

# Da Vinci Prior-Authorization Support Project

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# Agenda for March 20, 2019

- HIPAA requirements for Prior-Authorization (PA)
- Da Vinci Overview
- Orientation to Da Vinci use cases
- Approach for PA support
- Alternative workflows

This presentation will refer to FHIR and SMART of FHIR These are registered trademarks



HL7® FHIR®



# Current Prior-Authorization Environment



Providers

PA Request



Medical Records



Fax



Telephone



Portals



Electronic Transactions



Payers

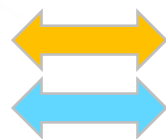


Currently providers (ambulatory and in-patient) and payers exchange prior authorization requests and supporting medical records using a number of methods: telephone, fax, portals, and electronic transactions

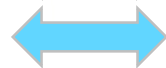




# Challenge



Must be ASC X12N 278 (PA request) / 275 (attachment with CDA)

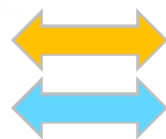


May be any method (including ASC X12N)



Most EHRs do not directly support ASC X12N 278 / 275 and there is no generally implemented standard for real-time exchange with an EHR for PA

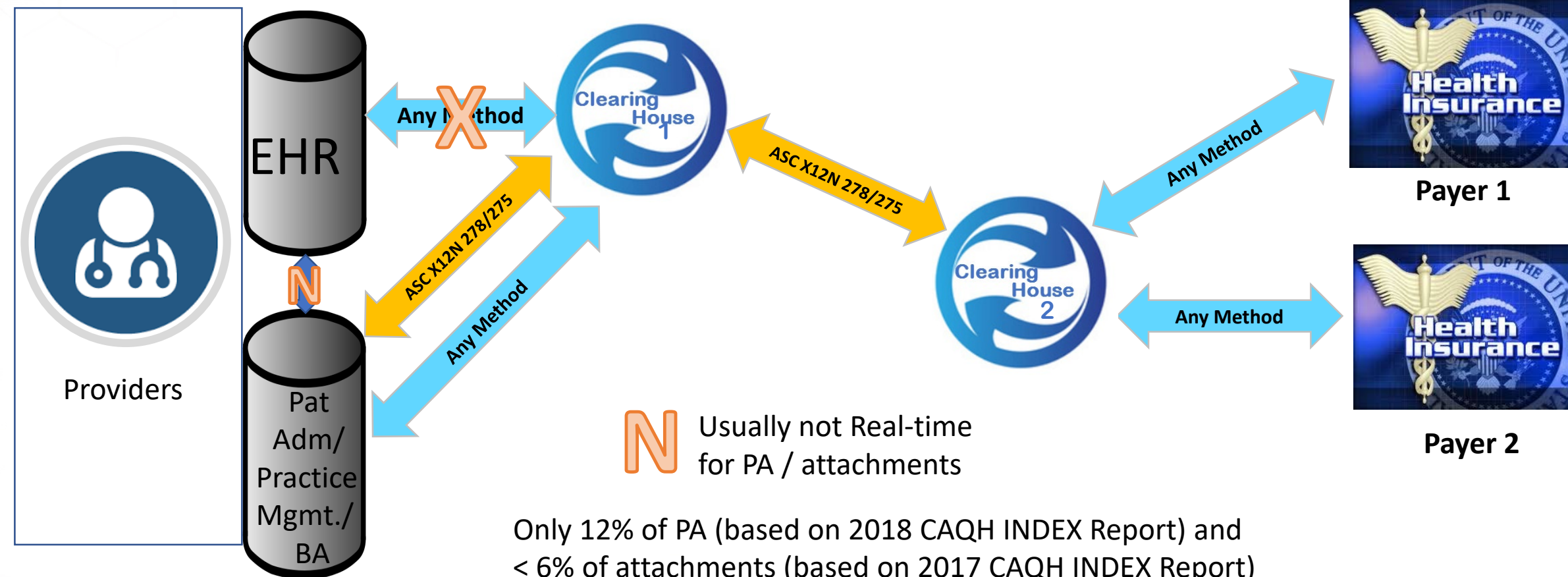
# Challenge



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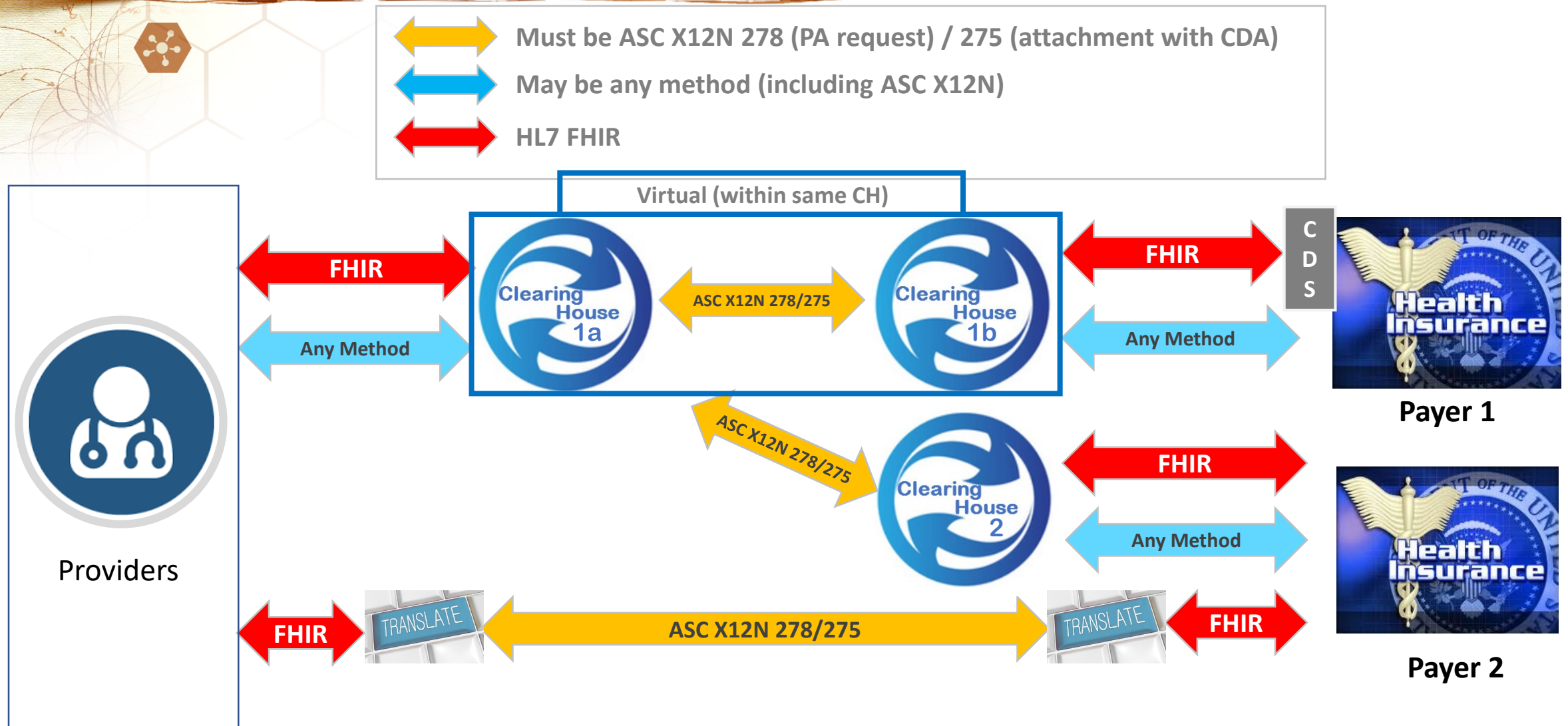


