



The Office of the National Coordinator for  
Health Information Technology

# Bridging the Payer - Provider Data Divide: The P2 FHIR Taskforce & HL7 DaVinci Project

Washington, D.C.  
November 29<sup>th</sup>, 2018





# ONC Payer + Provider (P2) FHIR Task Force Overview

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ONC Annual Meeting  
Washington, D.C.  
November 29<sup>th</sup>, 2018



# Supporting the Industry's Shift to Value-Based Care

*“To ensure the success of the industry’s **shift to Value Based Care**, there is a need to establish a **rapid multi-stakeholder** process to identify, exercise and implement initial use cases between payers and provider organizations.”*

*“The objective is **to minimize** the development and deployment of **unique solutions with focus on reference architectures that will promote industry wide standards and adoption.**”*

- P2 and Da Vinci Project Founding Members

# P2 FHIR Taskforce Overview

## **Problem:**

There are ecosystem and infrastructure barriers that prevent the wide-scale adoption and deployment of FHIR, for the sharing of clinical data between payers and providers.

## **Purpose:**

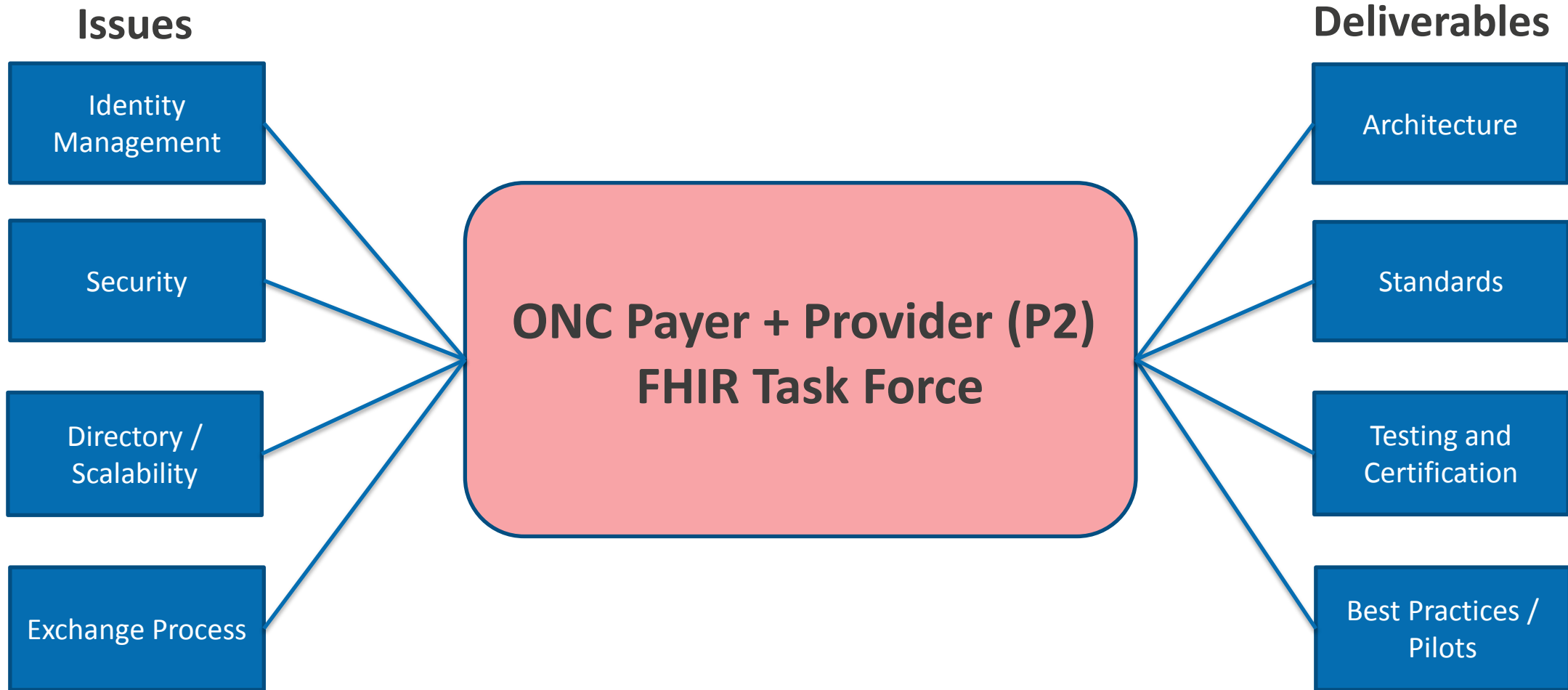
Through a collaborative effort, the taskforce aims to address such ecosystem barriers and accelerate adoption of FHIR for production exchange of clinical information between providers and payers.



# P2 FHIR Taskforce – Goals and Objectives

- Identify and prioritize a list of broad-based architectural, technical or process barriers that are likely to curtail wide scale FHIR deployment for clinical data exchange.
- Develop practical, consensus based, solutions to these barriers that could accelerate adoption.
- Create or identify an existing knowledge sharing process to distribute, update and publish consensus best practice.
- Identify a list of barriers that need regulatory solutions and document same for consideration to regulatory process.
- Conduct demonstration projects between EHR/HIE and payer end points that show value, will scale, and will not require fundamental new standards development.
- Design of a national architecture to enable FHIR based clinical clearinghouse solutions.

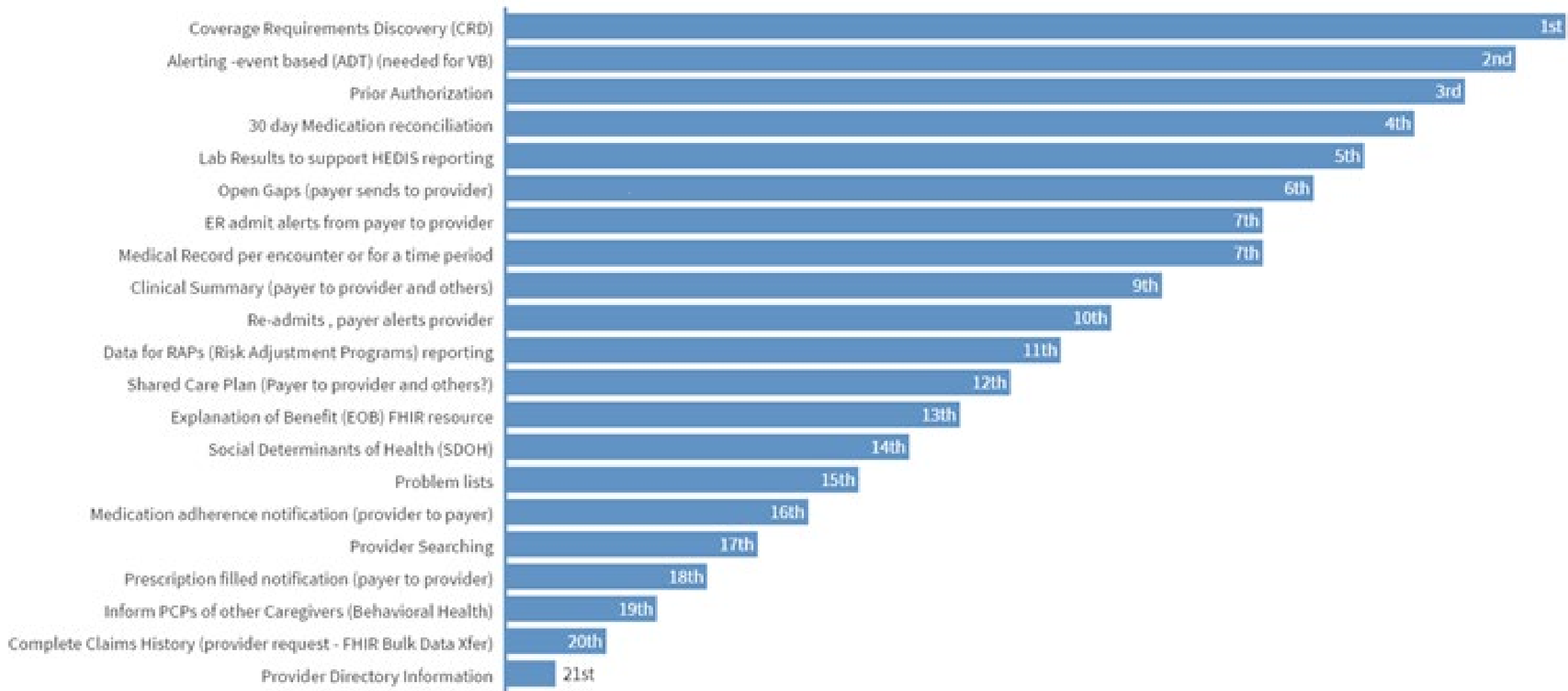
# Key Ecosystem Issues and Deliverables



# P2 – A Tiger Team Approach

1. **Ecosystem Use Cases** - Create use cases that will assist the rest of the tiger teams in directing their efforts and driving their solutions
2. **Identity** - Identify identity-proofing and patient-matching solutions across multiple types of users
3. **Security** - Identify scalable solutions for security authorization and authentication processes
4. **Directory, Versions, and Scale** - Focus on resource directory solutions and ensuring a process to handle versioning and the anticipated scale of resources
5. **Exchange Process (metadata)** - Focus on common metadata and process conventions
6. **Testing and Certification** - Focus on specification for testing and certification of the requirements defined for identity, security, Endpoint discovery, scaling and exchange process
7. **Pilots** - Identify the pilot models, technology, and participants needed to demonstrate the efficacy of the documentation and approaches created by other tiger teams

# P2 Use Case Tiger Team – Initial Brainstorm and Prioritization Results



# P2 Technical Learning Community (TLC)

- » Key component to a broader communications / engagement strategy
- » To include the following;
  - Bi-monthly “newsletter” sent to subscribers of the P2 FHIR TF public list serve
  - Quarterly public webinars for P2 FHIR TF updates (with Q&A), and community engagement
  - Notifications of opportunities to attend/participate in P2 / Da Vinci related events (i.e. connectathons, hackathons, meetups, workshops, etc.)





