Da Vinci PDex Drug Formulary

Implementation Guide Overview

Corey Spears
MITRE
Get connected - Zulip

• Formulary:
  - https://chat.fhir.org/#narrow/stream/197730-Da-Vinci.20PDex.20Drug.20Formulary
What is a Drug Formulary?

• A drug formulary is a list of brand-name and generic prescription drugs a health insurer agrees to pay for, at least partially, as part of health insurance coverage

• Drug formularies are developed based on the efficacy, safety and cost of drugs
CMS Interoperability and Patient Access Final Rule

- Drug formularies are part of the Patient Access API required by the CMS Interoperability and Patient Access Final Rule
  - Medicare Advantage prescription drug plans must make formulary information available via the Patient Access API
  - Medicaid and CHIP FFS and managed care must make preferred drug lists available
  - Enforced July 1, 2021:
    - Medicare Advantage organizations, state Medicaid and Children’s Health Insurance Program (CHIP) fee-for-service (FFS), Medicaid managed care plans, and CHIP managed care entities, or plan years beginning on or after January 1, 2021 for Qualified Health Plans (QHPs) on the Federally-facilitated exchanges (FFEs)
CMS Interoperability and Patient Access Final Rule

• CMS is strongly encouraging the use of the Da Vinci Formulary Implementation Guide as one way to meet the drug formulary API requirement

• **Objective:** Enable consumers/members/patients to understand the costs and alternatives for drugs that have been prescribed, and to compare their drug costs across different insurance plans
Targeted Users

• Members
  – Looking for information about drugs and their costs for their current group or plan

• Potential Members
  – People looking for a “Shopping Experience” to compare covered drugs and costs

• 3rd Party App Developers
  – Aggregating information from multiple plans
WORKFLOWS
Authenticated Member Access

Mobile app determines the cost of Medications under member’s current coverage

<table>
<thead>
<tr>
<th>Medication Copays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med</td>
</tr>
<tr>
<td>Med1</td>
</tr>
<tr>
<td>Med2</td>
</tr>
<tr>
<td>Med3</td>
</tr>
</tbody>
</table>

Outside scope of this IG

What are my Medications?

Medication1, Medication2, Medication3

RxNorm Codes

Electronic Health Record

Within scope of this IG

Tell me about:
Medication1, Medication2, Medication3

Info about:
Medication1, Medication2, Medication3

Formulary Service
## Authenticated Member Scenarios

<table>
<thead>
<tr>
<th>Situation</th>
<th>PlanID specified</th>
<th>PlanID not specified (shopping)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No plan available</td>
<td>Zero plans returned</td>
<td>Zero plans returned</td>
</tr>
<tr>
<td>No plan selected/no group</td>
<td>Zero plans returned</td>
<td>Bundle of available individual InsurancePlans</td>
</tr>
<tr>
<td>No plan selected/in group</td>
<td>Zero plans returned</td>
<td>Bundle of available group InsurancePlans</td>
</tr>
<tr>
<td>Plan selected/no group</td>
<td>If InsurancePlan specified matches member's plan, return InsurancePlan, otherwise zero plans returned</td>
<td>Zero plans returned</td>
</tr>
<tr>
<td>Plan selected/in group</td>
<td>If InsurancePlan specified matches member's plan, return InsurancePlan, otherwise zero plans returned</td>
<td>Bundle of available group InsurancePlans. If no plans available, zero plans returned</td>
</tr>
</tbody>
</table>
Mobile app compares health plans across multiple data sources on behalf of patient/consumer

### Medication Copays

<table>
<thead>
<tr>
<th>Med</th>
<th>Tier</th>
<th>Copay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med1</td>
<td>1</td>
<td>$5</td>
</tr>
<tr>
<td>Med1</td>
<td>4</td>
<td>$30</td>
</tr>
<tr>
<td>Med3</td>
<td>2</td>
<td>$10</td>
</tr>
</tbody>
</table>

### Outside scope of this IG

- What are my Medications?
- Medication1, Medication2, Medication3, RxNorm Codes
- Tell me about Payer Endpoints

### Within scope of this IG

- Tell me about Coverage Plans (iterative)
- Tell me about my Meds (iterative)

---

© 2019 Health Level Seven® International. Licensed under Creative Commons Attribution 4.0 International

HL7, Health Level Seven, FHIR and the FHIR flame logo are registered trademarks of Health Level Seven International. Reg. U.S. TM Office.
FORMULARY PROFILES
Required Terminologies

• No licensed terminologies
• Several value sets based on RxNorm
• All value sets supported by HL7 Terminologies or defined within IG
REFERENCE IMPLEMENTATION
Open Source!

• Apache 2.0 License
  – Permissive license that protects trademarks

• Server uses the HAPI FHIR Server (Java)
  – https://github.com/HL7-DaVinci/drug-formulary-ri

• Client is a Ruby on Rails application
  – https://github.com/HL7-DaVinci/pdex-formulary-client

• Sample Data:
  – https://github.com/HL7-DaVinci/pdex-formulary-sample-data
Da Vinci Formulary

- w/ Bulk Data - [https://build.fhir.org/ig/HL7/davinci-pdex-formulary/branches/bulk-draft/](https://build.fhir.org/ig/HL7/davinci-pdex-formulary/branches/bulk-draft/)
- Reference Implementations (2.0.0):
  - Client: [https://pdex-formular-client.herokuapp.com](https://pdex-formular-client.herokuapp.com)
  - Server: [https://davinci-drug-formulary-ri.logicahealth.org/fhir](https://davinci-drug-formulary-ri.logicahealth.org/fhir)
- Member (authenticated) and “shopping experience” (unauthenticated)
- Bulk Data
A server **MAY** support Bulk Data IG for the retrieval of formulary data not related to an individual. (Non-Authenticated)

**If a Formulary server supports bulk data export:**

**All InsurancePlan or Specific InsurancePlan:** The server **SHOULD** support the export operation on the InsurancePlan resource `[base]/InsurancePlan/$export` to export all plan & formulary information.

- The server **SHOULD** support providing all InsurancePlan, Basic, MedicationKnowledge, and Location resource types containing formulary related data associated with all formulary related plans.
- The server **SHOULD** support the graph structure Payer Insurance Plan and/or Formulary Bulk Data Graph Definition in returned results.
- The server **MAY** support a graph parameter using (e.g. `[base]/InsurancePlan/$export?graph=usdf-PayerInsurancePlanBulkDataGraphDefinition`) to request returning results starting at the PayerInsurancePlan.
- The server **MAY** support a graph parameter using (e.g. `[base]/InsurancePlan/$export?graph=usdf-FormularyBulkDataGraphDefinition`) to request returning results starting at the Formulary. This request would not return PayerInsurancePlan resources.

The server **SHOULD** return only formulary related resources conformant to this guide.

The server **SHOULD** support the Bulk Data Kick-off Request.
The server **SHOULD** support the Bulk Data File Request.
The server **MAY** support the Bulk Data Status Request.
The server **MAY** support the Bulk Data Delete Request.