



AIRA
AMERICAN IMMUNIZATION
REGISTRY ASSOCIATION

HL7 Immunization User Group

Monthly Meeting

July 11, 2019

2:00 PM ET

Agenda

- Welcome
 - Poll: Which perspective do you primarily identify yourself with?
 - August meeting is cancelled
- Updates
 - SISC Update
 - FHIR Dev Days Update
- Discussion
 - Continued: Common HL7 Issues and Resolutions Identified During Onboarding
- National Meeting: Agenda Review



SISC Update

Mary Woinarowicz



FHIR Dev Days Update

Kevin Snow



Common HL7 Issues and Resolutions Identified During Onboarding, Part 2: Vaccination Events

Kevin Snow



- What data quality issues are discoverable in the HL7 message?
- What can we do with the HL7 to prevent bad data in... without rejecting good data?



Vaccination – Administration Date

- Administration Date is illogical

```
RXA|0|1|20220113||48^HIB PRP-T^CVX|0.5|mL^^UCUM||00^New  
admin^NIP001|...
```

- Administration Date is unlikely

```
PID|1||432155^^^dcs^MR||Patient^Johnny^New^^^L|Lastname^Sally^^  
^^^M |20110411|...
```

```
ORC|...
```

```
RXA|0|1|20120113||165^HPV9^CVX|0.5|mL^^UCUM||00^New  
admin^NIP001|^Sticker^Nurse^^^^^^^^^^^^^^^^^^^^RN|^^^DCS_DC||||32k  
2a|20130309|PMC^sanofi^MVX|||CP|A
```



Vaccination – Administration Date

Identify

- Find illogical or improbably dates in IIS data.
 - Administration date is in the future or too far in the past.
 - Administration date is on a suspicious date such as January 1 or there are spikes of historical doses every month on the 1st or 15th.
- Ask the vendor and provider: How are historical immunizations entered when the exact month or day is unknown?

Resolve

- Implement business rules to ensure that immunizations with a date prior to the patient's date of birth are rejected.
- Advise providers on how to manage historical immunizations when the month/day is unknown.



Vaccination – Administered Code (CVX, NDC)

- Administered doses reported with the unspecified CVX code

```
RXA|0|1|20190113||137^HPV Unspecified^CVX|0.5|mL^^UCUM||00^New  
admin^NIP001|...
```

- Administered doses with mismatched CVX and NDC codes

```
RXA|0|1|20190113||48^HIB PRP-  
T^CVX~00006409301^HepB^NDC|0.5|mL^^UCUM||00^New admin^NIP001|...
```



Vaccination – Administered Code (CVX, NDC)

Identify

- Unspecified vaccine codes sent with a dose marked as administered (RXA-9 is 00)
- Mismatched CVX and NDC codes in the same RXA segment

Resolve

- Implement business rules to validate NDC to CVX
- Follow up with the vendor and provider to ensure that CVX codes are current in EHR.



Vaccination – Lot Number

- Extra characters appended to lot numbers to identify stock (private/public)

```
RXA|0|1|20120113||165^HPV9^CVX|0.5|mL^^UCUM||00^New  
admin^NIP001|^Sticker^Nurse^^^^^^^^^^^^^^^^^^RN|^^^MAIN ST  
CLINIC||||32k2a-PRIVATE|20130309|PMC^sanofi^MVX|||CP|A
```

- Placeholder text in lot number field

```
RXA|0|1|20120113||165^HPV9^CVX|0.5|mL^^UCUM||00^New  
admin^NIP001|^Sticker^Nurse^^^^^^^^^^^^^^^^^^RN|^^^MAIN ST  
CLINIC||||2222222|20130309|PMC^sanofi^MVX|||CP|A
```



Vaccination – Lot Number

Identify

- Extra characters in the lot number field, such as 'VFC' or 'private'
- Monitor during ongoing submission for issues with inventory deduction
- Ask vendor and provider: Are lot numbers manually typed into the patient record or selected from a drop down?
- Resolve
 - Send an acknowledgment to the provider.
 - Consider business rules that review the format of lot numbers, looking for patterns or suspicious characters.
 - Prevent or reduce occurrence of this issue by not allowing manual entry of lot numbers to the EHR.



Vaccination – Route/Site

- Including Site but not Route

RXR| |RT^Right Thigh^HL70163

- Using the correct codes

RXR|IM^Intramuscular^HL70162|RT^Right Thigh^HL70163



Vaccination – Route/Site

Identify

- Missing site or route data
- Use of older code sets

Resolve

- Follow up with vendor and provider to ensure that code sets are correct in EHR



What are some of your favorite ways to use HL7 to identify incoming data quality issues?



AIRA National Meeting, August 2019

Breakout Session Tracks that may be of potential interest to HL7 User Group

*See you at the
AIRA National
Meeting!*

Tues, August 13

- Electronic Health Records
- Health Information Technology
- HL7
- Onboarding
- Data Exchange

Weds, August 14

- Interoperability
- Standards
- EHR/IIS Collaboration

Thurs, August 15

- Vaccine Code Set Management
- Technical Capacity

View the Preliminary Agenda here:

https://www.airanationalmeeting.org/aira/media/uploaded/EVAIRA/event_9/AIRA_2019_National_Meeting_Preliminary_Agenda_Updated.pdf



Next Meeting

September 12, 2019

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:

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Thank you!