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## Get Involved!

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For latest information on the P2 FHIR Taskforce,

Please visit the official P2 FHIR Taskforce [Project Page](#).

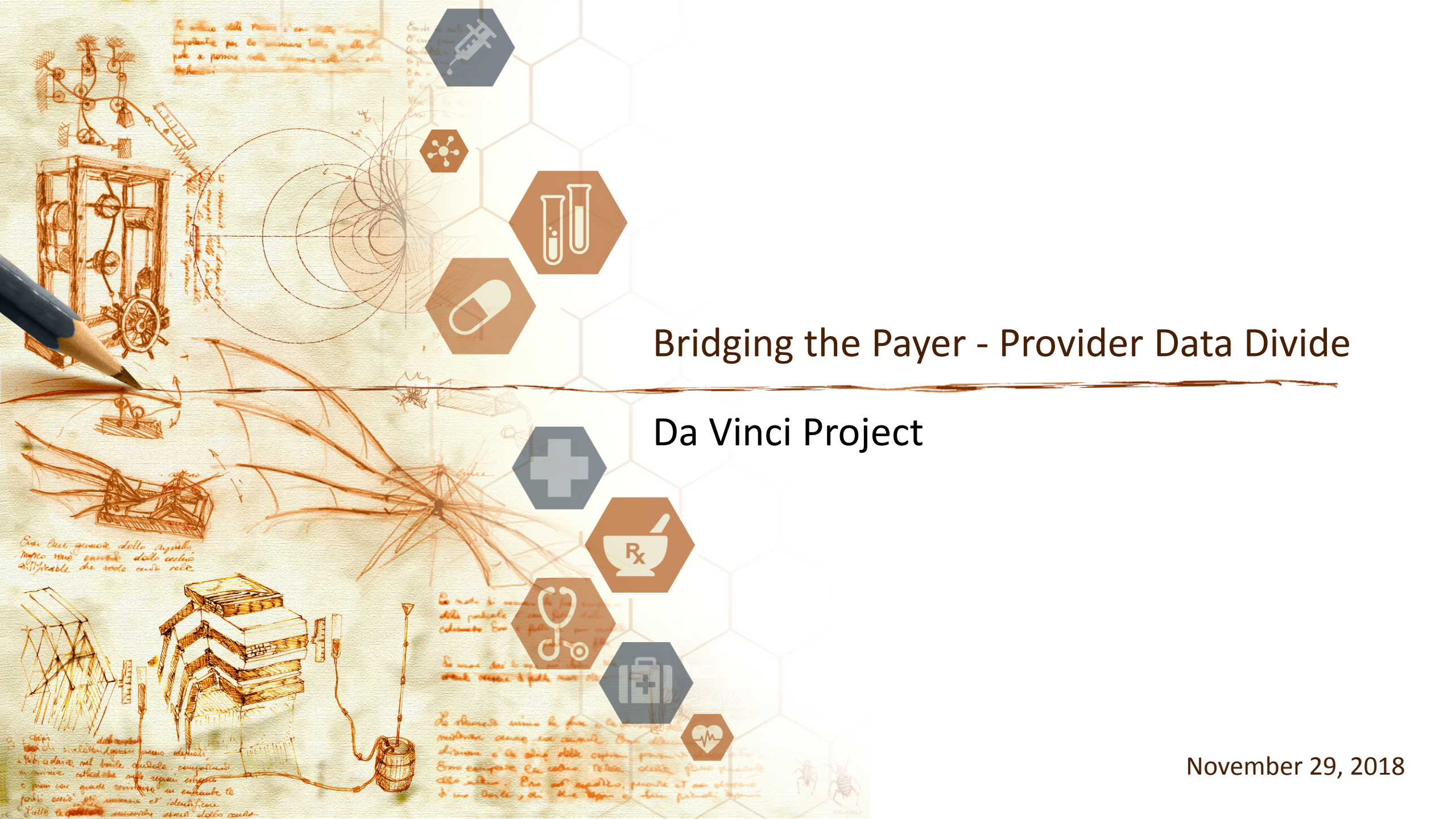
Have any further questions/suggestions?

Please contact Stephen Konya ([Stephen.Konya@hhs.gov](mailto:Stephen.Konya@hhs.gov))

 @ONC\_HealthIT

 @HHSOHC

HealthIT.gov 



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importante per lo scrivere tutti quelli che  
potè e povero nelle diverse culture alle  
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# Bridging the Payer - Provider Data Divide

## Da Vinci Project

November 29, 2018




# Interim Antitrust Policy

## ANSI Antitrust Policy

ANSI neither develops standards nor conducts certification programs but instead accredits standards developers and certification bodies under programs requiring adherence to principles of openness, voluntariness, due process and non-discrimination. ANSI, therefore, brings significant, procompetitive benefits to the standards and conformity assessment community.

ANSI nevertheless recognizes that it must not be a vehicle for individuals or organizations to reach unlawful agreements regarding prices, terms of sale, customers, or markets or engage in other aspects of anti-competitive behavior. ANSI's policy, therefore, is to take all appropriate measures to comply with U.S. antitrust laws and foreign competition laws and ANSI expects the same from its members and volunteers when acting on behalf of ANSI.

Approved by the ANSI Board of Directors  
May 22, 2014



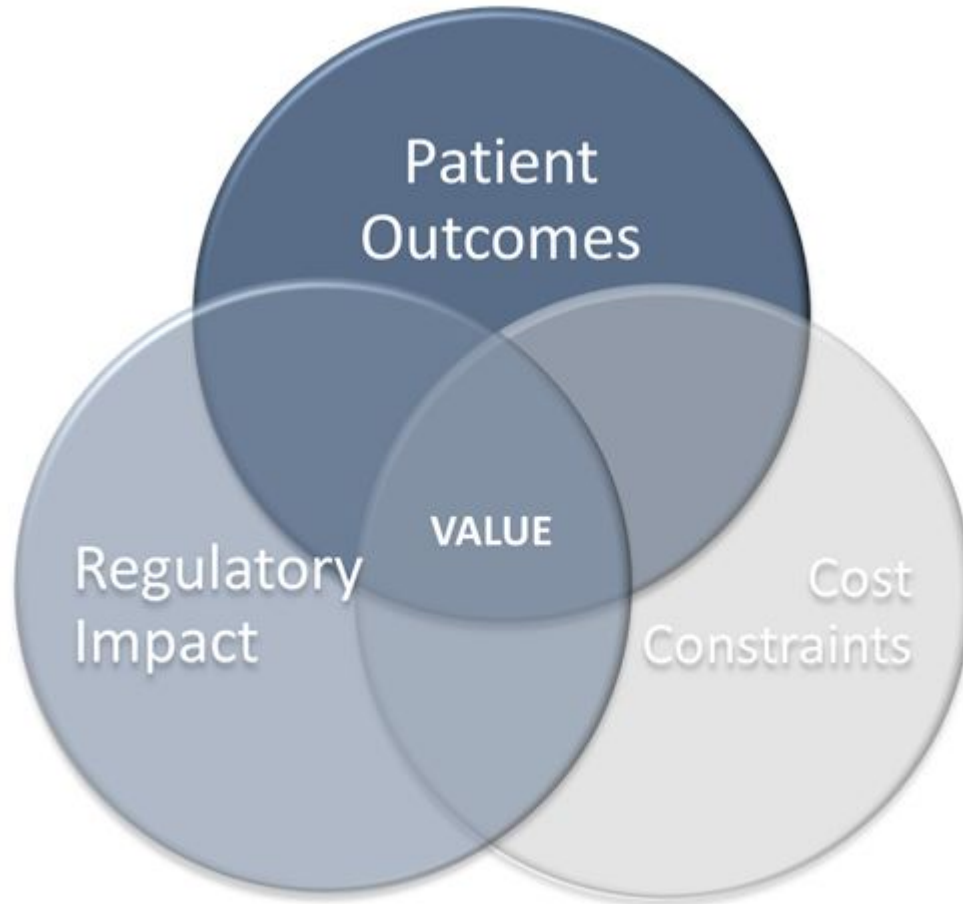
To ensure the success of the industry's **shift to Value Based Care** there is a need to establish a *rapid multi-stakeholder* process to identify, exercise and implement initial use cases between payers and provider organizations.

