



HL7 Da Vinci Project

December 2019

Project Challenge

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



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.

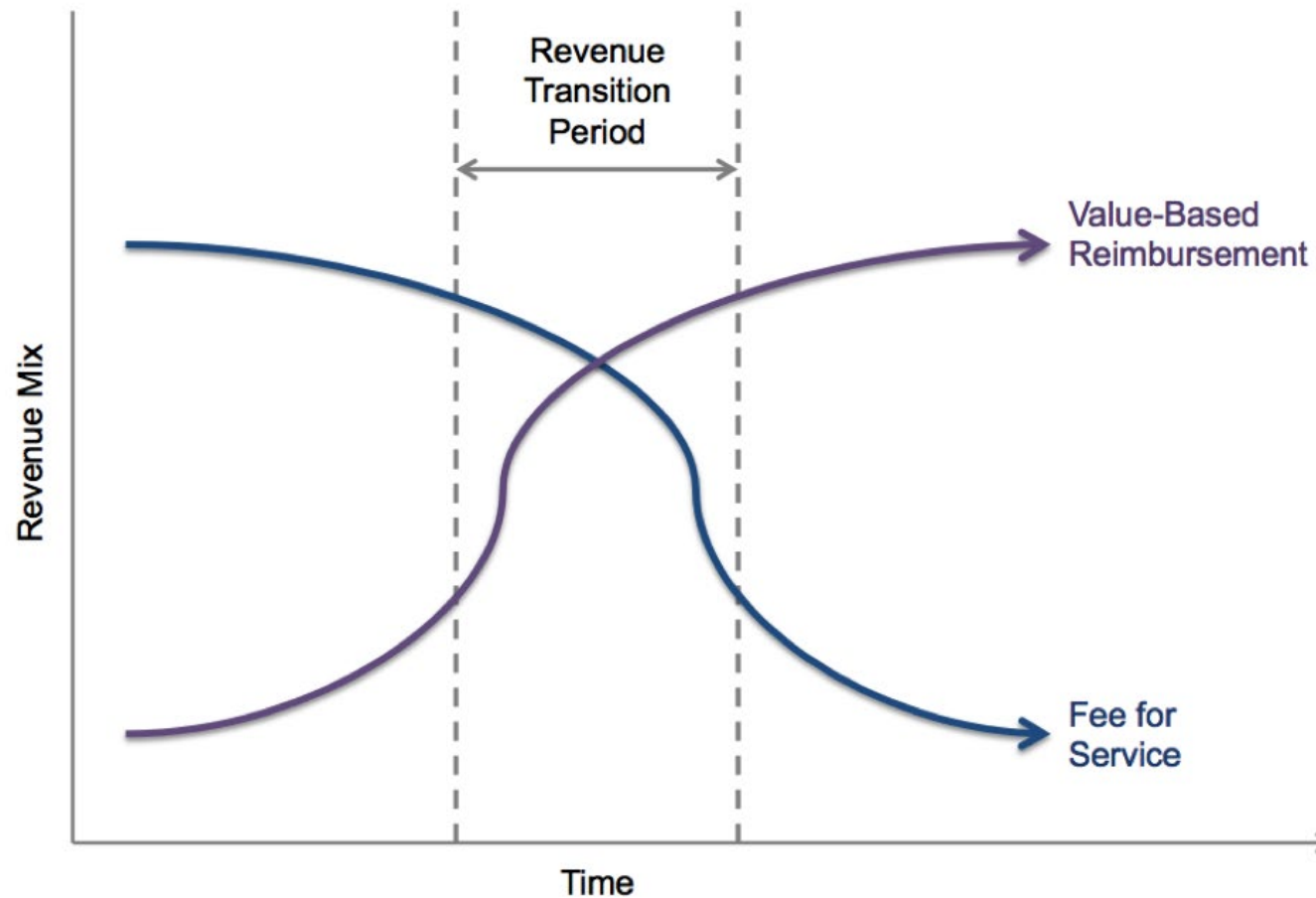


Success Measures:

Use of FHIR®, implementation guides and pilot projects.

