HL7® Da Vinci Project
Burden Reduction (CRD/DTR/PAS) and Clinical Data Exchange (CDex) Implementation Guides

Overview for ONC HITAC ePrior Authorization RFI Task Force Meeting

Viet Nguyen, MD
Da Vinci Technical Director
Da Vinci 2021 Multi-Stakeholder Membership

**PROVIDERS**
- athenahealth
- Cerner
- Epic
- Healow Insights
- veradigm
- MultiCare Connected Care
- OrthoVirginia
- Providence St. Joseph Health
- Texas Health Resources
- Weill Cornell Medicine
- UNC Health Care
- KAISER PERMANENTE®

**PAYERS**
- *Anthem*
- *Blue Cross of Idaho*
- *Blue Cross BlueShield of Tennessee*
- *Cambia*
- *Cigna*
- *Centene Corporation*
- *CVS Health*
- *Independence*
- *GuideWell*
- *Humana*
- *UnitedHealthcare*

**DEPLOYMENT**
- Availity
- MiHIN
- CHANGE Healthcare
- Cognizant

**VENDORS**
- *casenet*
- *cognosante*
- *edifees*
- *infor*
- *InterSystems*
- *juxly*
- *mcg*
- *OPTUM*
- *surescripts*
- *IBM Watson Health*
- *ZeOmega*
- *smile CDR*

**INDUSTRY PARTNERS**
- *HIMSS*
- *HL7 International*
- *NCQA*

*Indicates a founding member of the Da Vinci Project. Organization shown in primary Da Vinci role. Many members participate across categories.

For current membership: [http://www.hl7.org/about/davinci/members.cfm](http://www.hl7.org/about/davinci/members.cfm)
Use Case Readiness

**Clinical Data Exchange**
- Clinical Data Exchange (CDex)
- Payer Data Exchange (PDex)

**Quality & Risk**
- Data Exchange for Quality Measures inc. Gaps In Care (DEQM/GIC)
- Risk Adjustment (RA)

**Coverage, Transparency & Burden Reduction**
- Coverage Requirements Discovery (CRD)
- Documentation Templates and Rules (DTR)
- Prior-Authorization Support (PAS)

**Foundational Assets**
- Member Attribution List
- Notifications
- Health Record Exchange (HRex)

- Referenced in or supports Federal Regulation
- Aligned with expected Federal Regulation
- Dial denotes progress in current STU Phase

**Overall Maturity:**
- Most Mature
- Active Growth
- Least Mature
## Business Challenge: Reducing Burden of Prior Authorization

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Status</th>
<th>Core Capabilities</th>
<th>Regulatory Impacts</th>
<th>Implementer Progress</th>
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</thead>
<tbody>
<tr>
<td>Coverage Requirements</td>
<td>STU1 Published STU2 Ballot</td>
<td>Enables exchange of <strong>coverage plan requirements</strong> from payers to providers at the <strong>time of treatment decisions</strong>, patient specific with a goal to increase transparency for all parties of coverage that may impact services rendered i.e., is prior authorization required, are there other predecessor steps; lab tests required, physical therapy</td>
<td>Named in the rescinded NPRM CMS Interoperability and Prior Authorization (CMS-9123-P)</td>
<td>Connectathons x 3 years Early adopters and pilots underway</td>
</tr>
<tr>
<td>Discovery</td>
<td>2022Q1</td>
<td></td>
<td></td>
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<tr>
<td>Documentation Templates</td>
<td>STU1 Published STU2 Ballot</td>
<td>Builds on CRD to specify how payer rules can be executed in a provider context to ensure that <strong>documentation requirements</strong> are met. Provider burden will be reduced because of <strong>reduced manual data entry</strong>, i.e., from payers, extract data to pre-populate response</td>
<td>Named in the rescinded NPRM CMS Interoperability and Prior Authorization (CMS-9123-P)</td>
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</tr>
<tr>
<td>and Rules</td>
<td>2022Q1</td>
<td></td>
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<tr>
<td>Prior-Authorization</td>
<td>STU1 Published STU2 Ballot</td>
<td>Defines FHIR based services to enable provider, at point of service, to <strong>request authorization</strong> (including all necessary clinical information to support the request) and receive immediate authorization from Payer (incorporates HIPAA Tx standards)</td>
<td>Named in the rescinded NPRM CMS Interoperability and Prior Authorization (CMS-9123-P)</td>
<td>Connectathons x 3 years Early adopters and pilots underway</td>
</tr>
<tr>
<td>Support</td>
<td>2022Q1</td>
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**DRLS** = Document Requirements Lookup Service (DRLS) is CMS’ name for the combination of CRD + DTR.