The objective is **to minimize** the development and deployment of **unique solutions with focus on reference architectures that will promote industry wide standards and adoption.**

Components for success include (and where needed, create extensions to or craft revisions for) common:

1. Standards (HL7 FHIR®),
2. Implementation guides, and
3. Reference implementations and pilot projects to guide the development and deployment of interoperable solutions on a national scale.

# VBC Programs Drive Focus to Patient Outcomes

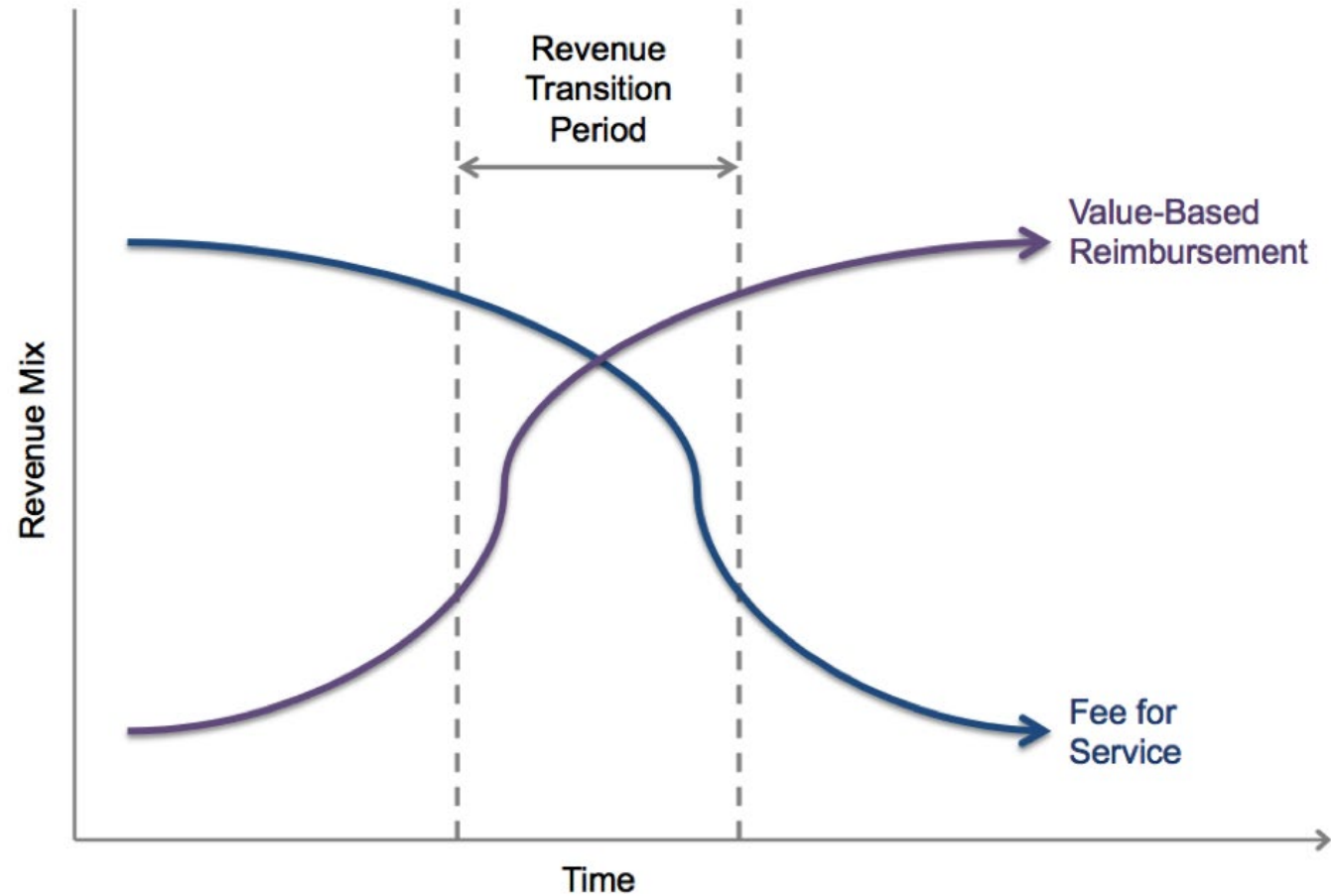


Enable provider to see right data at right time for specific patient coverage, benefits and care coordination

Historically, payment and coverage data completely separate from care



# Empower End Users to Shift to Value



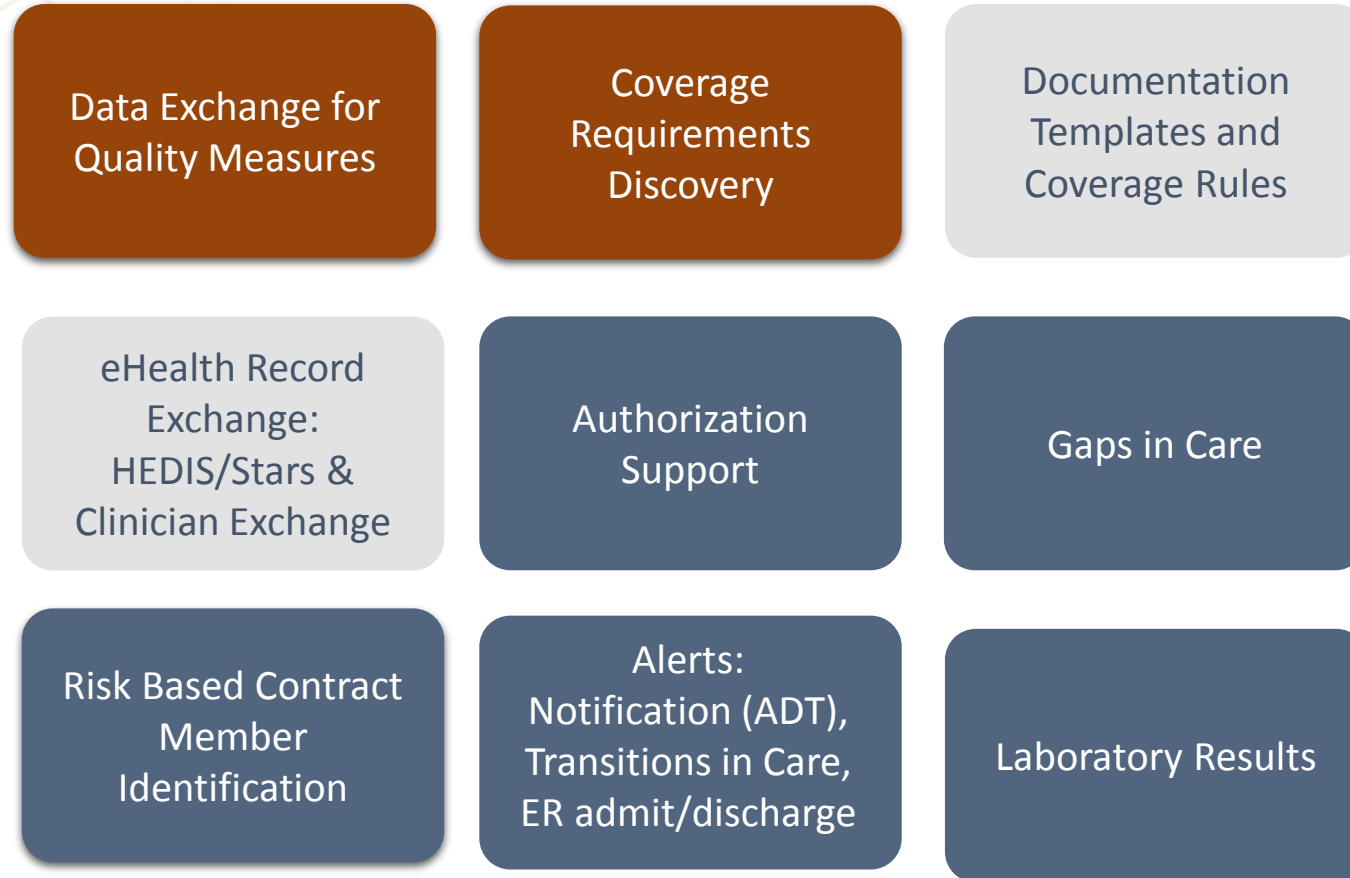
As a private industry project under HL7 International, Da Vinci will unleash critical data between payers and providers required for VBC workflows leveraging HL7<sup>®</sup> FHIR<sup>®</sup>

