

### Description

The provider attempts to document vaccine route, site, and administration amount for the influenza immunization for Juana Mariana Vazquez. These data quality checks primarily relate to improving vaccine dosing and administration information that will be included in the vaccination details when submitting data to the immunization registry.

The nurse documents administration route for the IM inactivated influenza vaccine as 'intranasal':

- Is alerted when documenting "intranasal" for intramuscular inactivated influenza vaccine.
- Is alerted when documenting the incorrect administration amount for the vaccine administered.

### Comments

Evaluates EHR functions for verifying data quality of vaccine dosing and administration data used for reporting vaccinations to the immunization registry. There is no transaction associated with this test step.

### Pre-condition

Order is placed for intramuscular inactivated influenza vaccine.

### Post-Condition

The EHR has alerted the provider for each of the vaccine dosing and administration data quality checks verified for Juana Mariana Vazquez.

### Test Objectives

**Data Quality Checks:** Integrate additional data quality checks into IIP Testing and Recognition to improve data quality and reduce rejections.

Note: The EHR or other clinical software system prevents specific data issues which would potentially result in IIS errors as defined by the AIRA Error Codes. This supports reducing data quality issues that could trigger the following AIRA-defined Error Codes:

- 2014: Indicates that the administration amount is inconsistent with the vaccine administered
- 2016 : Indicates that the administration route is inconsistent with the vaccine administered

### **Record Vaccine Information by Scanning 2D Barcode Found on Unit-of-Use for Vaccine Administration:**

The EHR or other clinical software system allows users to record vaccination information from 2D barcodes (GS1 DataMatrix) found on unit-of-use (vial or pre-filled syringe) for each vaccine administered. This 2D barcode contains: the Global Trade Item Number (GTIN), expiration date and lot number. The National Drug Code and manufacturer data elements (NDC) is embedded in the Global Trade Item Number (GTIN). Using mapping tables, the manufacturer can be determined from the NDC Code. The NDC and manufacturer data elements are later transmitted to an IIS by cross walking/mapping from the GTIN. The software system records this information as structured data elements.

### Evaluation Criteria

**Evaluation Criteria:** During the course of data entry for the variant information below, the EHR triggers the following data quality issues:

- Triggers Error that the administration amount is inconsistent with the vaccine administered (2014)
- Triggers Error that the administration route is inconsistent with the vaccine administered (2016)

The EHR Records the following vaccine administration information:

Entered By	Sandra Molina	
Ordering Provider	Frank Smith	
Entering Organization	Shoreline Pediatrics	
Vaccine Event information source (Administration Notes)	New immunization record (NIP001 00)	
Value/Text for Vaccine Type	Influenza, injectable, quadrivalent, preservative free (CVX 150) FLUARIX QUADRIVALENT (NDC 58160-0890-41)	
Vaccine 2D Barcode		
Date/Time of Start of Administration	Current Date	
Administered Amount (of Vaccine)	0.25	Triggers Error that the administration amount is inconsistent with the vaccine administered (2014)
Administered Units (of Measure)	mL	
Administering Provider	Sandra Molina	
Administered-at Location	400 Shoreline Drive, Stamford Connecticut 06901	
Lot Number	8L4B3521	
Substance Expiration Date	12/31/2023	
Substance Manufacturer Name	GlaxoSmithKline (SKB)	
Completion Status	Completed (CP)	
Route of Administration	Given by nose (NCIT C38284, HL70162 NS)	Triggers Error that the administration route is inconsistent with the vaccine administered (2016)
Administration Site	Left Deltoid (HL70163 LD)	
VFC Eligibility	Yes	
Funding Source	Public	
VIS Given Date	Current Date	
VIS Fully Encoded Text-String	253088698300010311210806	

Notes

The full vaccination details are provided here to facilitate the documentation constraints and/or screens that may be required by the vendor in order to attempt to document the data of interest, but these are not verified until the next step. Only those attributes specified that are anticipated to result in data quality alerts are required for this step.

While this test step requires verification of an appropriate route, the SUT should be sure that alternate route documentation is not restricted. While not part of this use case, there are situations where an alternate site may be medically indicated.