

### Description

The EMR Generates a Z44 query to the Immunization Registry to retrieve the Evaluated History and Forecast for Juana Mariana Gonzales.

Querying the registry will consist of the vendor creating Z44 messages for Juana Mariana Gonzales to be sent to the registry.

Using the Z42 Response to Immunization Registry Query, the EMR 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.

Note: This Test Case includes the query response functionality. While the system under test will not be able to perform the query/response functions, the rationale will be documented in the tool. This Test Case includes additional functionality for reconciling the history and providing vaccine forecast information based upon the data that was manually entered during the Initial Data Load.

### Comments

No Comments

### Pre Condition

Juana Mariana Gonzales is entered as a patient in the EMR with complete Demographic data, Immunization History Data, and Clinical Data according to the steps in the 'Juana Mariana Gonzales 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 enter distinguishing information about patients so that providers can uniquely identify patients who have similar sounding names or other similar identifying information. For example, twins living in the same household will have similar dates of birth, addresses, and may have similar names. EHRs or other clinical software must be able to store information to successfully match with patients in immunization registries, if the information is available. The information includes the mother's maiden name, whether the patient was part of a multiple birth, and the order of the multiple birth. This information allows the provider to correctly identify the patient and also helps assure a match when the EHR send the patient's information to external systems such as an immunization registry.

**Real Time Request/Receive Patient Immunization History:** The system sends a request to the public health immunization registry "on demand" (e.g., those without 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 (Query Response Grammar (RSP) - 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. The EHR is able to display the 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 or other clinical software is able to store 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 public health immunization registry (IIS). The display includes the forecast from the registry and includes recommended vaccination dates, minimum (earliest) date, ideal date, and maximum (latest) date 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, where the updated forecast results from the 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.

**Review Patient Immunization History:** To assist with the ordering process, the EHR or other clinical software system allows a user to specify standard views of patient immunization information for each vaccine dose administration, including patient-specific data (e.g., age on dates of administration, etc.).

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.

<b>Notes for Testers</b>
No Note