# Founding Members






Work Underway to Identify Initial Sites by Use Case

# 2018 Use Case Inventory and Project Deliverables



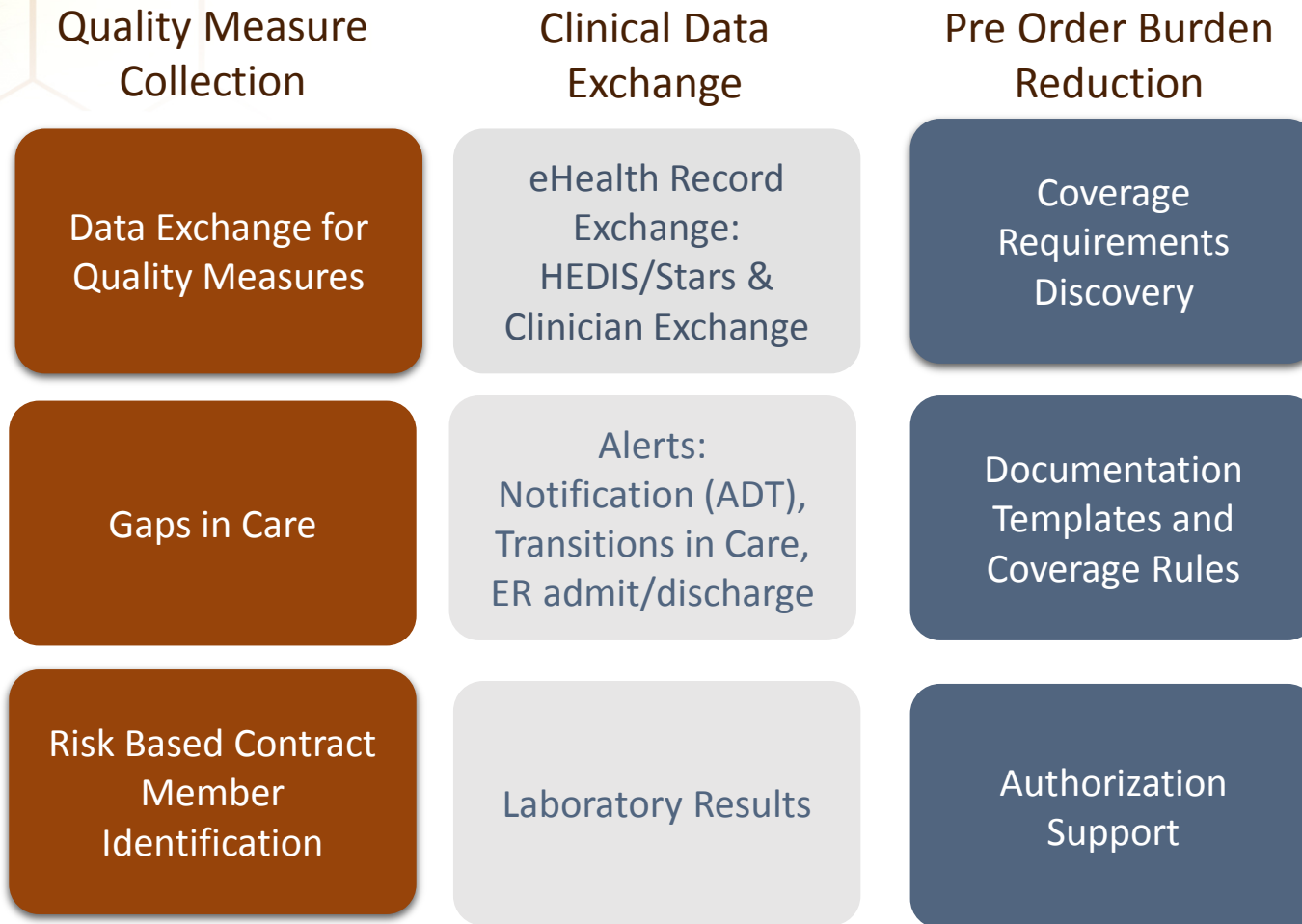
## Project Deliverables

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

-  In HL7 ballot reconciliation as draft standard
-  Discovery and requirements underway
-  Proposed 2019 Use Cases

# Use Case Alignment

Expanding Functionality Across Workflows



## Observations

- Relationships emerging around use cases
- Early use cases create building blocks, incremental improvements
- Currently three categories with expectations others will emerge as we advance and mature existing and add new use cases





# 2018-19 Membership



# Da Vinci Members

## Premier Members



## Associates



# Da Vinci Members

## Sponsors



## Members





# Active Use Cases

# 2018 Initial Delivered Use Cases

30 Day Medication Reconciliation via DEQM

Coverage Requirements Discovery

Stage	Q42018 Priorities	2019 Min Investment
<p>Ballot Reconciliation &amp; Connectathons</p>	<ul style="list-style-type: none"> <li>• Publish</li> <li>• Identify Implementers</li> <li>• Test</li> </ul>	<ul style="list-style-type: none"> <li>• v2: sync with FHIR STU4</li> <li>• Incorporate feedback</li> <li>• Extend DEQM for next set of Measures</li> </ul>
<p>Ballot Reconciliation &amp; Connectathons</p>	<ul style="list-style-type: none"> <li>• Publish</li> <li>• Identify Implementers</li> <li>• CMS Test late Fall</li> </ul>	<ul style="list-style-type: none"> <li>• v2: sync with FHIR STU4</li> <li>• Incorporate feedback</li> <li>• Add pricing by location functionality</li> </ul>



# 2018 In Flight Use Cases

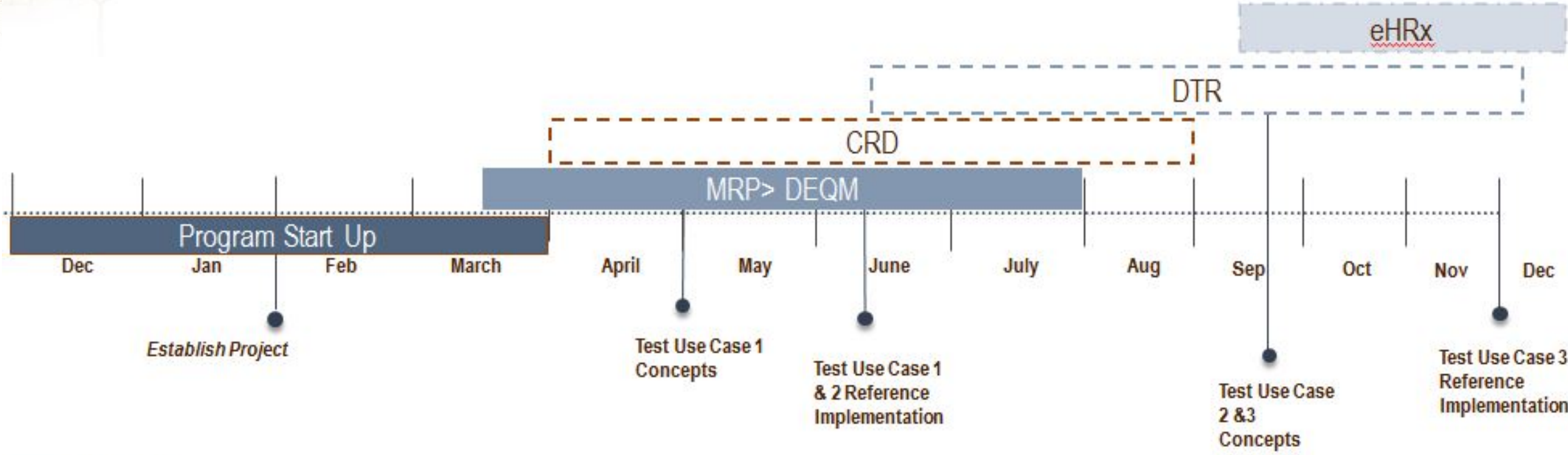
Documentation  
Templates and  
Coverage Rules

eHealth Record  
Exchange:  
HEDIS/Stars &  
Clinician Exchange

Stage	Q42018 Priorities	2019 Min Investment
Definition	<ul style="list-style-type: none"><li>• Finalize scope</li><li>• Submit Project Scope Statement</li><li>• Identify Implementers</li></ul>	<ul style="list-style-type: none"><li>• Ballot v1 IG</li><li>• Connectathons</li><li>• Implementations</li><li>• March 2019 CMS Testing</li></ul>
Discovery	<ul style="list-style-type: none"><li>• Identify scenarios and architectural approach</li><li>• Get IG work underway</li><li>• Identify Implementers</li></ul>	<ul style="list-style-type: none"><li>• Ballot v1 for 3 current IGs</li><li>• Connectathons</li><li>• Implementations</li></ul>