May be any method (including ASC X12N)



Only 12% of PA (based on 2018 CAQH INDEX Report) and < 6% of attachments (based on 2017 CAQH INDEX Report) are electronic end to end

# Future FHIR Enabled Solution



Translation by software, service, or third party (other than a clearing house)

# Da Vinci Project Challenge

To ensure the success of the industry's **shift to Value Based Care**

By providing FHIR based solutions for **provider to payer**  
and **provider to provider** exchanges



## Pre-Collaboration / Controlled Chaos:

Develop **rapid multi-stakeholder** process to identify, exercise and implement initial use cases.



## Collaboration:

Minimize the development and deployment of **unique solutions**.  
**Promote** industry wide **standards** and adoption.



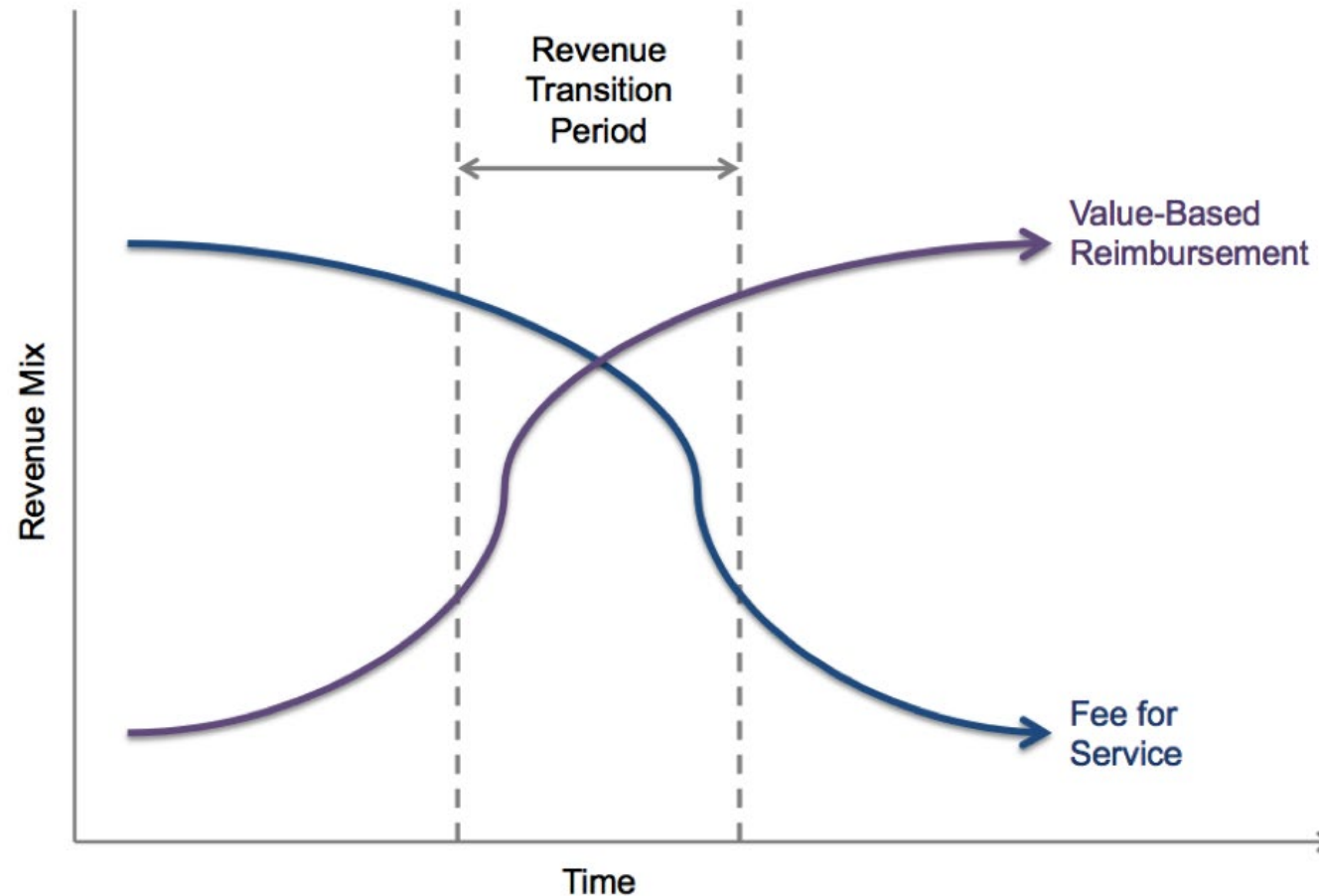
## Success Measures:

Use of FHIR®, implementation guides and pilot projects.



