Description
The Immunization Registry returns an Evaluated History and Forecast (Z42) to the EMR in response to the query for patient (Juana Mariana Vazquez). The provider reviews the immunization history from the registry and compares to the immunization history in the EMR. The provider reviews the information from these sources, identifying information known only to the registry, and identifying information that is more accurately reflected in the local EMR: The physician accesses the record for Juana Mariana Vazquez and the EHR Differentiates: The following vaccinations are available only to the EMR:

diphtheria, tetanus toxoids and acellular pertussis vaccine, 5 pertussis antigens (CVX 106) administered 11/20/2018
poliovirus vaccine, inactivated (CVX 10) administered 2/21/2016, -- Adverse Reaction: febrile seizure (e.g. Simple febrile seizure (finding) 432354000) VXC11^convulsions (fits, seizures) within 72 hours of dose^CDCPHINV)
Influenza, injectable,quadrivalent, preservative free, pediatric (CVX 161) administered 10/15/2018

The EHR differentiates the following vaccinations which differ between the EMR and the IIS:

For the hepatitis B vaccine, pediatric or pediatric/adolescent dosage (CVX 08) administered 12/20/2014, that EMR displays different text for the IIS (which documents a Non-specific formulation) and EMR (which documents hepatitis B vaccine, pediatric or pediatric/adolescent dosage) for Vaccine administered

The EHR differentiates the following vaccinations that are available from both the IIS and the local EMR:

measles, mumps, rubella virus vaccine (CVX 03) administered 8/22/2015 (an invalid dose)

The EHR differentiates the following vaccinations are that are available from the IIS that are not known to the local EMR:

hepatitis B vaccine, pediatric or pediatric/adolescent dosage (CVX 08) administered 11/01/2014
hepatitis B vaccine, pediatric or pediatric/adolescent dosage (CVX 08) administered 05/20/2015
diphtheria, tetanus toxoids and acellular pertussis vaccine, 5 pertussis antigens (CVX 106) administered 1/22/2015
diphtheria, tetanus toxoids and acellular pertussis vaccine, 5 pertussis antigens (CVX 106) administered 3/23/2015
diphtheria, tetanus toxoids and acellular pertussis vaccine, 5 pertussis antigens (CVX 106) administered 5/22/2015
diphtheria, tetanus toxoids and acellular pertussis vaccine, 5 pertussis antigens (CVX 106) administered 2/21/2016
Haemophilus influenzae type b vaccine, PRP-OMP conjugate (CVX 49) administered 1/22/2015
Haemophilus influenzae type b vaccine, PRP-OMP conjugate (CVX 49) administered 3/23/2015
Haemophilus influenzae type b vaccine, PRP-OMP conjugate (CVX 49) administered 5/22/2015
Haemophilus influenzae type b vaccine, PRP-OMP conjugate (CVX 49) administered 11/21/2015
poliovirus vaccine, inactivated (CVX 10) administered 1/22/2015
poliovirus vaccine, inactivated (CVX 10) administered 3/23/2015 – Adverse Reaction: (VXC12^fever of >40.5C (105F) within 48 hours of dose^CDCPHINVS)
pneumococcal conjugate vaccine, 13 valent (CVX 133) administered 1/22/2015
pneumococcal conjugate vaccine, 13 valent (CVX 133) administered 3/23/2015
pneumococcal conjugate vaccine, 13 valent (CVX 133) administered 5/22/2015
pneumococcal conjugate vaccine, 13 valent (CVX 133) administered 1/11/2016
rotavirus, live, monovalent vaccine (CVX 119) administered 1/22/2015
rotavirus, live, monovalent vaccine (CVX 119) administered 3/23/2015
Influenza, seasonal, injectable (CVX 141) administered 9/25/2015

Influenza, seasonal, injectable (CVX 141) administered 10/29/2015
Influenza, injectable,quadrivalent, preservative free, pediatric (CVX 161) administered 10/2/2016
Influenza, injectable,quadrivalent, preservative free, pediatric (CVX 161) administered 11/4/2017
hepatitis A vaccine, pediatric/adolescent dosage, 2 dose schedule (CVX 83) administered 11/23/2015
hepatitis A vaccine, pediatric/adolescent dosage, 2 dose schedule (CVX 83) administered 5/23/2016
measles, mumps, rubella virus vaccine (CVX 03) administered 9/22/2018
Varicella virus vaccine (CVX 21) administered 12/15/2016

Comments

No Comments

Pre-condition

Juana Mariana Vazquez Initial Data Load is completed.

Juana Mariana Vazquez is the active working patient in the EMR.

A Z44 query has been submitted to the Immunization Registry and a Z42 response is provided back to the EMR.

Post-Condition

Evaluated Immunization History returned from the registry is reviewed and compared to the immunizations in the patient record (Juana Mariana Vazquez).

Test Objectives

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.

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.

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

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

1. The EMR is able to receive the response from the Immunization Registry.

2. The EMR displays the information returned from the Immunization Registry according to the Juror Document.

   - Complete review for Polio administered 3/23/2015, MMR 8/22/2015.

   - remaining vaccines may be reviewed only for the vaccine name and date administered.

3. The EMR is able to differentiate the vaccines in the comparison between the EHR and the vaccination history.

Notes

The juror document also contains the verification content for the immunization forecast, which is tested and graded separately at step 5: View the vaccination history for Juana Mariana Vazquez. The criteria for this step is tested separately here and graded only with respect to the vaccine history.

Visualization of the adverse reaction for the Polio Vaccine in the history returned from the IIS is an advanced function. The adverse event is returned in the message and may be displayed during comparison by the EMR, but it is not listed in the Juror document.

The EMR must minimally display the vaccine administered and the date of the immunization.