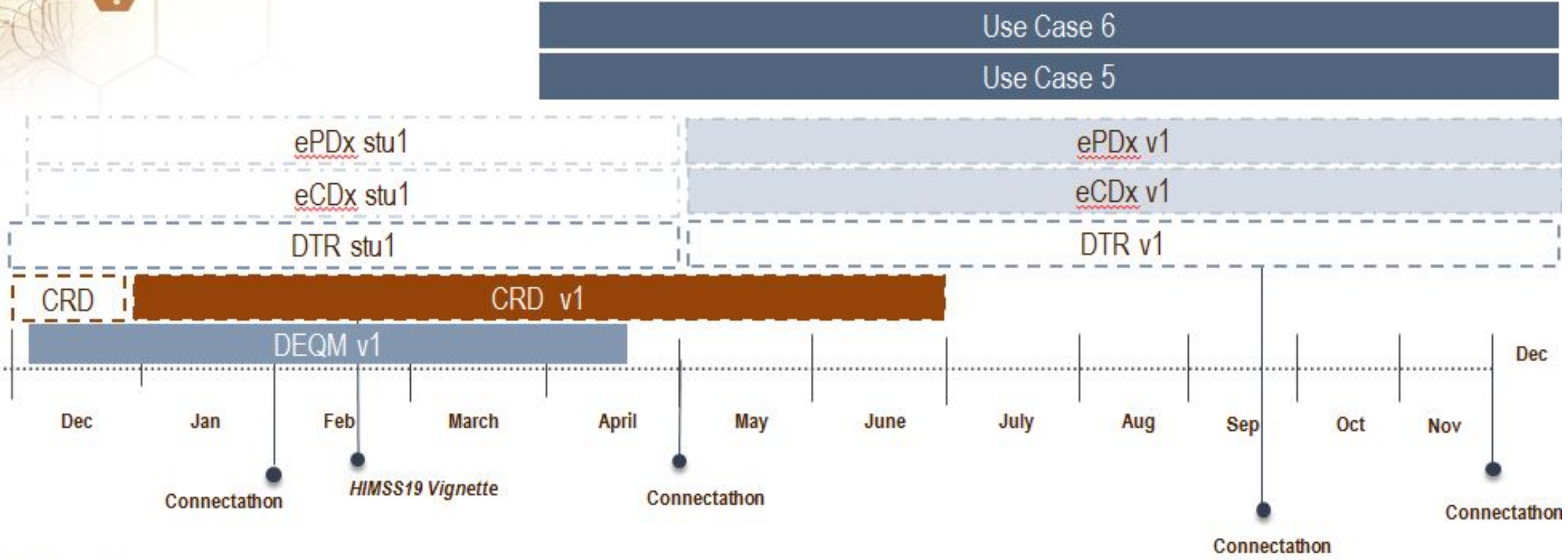


# Da Vinci 2018 Use Cases –Year 1



- Prelaunch
- Use Case 1
- ▭ Use Case 2
- ▭ Use Case 3
- ▭ Use Case 4

# Da Vinci 2018 Use Cases –Year 2



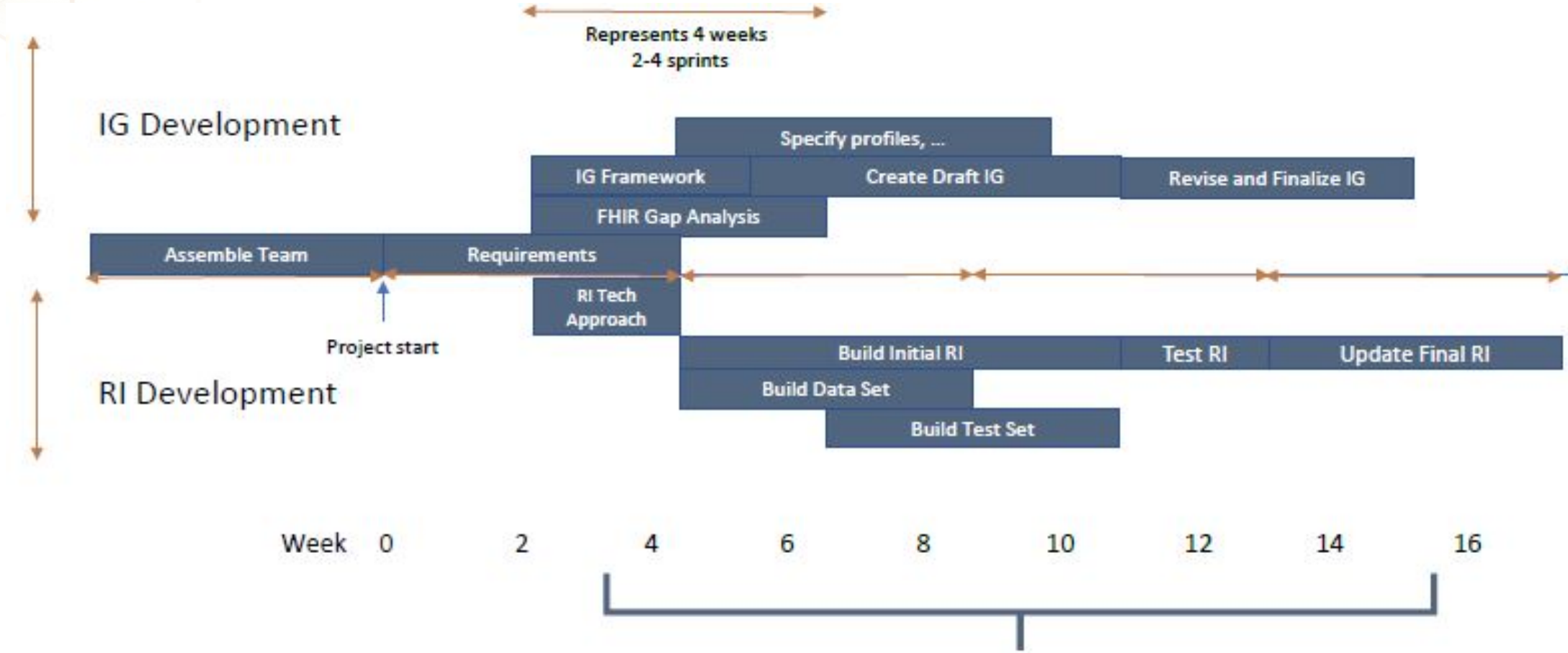
- Use Case 1
- Use Case 2
- Use Case 3
- Use Case 4
- Use Case 5



