



P2 Use Case Working Session: Coverage Requirements Discovery (CRD)

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P2 ONC FHIR Task Force

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- Synergies & Differences between Da Vinci and P2
- Process of use case development, architecture, and tiger team work assignment
- Maturation of the P2 use case process from generic to specific

P2 ONC FHIR Task Force

FHIR Ecosystem Task Force for Use Cases

07/21/2018

Coverage Requirements Discovery Use Case

P2 Model

Accelerate use of FHIR

Identify

Barriers to adoption and opportunities for synergy:

- Locator Services
- Security Approaches
- Identity Resolution
- Testing Approaches

Why

Removing barriers and aligning consensus based adoption via the network effect accelerates adoption.

How

- Tiger teams
- Best practices
- Leverage existing resources

Use Case Approaches

Use cases approaches can be used exclusively or in combination to define the dimensions of the model.



Barrier UC

Align use cases directly to an identified barrier such as resource locator, security, and identity.

Generic UC

Instead of aligning directly to a barrier, use generic ecosystem use cases which identify and spotlight barriers.

Da Vinci UC Base

Use Da Vinci uses cases a foundation for P2.

P2 provides the highway, Da Vinci provides the cars, trucks, and busses. Use the vehicles to help define the dimensions of the highway.

Use Case 1 – Endpoint for Coverage Requirement Discovery (CRD) Story/Epic (Da Vinci Base UC Approach)

A member/patient arrived at the his or her PCP for evaluation of lower back pain. The standard administrative workflow of E & B is followed and the exam proceeds via clinical standards.

The provider system finds the endpoint service locator for the payer's CRD service **E**. The provider system requests the coverage requirements from the payer **[1]** using the endpoint address of the Payer's CRD service. The Payer's endpoint service for CRD receives the request, validates that the provider system is legitimate and that the provider has the authority to access the members coverage information, **A** **[2]** and responds back to the provider system **[3]** with the Payer coverage requirements for that patient. **[4]** The provider system using URI, retrieves coverage requirements documentation from the payer **[5]** and processes the CRD information.

Capability Mapping

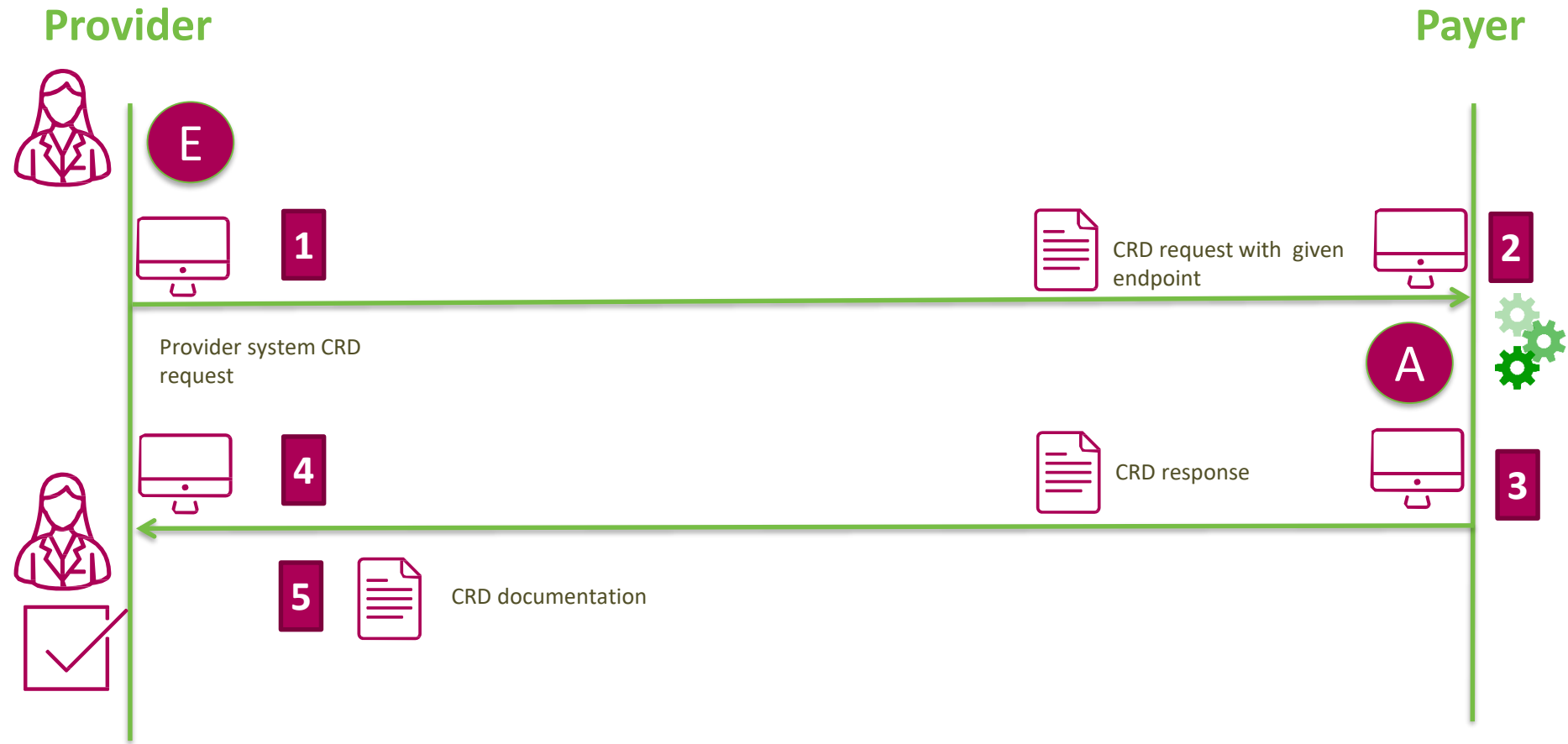
1. As a payer, I need to be sure the that the request for coverage information contains the appropriate information to identify the requester and the requesters authority to request this information.
2. As a provider, I need the response from the payer to be quick enough so as not to interfere with, or impeded, my clinical workflow.
3. As a provider, I need to feel comfortable that the registry is completely up to date and formatted correctly. As a provider, I need to be ensured that the communications are secure and meet industry and federal guidelines for security. Furthermore, I need to feel that participants on the network are trusted and legitimate sources of information.
4. As a payer, when I receive a request for information, I need to be sure that the entity requesting the information is authenticated and authorized and has rights to see that information.
5. As a payer, I need be able to respond back/acknowledge provider request timely.
6. As a provider, I need to feel comfortable that I will receive a response from both the registry and the payer at all times.

