ImpactSIIS Interoperability with Electronic Health Records (EHR) Systems

The Ohio Department of Health (ODH) immunization information system, ImpactSIIS (Statewide Immunization Information System), contains over 90 million vaccinations recorded for more than 9 million Ohioans. Immunization records are entered by participating providers and imported from other electronic sources (e.g., EHR systems and Medicaid claims data).

ImpactSIIS helps its thousands of participating health care providers with many beneficial features, such as forecasting scheduled immunizations, generating immunization reminder notices, and managing vaccine inventory. These services can improve immunization rates by 20%. The functions are based on immunization forecasting algorithms that are frequently evaluated and updated to assure the most up-to-date immunization schedules.

The system processes hundreds of HL7 (versions 2.3 - 2.5.1) files daily and each month approximately one million records are added. We are developing a dynamic HL7 exchange process. This bidirectional exchange will enable health care providers, using their own EHR systems, to query the ImpactSIIS system and to return immunization records for that specific patient back into their EHR.

There is no law in Ohio mandating the usage of ImpactSIIS by immunization providers, so recruiting providers and facilitating interoperability of ImpactSIIS with other electronic data sources is a vital component of the ODH ImpactSIIS program.

A. Initial Documentation

For an overview of the data transfer process:

High Level Overview

FAQ Arranged by Steps Checklist

The above FAQ document outlines the ODH specific processes regarding:

Data Exchange Type Frequency
Connectivity Vocabulary

File Naming convention Practice/Provider Identification

Validation/ Field Verification Testing

For questions about connectivity:

Mode of Connectivity

HL7 File, Manual Upload – Via Web Application HL7 File, Manual Upload – Via Secure FTP HL7 File, Automatic Upload – Via Secure FTP

We also support real-time bi-directional messaging over web services.

For creating messages:

Ohio's preferred HL7 version is 2.5.1. For creating messages we use the <u>CDC's</u> implementation guide.

B. Our HL7 Immunization Data Evaluator

After registration at <u>our secure message format validation tool</u> you will have access to the code set tables for several different versions of HL7.

Once you upload test data files, it requires just two mouse clicks to have the first 11 messages evaluated by the HL7 Immunization Data Evaluation Engine for code set compliance, language, syntax, and formatting. Results and failure/validation notifications are instant. All error reports are exportable for ease of communication to internal support staff.

To see instructions or register now, please follow the links.