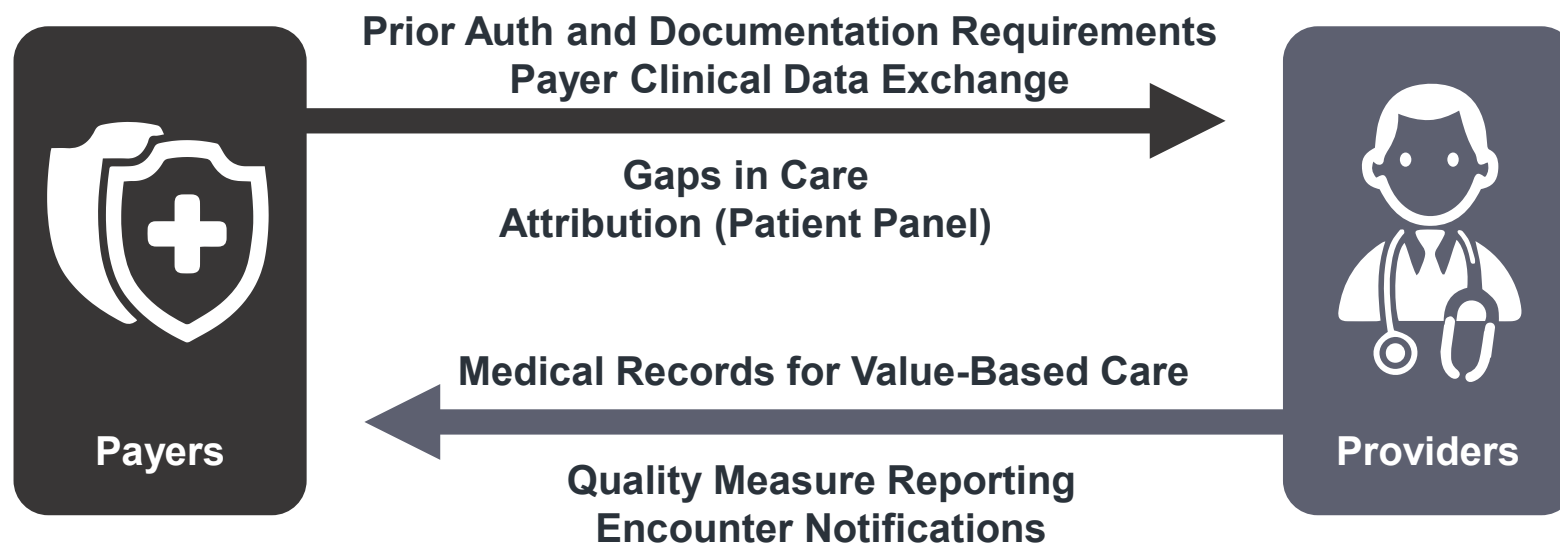


Empower End Users to Shift to Value



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®

Da Vinci is Driving Standards for the Exchange of Information Critical to Patient Care



