

#### Description

This test will consist of ordering vaccines for the test patients, reviewing any alerts caused by specific scenarios, and documenting vaccinations administered to the patients.

#### Comments

No Comments

#### Pre-condition

Juan Marcel Marina is entered as a patient in the EHR with complete Demographic data, Immunization History Data, and Clinical Data according to the steps in the 'Juan Marcel Marina Initial Data Load.'

#### Post-Condition

Visit orders are entered in Juan Marcel Marina's record.

#### Test Objectives

**Modify Antigen Recommendations Based on Active Diagnoses:** The EHR or other clinical software system notifies the provider of any conflicts between recommended vaccines in the updated forecast and the patient's current or historical diagnoses.

**Enter Vaccination Order:** The EHR or other clinical software system allows providers to order immunizations for a patient using filters for type of vaccine, including combination vaccines.

**Receive Dose Not Indicated Alert for Single Vaccine Order:** The EHR or other clinical software system notifies the provider in instances when there are single or combination vaccine orders that are inconsistent with the expected timing intervals included in the vaccine forecast. Inconsistencies include suggestion of different date(s) for ordering the vaccine(s) or indication the vaccine(s) is/are no longer required.

**Receive Dose Not Indicated Alert Upon Vaccine Administration:** The EHR or other clinical software system notifies the individual administering a vaccine that the vaccine is inconsistent with expected timing intervals as suggested by the vaccine forecast. The method and timing of notification can be specified to meet local clinical workflow. This requirement is a “failsafe” mechanism in case the provider orders a vaccine dose that is inconsistent with appropriate timing intervals.

**Notify of Vaccine Dose Expiration:** The EHR or other clinical software system notifies the provider administering a vaccine if the dose chosen for administration is expired.

**Record Vaccine Administration:** The EHR or other clinical software system records information about each vaccine administered. The EHR records this information as structured data elements, including, at a minimum: date administered, administering clinician, route of administration (e.g. intramuscular), site of administration (e.g., left arm), immunization type, lot number, manufacturer, Vaccine Information Statement date, quantity of vaccine/dose size and ordering clinician. The system also assures data quality, i.e., data entered are appropriate (e.g., avoid “oral” route for IM vaccines, and assure dose is appropriate for the vaccine).

**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 GTIN contains the National Drug Code (NDC) and manufacturer data elements. Implementers can use mapping tables to determine the manufacturer from this NDC. The software system records these elements as structured data elements so the immunization administration message can use them to include the NDC and manufacturer in the message to the IIS.

**Notify of Vaccine Dose Ineligibility:** The EHR or other clinical software system provides a method for alerting a provider if a vaccine is selected for a patient who is not eligible for the inventory item selected.

**Add Jurisdiction-Specific Vaccine Eligibility Code:** The EHR or other clinical software system demonstrates the ability to configure publicly funded dose level vaccine eligibility codes per jurisdictional requirements. This includes tracking and exchanging jurisdiction-specific dose level eligibility code(s) for administered vaccines. This capability only applies to newly administered doses, not historical doses.

**Data Quality Checks:** The EHR or other clinical software integrates 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:

- 2013: Indicates that the funding source code in an OBX segment conflicts with other data in the message (eligibility, age etc).
- 2016: Indicates that the administration route is inconsistent with the vaccine administered
- 2001: Indicates a conflict between the administration date in RXA-3 and the expiration date in RXA-16. In other words it indicates that an expired vaccine was administered.

#### Evaluation Criteria

Evaluation criteria is defined within each test step.

#### Notes

No Note