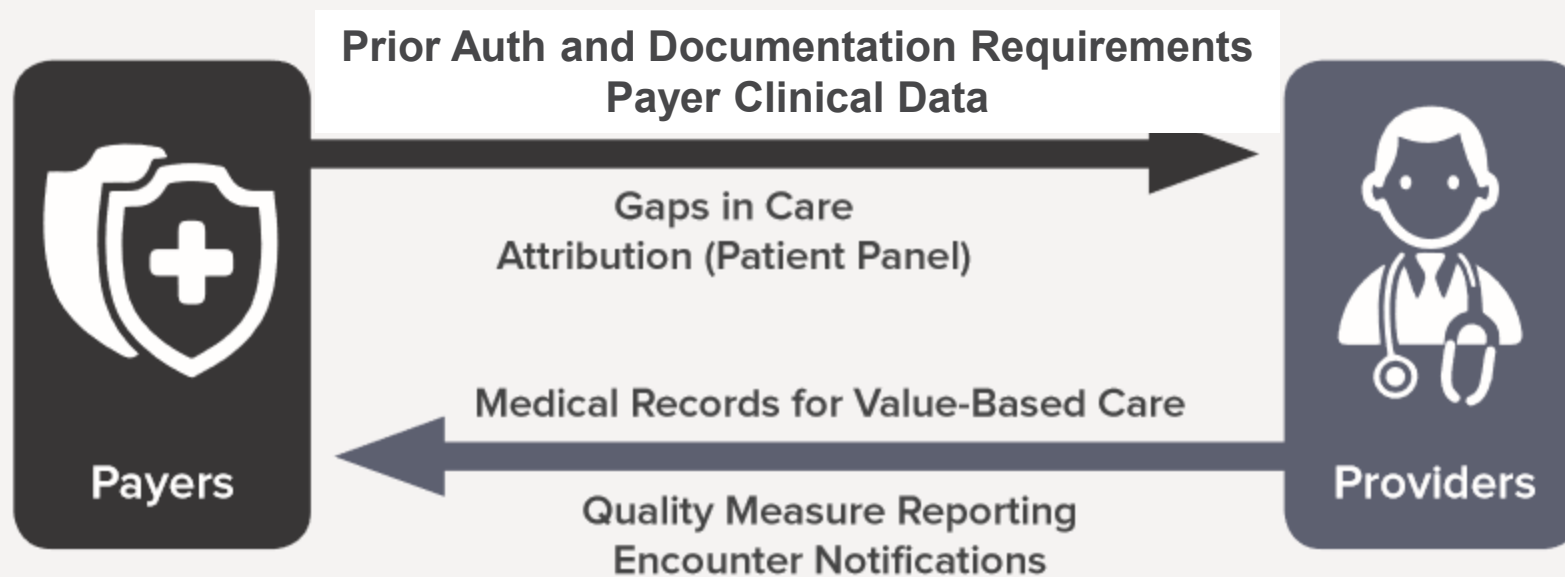


## Empower End Users to Shift to Value



As a private industry project under HL7 International, Da Vinci will unleash critical data between payers and providers required for VBC workflows leveraging HL7® FHIR®

## In Less Than Two Years, Da Vinci Efforts Will Drive Standards for the Exchange of Information Critical to Patient Care





# Da Vinci Statistics

Open standards available through HL7 and  
reference implementations available as open source on GitHub

Recent data from ONC  
has shown that more than  
four out of five hospitals  
and approximately two-  
thirds of clinicians report  
using EHRs that have  
implemented some  
version of the FHIR  
standard.

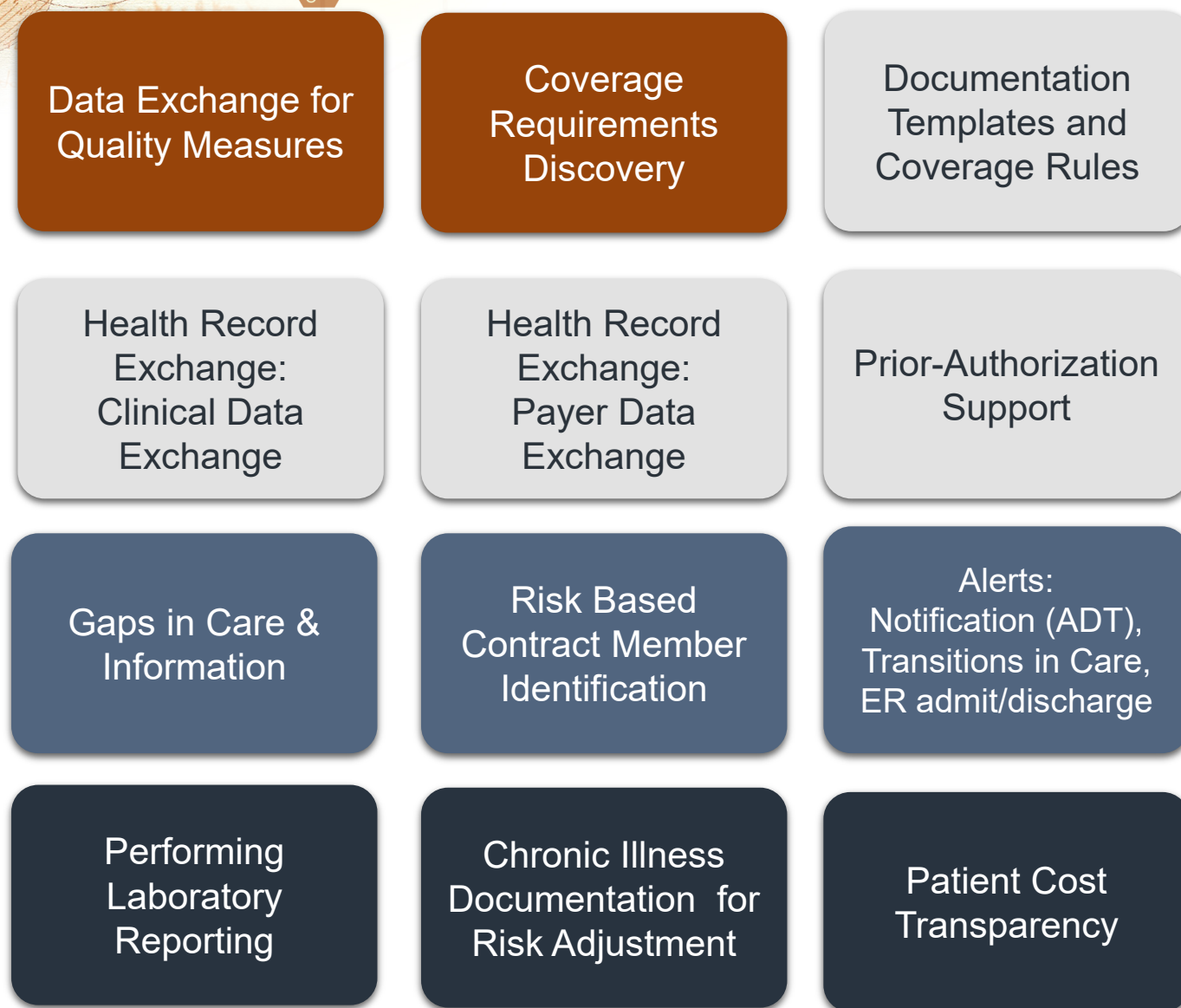


Members represent over 70% of all covered lives and installed EHR Users



## Partial List of Da Vinci Members









## Use Case Alignment

### Project Outputs



- ☐ Define requirements (technical, business and testing)
- ☐ Create Implementation Guide
- ☐ Create and test Reference Implementation (prove the guide works)
- ☐ Pilot the solution
- ☐ Deploy the solution

### Use Case Status

-  In HL7 ballot reconciliation as draft standard
-  Under active development
-  Planned 2019 Use Cases
-  In Discovery

# Use cases relevant to prior-authorization

## Use Case Status

-  In HL7 ballot reconciliation as draft standard
-  Under active development

### Coverage Requirements Discovery (CRD)

(Triggers and manages the conversation with the Payer)

### Documentation Templates and Coverage Rules (DTR)

(Payer/coverage rules executable in clinical workflow)