2019 MEMBERSHIP

Membership by Primary Industry Role

Providers



Payers



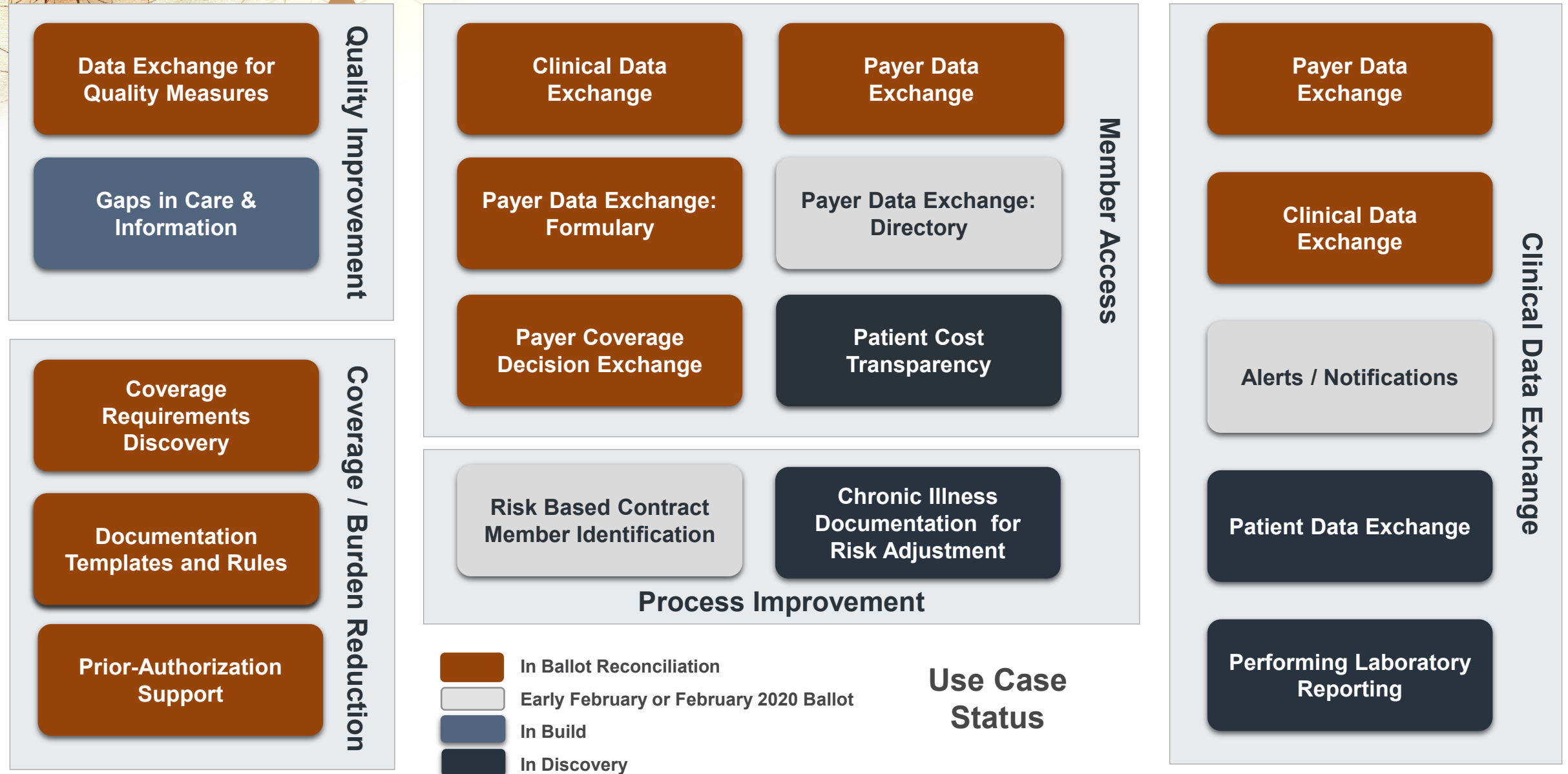
Vendors



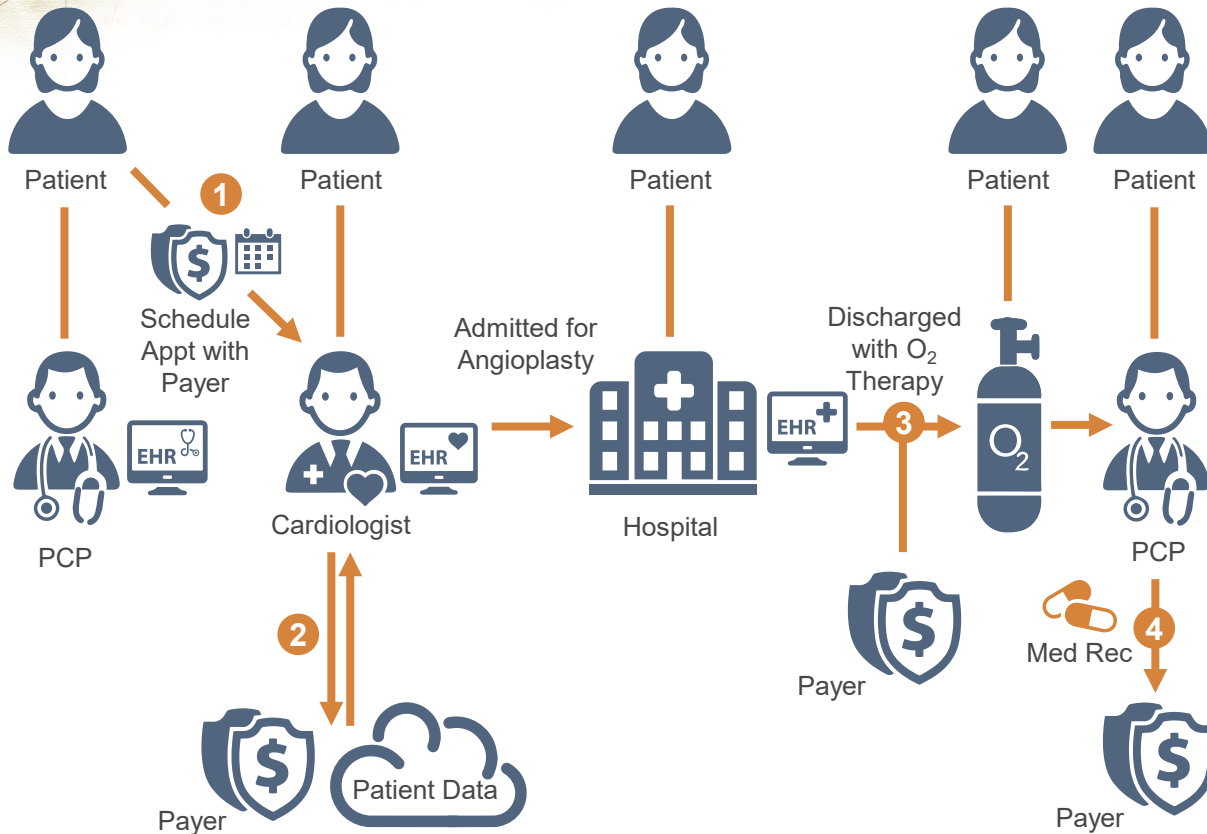
Partners



Use Case Focus Areas



Industry Progress and HIMSS Demonstration Update



The visual describes the interactions demonstrated at HIMSS Interoperability Showcase, direction of each exchange, the FHIR standards used, the setting where the interaction is occurring and the participants.

Each step represents a provider – payer exchange using FHIR IG

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%

Activities by the Numbers	Stats
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 %

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.

