

ImmPact DX HL7 testing requirements and expectations

- The EMR test region will closely represent the EMR's production region.
- The EMR will map the codes for required fields, provided in Appendix A of the Maine HL7 spec.
- The EMR will map the CVX codes provided by the State.
- The EMR will demonstrate the ability to send **ALL** VFC Eligibility codes (OBX-5).
- The EMR will demonstrate the ability to send Non-administered.
- All patients sent into the IIS test region will be fictitious. **Do not send real PHI.**
- All locations that will interface with Maine IIS might be tested.
- Each location will send messages that will reflect their typical patient cohort and vaccine use.
- For dose decrement testing, the state will supply a spreadsheet with inventory to test with.
- The expectation is that Reminder Recall will be allowed (02 any method) unless indicated differently by patient or guardian.
- If the protection indicator is defaulted in your system to Y, then do not send PD1.
- Opt-Out – Demonstrate *do not send* capability. Patients who opt-out by submitting a non-participation form to the State have their record locked in the IIS user interface. Any HL7 messages sent for the patient will unlock the record.
- Prior to testing validate sample messages using NIST Immunization Suite <https://hl7v2-iz-r1-5-testing.nist.gov/iztool/#/home>

Message example of required fields for administered doses:

```
MSH|^~&|EPIC|21672|IMMPACT|MAINECDC|20200603085801-0400|10163|VXU^V04^VXU_V04|
3243497|P|2.5.1|||ER|AL|||Z22^CDCPHINVS|10055
PID|1||E3229738^^EPIC^MR||MOUSE^MICKEY^G^^^L|MOUSE^MUM^^^M|20181106|F||2106-
3^White^CDCREC|18C DISNEY DRIVE^^BUXTON^ME^04093^USA^L^^York||^PRN^PH^^207^7564151
~^NET^X.400^mickeymouse959@email.com|||||2186-5^Not Hispanic or Latino^CDCREC|||||N
PD1|||||02^Reminder/Recall any method^HL70215|N|20200630|||A|20200630
NK1|1|MOUSE^MUM^D^^^L|MTH^mother^HL70063|18C DISNEY DRIVE^^BUXTON^ME^04093^
USA^H^^23031|^PRN^PH^^207^7564151
ORC|RE|176300616^EPC|987456^EPC|||||109074^WHO^DOC^P^^^EPC^^^NPI
RXA|0|1|20200630||83^HEPATITIS A VACCINE^CVX|0.5mL^mL^UCUM||00^NEW IMMUNIZATION
RECORD^NIP001||^10055|||C2732|20211212|SKB^^MVX|||CP|A|20260603085701-0400|||||
RXR|C38238^Intradermal^NCIT|LT^left thigh^HL70163
OBX|1|CE|64994-7^VFC STATUS^LN|1|V02^MEDICAID//MEDICAID MANAGED CARE^HL70064|||||F
OBX|2|CE|30956-7^Vaccine Type^LN|1|83^HEPATITIS A^CVX|||||F||20200630
OBX|3|TS|29768-9^Date vaccine information sheet published^LN|1|20160720|||||F||20200630
OBX|4|TS|29769-7^Date Vaccine Information Sheet Presented^LN|1|20200630|||||F||20200630
```

Details of required fields:

MSH-4 will contain organization id of the sending location – Org IDs are supplied by the State.
MSH-22 will contain the organization id of the location administering the immunization – Org IDs are supplied by the State

PID-3 – Patient identifier is required in PID-3.1. PID-3.5 must contain an Identifier Type Code

PID-5 – Messages with first name “Girl” will be rejected. If a patient is unnamed send NO FIRST NAME or NOFIRSTNAME in PID-5. If patient is un-named, mother’s name is required in PID-6

PID-7 – Birth date in format YYYYMMDD

PID-10 and **PID-22** – if included use codes supplied in Appendix A of the Maine HL7 spec

PID-11 – Demonstrate ability to send county. The format is the county name spelled out

PID-13 – if supplied by patient, include. Format is PID-13.6 three-digit area code; PID-13.7 seven-digit phone number.

PD1 – This segment is not required. If not sent the IIS will treat as Reminder Recall Allowed and Sharing Allowed.

PD1-11 will be 02 unless patient declines inclusion in Reminder/Recall. 02 is the only value that will allow patients to be returned in the result of a Reminder/Recall report run by users in the IIS. Do not default all patients to 01.

NOTE: if **PD1-11** is empty, the IIS will default to 02.

PD1-12 – If Protection Indicator is set to Y, other organization users get a warning that the patient does not wish to share. This is not a patient opt-out. Do not default all patients to Y.

NK1 – Send next of kin/responsible person information. If none is given by the patient use SEL in NK1-3 and same name/address info from PID. This information helps with patient deduplication.

RXA-5 – Must be a valid CVX code. NDC may be sent in the second triplet

RXA-6, RXA-7 – Must be dose amount in mL (milliliter)

RXA-15, RXA-16 – For dose decrement these must match the values in ImmPact inventory

RXA-11.4 will contain the organization id of the location administering the immunization – code is supplied by the State. This code is linked to the inventory for dose decrementing.

RXR – Both RXR-1 and RXR-2 should be sent for administered immunizations.

OBX-5.1 – Use only the eligibility codes listed in our spec when OBX-3.1=64994-7.

OBX for VIS– Send VIS OBXs for all immunizations administered from state supplied vaccine.

ImmPact does not accept bar code VIS. Send in format:

one OBX segment with OBX-3.1 valued '30956-7' (vaccine type) and

one OBX segment with OBX-3.1 valued '29768-9' (version date) and

one OBX with OBX-3.1 valued '29769-7' (presentation or delivery date) associated.

All three OBX shall have the same value in OBX-4]

VIS revision dates in the IIS are updated per the CDC website

Message example of required fields for non-administered (historical):

MSH|^~&|EPIC|21672||IMMPACT|MAINECDC|20200603085801-0400|10163|VXU^V04^VXU_V04
|3243497|P|2.5.1|||ER|AL||||Z22^CDCPHINVS|10055
PID|1||E3229738^^^EPIC^MR||MOUSE^MICKEY^G^^^L|MOUSE^MUM^^^M|20181106|F||2106-
3^White^CDCREC|18C DISNEY DRIVE^^BUXTON^ME^04093^USA^L^^York
|^PRN^PH^^207^7564151~^NET^X.400^mickeymouse959@email.com|||||||2186-5^Not Hispanic or
Latino^CDCREC|||||||N
PD1|||||||02^Reminder/Recall any method^HL70215|N|20200630|||A|20200630
NK1|1|MOUSE^MUM^D^^^L|MTH^mother^HL70063|18C DISNEY DRIVE^^BUXTON^ME^04093^
USA^H^^23031|^PRN^PH^^207^7564151
ORC|RE|176300616^EPC|987456^EPC|||||||
RXA|0|1|20200630||83^HEPATITIS A VACCINE^CVX|999|||01^HISTORICAL IMMUNIZATION
RECORD^NIP001|||||||CP|A

Details of required fields:

Requirements for segments MSH, PID, PD1, NK1 and ORC are the same as detailed above.

RXA-6 – Value must be 999

RXA-7 – Field should be empty

RXA-11.4 – if empty the value is assumed the same as MSH-22.1

RXA-15, RXA-16, RXA-17 – May be empty but can be sent if known

OBX – No OBX segments expected. If sent, they are ignored.