# 2023-01 DRAFT Da Vinci Payer Data Exchange (PDex) and Formulary

## Short Description
Payer Data Exchange (PDex) is preparing an update to the STU2 version of the IG. This will incorporate changes to support anticipated regulatory changes related to Burden Reduction and Payer-Provider Bulk Exchange. This track will be testing out the changes to the IG made for the post STU2 Ballot Submission planned for early 2023.

**Type**
Test an Implementation Guide

**Track Prerequisites**
PDex IG - Payer to Payer Exchange

**Track Lead(s)**
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## Long Description
Testing of changes to the Payer Data Exchange IG that are planned for the post-STU2 version of the guide. With an impending NPRM that may address Payer-to-Payer Exchange and Payer-Provider Exchange this will be an opportunity for payers to test their exchange solutions with other payers.

**Type**
Test an Implementation Guide

**Track Prerequisites**
PDex Formulary Break-out - Implementer support Office Hours

**Track Lead(s)**
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## Testing Scenario:

### Payer to Payer Exchange

*Review the following Page in the Continuous Integration Build: [Payer-to-Payer Exchange](https://github.com/rdieterle2/Payer-Payer)*

*Read up about mTLS. It is used to setup access to Dynamic Client Registration in OAuth2.0. Here is an article that may help (You can search for mTLS in a search engine for other explanations): [https://codeburst.io/mutual-tls-authentication-mtls-de-mystified-11fa2a52e9cf](https://codeburst.io/mutual-tls-authentication-mtls-de-mystified-11fa2a52e9cf)*

**FHIR Client**

Come prepared to interact with a FHIR Server. This can be accomplished with an application that can be configured or coded to make FHIR RESTful calls. See the "Step by step tutorial and sample projects" under the Helpful Links below for an example of how to do this use Postman.

**FHIR Server**

Come prepared for other FHIR Clients to be able to interact with your FHIR Server.

## Specification Information

**CMS 2022 – 07 Da Vinci Payer Data Exchange (PDex) & Drug Formulary**

*Note: the directory has only the example from the PDex IG loaded – please load compliant examples based the plan for the Git directory*

**Call for participants**

Payers, Vendors and Providers

**Zulip stream**

PDex: [https://chat.fhir.org/#narrow/stream/235286-Da-Vinci.20PDex](https://chat.fhir.org/#narrow/stream/235286-Da-Vinci.20PDex)
<table>
<thead>
<tr>
<th>Track Kick off Call</th>
<th>Kick-off call will take place on [TBD] during the regular 1:00 PM ET PDex/Formulary Workgroup call; Meeting recording: TBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectathon31-O...DaVinciPDex.pptx</td>
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<tr>
<td>20220909_PDex_Form...athonKickoff.pdf</td>
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<tr>
<td>Clinical Input Required?</td>
<td>Payers and Providers using US Core 3.1.1</td>
</tr>
<tr>
<td>Related Tracks?</td>
<td>Member Attribution - for Payer-Provider exchange</td>
</tr>
</tbody>
</table>
| Helpful Links | Here are some links to assist implementers:  
  - REST API in the Specification.  
  - Open_Source_FHIR_Implementations.  
  - Public Test Servers.  
  - Step by step tutorial and sample projects. |
| Testing Scenario | Preparation Steps:  
  Roles involved:  
  - Network Engineering  
  - Security Engineering  
  - Developer  
  Time Required: |
1-2 Hrs

Steps involved:

Use Case 1 - Payer-to-Payer

System roles:
- Payer acting as Server
- Payer acting as Client

Payers will need to register an mTLS endpoint into a GitHub repository to enable mTLS endpoint discovery.

Role 1 Name: Establish mTLS connection

Scenarios:
- Payer1 will search for Payer2 in mTLS endpoint repository
- Payer1 will request connection with Payer2
- Payer2 will lookup Payer1 in mTLS endpoint repository to confirm legitimate request
- Payer2 will reciprocate connection back to Payer1 to establish mTLS connectivity.

Scenario Step 1 Name

Action:
- Payer1 and Payer2 successfully connect via mTLS

Precondition: Success Criteria:
- Payer1 successfully makes a request to OAuth2.0 Dynamic Client Registration Protocol endpoint and relieves client credentials that enable a $member-match operation to be requested.

Success Criteria:
- Payer1 reaches $member-match operation with valid client credentials issued by DCRP endpoint via mTLS connection.

Bonus point:
- Successful $member-match operation

TestScript(s):
- TBD

Security and Privacy Considerations:
- mTLS will be established to enable access to OAuth2.0 DCRP endpoint.

Use Case 2 - Payer Provider

System roles:
- Payer acting as Server
- Provider acting as Client

Providers will need to be registered with Payer with appropriate User level credentials to access the required FHIR APIs and Operations.

Role 1 Name: Get Patient info for Current Patient Roster

Scenarios:
- Provider will submit a list of patients to Payer to retrieve patient clinical data
- Provider will submit a list of patients to Payer to retrieve data for Patients since a previous download date
- Payer will validate list to ensure all members are attributed to Provider

Precondition: Success Criteria:
- Provider successfully downloads data from Payer for a group of members/patients using bulk async protocols

Bonus point:
- Provider successfully downloads a subset of members from their attributed list
- Payer and Provider successfully negotiate updates to attributed member list(s)

TestScript(s):
TBD

Security and Privacy Considerations:
- TBD

**Use Case 3 - Formulary Bulk Export**

System roles:
- Payer/PBM acting as Server
- Third-Party App acting as Client

Role 1 Name: Server
Server provides $export operation to enable one or more Formularies to be exported.

Role 2 Name: Client
Client makes $export request to download formulary.