2019 Implementation Guides and Connectathons



Deliverable - HL7 Ballots are for STU with the exception of DTR in May

Event – See confluence.hl7.org

BALLOTTED in MAY

- STU Data Exchange for Quality Measures (DEQM)
- STU Coverage Requirements Discovery (CRD)
- Comment Documentation Templates & Rules (DTR)

BALLOTTED EARLY SEPTEMBER

- STU Health Record Exchange (HRex)
- STU Payer Data Exchange (PDex)
- STU PDex Formulary
- STU Clinical Data Exchange (CDex)

BALLOTTED EARLY FEBRUARY

- STU PDex Payer Directory

2019

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

2020

JAN

FEB

MAR

HIMSS19
Interop
Showcase

Da Vinci
Connectathon &
Working Session

HL7
Connectathon

BALLOTTED SEPTEMBER

- STU Documentation Templates and Rules (DTR)
- STU Payer Coverage Decision Exchange
- STU Prior Authorization Support (Prior Auth)

HL7
Connectathon

Da Vinci
Connectathon

ONC Annual Meeting
Da Vinci Meeting & Connectathon

CMS
Connectathon

FEBRUARY BALLOT (Dec 27 – Jan 26)

- STU STU Patient Cost Transparency
- STU RBC Member ID and Bulk Data
- STU Alerts / Notifications

HIMSS20
Demonstration

Implementation Guide Status

Implementation Guide	IG Status	RI Live	Number of Connectathons
Quality Improvement			
Data Exchange for Quality Measures		<input checked="" type="checkbox"/>	5
Gaps in Care & Information			
Burden Reduction			
Coverage Requirements Discovery		<input checked="" type="checkbox"/>	5
Documentation Templates and Payer Rules		<input checked="" type="checkbox"/>	4
Prior Authorization Support		<input checked="" type="checkbox"/>	2
Member Access			
Health Record Exchange Framework (HReX)		*	*
Clinical Data Exchange (CDex)		<input checked="" type="checkbox"/>	3
Payer Data Exchange (PDex)		<input checked="" type="checkbox"/>	3
Payer Data Exchange (PDex): Formulary		<input checked="" type="checkbox"/>	2
Payer Data Exchange (PDex): Plan Network Directory		<input checked="" type="checkbox"/>	2
Payer - Payer Coverage Decision Exchange		<input checked="" type="checkbox"/>	2
Patient Cost Transparency		<input checked="" type="checkbox"/>	

Implementation Guide	IG Status	RI Live	Number of Connectathons
Clinical Data Exchange			
Alerts: Notification (ADT), Transitions in Care, ER admit/discharge		<input checked="" type="checkbox"/>	2
Health Record Exchange: Patient Data Exchange			
Health Record Exchange: Patient Data Exchange			
Performing Laboratory Reporting			
Process Improvement			
Risk Based Contract Member Identification			
Chronic Illness Documentation for Risk Adjustment			

KEY

- Planning
- Build
- STU1 Ballot Reconciliation > Publish
- STU2 Ballot Reconciliation > Publish
- * Not Meaningful / Foundational IG

2020 Implementation Guide Progress



Deliverable - HL7 Ballots are for STU with the exception of DTR in May

Event – See confluence.hl7.org

FEBRUARY BALLOT (Dec 27 – Jan 26)

- STU1 Alerts / Notifications
- STU 1 RBC Member ID and Bulk Data
- STU1 PDex Payer Directory (early)

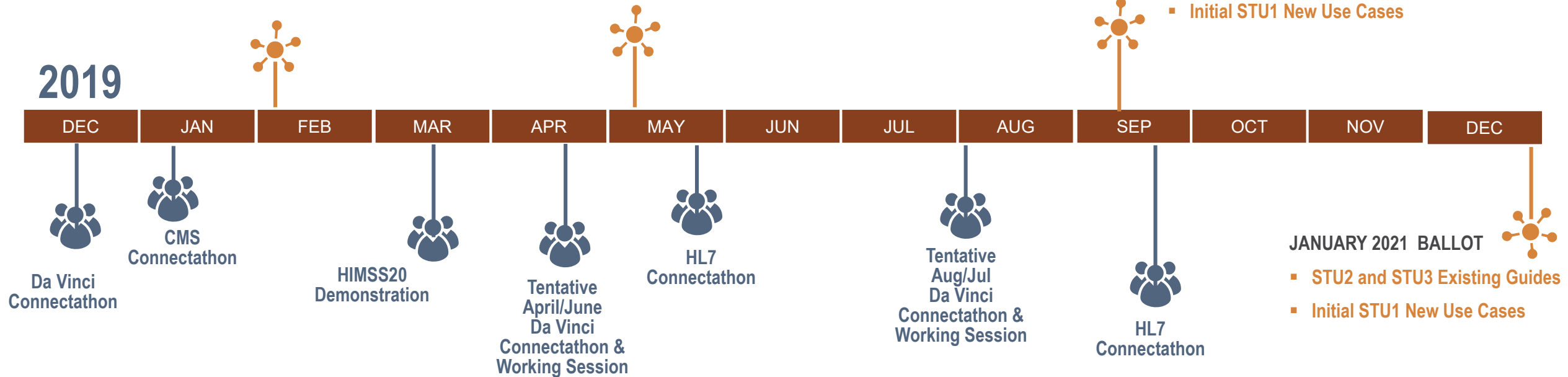
MAY BALLOT

- STU1 Gaps in Care
- STU1 Clinical Data Exchange (CDex)
- STU2 and STU3 Existing Guides
- Initial STU1 New Use Cases

