13.7 or NK1-5.7 Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRN</td>
<td>Primary Residence Number</td>
<td>PH</td>
<td>Phone</td>
<td></td>
<td></td>
<td>3 Digit Area Code</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CP</td>
<td>Cell Phone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORN</td>
<td>Other Residence Number</td>
<td>PH</td>
<td>Phone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>CP</td>
<td>Cell Phone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMR</td>
<td>Emergency Number</td>
<td>PH</td>
<td>Phone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>CP</td>
<td>Cell Phone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NET</td>
<td>Network (Email) Address</td>
<td>X.400</td>
<td>Email Address</td>
<td></td>
<td><a href="mailto:emailaddress@email.com">emailaddress@email.com</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internet</td>
<td>Internet Address</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NK1-6.2 Telecom Use Code</th>
<th>Description</th>
<th>NK1-6.3 Telecom equipment type</th>
<th>Description</th>
<th>NK1-6.6 Area Code</th>
<th>NK1-6.7 Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPN</td>
<td>Work number</td>
<td>PH</td>
<td>Phone</td>
<td>3 Digit Area Code</td>
<td>7 Digit Phone Number</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CP</td>
<td>Cell Phone</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CIR IG reference:
p. 27-30 and 37-40

See HL7 Example:
```
P|D|1|3124^PATID^MR||Test^ELSA^L|19830102|F||2028-9^Asian^HL70005|177 E Vaccine ST^NEW YORK^NY^12345^USA||^PRN^PH^1^212^5551234~^ORN^CP^1^917^5557890~^NET^Internet^elsatest@email.com~^EMR^PH^1^212^5556155||ENG|S|OTHER|||N^NOT HISPANIC OR LATINO^HL70189||| | |
Meaningful Use Stage 3:
Citywide Immunization Registry Reporting Checklist

NDC Codes for Newly Administered Immunizations

The CIR accepts NDC11 codes for newly administered immunizations in RXA-5.4: Alternate Identifier, RXA-5.5: Alternate Text, and RXA-5.6: Alternate Coding System. However, please note that CVX codes will still be required for all immunizations in RXA-5.1: Administered Code ID, RXA-5.2: Administered Code Text, and RXA-5.3: Administered Coding System.

CIR IG reference:
There is no guidance in the current CIR IG regarding NDC codes. For NDC11 mappings with CVX code, please see the CDC’s crosswalk.

See HL7 Example:
RXA|0|1|20180301|20180301|140^INFLUENZA (IM) PRESERVATIVE FREE^CVX^49281-417-88^INFLUENZA (IM) PRESERVATIVE FREE^NDC|0.5|mL||00^New immunization record^NIP001~|7736^Provider^Vaccine^^|^^^9999I19^^^^^MAIN INPATIENT| ||U1839AB||PMC^Sanofi Pasteur^MVX|||CP|A|20180301102822-0500

Querying for Immunization History, Forecasting and Recommendations

The CIR HL7 Web Service supports querying the CIR for a patient’s immunization history and immunization recommendations using the Z34 profile for QBP messages.

CIR IG Reference:
pgs. 58-67; 75-83; 125-137

See HL7 Example:
MSH|^~\&|EHR-Name|8000N70|||20180111051122-0400||QBP^Q11^QBP_Q11|ExistingPT_Qry_03|T|2.5.1|||NE|AL||||9999Q99 QPD|Z34^Request Immunization History^HL70471|QT216987|777851651^^^^LR~MM54321M^^^^9999Q99^MR|LName^FName^MName^^^^L|MotherLName^Rebecca^^^^^M|20081015|F| RCP |I|1^RD|R

Specific Querying Site

To better support data quality issues and MU Stage 3 compliance, the CIR would like their data exchange partners to identify the facility code of the querying site (i.e., the “child” site that it querying under the “parent” or “hub” site, which is sent in MSH-4.1). To identify the querying site in a QBP message, the facility code should be sent in MSH-22: Responsible Sending Organization.

CIR IG Reference:
There is no guidance in the current CIR IG regarding specifying querying sites.

See HL7 Example:
MSH|^~\&|EHR-Name|8000N70|||20180111051122-0400||QBP^Q11^QBP_Q11|Qry_03|T|2.5.1|||NE|AL||||9999Q99 QPD|Z34^Request Immunization History^HL70471|QT216987|777851651^^^^LR~MM54321M^^^^9999Q99^MR|LName^FName^MName^^^^L|MotherLName^Rebecca^^^^^M|20081015|F| RCP |I|1^RD|R