AMIA 25 By 5: Symposium to Reduce Documentation Burden on U.S. Clinicians by 75% by 2025

HL7® Da Vinci Project:
FHIR® Implementation Guides to Reduce Clinician Burden

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Project Challenge

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

Transform out of 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.

Da Vinci 2021 Multi-Stakeholder Membership

PROVIDERS

AMA Medical Group
Cedars-Sinai
HCA Healthcare
Sutter Health
MultiCare Connected Care
OrthoVirginia
OHSU
Providence St. Joseph Health
*RUSH
Texas Health Resources
UC Davis Health
UNC Health Care
Weill Cornell Medicine

EHRs

athenahealth
*Cerner
*Epic
healow | Insights
*veradigm

DEPLOYMENT

Availity
MiHIN
CHANGE HEALTHCARE
Cognizant

PAYERS

*Anthem
*BlueCross BlueShield of Alabama
*BlueCross BlueShield Association
*Blue Cross of Idaho
Blue Cross Blue Shield Blue Care Network of Michigan
of Tennessee
*CAMBIA
*Cigna
CENTENE Corporation
*CMS
CVS Health
GUIDEWELL
*HCSC Health Care Service Corporation
*Humana
*Independence
*UnitedHealthcare

VENDORS

casenet
*cognosante
*edifecs
infor
InterSystems Health | Business | Government
juxly
mcg
*OPTUM
*surescripts
*ZeOmega

INDUSTRY PARTNERS

HIMSS
*HL7 International
NCQA Measuring quality. Improving health care.

*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

Use Case Maturity

Standard Phase	Future	Build	Ballot	Published/ing
Connectathon	<1		2-4	5+
Live	<1		1-3	>4
Progress				