### Health Record Exchange: Clinical Data Exchange (CDex)

(Standards for conveying supporting documentation using FHJR)

### Prior-Authorization Support

(workflow to exchange PA request/response and supporting documentation with a payer)



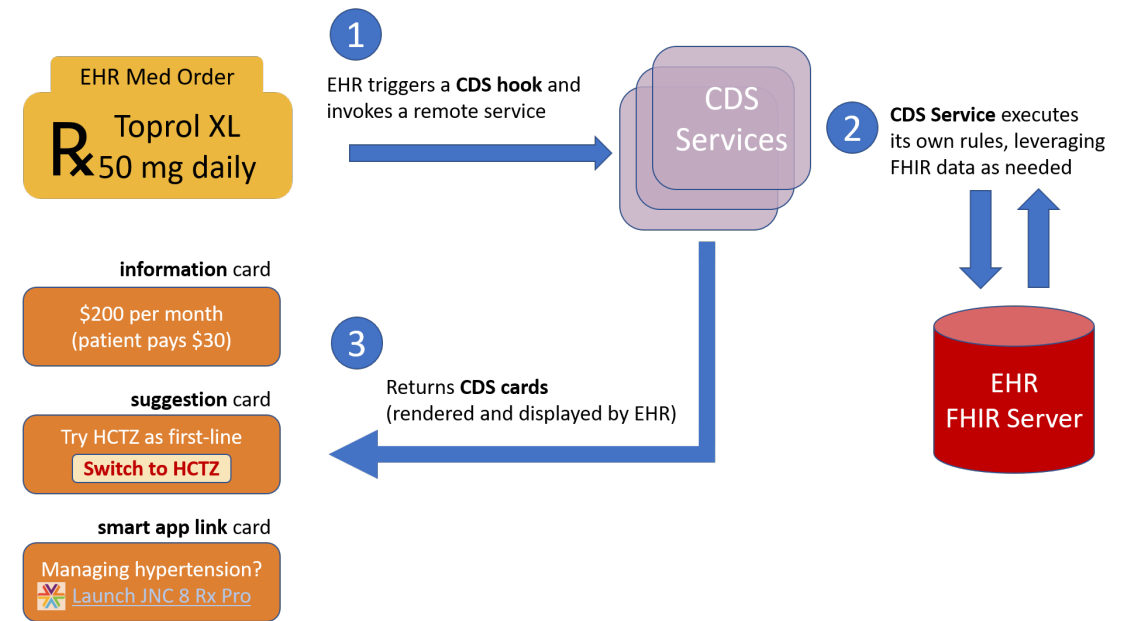
# Da Vinci uses CDS Hooks to invoke Payer interactions

## Technology Overview – CDS Hooks

Lightweight event-driven framework for integration of Clinical Decision Support Services into the EHR workflow

### Features:

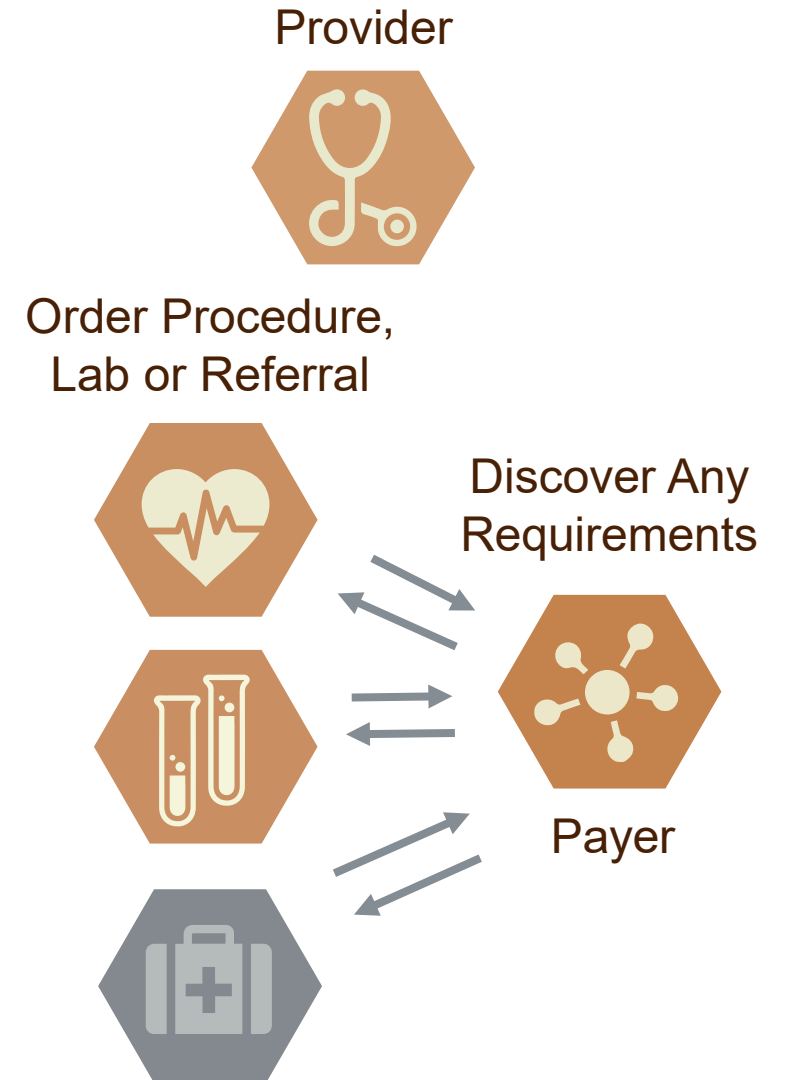
- Multiple triggers
- Context prefetch
- Provides secure token to access to patient record
- Multiple type of cards for return information/actions
  - Information / warning,
  - Suggestion, with FHIR resource(s)
  - App Launch (e.g. SMART on FHIR) with context
- Supported by Argonaut and major EHR vendors
- No end user training requirements
- Standardization of CDS integration



One of the initial use cases for CDS Hooks

# Coverage Requirements Discovery Utilizing CDS Hooks

- Providers need to easily discover which payer covered procedure, DME or other medical service have
  - Requirement for Prior Authorization (PA) or other approvals
  - Specific documentation requirements,
  - Rules for determining need for specific treatments/services
  - Specific guidance.
- Using CDS Hooks, providers can discover in real-time specific payer requirements that may affect the ability to have certain services or devices covered by the responsible payer.
- Response may be
  - The answer to the discovery request
  - A list of services, templates, documents, rules
  - URL to retrieve specific items (e.g. template)



# Coverage Requirements Discovery

1. Based on a specific clinical workflow event:  
scheduling,  
start of encounter,  
planning treatment,  
ordering,  
discharge
2. Provider's send CDS Hooks based request, with appropriate clinical context to the responsible payer
  - a) Payer may request additional information from the provider EHR using existing FHIR APIs
  - b) Payer responds to the EHR with any specific requirements that may impact the clinical decisions or coverage