Notice of Proposed Rulemaking (NPRM) Press Release found [here](#). Note: **Final** CMS’ Interoperability and Prior Authorization Rule links are unavailable pending HHS review.
Coverage Requirements Discovery, Documentation Templates & Rules, & Prior Authorization Support

- Improve transparency
- Reduce effort for prior authorization
- Leverage available clinical content and increase automation
Coverage Requirements Discovery, **Documentation Templates & Rules, & Prior Authorization Support**

- **Coverage Requirements Discovery**
- **Documentation Templates and Coverage Rules**
- **CDS Hooks**
- **FHIR APIs**
- **Coverage Requirements Discovery**
- **Documentation Templates and Coverage Rules**

**EH/P/PROV/DE BACK OFFICE SYSTEMS**

- Improve transparency
- Reduce effort for prior authorization
- Leverage available clinical content and increase automation
Coverage Requirements Discovery, Documentation Templates & Rules, & **Prior Authorization Support**

- **Coverage Requirements Discovery**
- **Documentation Templates and Coverage Rules**
- **Prior Authorization Support**

- **CDS Hooks**
- **FHIR APIs**
- **Transformation Layer**
  - **X12 278**
  - **X12 275 if required**

**Benefits**:
- Improve transparency
- Reduce effort for prior authorization
- Leverage available clinical content and increase automation
Coverage Requirements Discovery (CRD)/Documentation Templates & Rules (DTR)

Benefits
Takes guesswork out of patient specific coverage by sharing authorization or process requirements in workflow
Improves transparency of patient and procedure specific rules to provider and patient
Exposes information about patient benefits when care team is most likely with or near patient, so options can be discussed and decided upon
Coverage Requirements Discovery
Base FHIR Technologies

• CDS Hooks support
  – EHR triggering
  – Payer CDS Service Response
  – Hooks
    • Order-select
    • Order-sign
  – CDS Card Response
  – SMART Launch from CDS

• FHIR Resources and Profiles
  – US Core
  – Patient, Practitioner, Encounter, Location
  – Coverage
  – DeviceRequest, NutritionOrder, Medication Request

• Terminologies (examples)
  – Builds upon US Core 3.1.1 profiles
  – Service Request Codes (CPT, SNOMED CT, HCPCS Level II, LOINC)
• SMART on FHIR App Launch
• CDS Hooks
• Structured Data Capture
• Clinical Quality Language

• FHIR Resources and Profiles
  – US Core FHIR Profiles
  – Questionnaire
  – QuestionnaireResponse
  – Task
• FHIR Operations
  – ClaimSubmitOperation
  – ClaimInquiryOperation

• FHIR Resources and Profiles (Examples)
  – Patient (Beneficiary)
  – Claim, Claim Inquiry, Claim Inquiry Response
  – Coverage
  – Device Request, Medication Request
  – Subscriber

• Value Sets
  – AHA NUBC
  – X12 278 Diagnosis Codes
  – X12 278 Health Care Service Location
  – X12 Reject Reason Value Set
Automates Processes for Provider-Payer and Provider-Provider Clinical Data Exchange

- Workflows supported
  - Referrals
  - Attachments for claim submission
  - Documentation to support medical necessity, coverage rules, claims audits, etc.
  - Supplemental data for Prior Auth, Risk Adjustment and Quality Measures

- Requested data is pre-defined by requestor
- Task-based and direct query approaches executed via FHIR with optional review
- Supports all available FHIR data
  - Documents (e.g. C-CDAs)
  - Laboratory
  - Medications
  - Vital Signs
Clinical Data Exchange (CDex)

1. Payer or External Provider System Initiates Request
   - eg, What are the patient’s active conditions?
   - eg, What are the patient’s HbA1C results after 2020-01-01?
   - eg, Send the patient’s latest History & Physical

2. Provider System Retrieves Data

3. Practitioner Intervention (if required)
   - Direct Query or Task Based Approach
   - Task Based Approach

4. Provider System Returns Data
Clinical Data Exchange (CDex)
Base FHIR Technologies

• FHIR Operations (Clients and Servers)
  – Request and respond to data via FHIR RESTful queries
  – Posting and response of Task and Subscription resources
  – Request, response and polling of Task resource
  – Responding to CommunicationRequest and Service Request
  – Post & response to $submit-attachment operation

• Generating and verifying signed resources

• Value Sets
  – Purpose of Use
  – Attachment Reason
  – Work Queue
Upcoming Activities

**CRD/DTR/PAS**
- Ballot in 2022Q1
- Anticipated reconciliation and publishing by 2022Q4

**CDex**
- Publish STU1 in 2022Q1
- Ongoing testing and feedback of STU1
- Testing of draft content
  - Unsolicited push
• Da Vinci Confluence Page - https://confluence.hl7.org/display/DVP
• Da Vinci Coverage Requirements Discovery - http://hl7.org/fhir/us/davinci-crd/
• Da Vinci Documentation Templates and Rules - https://build.fhir.org/ig/HL7/davinci-dtr/
• Da Vinci Prior Authorization Support - https://build.fhir.org/ig/HL7/davinci-pas/
• Da Vinci Clinical Data Exchange - https://build.fhir.org/ig/HL7/davinci-ecdx/

• CDS Hooks - https://cds-hooks.org/
• SMART App Launch - http://hl7.org/fhir/smart-app-launch/
• Clinical Quality Language - https://cql.hl7.org/
• FHIR US Core - http://hl7.org/fhir/us/core/
Da Vinci Technical Lead:
Dr. Viet Nguyen, Stratametrics LLC
vietnguyen@stratametrics.com

Da Vinci Program Manager:
Jocelyn Keegan, Point of Care Partners
jocelyn.keegan@pocp.com

Da Vinci Project Manager:
Vanessa Candelora, Point of Care Partners
vanessa.candelora@pocp.com