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# Bidirectional Data Exchange: Testing

Texas Immunization Registry

Interoperability Team : 1-800-348-9158 Option 3

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# Terminology

Terminology we will use in this presentation:

- BiDX = Bidirectional data exchange
- Registry = Texas Immunization Registry
- Orgs = Providers, healthcare entities, organizations
- EHR = Electronic Health Records systems
- POC = Your Org's registered Point of Contact

# Message Types

- Affirmation Message
  - Adds patient to the registry
  - 2 types – HL7 or Flat Files
- QBP: Query By Parameter
  - Requests immunization history
- VXU: Vaccine History Update
  - Adds new immunization to a patient record

# Overview

- Preparation
- Testing Scenarios
- Troubleshooting
- Completion

# Preparation



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# Purpose of Testing

- BiDX Testing ensures:
  - Connection is set up correctly
  - HL7 messages are formatted correctly
  - EHR functions as expected
  - Workflow analyzed and prepared





# Goal of BiDX Testing

- The goal of Bidirectional Data Exchange Testing is to:  
**Complete all testing scenarios without errors**

# Requirements

- Testing team identified:
  - Org staff and EHR support
  - Org Subject Matter Experts (SME)
  - Available for 2 weeks of testing
  - Who will need ImmTrac2 test access?
- EHR BiDX functionality ready



# Credentials & Resources

- Webservice credentials sent to POC
  - Includes Webservices URL
- ImmTrac2 test access sent to individuals
- Resources sent to testing team
  - Test Plan
  - Test Patient List



# Resources in Detail

- Test Plan
  - List of scenarios that must be tested
  - All scenarios must be successful
- Test Patient List
  - QBP Only Orgs: Full list of patients to test with
  - VXU Orgs: Single patient – All others provided by Org



# Test Scenarios



# Connection Testing

- Simple test to confirm:
  - EHR can connect to the registry
  - Webservice credentials are correct



# Affirmation Testing

- Applies only to VXU submitters
- Submit affirmation messages for all testing patients
  - Variety of patient types
  - Patients to be used for other tests
- Review response messages
- Verify patients were added in ImmTrac2 Test



# QBP Testing

- Send QBP messages for each test scenario
- Was a response received without error?
- Review the returned records in the EHR
- Compare results to the record in ImmTrac2 test





# VXU Testing

- Create records in the EHR for each test scenario
- Send VXU message
  - Will this be automatic, or will this require an action by the end user?
- Review the response for errors
  - How will end user be aware of errors?
- Compare patient record in ImmTrac2 Test to EHR



# Troubleshooting



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# Troubleshooting

- The Data Exchange Error Guide
  - Explains all errors returned by the registry
  - Offers solutions to many errors
- Review your documentation and the scenario
- Collaborate with your EHR Vendor
- Contact the registry if your team cannot resolve the error



# Completion



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# Completing Testing

- Plan “Go-Live Date”
- Once all Test Scenarios are successful
  - Contact the registry for review
  - Provide complete list of test patients
  - List of each scenario tested for each patient
- The registry will validate test results
- Your team will be notified of successful completion



# TIPS Report

- Testing activity may show on TIPS report
- Disregard Data Exchange Activity for month of testing



# Thank you!

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