

# Immunization (IZ) Gateway Portfolio Overview

## Introduction

The IZ Gateway is a portfolio of components which share a common IT infrastructure. These components support the exchange of immunization data between immunization information systems (IISs), provider organizations, and consumer applications. The IZ Gateway can streamline time and resource intensive data exchange onboarding. It also replaces multiple one-to-one connections with centralized routing. This document includes an overview of each component including the requirements and benefits of participating in each one.

## Acronym List:

- AIRA – American Immunization Registry Association
- ASTHO – Association of State and Territorial Health Officials
- APHL – Association of Public Health Laboratories
- BAA – Business Associate Agreement
- CDC – Centers for Disease Control and Prevention
- DUA – Data Use Agreement
- HIPAA: Health Insurance Portability and Accountability Act
- HL7 – Health Level Seven International
- IIS – Immunization Information System
- MOU – Memorandum of Understanding
- WSDL – Web Services Description Language

## Legal Agreements:

Project participants must sign the following legal agreements to participate in the IZ Gateway. Each component has different requirements. Regulatory and legal changes might be necessary in some jurisdictions to participate in the IZ Gateway. Participating jurisdictions should begin reviewing their current agreements and these requirements now to determine what may need to be added.

- Interjurisdictional MOU – Jurisdiction IIS and Jurisdiction IIS:
  - Public Health Interjurisdictional Memorandum of Understanding (MOU) (Updated August 2019)
  - Signed among public health jurisdictions
  - Allows data exchange to occur through the IZ Gateway or an alternative mechanism with any state or jurisdiction that has signed the MOU
  - Not a federal agreement, only between signatories
  - No renewal required
  - AIRA holds the signed MOUs
- Data Use Agreement – Jurisdiction IIS and APHL
  - Allows data to flow through the IZ Gateway which is hosted by APHL
  - Addresses security, responsibilities, relationship of the parties, amendment, and incident response

- No renewal required
- Data are not held by APHL outside of the immediate transaction
- APHL holds the signed DUAs
  
- Business Associate Agreement – Provider Organization and APHL
  - Recognizes that the IZ Gateway sends and receives data on behalf of the provider organization
  - Addresses use and disclosure of protected health information, security, privacy, incident response and other clauses
  - No renewal required
  - Required by HIPAA
  - APHL holds the signed BAAs
  
- Data Use Agreement – Jurisdiction IIS and CDC
  - Allows CDC access to de-identified IIS data
  - In development
  
- Jurisdiction-specific Policy Agreement(s) (e.g., provider site agreements, confidentiality agreements, etc.) - IIS and Provider Organization
  - Specific to each jurisdiction
  - Signed by provider organization

#### IZ Gateway Portfolio Overview

IZ Gateway Portfolio Component	Capability	Benefits	Technology Requirements	Policy Requirements	Participation Steps
<b>Connect</b>	<ul style="list-style-type: none"> <li>• Enables large national and non-traditional vaccinators to report and query immunization data with multiple IISs using the IZ Gateway</li> <li>• Provides a centralized data exchange connection so multi-jurisdiction provider organizations have one connection instead of multiple, individual, point-to-point IIS connections</li> </ul>	<ul style="list-style-type: none"> <li>• More complete and accurate vaccine information is available from national provider organizations and non-traditional vaccinators (organizations that are not currently sharing with IIS)</li> <li>• Onboarding concierge services to help provider organizations navigate local policy and technology variations per IIS jurisdiction</li> <li>• Centralized onboarding services, quality assurance and testing make it easier for both the provider and the IIS</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Provide Immunization Gateway credentials</li> <li><input type="checkbox"/> CDC WSDL and HL7 2.5.1 Release 1.5</li> <li><input type="checkbox"/> DUA between IIS and APHL (Drafting currently in progress)</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Jurisdiction-specific Policy Agreement(s) between IIS and Provider Organization</li> <li><input type="checkbox"/> BAA between Provider Organization and APHL</li> </ul>	<ol style="list-style-type: none"> <li>1. IIS provides IZ Gateway credentials and recognizes sender in MSH/RXA segments</li> <li>2. IIS provides jurisdiction-specific agreements</li> <li>3. IIS identifies provider organization partner to sign local policy agreements and BAA</li> <li>4. IIS maps and provides facility IDs</li> </ol>