SEPTEMBER BALLOT

- STU2 and STU3 Existing Guides
- Initial STU1 New Use Cases

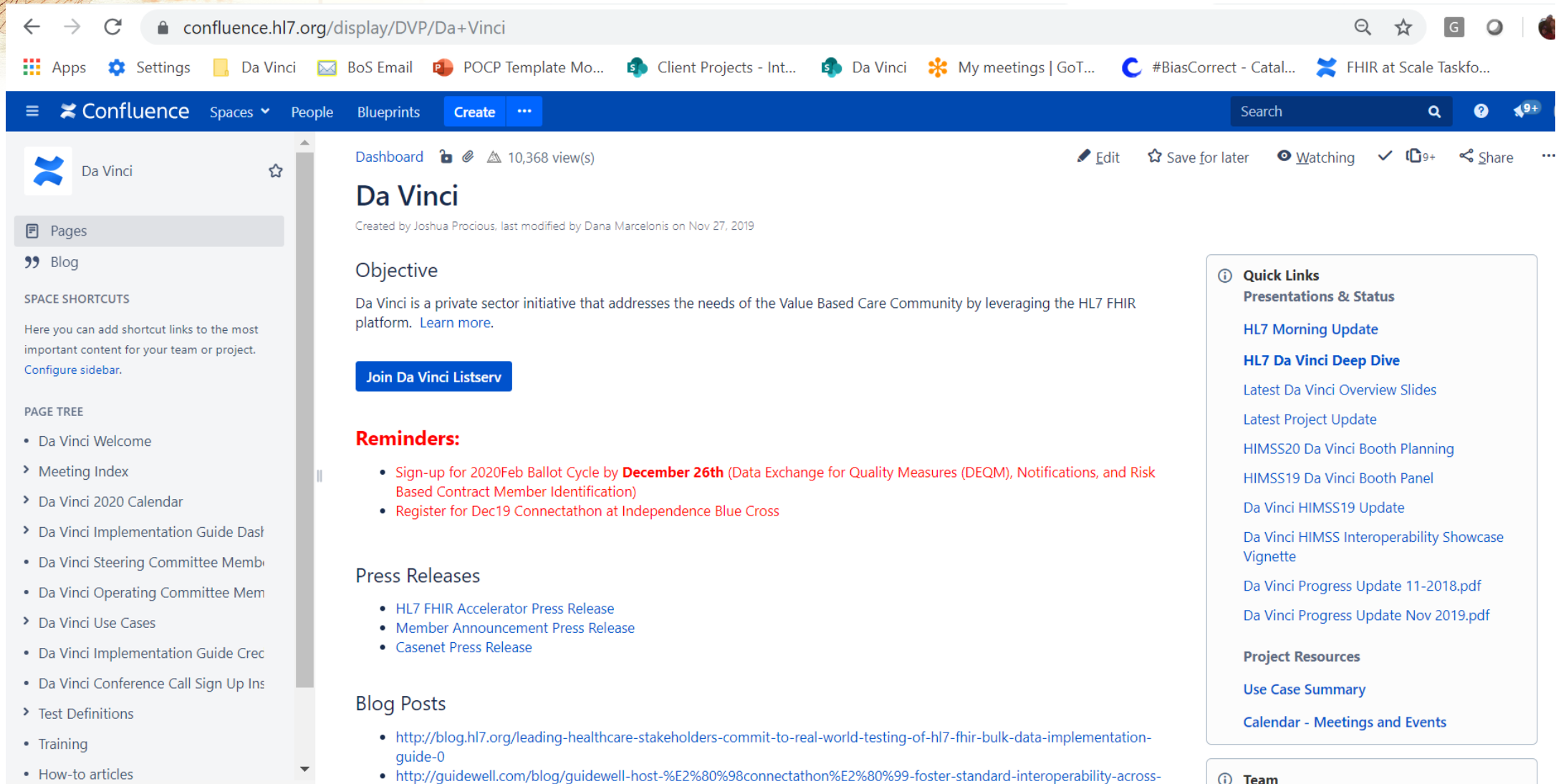
2019



JANUARY 2021 BALLOT

- STU2 and STU3 Existing Guides
- Initial STU1 New Use Cases

Resources on <http://confluence.hl7.org>



The screenshot shows the Confluence HL7.org website. The browser address bar displays confluence.hl7.org/display/DVP/Da+Vinci. The page title is "Da Vinci" with 10,368 views. The page was created by Joshua Procius and last modified by Dana Marcelonis on Nov 27, 2019. The main content area includes an "Objective" section describing Da Vinci as a private sector initiative for the Value Based Care Community, a "Join Da Vinci Listserv" button, a "Reminders" section with links to sign-up for the 2020 Feb Ballot Cycle and register for the Dec19 Connectathon, a "Press Releases" section with links to HL7 FHIR Accelerator, Member Announcement, and Casenet press releases, and a "Blog Posts" section with links to a leading healthcare stakeholders commit-to-real-world-testing guide and a guidewell-host-connectathon foster standard interoperability across-... article. The left sidebar shows the "Da Vinci" space with a "Pages" section containing "Da Vinci Welcome", "Meeting Index", "Da Vinci 2020 Calendar", "Da Vinci Implementation Guide Dasl", "Da Vinci Steering Committee Memb", "Da Vinci Operating Committee Mem", "Da Vinci Use Cases", "Da Vinci Implementation Guide Crec", "Da Vinci Conference Call Sign Up Ins", "Test Definitions", "Training", and "How-to articles". The right sidebar contains "Quick Links" under "Presentations & Status" including "HL7 Morning Update", "HL7 Da Vinci Deep Dive", "Latest Da Vinci Overview Slides", "Latest Project Update", "HIMSS20 Da Vinci Booth Planning", "HIMSS19 Da Vinci Booth Panel", "Da Vinci HIMSS19 Update", "Da Vinci HIMSS Interoperability Showcase Vignette", "Da Vinci Progress Update 11-2018.pdf", and "Da Vinci Progress Update Nov 2019.pdf", and "Project Resources" including "Use Case Summary" and "Calendar - Meetings and Events". The bottom right corner shows a "Team" section.

