



Colorado Immunization Information System (CIIS) Immunization Registry Interface Implementation Process For EHR Vendors

The Colorado Immunization Information System (CIIS) has the ability to accept immunization data directly from provider office Electronic Health Record (EHR) systems through a real-time bi-directional interface and one-way batch file transfers, both using Health Level 7 (HL7) messages. CIIS accepts HL7 files formatted in version 2.5.1. This document outlines the high-level phases of interface implementation. Interface implementation timelines average 90 days, but can vary widely based on data quality, EHR Vendor engagement and responsiveness of the provider. All EHR providers will go through the phases described below in order to establish an HL7 interface between their EHR and CIIS.

***NOTE: Not all of the steps below are “owned” by the EHR Vendor; some steps will be completed by CIIS staff.**

Preparation Phase

The Preparation Phase can begin at any time.

1. Enroll your EHR in the CIIS Resource Center (CRC) at www.ciisresources.com.
2. Install and configure interfaces for interested clients as necessary.
3. Complete HL7 self-testing of messages on behalf of clients within the CRC.
4. Prepare and deliver training to your clients on the immunization functionality available in your EHR.
5. Await contact from CIIS for implementation to begin.

Implementation Phase

The Implementation Phase cannot begin until a provider has successfully completed HL7 self-testing in the CRC.

1. Participate in project kick-off call as necessary.
 - a. Designate an EHR Vendor contact to be main contact for the entire implementation.
 - b. Discuss project timeline, including ongoing meetings, communications, milestones and file frequency as needed.

Subsequent steps in the implementation phase vary slightly based on a provider's intent to seek a real-time or for FTP batch connection. Please refer to the appropriate column.

Real-time	Batch
<p>2. Test real-time connectivity after receiving credentials.</p>	<p>2. Establish secure FTP account for file transfers to CIIS.</p> <p>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).</p> <p>b. Test the FTP connection with CIIS staff (testing may be performed by vendor or provider depending on FTP account)</p>
<p>3. Activate interface using real patient data from provider's production environment.</p> <p>a. EHR vendor or provider generates HL7 message using real patient data and sends to CIIS via the gateway for CIIS review until deemed successful.</p>	<p>3. Activate interface using real patient data from provider's production environment.</p> <p>a. EHR vendor or provider generates HL7 message using real patient data and sends to CIIS via secure FTP for CIIS review until deemed successful.</p>
<p>4. Assist CIIS staff with data validation process</p> <p>a. Provider pulls requested hard copy patient records and submits them to CIIS for data validation.</p> <p>b. CIIS staff performs review of submitted data and communicates any issues back to provider.</p> <p>c. Work with CIIS staff to resolve issues until a $\geq 95\%$ accuracy rate is achieved.</p>	<p>4. Assist CIIS staff with data validation process</p> <p>a. Provider pulls requested hard copy patient records and submits them to CIIS for data validation.</p> <p>b. CIIS staff performs review of submitted data and communicates any issues back to provider.</p> <p>c. Work with CIIS staff to resolve issues until a $\geq 95\%$ accuracy rate is achieved.</p>
<p>5. Support interface Go Live</p> <p>a. CIIS and provider work together to select Go Live date.</p> <p>b. Provider staff participates in CIIS training, if not already completed.</p> <p>c. Ongoing monitoring of real-time messages</p>	<p>5. Support interface Go Live</p> <p>a. CIIS and provider work together to select Go Live date.</p> <p>b. Provider staff participates in CIIS training, if not already completed.</p> <p>c. Send ongoing data files to CIIS on mutually-agreed-upon frequency</p>