		<ul style="list-style-type: none"> <li>No policy requirements make it easy for IIS participation</li> </ul>			<ol style="list-style-type: none"> <li>All parties participate in meetings (initial, testing, QA, hand-off, others as needed)</li> <li>IIS reviews test messages and provides testing/QA synopsis</li> <li>IIS and provider organization complete production readiness activities</li> <li>All parties participate in project evaluation activities/data compilation</li> </ol>
Share	<ul style="list-style-type: none"> <li>Allows exchange of immunization information across IIS jurisdictions</li> <li>Automates messages to an IIS for patients immunized outside of their jurisdiction</li> </ul>	<ul style="list-style-type: none"> <li>Gain a more complete and accurate assessment of vaccine coverage per jurisdiction through data sharing of appropriate vaccination records</li> <li>Option to have a user interface generate a query to another IIS (currently available through STC and Envision products). See “multi-jurisdictional query” below for automated functionality through provider organization.</li> </ul>	<ul style="list-style-type: none"> <li>Provide Immunization Gateway credentials</li> <li>Capability to recognize out of state address in incoming HL7 message and in data at rest</li> <li>Trigger creation of a new historical VXU to send to another IIS based on out of state address</li> <li>Capability to install client-side certificate</li> <li>Modified CDC WSDL and HL7 2.5.1 Release 1.5</li> </ul>	<ul style="list-style-type: none"> <li>Interjurisdictional MOU by IIS</li> <li>DUA between Jurisdiction and APHL</li> </ul>	<ol style="list-style-type: none"> <li>Sign Interjurisdictional MOU</li> <li>Sign DUA with APHL</li> <li>Software modification as need to support features*</li> <li>Test and implement message trigger for outgoing messages</li> <li>Test and accept incoming messages – treating incoming messages as historical</li> </ol> <p>*Jurisdictions not using STC or Envision IIS software may have significant costs for upgrades</p>
Provider-initiated Multi-jurisdictional Data Exchange	<ul style="list-style-type: none"> <li>Allows providers to initiate a query for vaccine information from multiple jurisdictions and receive a consolidated record</li> </ul>	<ul style="list-style-type: none"> <li>Enables provider organizations to query multiple IISs that have signed the Interjurisdictional MOU for IZ Gateway Share</li> <li>Provides consolidated vaccine record from multiple states, where needed</li> </ul>	<ul style="list-style-type: none"> <li>Provide Immunization Gateway credentials</li> <li>CDC WSDL and HL7 2.5.1 Release 1.5</li> </ul>	<ul style="list-style-type: none"> <li>Jurisdiction-specific Policy Agreements between IIS and Provider Organizations</li> </ul>	<ol style="list-style-type: none"> <li>Ensure Provider Organization signs all Jurisdiction-specific Policy Agreements</li> <li>Sign Interjurisdictional MOU</li> <li>Sign DUA with APHL</li> <li>Respond to provider/IZ Gateway query</li> </ol>

				<ul style="list-style-type: none"> <li><input type="checkbox"/> Interjurisdictional MOU by IIS</li> <li><input type="checkbox"/> DUA between Jurisdiction and APHL</li> </ul>	
Access	<ul style="list-style-type: none"> <li>• Enables consumer access to online immunization records and forecasts through easy-to-use digital tools</li> </ul>	<ul style="list-style-type: none"> <li>• Consumers can monitor and ensure vaccinations are up to date</li> <li>• Consumers have convenient access to official immunization records for their needs (e.g. school, travel, work, doctor visits)</li> <li>• Decreases record request burden on IIS programs and providers</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Provide Immunization Gateway credentials (depending on consumer access product)</li> <li><input type="checkbox"/> CDC WSDL and HL7 2.5.1 Release 1.5</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Work with IZ Gateway team to find the right access product to connect to your system</li> <li><input type="checkbox"/> Ensure no policy issues prevent consumer access</li> <li><input type="checkbox"/> DUA between Jurisdiction and APHL</li> </ul>	<ol style="list-style-type: none"> <li>1. Review and select consumer access options</li> <li>2. Participate in planning meetings with team and vendors</li> <li>3. Sign DUA with APHL</li> <li>4. Depending on product, complete testing and QA</li> <li>5. Onboard product through IZ Gateway</li> <li>6. Participate in and inform marketing and evaluation efforts</li> </ol>
Analytics	<ul style="list-style-type: none"> <li>• Provides Data Lake snapshot of de-identified COVID-19 vaccine administered doses for CDC analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Provides centralized point for analysis of de-identified, de-duplicated COVID-19 doses administered data in real-time</li> <li>• Identify areas of high-risk for vaccine distribution or implementation of alternative intervention efforts</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Produce IIS extract of de-identified data based on a detailed specification and send through specified transport method on a specified schedule (specifics TBD)</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> DUA between Jurisdiction and CDC to share de-identified patient COVID-19 records</li> <li><input type="checkbox"/> DUA between Jurisdiction and data host, such as APHL</li> </ul>	<ol style="list-style-type: none"> <li>1. Sign CDC DUA</li> <li>2. Sign DUA with data host</li> <li>3. IIS produces Data Extract according to specifications (TBD)</li> <li>4. Send de-identified data extract to Data Lake</li> </ol>