

#### Description

The EHR generates a Z44 query to the Immunization Registry to retrieve the Evaluated History and Forecast for Juana Mariana Vazquez.

Querying the registry will consist of the vendor creating Z44 messages for Juana Mariana Vazquez to be sent to the registry. The response will be processed as part of the 'Display, Reconcile, Import and Update Immunization Information' activity.

Using the Z42 Response to Immunization Registry Query, the EHR displays the Evaluated History and Forecast to the user for reconciliation and update. The vendor will receive information back from the registry and show the ability to view and reconcile, and import the information returned by the registry (NOTE: the Z42 message will be provided either manually, or as part of the tool). This test will also look at the system's ability to view the forecast returned by the registry and create a new forecast after reconciling the information.

#### 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

A Z44 Query is generated and submitted to the Immunization Registry/Test tool, and a Z42 response is returned.

#### Test Objectives

**Select New Patient:** The system must allow a user to distinguish information about patients with similar names or identifying information in order to select the right patient from the providers' EHR or other clinical software system. This information is crucial for identifying and selecting the correct patient. For example, twins living in the same household will have similar dates of birth, addresses, and may have similar sounding names. In order to match patients with those already in the immunization registry, the EHR or other clinical software should have the ability to record the mother's maiden name, whether the patient was part of a multiple birth, and if so, the order of birth (when such information is available). The provider should be aware of how often the protection indicator information must be updated based on local rules.

**Request/Receipt of Patient Immunization History:** The EHR or other clinical software system sends a request to the public health immunization registry "on demand," or in advance for those with scheduled appointments. The request includes the identifying information the immunization registry needs to match each patient with those in the registry including, if present, the mother's maiden name, a multiple birth indicator, and the birth order. The request also is sent in a pre-determined format the registry can read and interpret (Request Evaluated Immunization History and Forecast (Z44) - HL7 version 2.5.1 Implementation Guide for Immunization Messaging Release 1.5).

#### **Compare Public Health Immunization Registry (IIS) Immunization History to EHR Immunization History:**

The public health immunization registry has returned the requested immunization history for a patient (Return Evaluated Immunization History and Forecast (Z42) – HL7 Version 2.5.1 Implementation Guide for Immunization Messaging Release 1.5). The EHR is able to display the evaluated immunization history received from the registry as well as the immunization history already present in the EHR so that a user can compare them. The EHR provides a way for the provider to view both histories, determine what is different (if anything), and update the existing EHR immunization history with new information from the public health registry if he or she chooses to do so. The system must store the new information as structured data as part of the patient's local immunization history and include the time of the update and the source of the new information.

**Request/Receive Patient Immunization Data and Identify Source:** The EHR 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 manually as patient-reported, and which were accepted electronically from the public health registry.

**View Immunization Forecast:** The system provides a view of the immunization forecast provided by the IIS. The display includes the recommended vaccines and their associated dates (e.g., earliest, recommended, past due, latest) for each vaccine included in the forecast.

**View Reconciled Immunization Forecast:** The EHR or other clinical software system has the ability to re-evaluate and update the immunization forecast using a patient's newly updated immunization history. Forecasts are updated following reconciliation of immunization data contained in the public health immunization registry with immunization data contained in the EHR. Processing the new forecast can be internal to the EHR or it can use an external forecasting service, but should reference the most recent recommendations.

**Review Patient Immunization History:** The EHR or other clinical software systems displays vaccine history by vaccine series.

**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.

Support for:

**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.

Evaluation Criteria
Evaluation criteria is defined within each test step.

Notes
No Note