HL7 Immunization User Group

Monthly Meeting

July 12, 2018

2:00 PM ET

Agenda

- Welcome
  - Poll: Which perspective do you primarily identify yourself with?
- Updates
  - AIRA National Meeting
  - SISC Update
- Discussion Topic
  - Administered vs Historical Vaccines

AIRA National Meeting

- Register!
- AART Clinics

The AIRA Technical Assistance Team is providing individual check-ins at the National Meeting. Reserve a 15- or 30-minute appointment now! You and your IIS colleagues will receive a brief tour of AART and recommendations, specific to your IIS, on ways to improve your HL7 interface or Transport Method. Contact Tracy Little for more information: tlittle@immregistries.org

SISC Update

Mary Woinarowicz

Info Request

Nathan Bunker

Info Request

- In AART Discovery testing there are "EHR Examples"
  - Messages taken from real EHR systems
  - Verify that IIS are able to accept these
  - But these are currently quite dated
- AART Discovery report is being updated
  - Do you have EHR examples you can send us?
  - Must not contain real patient data
  - Can include both good and bad examples
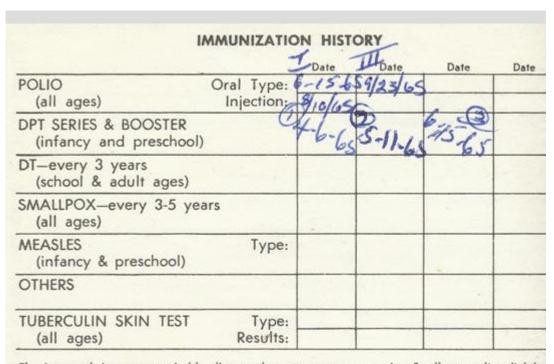- Please send to Nathan Bunker or Eric Larson

Administered vs Historical

Current Standards and Survey Results

History of Administered vs Historical

- In the beginning…
  - The official immunization history was kept on paper
  - Carried by the patient!
- Immunization registries envisioned to collect these histories
  - Paper records had to be transcribed into the registry

History of Administered vs Historical

- Immunization registries also allowed clinicians to enter in vaccinations they gave directly into the system
- Many registries were either local and/or distributed deployments
- Don't forget to mail your floppy disk!

What does "Historical" mean?

- There are different senses to the word "historical" that are floating around the IIS community:
  - #1: belonging to the past, not the present
  - #2: information transferred from the older paper system
  - #3: information is second hand, or "given elsewhere"
- Which sense is the most correct for messaging in RXA-9?

What does our HL7 Standard say?

RXA-9 Administration Notes (CE) 00351

Definition: This field is used to indicate whether this immunization record is based on a historical record or was given by the reporting provider. It should contain the information source (see *NIP-defined Table 0001 - Immunization Information Source*). The first component shall contain the code, the second the free text and the third shall contain the name of the code system. (NIP001) Sending systems should be able to send this information. Receiving systems should be able to accept this information.

This field may be used for other notes if specified locally. The first repetition shall be the information source. If other notes are sent when information source is not populated, then the first repetition shall be empty.

Other notes may include text only in component 2 of the repeat. Acceptance of text only is by local agreement only.

Information source is an NVAC core data element. It speaks to the reliability of the immunization record. IIS rely on this information.

- indicate whether immunization record is based on historical record or was given by the reporting provider
- speaks to the reliability of the immunization record.

What does our HL7 Standard say?

Value	Description	Operational Definition
00	New immunization record	The record of a newly administered dose of vaccine. The dose was administered by the organization that is reporting this dose.
01	Historical information - source unspecified	The record of a vaccine dose from a reliable historical source, such as an immunization card.

- Please note the word "newly" applies in the context of recording the immunization
- A delay in reporting this to the IIS has no effect on this status

What does our HL7 Standard say?

- Would it okay for an EHR to report to an IIS in 2018 that they administered a vaccination in 2008?
  - According to the HL7 Standard: Yes
  - According to best practices for IIS: Yes
- Would it be okay for an EHR to report to an IIS that a historical vaccination was given in the last week or so?
  - According to the HL7 Standard: Yes
  - Not common, but some people get vaccinations from more than one location on the same day
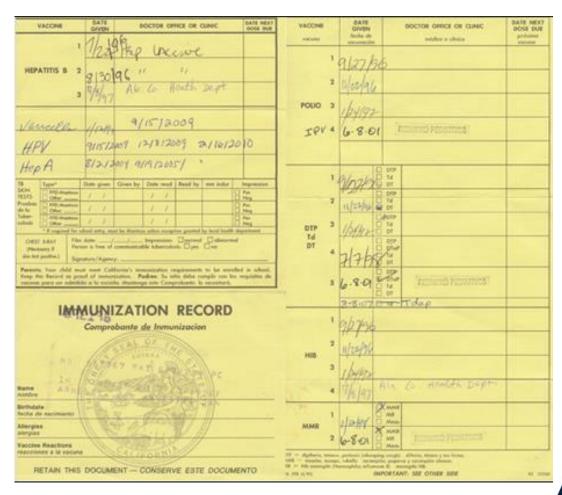- The HL7 standard does not tie RXA-9 value to the time it is reported to the IIS

What does "Historical" mean?