*Provider utilizes this information to make treatment decisions while considering specific payer coverage requirements.*



Provider

Provider requests coverage requirements from payer

Optional: request additional information

Payer responds to the request



Payer





# Documentation Templates and Coverage Rules (DTR)

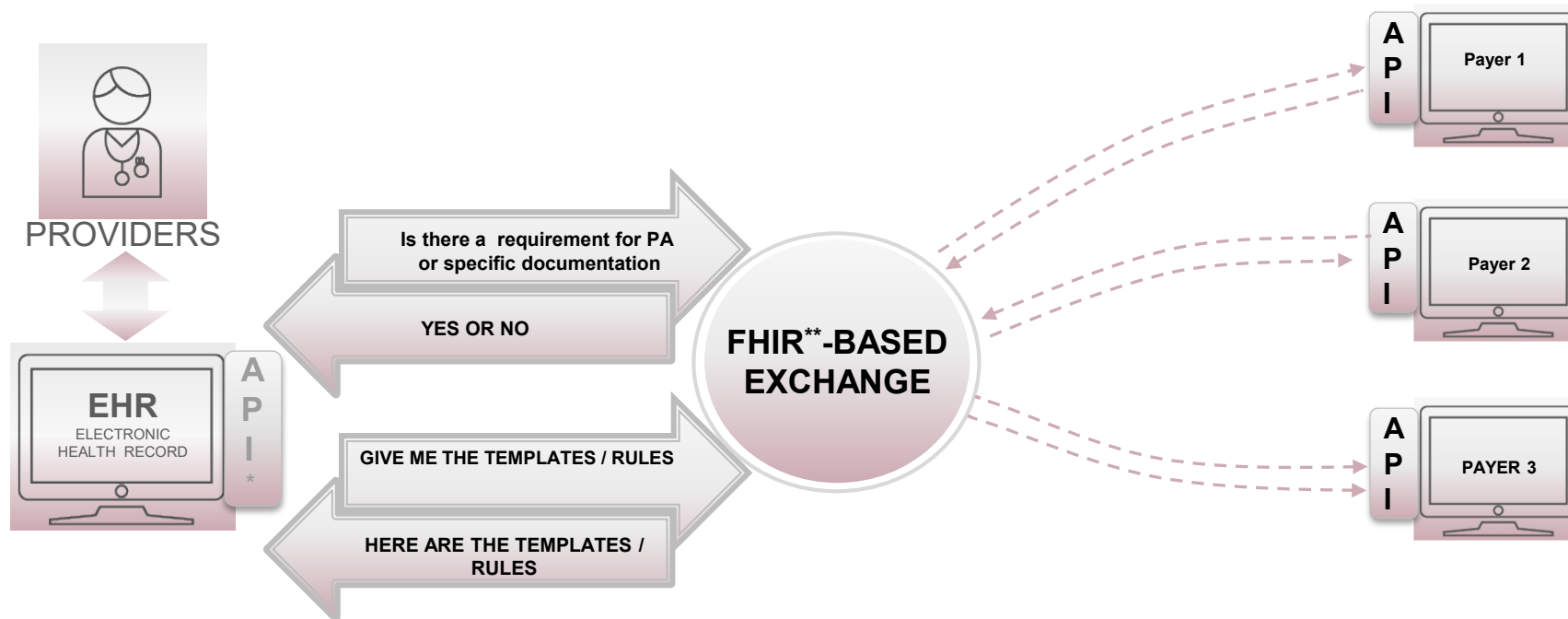
## [Builds on CRD (CDS Hooks), CQL, SMART on FHIR and SDC]

- Providers need to easily incorporate payer requirements into their clinical workflow
  - Requirement for Prior Authorization (PA) or other approvals
  - Specific documentation requirements,
  - Rules for determining need for specific treatments/services
  - Specific guidance.
  - Capture missing information using Structured Data Capture (SDC)
- Uses a FHIR compliant standard (Clinical Quality Language: CQL) to represent payer “rules” for payer medical necessity and best clinical practice requirements that may affect the ability to have certain services or devices covered by the responsible payer.
- Information is retrieved directly from the EHR and does not require duplicate entry
- Provider input is only required for missing or ambiguous information.
- The template and rules may
  - Collect information for prior-authorization
  - Specify provider documentation requirements for coverage, medical necessity
  - Indicate clinical requirements including appropriate use
  - Collect specific documentation for quality measures
  - Respond with specific information as requested/documented in the template/rules

# CMS Documentation Requirements Look-up Service (DRLS)

## Based on a specific clinical workflow event:

- scheduling
- start of encounter
- ordering or planning treatment
- discharge



DRLS is the CMS instantiation of the Da Vinci Coverage Requirements Discovery (CRD) use case  
Graphic taken from the CMS Special Open Door Forum (SODF) presentation

## (Da Vinci Prior-Authorization Support Project)

### Provider EHR

Provider Action

Pre Fetch

Provider Initiates App

SMART on FHIR Application

- 1) Get Payer PA Rules (CQL)
- 2) Retrieve information
- 3) Query missing information (SDC)
- 4) Send PA request with info
- 5) Receive and display result

#### 1) CDS Hooks

Context with Access Token

#### 2) Access Patient Record

optional

#### 3) Return CARD(s)

Optional link to SMART App

#### 4) Get Payer PA Rules

#### 5) PA Request with MR\*

#### 6) PA Result\*

### Payer PA Service

Payer CDS

- 1) Evaluates request
- 2) Gets additional information
- 3) Issues cards (result or links)
- 4) If PA required, sends SMART on FHIR link and context
- 5) Send documentation rules
- 6) Evaluate PA request
- 7) Reply with PA result

