AIRA
AMERICAN IMMUNIZATION REGISTRY ASSOCIATION

Guidance on Populating OBX-14 (DateTime of the Observation)

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Background

HL7 v2.5.1 defines OBX-14 as "the physiologically relevant date-time or the closest approximation to that date-time". Many of the observations contained in immunization messages are not physiological in nature but still have an observation timestamp. This document will provide guidance on how to populate OBX-14 for common observation types.

Scope of Guidance

In Scope

Common observations types will be covered in this document. OBX segments in both VXU and RSP messages will be included.

Out of Scope

For any observations not included in this document, trading partners should discuss the meaning of the date/time provided in OBX-14. The effective and expiration dates for indication and contraindication data is messaged using dedicated LOINC codes and is not covered here.

Populating OBX-14

A few basic principles should be followed when populating OBX-14:

- The OBX-14 date/time should be when the event (observation) occurred
- For observations that span multiple days (pregnancies, allergies, etc) the onset date/time should be used
- The General Observation, Indication and Contraindication observations are associated with related codes for effective and abatement dates
    - Because the relevant date for the coded observation is contained in a related OBX segment, OBX-14 need not be populated in the primary OBX segment. For example, in a Contraindication OBX segment, OBX-14 does not need to be populated so long as it is accompanied by a Contraindication Effective Date OBX segment
    - Neither the onset nor abatement date observations have a relevant date/time, so OBX-14 need not be populated
- For serology-based observations (ie serological immunity) the date/time the blood is drawn should be used
- If the appropriate value is not known, OBX-14 should remain empty – it is an RE field and is not required in every message instance
- RXA-3 and OBX-14 will not always be the same date/time
    - Patient level observations (Serological Immunity, History of Disease Immunity and Reaction (when it can't be attributed to a specific administration event)) will follow an RXA segment where RXA-3 is the date/time that the report is being made (ie when the message is constructed)
    - Administration event level observations including evaluation related observations in an RSP message (Eligibility, Funding Source, VIS Related, Reaction (when it can be attributed to a specific administration event), Comment and Evaluation Related) will follow an RXA segment where RXA-3 is the date/time that

the vaccine was administered (even if the report is happening later like if an adverse reaction is being reported a few days after the administration)
    - Forecast level observations will follow an RXA segment where RXA-3 is the date/time the evaluation and forecast were done (typically very close to when the message is constructed)
- RSP messages would echo the date/time a submitter sent in the VXU message

Guidance for specific observation types is provided below:

Observation	Context	Proposed Observation Date/Time (OBX-14) Concept
Serological Immunity	VXU/RSP (if included)	Date the specimen was collected
History of Disease Immunity	VXU/RSP (if included)	Date of the disease onset
Eligibility	VXU/RSP (if included)	Date the eligibility was calculated
Funding Source	VXU/RSP (if included)	Date the funding source was determined
VIS Related	VXU/RSP (if included)	Date the VIS was presented
Reaction	VXU/RSP (if included)	Date of the reaction
Comment	VXU/RSP (if included)	Date the comment was entered or updated
Any Evaluation Observations	RSP	Date the evaluation was performed
Any Forecast Observations	RSP	Date the forecast was generated

Example

Below is an example (v2.5.1) of a history of varicella with a reporting date of 4/19/2019 and a disease date of 02/02/2018.

ORC|RE||9999^DCS|||||||^Clerk^Myron|
RXA|0|1|20190419||998^No vaccine administered^CVX|999|||||||||||||NA
OBX|1|CE|59784-9^Disease with presumed immunity ^LN|1|38907003^ History of Varicella Infection^SCT||||||F|||20180202

Keep in mind that in a v2.8.2 message, the availability of PID-level OBX segments would move this sort of data out of the Order Segment Group and up to the patient level.

Summary

OBX-14 should reflect the timestamp of the observation and not when the message is created. For physiological observations, OBX-14 should reflect the physiologically-relevant date/time such as the time of specimen collection for a serological test or the onset of a condition.