- There are different senses to the word "historical" that are floating around the IIS community:
  - #1: belonging to the past, not the present
  - #2: information transferred from the older paper system
  - **#3: information is second hand, or "given elsewhere"**
- RXA-9 should NOT be interpreted under sense #1
- IIS should expect RXA-9 to indicate the sense #3

But how do IIS really use this?

- Vaccination deduplication
  - Prefer vaccination reported as administered vs historical
  - Historical are expected to be less specific and may contain errors
    - non-specific vaccinations
    - incomplete or smudged dates
    - combinations are recorded as singles
    - Lot number and other information is often missing

But how do IIS really use this?

- Determine ownership
  - IIS may determine ownership by looking at where vaccinations were administered
- Track who was responsible for administration
- Improve data quality
  - Our HL7 standard has specific requirements for administered vaccinations
  - Many IIS have additional requirements for administered that don't apply to historical

But how do IIS really use this?

- Lot decrementing and inventory functions
  - IIS can track inventory and deduct as it sees vaccines administered
  - RXA-9 can be used to ignore the historical ones and only decrement the administered ones
  - This function was not originally designed into the HL7 standard

Administered vs Historical Problem

- If a submitting site is tracking their lots in the IIS:
  - It is critical that every vaccination administered be properly decremented in the IIS
  - IIS that want to decrement set higher standards for administered vaccinations
  - But the submitting site could still submit administered vaccinations that don't need to be decremented
  - Some IIS have asked submitters to not submit these older vaccinations as administered

Administered vs Historical Problem

- Why would an EHR submit older administered vaccinations?
  - Biggest reason:
    - EHR is integrating with IIS for the first time but has good data going back over several years
  - Other reasons:
    - EHR may send the complete patient history they have in order to ensure IIS has complete picture
    - Ongoing data quality: Sometimes clinics realize that batches of older data was not submitted, and there are gaps in records in the IIS

Administered vs Historical Problem

- Ideal solution: IIS only decrement and apply the highest data quality rules to recently administered vaccinations
  - Use onboarding date as a reference point
  - Or, look at date submitted and/or date updated
  - Or, set an arbitrary timeframe for considering administered
- Workarounds:
  - IIS loads the older data using a separate process as part of onboarding, but after that, no older administered data should be submitted
  - EHR changes administered vaccinations to historical if too old for IIS
  - EHR does not submit older information

Questions for the IIS

A family practice is integrating with your IIS for the first time and they have vaccinations to report that they administered and recorded in their EHR in 2015, but these have never been reported to the IIS.

1. Do you instruct them to submit as administered (RXA-9 as 00)?
2. How do you instruct them to send this older data?
3. How often are providers and EHRs able to accomplish this kind of data backload?
4. What barriers are in place? Check all that apply. Feel free to add comments.
5. What does your IIS use RXA-9 for?

Questions for EHRs

A family practice is integrating with their IIS for the first time and they have vaccinations to report that they administered and recorded in the EHR in 2015, but these have never been reported to the IIS. The practice would like to send this data to the IIS to ensure that patient records are complete in the IIS.

1. How does your EHR software handle this problem?
2. Can previously administered vaccines by the submitting provider be entered into your EHR and sent to the IIS as Administered, even if the occurred a long time ago?
3. If a patient transfers into a practice, can vaccines administered by other providers in the past be marked "historical" and sent to the IIS when they are first added to the EHR?
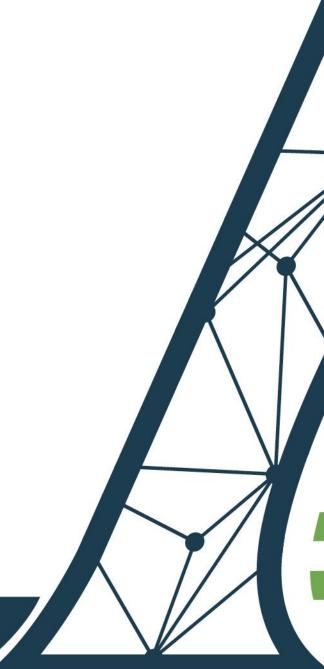
Questions for EHRs

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4. If a patient, submits a vaccine (Flu) to their provider that was administered at a pharmacy, can that be entered as "historical" and submitted to the IIS even though it is current?

5. How is legacy data from another system treated by the EHR – can it all be sent to IIS? How are vaccines marked as "administered" or "historical"?

Next Meeting

Thursday, August 9th

2:00 pm ET / 11:00 am PT

More Information

- Web Links
  - Subscribe to immunization group
    http://www.hl7.org/participate/UserGroups.cfm?UserGroup=Immunization
  - Public User Group Wiki
    http://www.hl7.org/special/committees/iug/index.cfm
  - Private User Group Wiki
    http://iugwiki.hl7.org/
  - HL7 Press Release
    http://www.hl7.org/documentcenter/public_temp_F760602A-1C23-BA17-0C0D326E635471F9/pressreleases/HL7_PRESS_20140402.pdf
  - AIRA Press Release
    http://www.immregistries.org/events/2014/04/10/hl7-immunization-user-group

Contact Information

If you have any questions or comments:

- Kim Salisbury-Keith Kim.SalisburyKeith@health.ri.gov

- Nathan Bunker nbunker@immregistries.org

- Kevin Snow ksnow@envisiontechnology.com

- Danny Wise Danny.Wise@allscripts.com

Thank you!