\*Conversion to/from ASC X12N required to meet HIPAA regulations

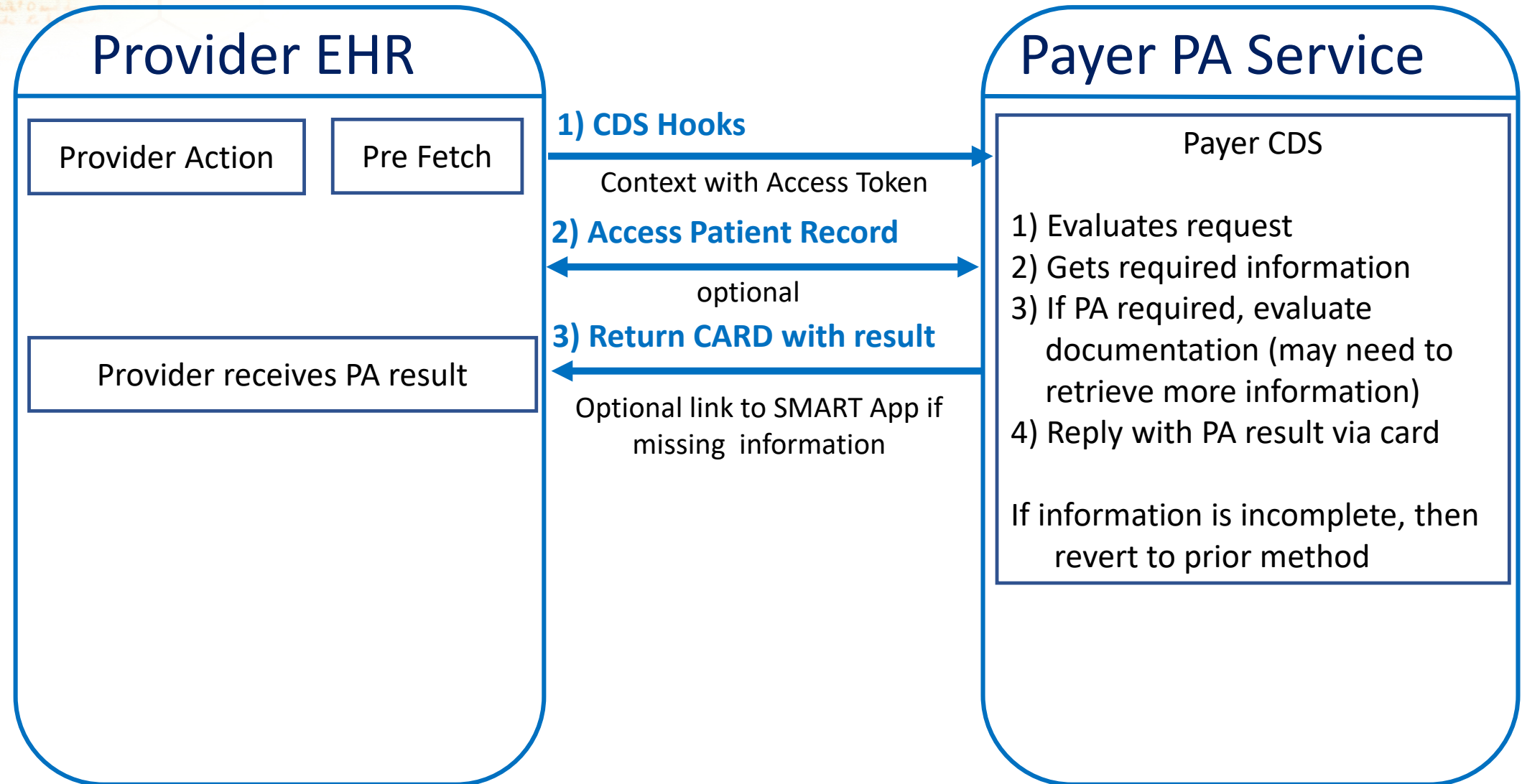




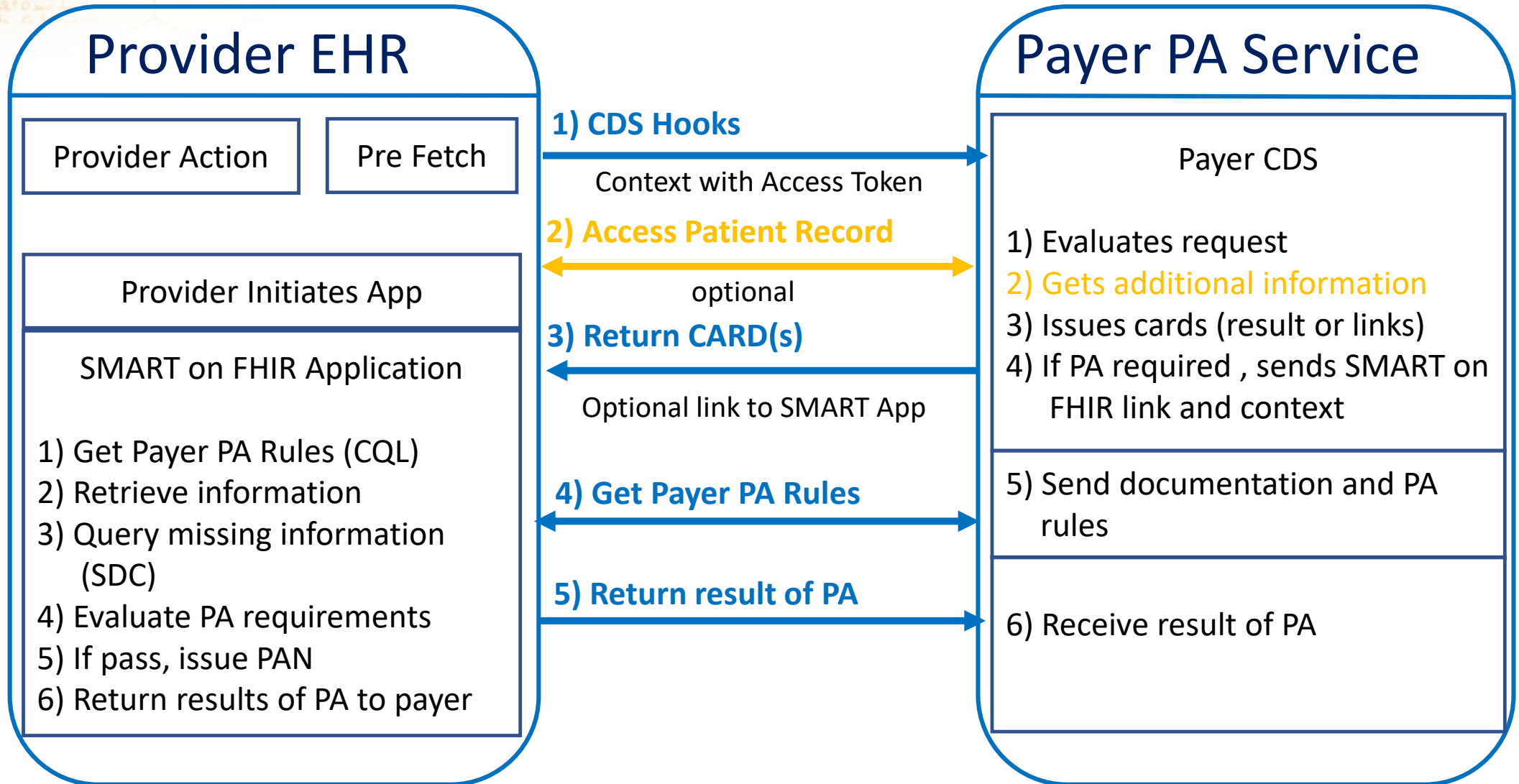
# Approaches to Prior-Authorization

- Payer-Provider PA mediation (Da Vinci Prior-Authorization Support Project)
  - Is Prior-authorization required?
    - Yes, here are the rules for information required
    - Based on the rules assemble the information from the record
    - Query for missing information
    - Submit the request and information using current standards (e.g. X12N) to the payer for a decision
    - Receive the response (PAN, denial, additional request for information)
  - Payer only PA mediation
    - Is Prior-Authorization Required?
      - Yes -- use access to record (as part of CDS Hooks, via token passed with request)
      - Payer accesses record and determines if PA requirements are met
      - Send PAN, denial, or request for information
  - Provider only PA mediation (Auto Auth)
    - Is Prior-authorization required?
      - Yes, here are the rules for evaluation of information
      - Evaluate existing information
      - Query for and evaluate missing information
      - If documentation meets requirements issues PAN, if not, option to submit to payer or take “out-of-band”