confluence.hl7.org/display/DVP/Da+Vinci

Apps Settings Da Vinci BoS Email POC Template Mo... Client Projects - Int... Da Vinci My meetings | GoT... #BiasCorrect - Catal... FHIR at Scale Taskfo...

Confluence Spaces People Blueprints Create

Da Vinci

Pages

Blog

SPACE SHORTCUTS

Here you can add shortcut links to the most important content for your team or project. [Configure sidebar.](#)

PAGE TREE

- Da Vinci Welcome
- Meeting Index
- Da Vinci 2020 Calendar
- Da Vinci Implementation Guide Dasl
- Da Vinci Steering Committee Memb
- Da Vinci Operating Committee Mem
- Da Vinci Use Cases
- Da Vinci Implementation Guide Crec
- Da Vinci Conference Call Sign Up Ins
- Test Definitions
- Training
- How-to articles

Dashboard 10,368 view(s)

Da Vinci

Created by Joshua Procius, last modified by Dana Marcelonis on Nov 27, 2019

Objective

Da Vinci is a private sector initiative that addresses the needs of the Value Based Care Community by leveraging the HL7 FHIR platform. [Learn more.](#)

[Join Da Vinci Listserv](#)

Reminders:

- Sign-up for 2020Feb Ballot Cycle by **December 26th** (Data Exchange for Quality Measures (DEQM), Notifications, and Risk Based Contract Member Identification)
- Register for Dec19 Connectathon at Independence Blue Cross

Press Releases

- [HL7 FHIR Accelerator Press Release](#)
- [Member Announcement Press Release](#)
- [Casenet Press Release](#)

Blog Posts

- <http://blog.hl7.org/leading-healthcare-stakeholders-commit-to-real-world-testing-of-hl7-fhir-bulk-data-implementation-guide-0>
- <http://guidewell.com/blog/guidewell-host-%E2%80%99connectathon%E2%80%99-foster-standard-interoperability-across->

Quick Links

Presentations & Status

- [HL7 Morning Update](#)
- [HL7 Da Vinci Deep Dive](#)
- [Latest Da Vinci Overview Slides](#)
- [Latest Project Update](#)
- [HIMSS20 Da Vinci Booth Planning](#)
- [HIMSS19 Da Vinci Booth Panel](#)
- [Da Vinci HIMSS19 Update](#)
- [Da Vinci HIMSS Interoperability Showcase Vignette](#)
- [Da Vinci Progress Update 11-2018.pdf](#)
- [Da Vinci Progress Update Nov 2019.pdf](#)