Architecture Artifacts



Revisions History

Use Case 1 – CRD (Da Vinci UC Approach)



Capability Mapping to Tiger Teams

Capability #	Capability	Technical Learning Community	Identity	Security	Directory Versions Scale	Exchange Process	Testing & Certification	Pilots
E	Endpoint Discovery Use Case	✓	✓	✓	✓	✓	✓	✓
1	Provider CRD request capability	✓	✓	✓	✓	✓	✓	✓
2	Payer CRD response capability	✓	✓	✓	✓	✓	✓	✓
A	Authentication Use Case	✓	✓	✓	✓	✓	✓	✓
3	Payer CRD response capability	✓	✓	✓	✓	✓	✓	✓
4	Provider retrieves “associated documents”	✓	✓	✓	✓	✓	✓	✓
5	Provider retrieves “associated documents”	✓	✓	✓	✓	✓	✓	✓

P2 ONC FHIR Task Force

FHIR Ecosystem Task Force for Use Cases

07/24/2018

Endpoint Discovery and Validation

P2 Model

Accelerate use of FHIR

Identify

Barriers to adoption and opportunities for synergy:

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Core Use Case 1 – Endpoint Discovery

Introduction and Background

The purpose of the core use cases is to define requirements for actions/activities that are common across many or all use cases. These include but may not be limited to: endpoint determination, authentication and authorization, and patient matching.

These use case serve to create requirements that may be utilized by the individual tiger teams to help define solutions that may be deployed on a national basis to help scale FHIR based solutions.

Core Use Case 1 – Endpoint Discovery

Common Story

An originating system needs to automatically determine the appropriate endpoint for a specific transaction/operation. The “service” that supplies the endpoint information must be reasonably accessible to any originating system. The “service” may require authentication of the requester before responding to the request.

The endpoint must support the type of transaction/operation and, where appropriate, the payload. Support will include the specific version of FHIR or be a multi-version endpoint.

Core Use Case 1 – Endpoint Discovery In Scope

- Discovery of any FHIR endpoint
- Version(s) of FHIR supported
- Service(s) supported

Core Use Case 1 – Endpoint Discovery

Assumptions

There exists:

- The ability to send a request for an endpoint to a directory resource
- The ability of the directory resource to validate the request and requester (if necessary)
- The ability of the directory resource to respond to the request for an endpoint
- The ability to communicate in a secure fashion between the endpoint requestor and the directory resource

Core Use Case 1 – Endpoint Discovery
Actors

Actor	Description	Additional Information
Endpoint Requester	This the system that needs to discover a valid endpoint for a FHIR based information exchange	
Endpoint Directory	This is the system that contains FHIR based endpoints and can respond to a request	

Requirements

1. As a transaction initiator, I need my system to be able to determine where the intended recipients endpoint is without needing to configure the endpoints manually.
 - a. Requester system should be able to locate the endpoint for a service
 - b. The endpoint information should be valid and current
 - c. The endpoint directory should be able to respond with information indicating that such an endpoint does or does not exist
 - d. The endpoint directory should return sufficient information to determine if is compatible
 - e. The requester system should be able to give a good error response when the endpoint service is not available and workflow should be able to continue with existing, non-automated processes (is this an assumption?)
 - f. The endpoint directory should know the normal availability for a the specific endpoint service (like down between 12am and 2am on Sunday mornings)
 - g. The endpoint owner should be able to update the endpoint directory to denote when the endpoint and/or service is down during unscheduled times such a production issue (like a switch saying that endpoint service is not processing at this time)
 - h. The endpoint directory should ensure that requesting system has appropriate credentials/authorization to access the endpoint service

