

#### 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

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

#### Post-Condition

Visit orders are entered in Juana Mariana Vazquez's record.

#### Test Objectives

**Notify of Previous Adverse Event:** The EHR or other clinical software system alerts providers to previous adverse events for a specific patient, in order to inform clinical decision-making when providers view an existing immunization record.

**Record Vaccine Administration Deferral:** The EHR or other clinical software system allows a user to enter a reason or reasons why a specific immunization was not given to a patient (e.g., due to contraindication, refusal, etc.). The system also stores that information in a structured way so it can be reported and analyzed as needed.

**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 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.

**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).

**Receive Dose Not Indicated Alert Upon Vaccine Administration:** The 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.

**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.

**Record Past Immunizations:** The EHR or other clinical software system allows providers to enter information about immunizations given elsewhere (e.g., by another doctor, at a public health clinic, pharmacy, etc.) with incomplete details.

**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 prefilled 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.

**Request/Receive Patient Immunization Data and Identify Source:** The EHR or other clinical software stores immunization history accepted electronically from other sources (such as a public health immunization registry consistent with HL7 version 2.5.1, Implementation Guide for Immunization Messaging Release 1.5) or communicated by the patient and manually entered by the clinician. When viewing such information, the provider can determine which immunizations were administered by the practice, which were entered historically as patient-reported, and which were accepted electronically from the public health registry.

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

- 2008: Indicates that either a refusal reason was messaged in RXA-18 when the completion status in RXA-20 was not RE or a valid refusal reason was not messaged when the completion status was RE
- 2014: Indicates that the administration amount is inconsistent with the vaccine administered
- 2016: Indicates that the administration route is inconsistent with the vaccine administered

#### Evaluation Criteria

Evaluation criteria is defined within each test step.

#### Notes

No Note