Quality Improvement

Data Exchange for Quality Measures

Gaps in Care & Information

Coverage/Burden Reduction

Coverage Requirements Discovery

Documentation Templates and Rules

Prior-Authorization Support

Member Access

Clinical Data Exchange

Payer Data Exchange

Directory

Formulary

Coverage Decision Exchange

Price Cost Transparency

Process Improvement

Risk Based Contract Member Identification

Risk Based Coding

Clinical Data Exchange

Payer Data Exchange

Clinical Data Exchange

Notifications

Patient Data Exchange

Performing Laboratory Reporting

Proposed CMS Rules

Aligned with final ONC or CMS rule

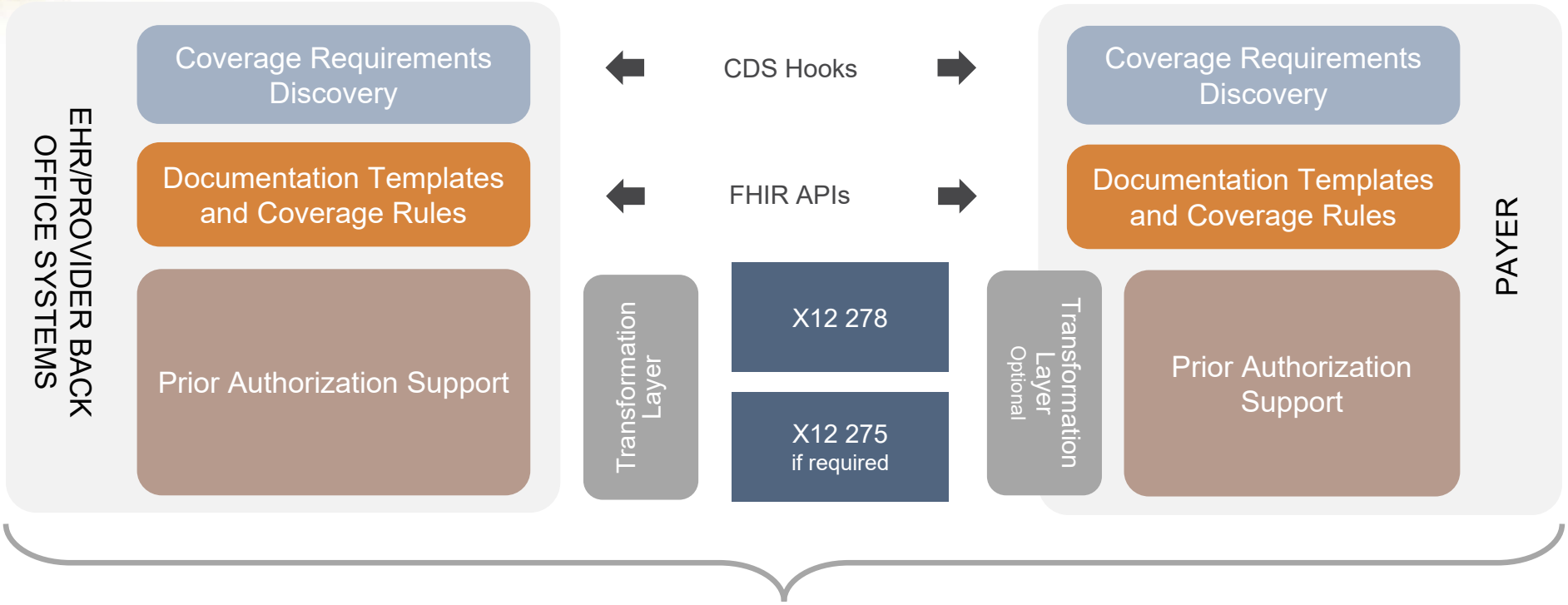
How Da Vinci Solves Business Challenges

Reducing Prior Authorization Burden

Use Case	Status	Core Capabilities	Regulatory Impacts	Implementer Progress
 Coverage Requirements Discovery	**STU1** Published	Enables exchange of coverage plan requirements from payers to providers at the time of treatment decisions, 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	Named in the NPRM CMS Interoperability and Prior Authorization (CMS-9123-P) by January 1, 2023, FHIR-based DRLS API	9 Connectathons Early adopters and pilots underway
 Documentation Templates and Rules	**STU1** Published	Builds on CRD to specify how payer rules can be executed in a provider context to ensure that documentation requirements are met. Provider burden will be reduced because of reduced manual data entry, i.e., electronic questionnaires from payers, extract data to pre-populate response	Named in the NPRM CMS Interoperability and Prior Authorization (CMS-9123-P) by January 1, 2023, FHIR-based DRLS API	8 Connectathons Early adopters and pilots underway
 Prior-Authorization Support	**STU1** Published	Defines FHIR based services to enable provider, at point of service, to request authorization (including all necessary clinical information to support the request) and receive immediate authorization from Payer (incorporates HIPAA Tx standards)	Named in the NPRM CMS Interoperability and Prior Authorization (CMS-9123-P) by January 1, 2023, FHIR-based electronic Prior Authorization Support API	6 Connectathons Early adopters and pilots underway