Project Resources

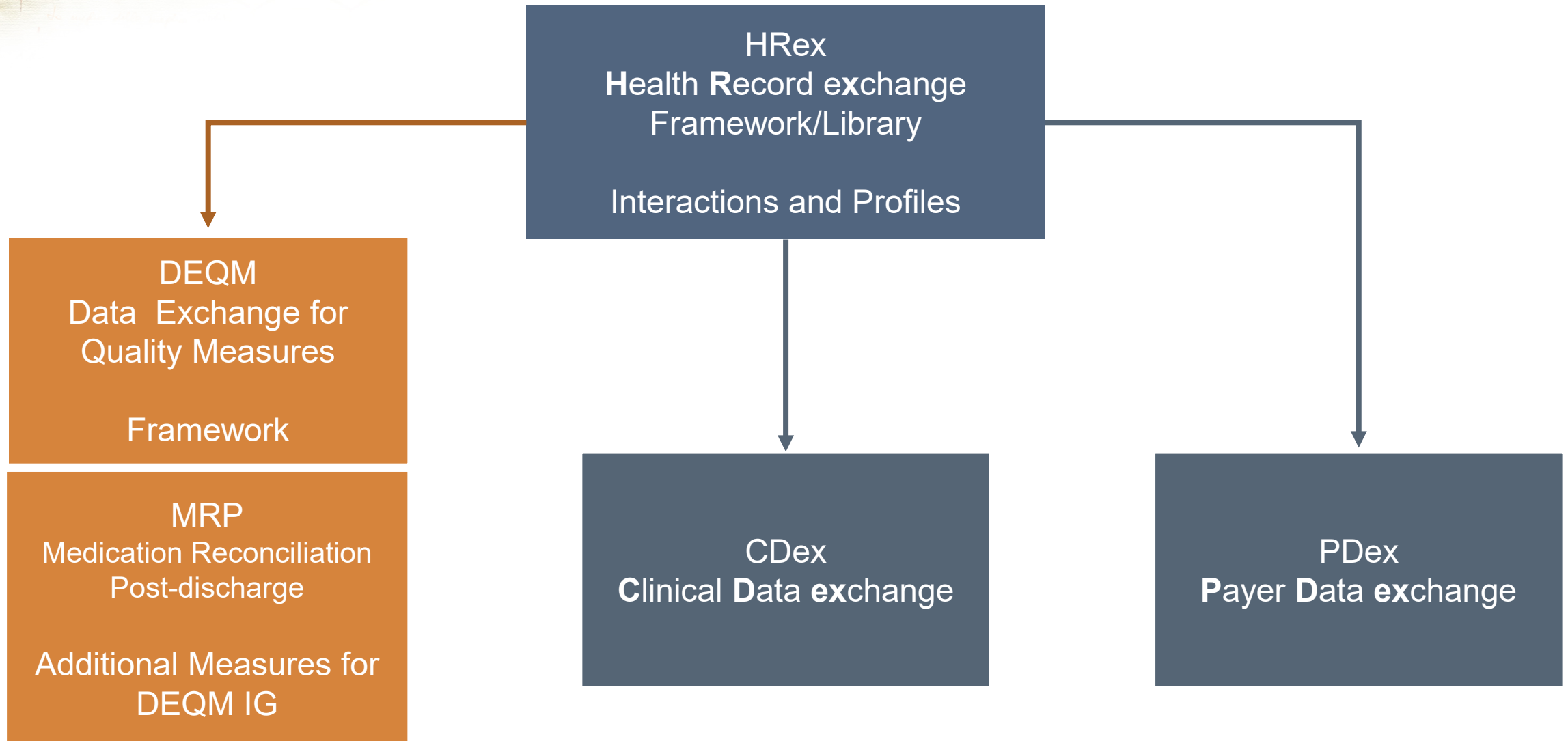
- [Use Case Summary](#)
- [Calendar - Meetings and Events](#)

Team

CDex – Clinical Data Exchange



Health Record Exchange





Health Record Exchange: Health Record Exchange Framework/Library

SUMMARY

- The Da Vinci Payer Health Record Exchange (HReX) Framework/Library specifies the FHIR elements used in multiple Da Vinci implementation guides. This includes FHIR profiles, functions, operations, and constraints on other specifications such as CDS-Hooks and other aspects of Da Vinci Use Cases that are common across more than a single use case.
- Da Vinci HReX Implementation Guide (IG) will make use of US Core profiles that are based on the FHIR R4 specification wherever practical. The HReX IG will use the HL7 FHIR Release 4/US Core STU3 specification as its base but will provide additional guidance and documentation to support implementations that follow the HL7 FHIR STU3/US Core STU2 and HL7 FHIR DSTU2/Argonaut specifications.
- The HReX profiles documented in this IG will be used to exchange data between providers systems (e.g. EHRs) and other providers, payers, and third-party applications where appropriate. In addition, exchanges from payer systems to providers, other payers, and third-party applications are supported by the HReX profiles and operations.
- HReX may define new extensions, profiles, value sets, constraints/extension to other specification (e.g. specific CDS-Hooks) that are specific Da Vinci requirements. Where appropriate these Da Vinci specific artifacts will be promoted for incorporation into the future versions of existing standards (e.g. R4 US Core profiles) and deprecated in this guide on publication in the updated standard.