# Potential Payer Focused Prior-Authorization




# Potential Provider Focused Prior-Authorization



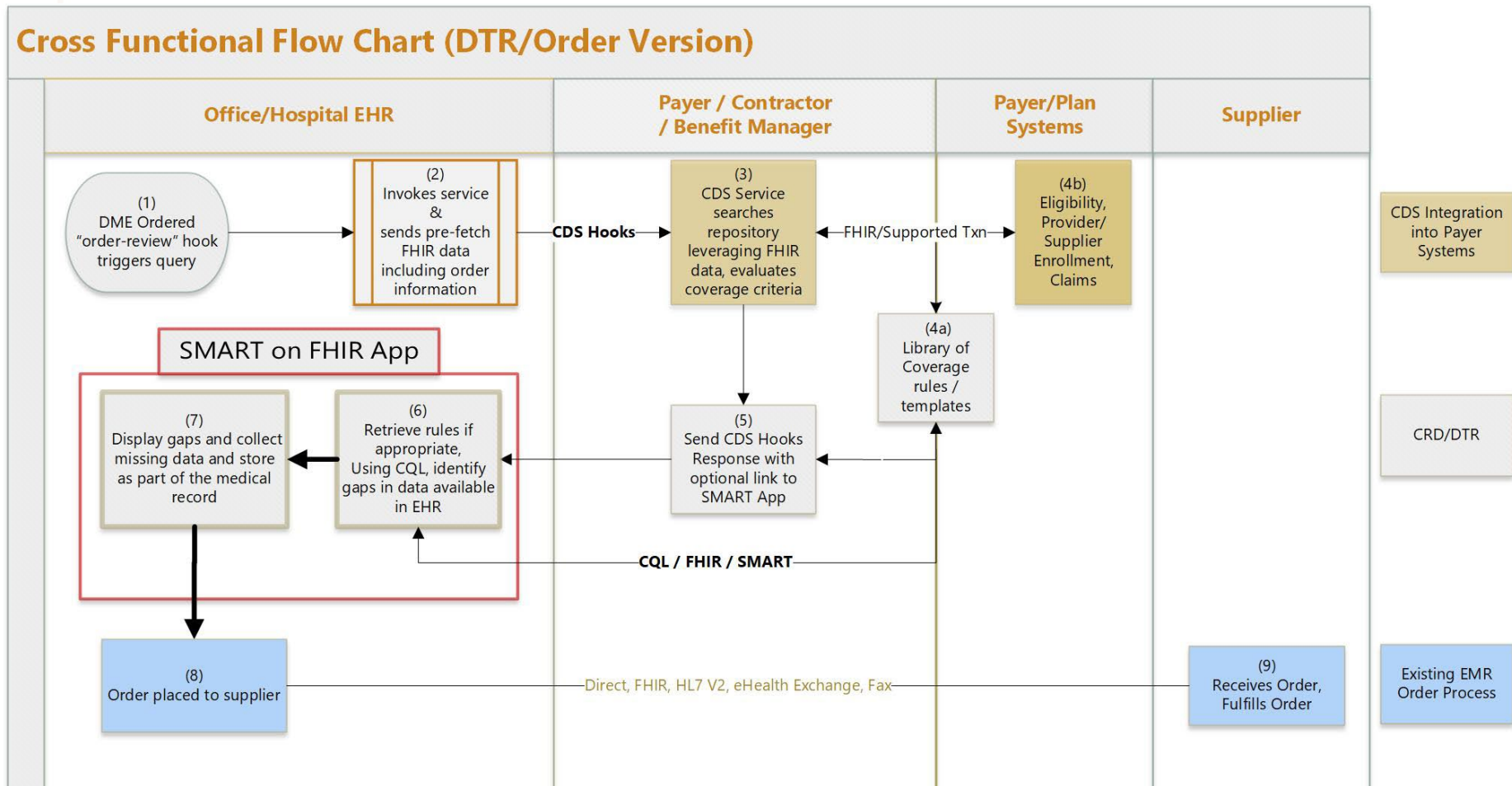


# Summary

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- Using new technologies (FHIR , CDS Hooks, SMART on FHIR, CQL) it is possible to integrate previously time intensive tasks into the clinical workflow to achieve significant efficiencies
  - We can substantially reduce provider burden by
    1. Acquiring critical patient information while the patient is available
    2. Obtain prior-authorizations in real-time for certain common services
    3. Minimize rework by “getting it right the first time”
  - One critical impact of improving the prior-authorization workflow is the improvement on patient care and experience.

