



Immunization Registry Interface Implementation Process For Electronic Health Record Vendors

The Colorado Immunization Information System (CIIS) has the ability to accept immunization data directly from provider office Electronic Health Record (EHR) systems through one-way, HL7 (Health Level 7) batch file transfers. CIIS currently accepts HL7 files formatted in version 2.3.1 and 2.5.1. This document outlines the various high-level phases of interface implementation. While the timeline of interface implementation may vary from one provider office to another, all EHR vendors will go through the phases described below in order to establish HL7 batch interfaces between their Colorado clients and CIIS. *NOTE: Not all of the steps below are “owned” by the EHR vendor; some steps will be completed by the provider office and CIIS staff.

Preparation Phase

The Preparation Phase can begin at any time.

1. [Contact CIIS](#) with interest in testing interface and get on CIIS EHR vendor waitlist.
 - a. Supply EHR product name(s) and version(s) to be tested.
 - b. Supply list of Colorado clients.
 - c. Provide contact information for testing lead.
2. Review [CIIS HL7 Messaging Specifications Guide](#) and create test message.
3. Await contact from CIIS for implementation to begin. *Note: Due to the length of our waiting list and the significant amount of time it is taking to complete some interfaces, your waiting period could be extensive.*

Testing Phase

The Testing Phase begins after CIIS contacts the EHR vendor testing lead. CIIS will not review test messages from EHR vendors prior to initiating this contact.

1. If not already completed during the Preparation Phase, generate HL7 test message(s) and send to CIIS for formatting review until deemed successful.
2. Work with CIIS staff to identify provider office(s) for interface implementation.

Implementation Phase

The Implementation Phase begins after the EHR interface has successfully met CIIS file formatting requirements using test data. The EHR vendor will follow the steps described below for every provider interface.

1. Participate in project kick-off call.
 - a. Coordinate timing of interface installation with provider office prior to production testing.
 - b. Discuss project timeline, including ongoing meetings, communications, milestones and file frequency.
2. Test interface using fake patient data from provider’s test environment.
 - a. Successfully install interface in provider’s local environment(s) (*may not be applicable for all EHR vendors*).
 - b. EHR vendor or provider generates HL7 test message and sends to CIIS for formatting review until deemed successful.
3. Establish secure FTP account for file transfers to CIIS.
 - a. Work with CIIS staff to establish secure FTP account (*CIIS provides FTP license free-of-charge; FTP account may be vendor-based or provider-based depending on who will actually send ongoing data files to CIIS*).
 - b. Test the FTP connection with CIIS staff (*testing may be performed by vendor or provider depending on FTP account*).
4. Test interface using real patient data from provider’s production environment.
 - a. EHR vendor or provider generates HL7 test message using real patient data and sends to CIIS via FTP for CIIS review until deemed successful.
5. EHR vendor or provider generates file for data validation based on CIIS-specified parameters.
 - a. CIIS staff performs review of submitted data and communicates any issues back to provider.
 - b. Provider works with CIIS staff to resolve issues.
 - c. Requirement is to achieve ≥95% accuracy rate.
6. Support interface Go Live.
 - a. Assist provider in selecting Go Live date and communicate scheduled Go Live date to CIIS staff.
 - b. CIIS verifies receipt of enhanced data file submitted to registry on Go Live date.

- c. Provider staff participates in CIIS training, if not already completed.
- d. If sending on behalf of provider, continue to send data files to CIIS on mutually-agreed-upon frequency.