# Project Construct

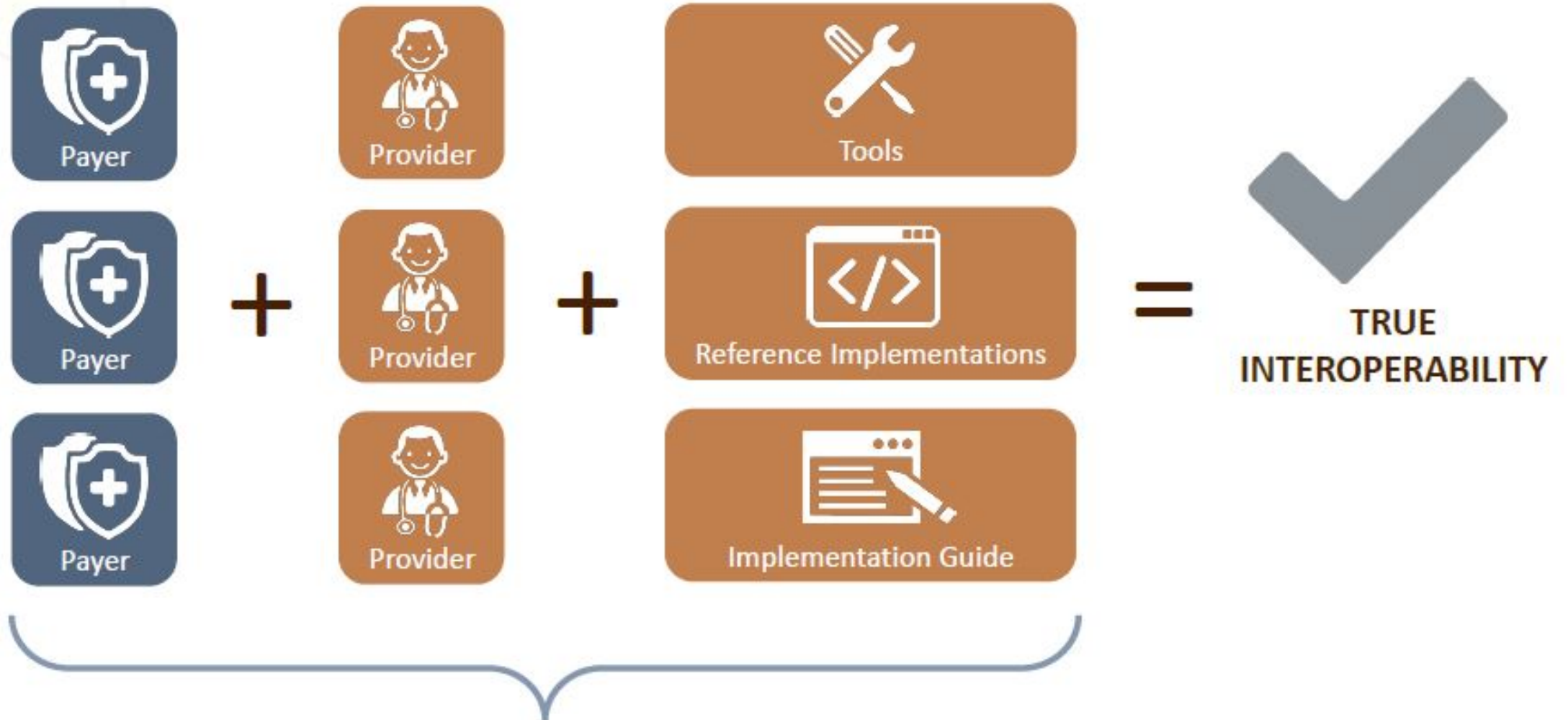


# Sample Project Structure & Timeline



Work with appropriate HL7 workgroup for IG sponsorship and input

# Demonstration Projects Recommendation



Build Your Implementation Organization

# HL7 Balloted Implementation Guides



Data Exchange For Quality Measures Implementation Guide: STU1 Ballot 1 (for FHIR 3.0.1)



[Home](#) [Guidance and Overview](#) [Use Cases](#) [Profiles/Extensions](#) [Operations](#) [Terminology](#) [Capability Statements](#) [Downloads](#)

This is a pre-release version (Ballot 1) of Data Exchange For a full list of available versions, see the [Directory of p](#)

[TOC](#) [Home](#)

## DaVinci Data Exchange For Quality

This is the Continuous Integration Build of the Data Exch 3.0.1. See the [Directory of published versions](#)

Contents:

- [Summary](#)
- [Background](#)
- [How to read this Guide](#)

### 1 Summary

The purpose of this implementation guide is to support v Implementation Guide can be usable for multiple use cas the U.S. Realm.

Interoperability challenges have limited many stakeholde The dual challenges of data standardization and easy infc to create efficient care deliverv solutions and effective ca



CoverageRequirementsDiscovery 0.1.0 - STU1 Ballot 1 (for FHIR 3.5.0)



[IG Home](#) [Table of Contents](#) [Artifact Index](#) [FHIR Spec](#) [CDS Hooks](#) [History](#)

[Table of Contents](#) > [CRD IG Home Page](#)

This is a pre-release version (Ballot 1) of Coverage Requirements Discovery (CRD) R1/STU. There is no current official version. For a full list of available versions, see the [Directory of published versions](#)

### 1 CRD IG Home Page

This specification is currently undergoing ballot and connectathon testing. It is expected to evolve, possibly significantly, as part of that process.

Feedback is welcome and may be submitted through the [FHIR gForge tracker](#) indicating "US Da Vinci CRD" as the specification. If balloting on this IG, please submit your comments via the tracker and just reference them in your ballot submission implementation guide.

This implementation guide is dependent on other specifications. Please submit any comments you have on these base specifications as follows:

- Feedback on CDS Hooks should be posted to the CDS Hooks [GitHub Issue List](#)
- Feedback on the FHIR core specification should be submitted to the [FHIR gForge tracker](#) with "FHIR Core" as the specification.
- Feedback on the US core profiles should be submitted to the [FHIR gForge tracker](#) with "US Core" as the specification.

Individuals interested in participating in the Coverage Requirements Discovery or other HL7 Da Vinci projects can find information about Da Vinci [here](#).

There are a few places in this implementation guide marked as 'ToDo'. All such areas represent supplementary content such as examples, additional background or context or other non-definitional content. I.e. they do not change any of the conformance expectations on implementers. Where ToDo appears, such content will be created and included in the implementation guide prior to publication as a Standard for Trial Use.

- [Overview](#)
- [Content and organization](#)

#### 1.1 Overview

# Follow Progress, Test, Implement

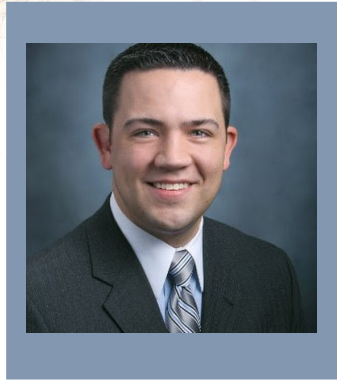
## Find

- Background collateral
- Implementation Guide
  - Balloted Sept '18, reconciliation underway
- Reference Implementation
  - HL7 Connectathon participants
  - Publicly available

- HL7 Da Vinci Wiki & Listserv signup -  
<http://www.hl7.org/about/davinci/index.cfm>
- HL7 Confluence Site -  
<https://confluence.hl7.org/display/DVP/>
- Data Exchange For Quality Measures (DEQM) Implementation Guide STU1 Ballot 1
  - <http://hl7.org/fhir/us/davinci-deqm/2018Sep/STU3/index.html>
- Coverage Requirements Discovery (CRD) Implementation Guide STU1 Ballot 1
  - <http://hl7.org/fhir/us/davinci-crd/2018Sep/index.html>
- Reference Implementation Code Repository -  
<https://github.com/HL7-DaVinci>



# Q&A



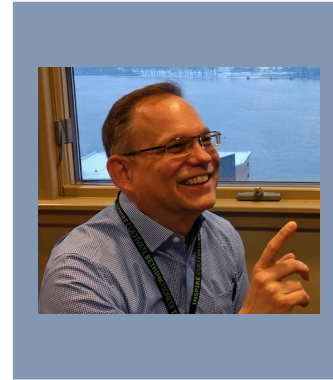
Stephen Konya  
ONC  
P2 Lead



Jocelyn Keegan  
Da Vinci  
Program Manager  
Point of Care  
Partners



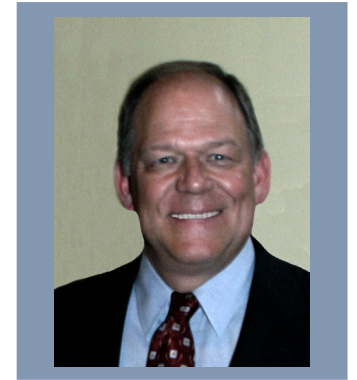
Viet Nguyen, MD  
Da Vinci  
Technical Director  
Stratametrics



Patrick Murta  
P2 Lead &  
Da Vinci Operating  
Member  
Humana



Lenel James  
P2 Lead & Da Vinci  
PMO  
BCBSA



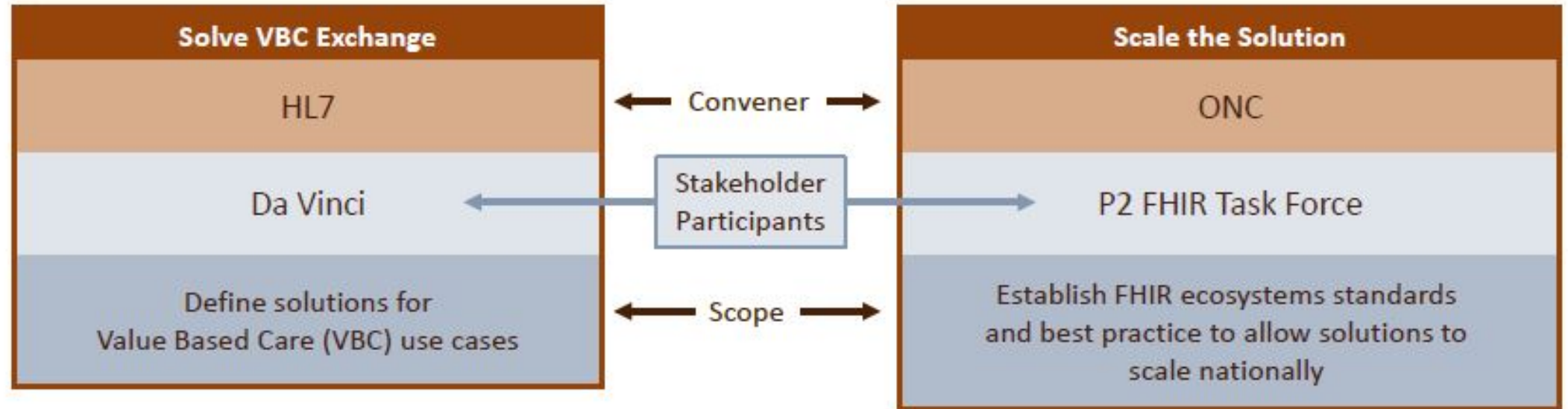
Bob Diertle  
P2 Lead &  
Da Vinci PMO/IV&V  
Enablecare



