

On June 17, 2023 the Hawaii Immunization Registry (HIR) was upgraded to the latest version of Health Level Seven - HL7 2.5.1 r1.5. to meet interoperability standards endorsed by CDC for message content, format, and transport.

Health Level Seven (HL7) is a nationally recognized standard for electronic data exchange between systems housing health care data. The HL7 standard is a key factor that supports this two-way exchange of information because it defines a syntax or grammar for formulating the messages that carry this information.

Please refer to CDC's HL7 Implementation Guide for current information on the data transmission implementation guide: <https://www.cdc.gov/vaccines/programs/iis/technical-guidance/downloads/hl7guide-1-5-2014-11.pdf>

- **QBP** messages were rejected due to a missing value in the **QPD-4.3** (QBP). The update made this a 'required' field.
  - **Solution:** You can use the Hawaii State Code "HIA", or no value as the HIR was modified so the field is now "optional".

Example of correct HL7

```
QPD|Z34^Request Immunization
History^CDCPHINVS|Qry_01|1^^^HIA^PI|PATIENT^^^^^L|BREAD^TOASTY^^^^^M|20010815|M|1555 PERFECT
ST^^ANYTOWN^HI^95206^US^L^^ID009|^^^^301^5551111|N
```

- **PID-3.4** (VXU) segment/fields. The upgrade now requires a value for all client ID, medical records, etc. This value can be static for all HL7 (QBP QPD and VXU PID) messages.
  - **Solution:** You can use the Hawaii State code 'HIA' in this field or no value " or no value as the HIR was modified so the field is now "optional".

Example of correct HL7

```
PID|1||OFF987NuYv^^^HIA^MR||VISDATES^LATER^^^^^L|VIS^Tab^^^^^M|20010711|M||2079-2^NATIVE
HAWAIIAN^CDCREC~2039-6^JAPANESE^CDCREC|1777 Kuna Place
#101^^Kailua^HI^96734^USA^L^^|^PRN^PH^^808^5550747~^PRN^CP^^808^5550737~||chi^Chinese^Language|||||2
186-5^Not Hispanic or Latino^CDCREC|
```

- **MSH-4.** The upgrade has made it necessary for only the assigned HIR 'Org ID' to be entered in the MSH-4 segment. Previously some providers have used the VFC PIN or a 'short name'.
  - **Solution:** The VFC PIN or Short name options are no longer available. If you do not use the Org ID for the submitted record, the record will reject. You will need to provide the HIR 'Org ID'

Example of correct HL7

```
MSH|^~\&|VAMS|2|HIR|HIR|20221229232701+0000||VXU^V04^VXU_V04|VAMS-20220930-VXU04-
a0Z3d0003FjnxEAC|P|2.5.1|||ER|AL|||||Z22^CDCPHINVS|||
```

- **MSH-21 for QBP.** The upgrade made this a required field.
  - **Solution:** Depending on the type of request (Z34 is for Immunization history, Z44 is for immunization history and forecast) provider will need to add this value Z34^CDCPHINVS or Z44^CDCPHINVS

Example of correct HL7.

```
MSH|^~\&|VIIS|2|HIR|HIR|20230404||QBP^Q11^QBP_Q11|Qry_01|P|2.5.1|||ER|AL|||||Z44^CDCPHINVS|HIR
```

- **NDC** is now optional, but if value is contained it must match with NDC listing in HIR.
  - **Solution:** The HIR vendor removed the validation of NDCs, it will not reject if NDC is provided. We are reviewing all NDCs to ensure they match with CDC.

- **ORC-12.13**

ERR||ORC^1^12^13|102^^HL70357|W|6^^HL70533|||Error Code -231: ORC-12.13(Ordering Physician Role Code) NPI is the only valid identifier to process NPI records.

With the upgrade this became a required field.

- **Solution:** The text 'NPI' must be included in the ORC-12.13 position when the ORC-12.1, 12.2, and 12.3 are populated. Position ORC-12.1 is where the actual NPI, employee #, or whatever number is used to identify the staff member (ordering physician) who requested the shot to be administered. When the information is entered, that clinician/staff member is added to the list of clinicians in the HIR.

Example of correct HL7

ORC|RE||a0Z3d000003FjnxEAC^VAMS|||||||003t0pzzp00fcYOW^Sticker^Bubba^^^^^^GEHC^^^^^^R.N.|||||2  
|

- **RXA-20**

ERR||RXA^1|102^^HL70357|E|4^^HL70533|||Error Code - 185: RXA-20 is valued CP or PA and RXA-9 is missing. Immunization record is rejected.

- **Solution:** HIR vendor has reverted to the logic in place before the upgrade, PA values will be accepted.