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

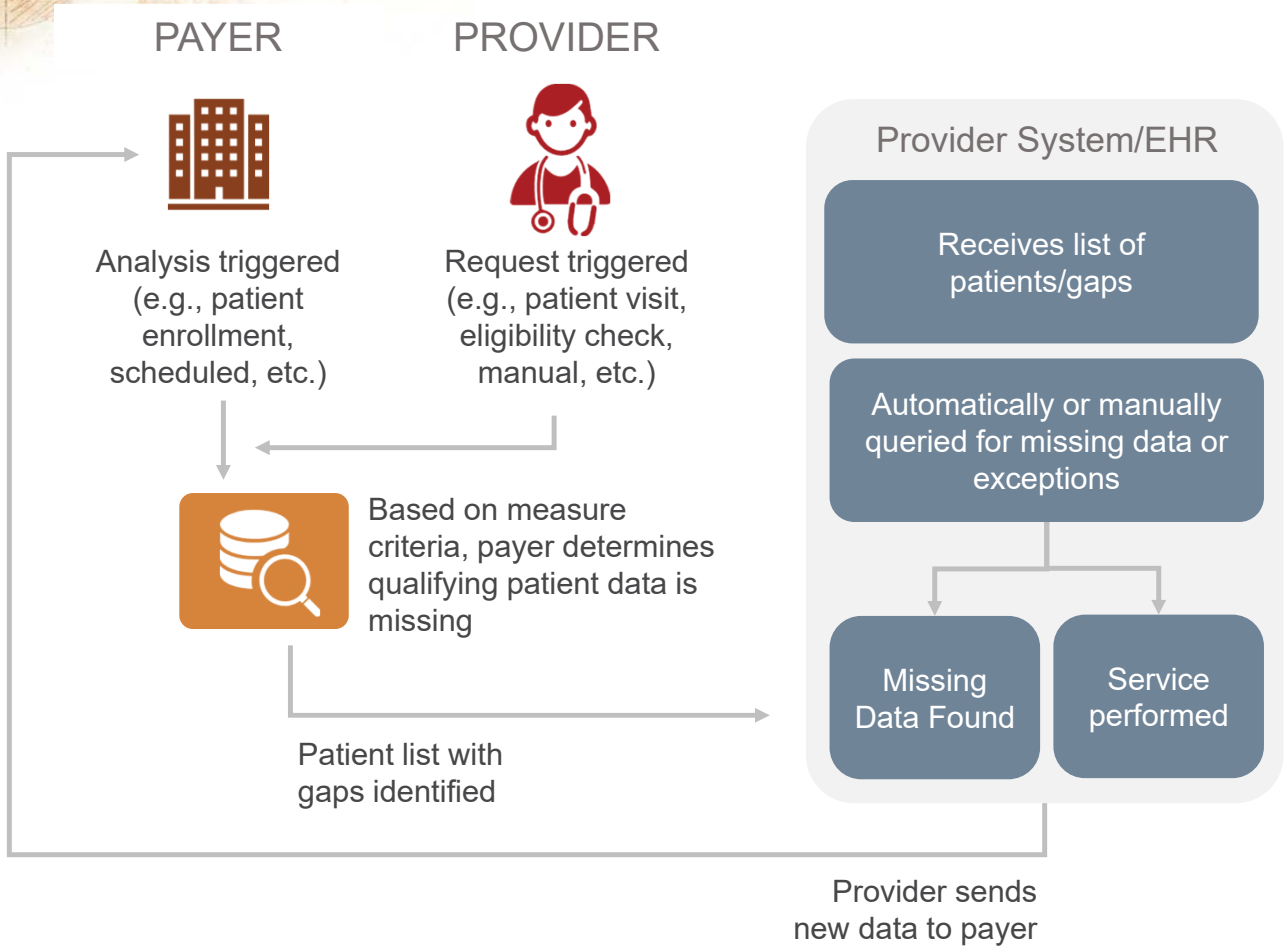


- Improve transparency
- Reduce effort for prior authorization
- Leverage available clinical content and increase automation

Automating Quality Improvement

Use Case	Status	Core Capabilities	Regulatory Impacts	Implementer Progress
 Data Exchange for Quality Measures	**STU2** Published	Focus is on creating a framework to make quality measure collection, attestation and proof identifiable, collected and transported between trading partners in a repeatable way. Work underway to expand examples.	No current regulatory impacts	8 Connectathons In production across multiple payer-provider sites. Often initial use case selected for high financial and shared value across trading partners.
 Gaps in Care & Information	**BALLOT** Reconciliation	To support value-based data exchange by: Represent open and closed gaps in care Define how providers and payers can be informed of gaps and closings Define a close the loop framework between vendor/payer and providers.	No current regulatory impacts	9 Connectathons
 Clinical Data Exchange	**BALLOT** Reconciliation	Ability to enable provider to share clinical data to payers, other providers in workflow.	No current regulatory impacts	7 Connectathons
 Risk Based Contract Member Identification	**STU1** Publishing	Provides ability for trading partners to validate patients/members in common to ensure for secure transfer of correct population. Developed to streamline matching for DEQM use case. Expanded as applicable across many FHIR APIs	No current regulatory impacts	3 Connectathons In production or early adopter projects across multiple payer-provider sites. Seen as a utility across many early adopters.

Gaps in Care



Benefits

- Facilitates the exchange of gaps in care and quality measures between providers and payers
- Identifies gaps based on patient criteria and contractual agreements
- Supports the exchange of clinical data to close clinical and information gaps prospectively vs retrospectively
- Leverages the FHIR-based, quality measure framework
- Reduces manual data retrieval and cost associated with current practices
- Gets the right triggers to right end users in patient care workflow increasing probability of positive impact
- Improve quality of information shared by using FHIR standard
- Can be used for single patient or with population of patients