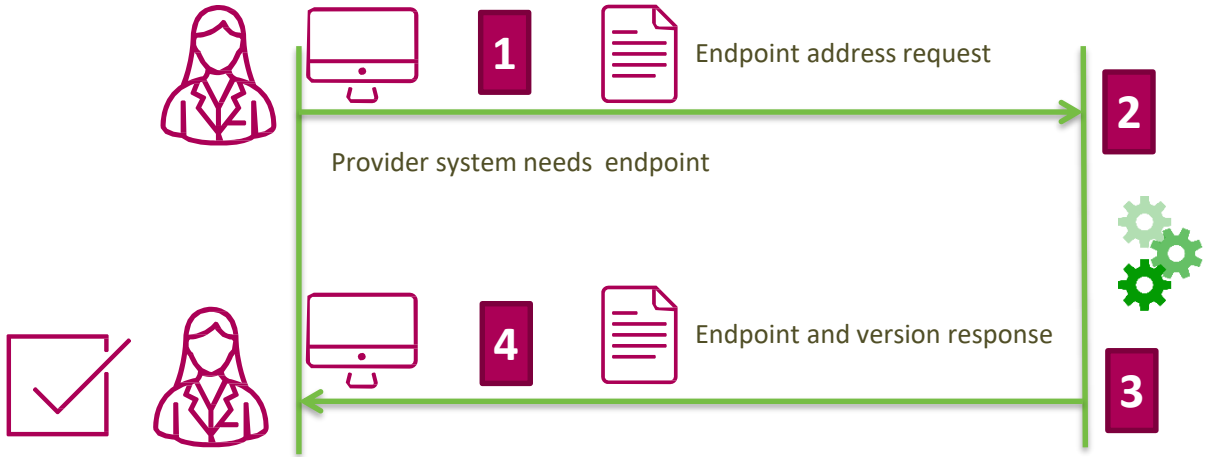
Capability Mapping

1. As a provider, I need my EMR to be able to determine where the payer's information is available via a payer agnostic accessible registry without having to configure the endpoints individually
2. As a provider, I need the accessible registry to contain all the necessary information for my EMR to interact with the payer's data to be assured that the format of the data coming back to my EMR matches the expectation of my EMR and displays and functions correctly.
3. As a payer, I need to be sure the that the request for coverage information contains the appropriate information to identify the requester and the requesters authority to request this information.
4. As a provider, I need the response from the payer to be quick enough so as not to interfere with, or impeded, my clinical workflow.
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Core Use Case 1 – Endpoint Discovery

Endpoint Requestor

Endpoint Directory



Capability Mapping to Tiger Teams

Cap abili ty #	Capability	Technical Learning Community	Identity	Security	Directory Versions Scale	Exchange Process	Testing & Certification	Pilots
1	Create secure connection with directory resource			✓	✓	✓	✓	✓
2	Endpoint Directory				✓		✓	✓
3			✓	✓	✓		✓	✓

Use Case Groupings

Alerts

- Provider to x (originator to x)
- Payer to x (secondary to x)
- Alerting – event based similar to ADT (needed for Value Based and others)
 - Re-admit, payer alerts provider
 - ER admits alert from provider to payer

Referrals / Consults

- Provider to provider
- May require authorization (separate use case)

Orders

- Provider to supplier (lab, DME, imaging, medications, ...)
- E-prescribing – example DME and home health (needs more than an order). Usually done by Fax.
- Examples oxygen, the DME needs lab results, cert of medical necessity

Quality / RAP reporting (provider to x) (push, pull, subscribe)

- 30 day medication reconciliation –
- Lab Results to support HEDIS reporting
- Data for RAPs (Risk Adjustment Programs) – specific data elements, mostly conditions or diagnosis

Shared care planning (provider, provider, payer, ...)

Push patient information

- Provider to provider/supplier
 - Full Medical Record or any specific portion (e.g. problem list)
- Provider to plan
 - Full Medical Record or any specific portion (e.g. problem list)
 - Medication adherence notification. (Provider sends to Payer). What if a specialist asks for med adherence? How will the PCP know the answer to that?
 - Can be recorded by payer and broadcast to PCP and specialist.
- Plan to provider
 - Clinical Summary that can be shared with the provider
 - Payer tells the provider about prescriptions filled. Can be event based or a part of a shared summary or care plan.

Request plan information

- Coverage Requirement Discovery (CRD) – Da Vinci use case (does not include the actual Prior Authorization Request).
- Prior Authorization (“authorization support” as defined by Da Vinci)
- Documentation requirements
- Healthcare Directory
 - Provider searching – finding specialists
 - Provider Directory information (Direct Secure Address, Status, specialty, certification, taking new patients)
- Care team coordination
 - Inform PCP of other caregivers such as Behavioral Health
- Scheduling
 - Scheduling of visits (payer or provider)