STATUS

Stage	July STU Ballot
Implementation Guide	HReX – CI Build
Reference Implementation	N/A
Confluence Artifacts	Health Record Exchange Framework (HReX)



Health Record Exchange: Clinical Data Exchange (CDex)

SUMMARY

- Providers and Payers need to exchange information regarding prior and current healthcare services planned for or received by the patient/member to more effectively manage the patients care. Currently, no FHIR implementation guides exist to standardize the method of exchange (push, pull, triggers, subscription, etc.) and the formal representation (e.g. Documents, Bundles, Profiles and Vocabulary) for the range of exchanges between providers and providers or providers and payers of current and emerging interest to the involved parties.
- The focus is on the exchange of provider and payer originated information to improve patient care and reduce provider and payer burden.
- This use case will define combinations of exchange methods (push, pull, subscribe, CDS Hooks, ...), specific payloads (Documents, Bundles, and Individual Resources), search criteria, conformance, provenance, and other relevant requirements to support specific exchanges of clinical information between: 1) providers, 2) a provider and a payer, 3) a payer and providers, and/or a provider and any third party involved in value based care (e.g. a quality management organization).
- This project will reference, where possible, the prior work from Argonaut, US Core and QI Core effort for FHIR DSTU2, STU3

STATUS

Stage	July STU Ballot
Implementation Guide	<u>CDex - CI Build</u>
Reference Implementation	<u>CDex Communication Response App</u> <u>CDex Communication Request App</u>
Confluence Artifacts	<u>Clinical Data Exchange (CDex)</u>



Links for CDex Upcoming Connectathon

- General links to Da Vinci and recent presentations:
<https://confluence.hl7.org/display/DVP/Da+Vinci>
- Overview of all of the Use Cases:
<https://confluence.hl7.org/display/DVP/Da+Vinci+Implementation+Guide+Dashboard>
- Detail link to Da Vinci CDex Resources:
<https://confluence.hl7.org/pages/viewpage.action?pageId=40738757>

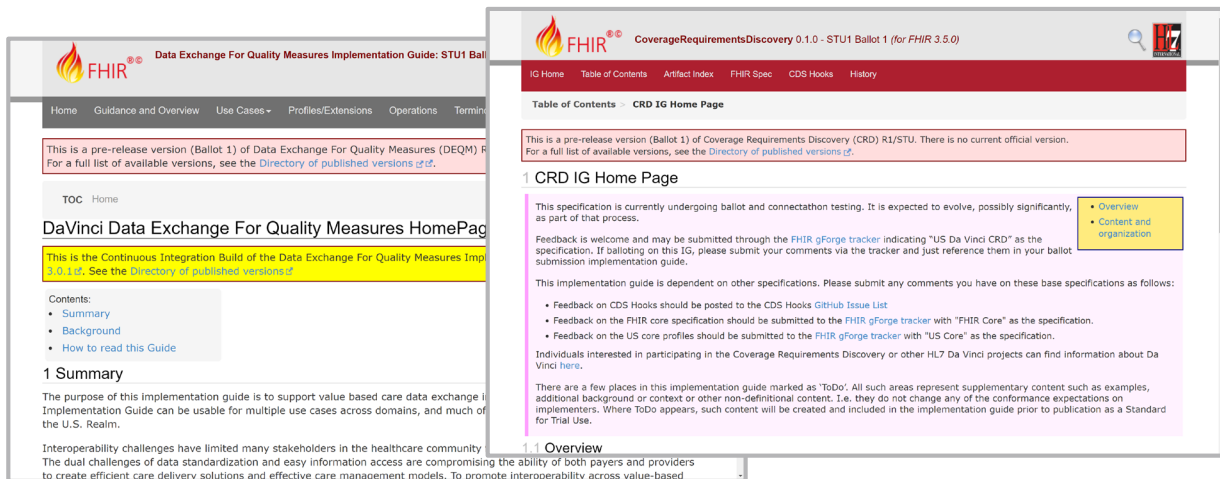
Follow Progress, Test, Implement


FIND

- Listserv Sign Up
- Background collateral
- Active Use Case content
- Implementation Guides
- Reference Implementations
- Calendar of Activities & Updates

RESOURCES

- HL7 Confluence Site - <https://confluence.hl7.org/display/DVP/>
- Where to find Da Vinci in Industry - <https://confluence.hl7.org/display/DVP/Da+Vinci+2020+Calendar>
- Use Case Summary and Links to Call In & Artifacts - <https://confluence.hl7.org/display/DVP/Da+Vinci+Use+Cases>
- Reference Implementation Code Repository - <https://github.com/HL7-DaVinci>



The background features a collage of Leonardo da Vinci's sketches, including anatomical drawings of the human eye and ear, and mechanical designs of a crane and a helicopter. Overlaid on these are several hexagonal icons: a stethoscope, a test tube, a microscope, a heart with a pulse line, and a first aid cross. The text is centered in a clean, sans-serif font.

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