## Additional Information

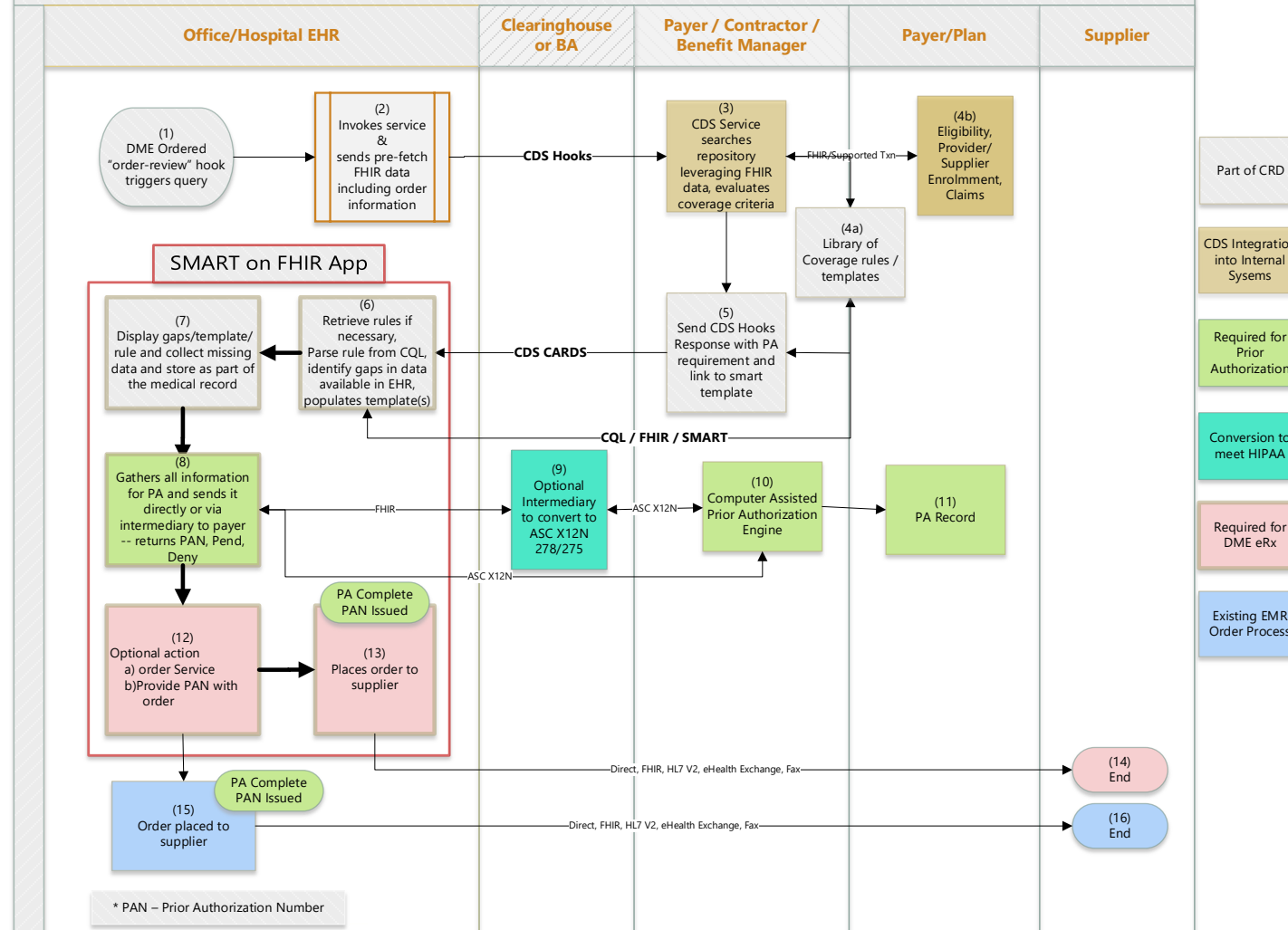
# CRD and DTR

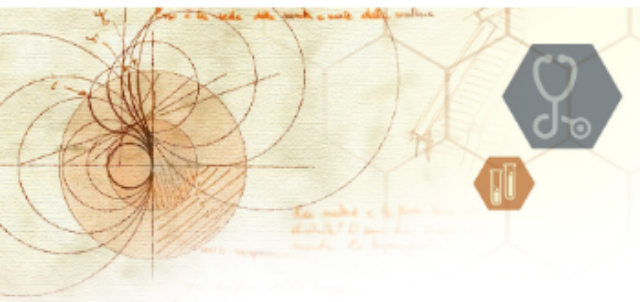




# CRD + DTR + Prior-Authorization Support

**Cross Functional Flow Chart (PA Version with X12 transaction receipt by payer)**  
(Alternative is conversion back to FHIR prior to receipt by payer)





# UNLOCKING PAYER INFORMATION TO IMPROVE CARE

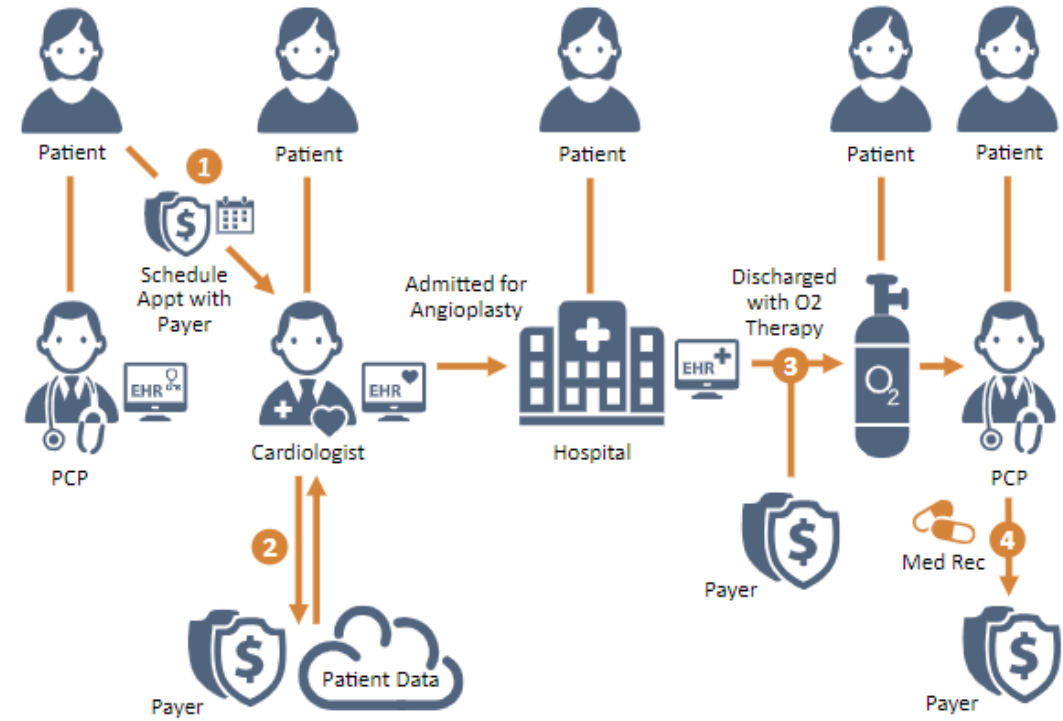
## HIMSS19 Demonstration

### CLINICAL SUMMARY

Da Vinci is demonstrating the ability to exchange information between payers and providers using HL7® FHIR® and CDS Hooks® as part of the Interoperability Showcase.

The vignette describes a clinical encounter for 78-year-old Asian women named Dara that starts with her primary care physician, proceeds to a cardiologist who admits Dara to the hospital for an angiogram and observation where it is determined that her chronic obstructive pulmonary disease has progressed to the point that she needs supplemental oxygen.

As Dara returns to her primary care physician, her previous medications are reconciled with those prescribed at discharge, the PCP reports the medication reconciliation, in support of a quality measure the Medicare Advantage program is following for its members.



The visual & table describes the interactions demonstrated, direction of each exchange, the FHIR standards used, the setting where the interaction is occurring and the participants.

Activities By the Numbers	Stats
Total practice runs	3
Total public runs	23
Filming runs	1
Total variations	14
Total roles	96
Total role system issues	7
Role availability	92.7%
AEGIS Touchstone available	100%
Total MCs	6
Total EHRs	2
Total Payer/Partner	4
Total Payer only	5
Total Sponsors	16
Number of visitors (approx.)	500
Percent that left during vignette	< 10 %

Each step represents a provider – payer exchange using FHIR IG