Additional Slides  
(for reference, as needed)

# Relationship Between Da Vinci & P2 FHIR Task Force

Using FHIR to Solve Payer-Provider and Provider-Provider Interoperability Problems



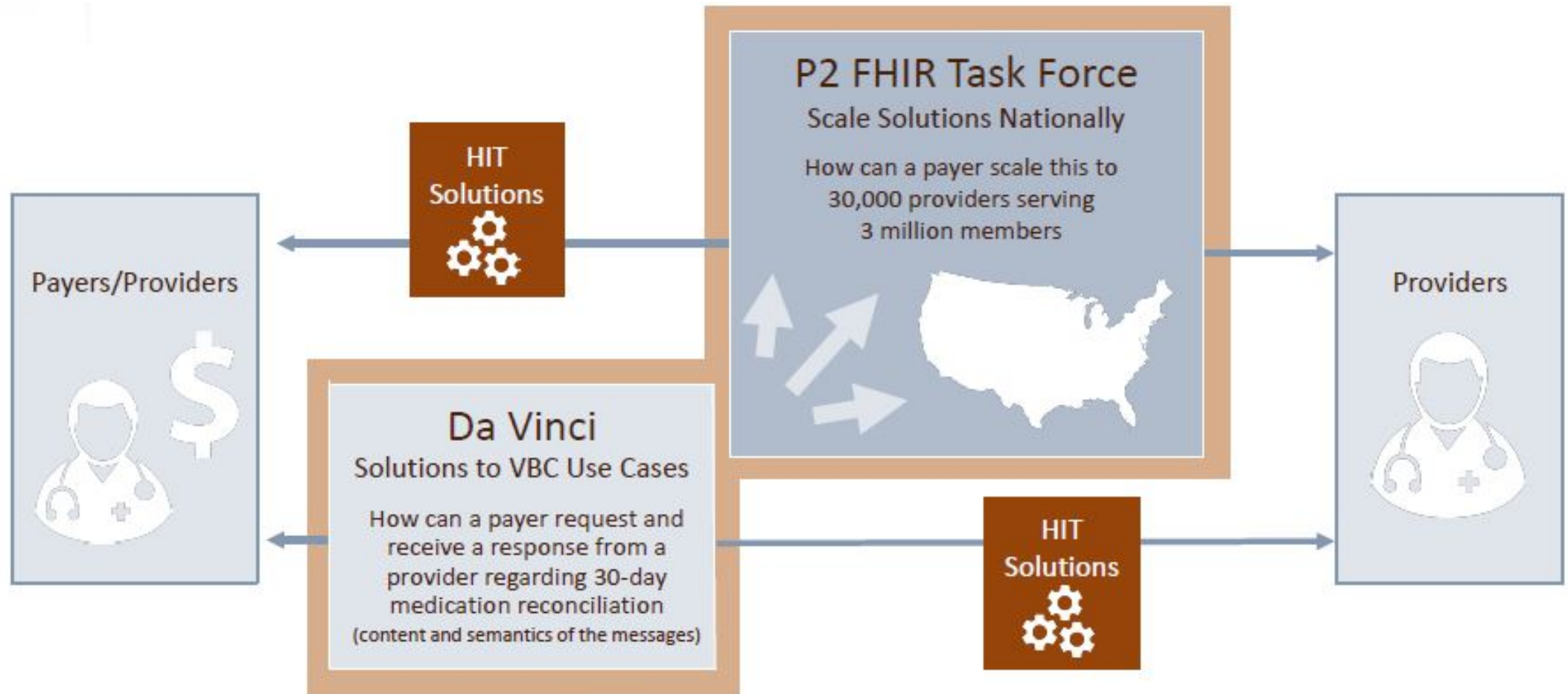
- Start with a VBC use case (e.g. 30-day medication reconciliation)
- Define the requirements (business, technical)
- Create implementation guide and reference implementation
- Pilot the solution

- Identity management
- Security and authentication
- API discovery
- Scaling solutions
- Content identification and Routing
- Testing and certification



# Da Vinci and P2 FHIR Task Force Payer, Provider and HIT vendors

Using FHIR to Solve Payer-Provider and Provider-Provider Interoperability Problems





## Use Case Details



# Use Case/Architecture Model

## Use Case Sources



Da Vinci UC Base



Existing Workflow (i.e., PA)

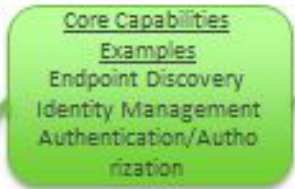
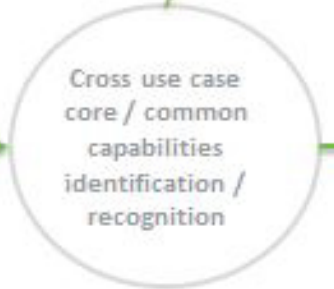


Known Barrier to Scalability

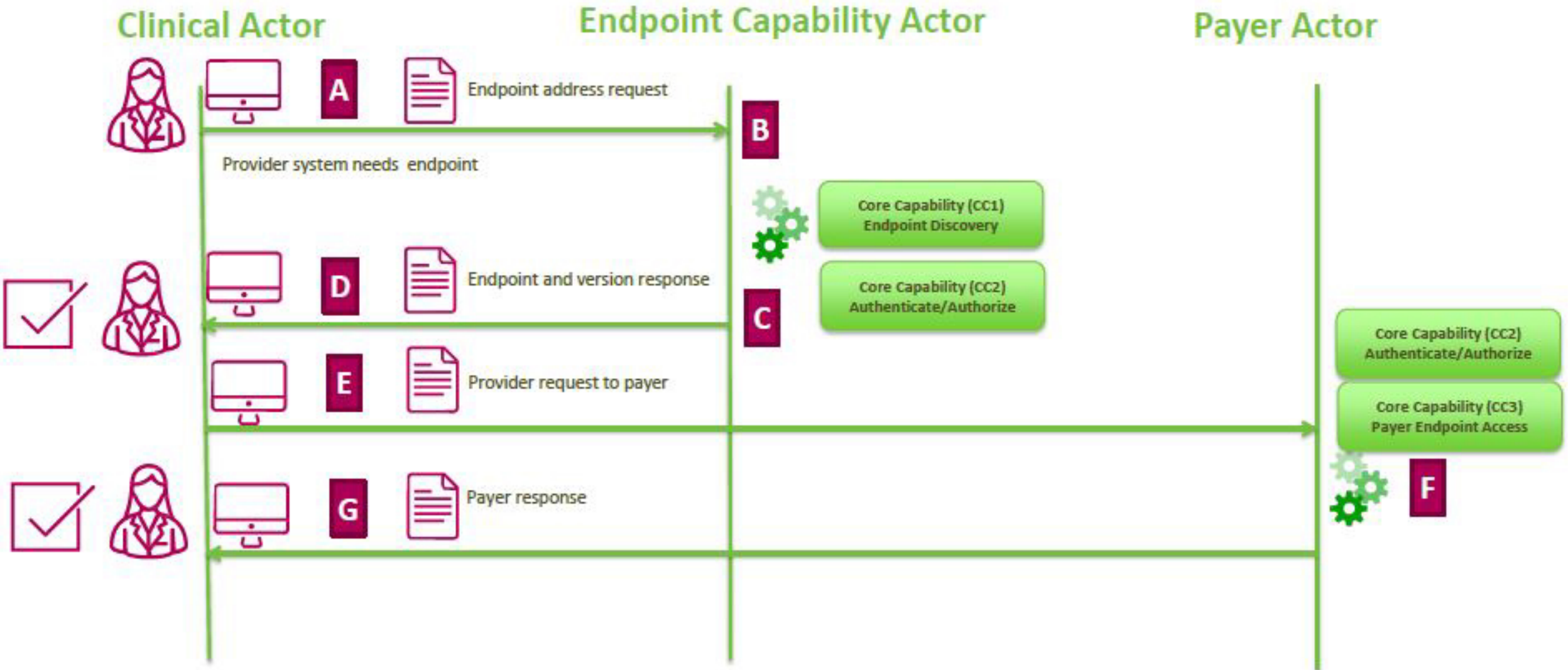
## Tiger Teams

### Architecture Team

### Use Case Team

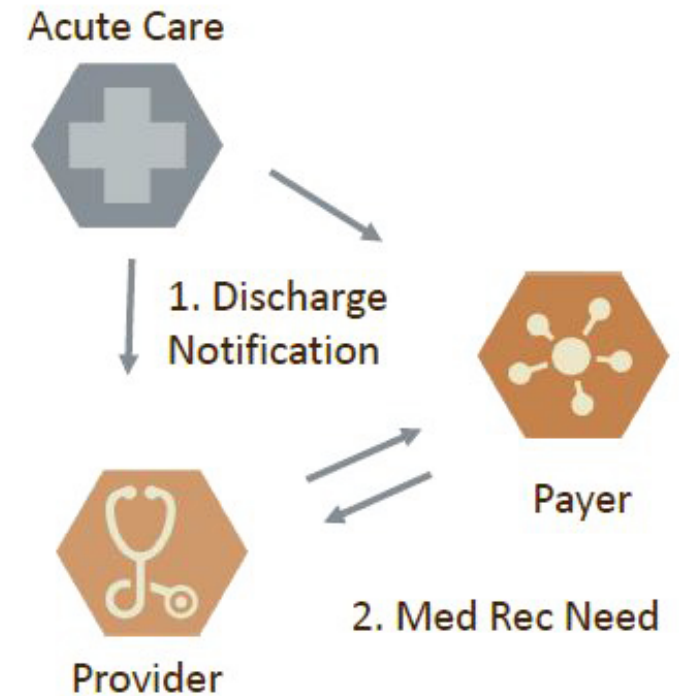


# Patient Information Request – Provider to Payer/Plan



# 30 Day Medication Reconciliation

- Need for provider to attest that Med Rec has been completed post-discharge
- Increasingly required for HEDIS and commercial at risk contracts
- Focus is to compare pre/post medication lists to avoid errors
- Today done through claims processing or manual review of lists

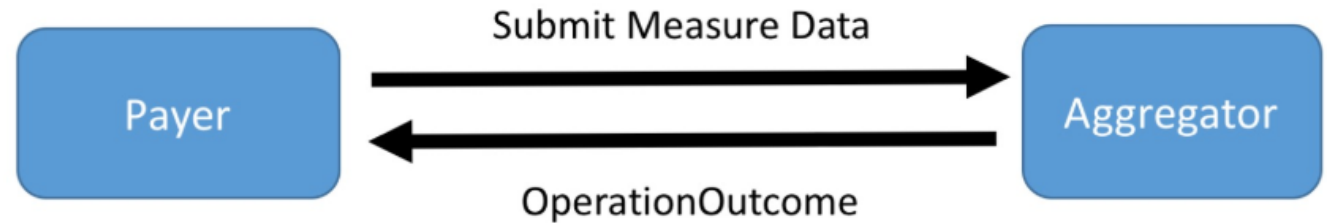


# Quality Data Exchange Implementation Guide

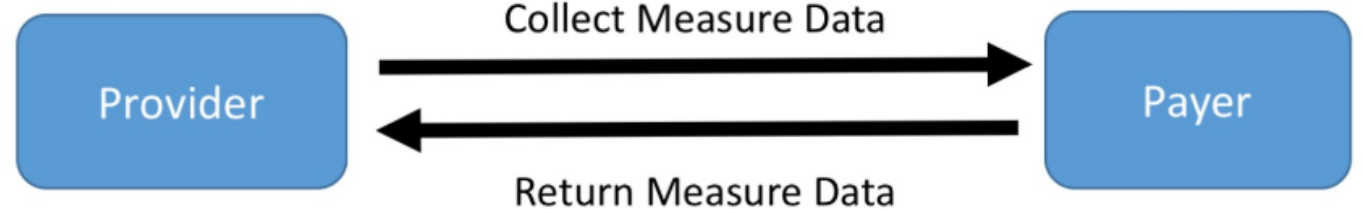
Use case creates a common framework for quality data exchange

- Enables the exchange of raw quality measure data between quality measurement Teams and Care teams that provide patient care
- Timely exchange of key data is critical to evaluate and capture quality
- Future work will incorporate additional use cases

## 1. Submit



## 2. Collect



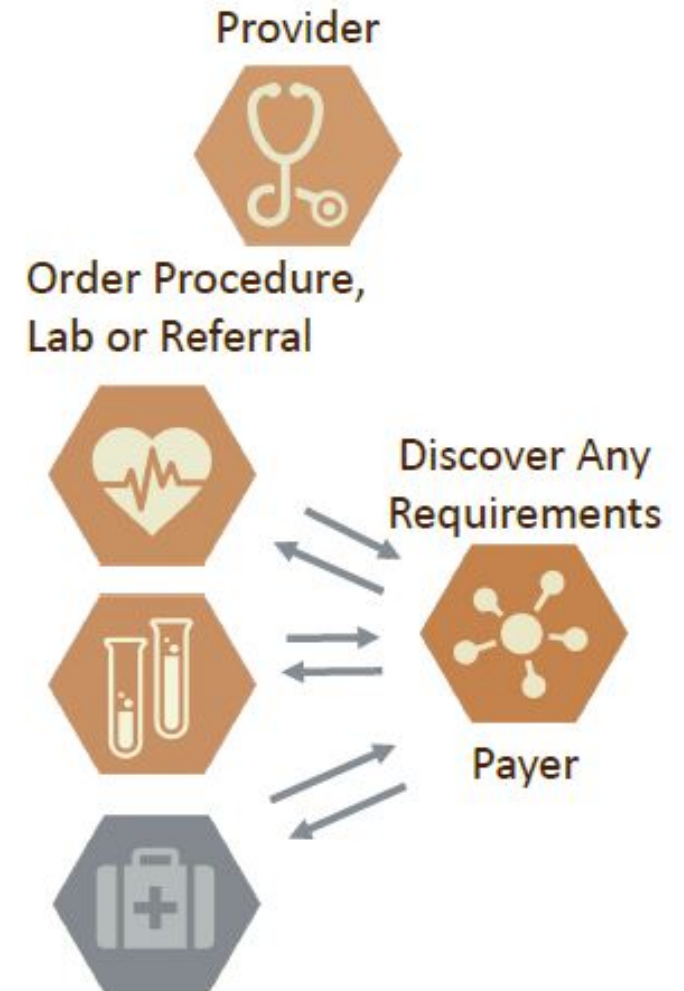
## 3. Subscribe





# Coverage Requirements Discovery

- Providers need to easily discover which payer covered services or devices have
  - Specific documentation requirements,
  - Rules for determining need for specific treatments/services
  - Requirement for Prior Authorization (PA) or other approvals
  - Specific guidance.
- With a FHIR based API, 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 Implementation Guide

## 1) Based on a specific clinical workflow event:

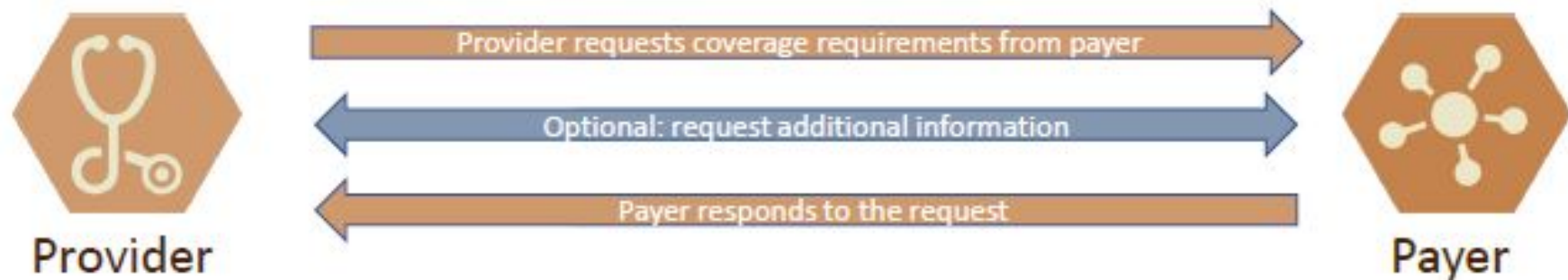
scheduling,  
start of encounter,  
planning treatment,  
ordering,  
discharge

Provider's send FHIR based request, with appropriate clinical context to the responsible payer

## 2) Payer may request additional information from the provider EHR using existing FHIR APIs

## 3) 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.



# Documentation Templates and Payer Rules

- Providers need to easily incorporate payer requirements into their clinical workflow
  - Specific documentation requirements,
  - Rules for determining need for specific treatments/services
  - Requirement for Prior Authorization (PA) or other approvals
  - Specific guidance.
- Use a FHIR based standard for representing payer “rules” to communicate, in real-time, payer medical necessity and best clinical practice requirements that may affect the ability to have certain services or devices covered by the responsible payer.
- The template/rules may (examples, not complete list)
  - Specify provider documentation requirements for coverage, medical necessity
  - Provide guidance / documentation requirements regarding social determinates that are antecedents for specific care
  - Collect information for some purpose (e.g. authorizations)
  - Indicate clinical requirements including appropriate use
  - Collect specific documentation for Quality Measures
  - Respond with specific information as requested/documented in the template/rules

# eHealth Record Exchange