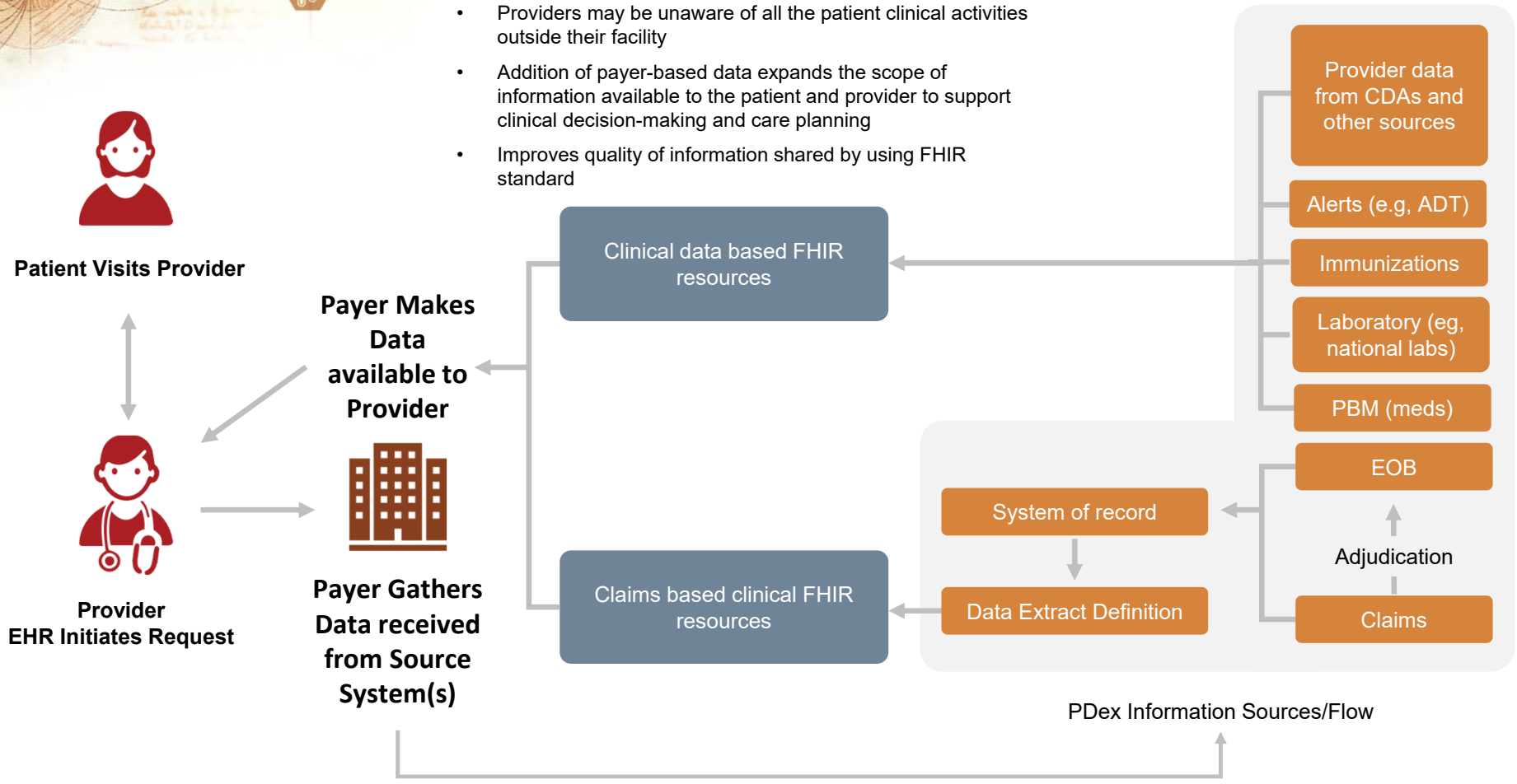
Patient - Payer Data Access APIs

Use Case	Status	Core Capabilities	Regulatory Impacts	Implementer Progress
 Payer Data Exchange	**STU1** Published	Enables a health plan to share key clinical data and patient history with application of patient's choice.	CMS Interoperability and Patient Access final rule (CMS-9115-F) – enforcement begins on July 1, 2021 – use to make patients' clinical (USCDI) data available via Patient Access API.	6 Connectathons Active implementations underway, emerging vendor and payer go lives in preparation for 7/1 rule.
 Formulary	**STU1 Published**	Enable payers to share drug estimated cost and information (drug formulary) for patients/consumers applications. Improves clarity of patient cost under current or potential health plan. Improve consumers ability to shop plan coverage better.	CMS Interoperability and Patient Access final rule (CMS-9115-F) – enforcement begins on July 1, 2021 – use to make formulary information available via the Patient Access API and via publicly accessible API.	6 Connectathons Active implementations underway, emerging vendor and payer go lives in preparation for 7/1 rule.
 Directory	**STU1** Published	Enable patient to more easily understand what providers, facilities, pharmacies are in the network covered by the current or potential future plan. Increases transparency of available service providers at patient specific level.	CMS Interoperability and Patient Access final rule (CMS-9115-F)– use to make provider directory data available via publicly accessible API.	6 Connectathons Active implementations underway, emerging vendor and payer go lives underway.
 Price Cost Transparency	**Discovery**	Provide simple exchange for patients and providers to request and display cost information from payer/practice management to enable clinician and patient pharmaceutical / medical device / services / medical care conversation.	Rules Impact Evaluation Underway • CMS Transparency in Coverage Final Rule (CMS-9915-F) 1/1/2022 • Hospital Price Transparency Rule – 1/1/2021	N/A

Payer Data Exchange (PDex)

Benefits

- Creates a full picture of all patient activities
- Providers may be unaware of all the patient clinical activities outside their facility
- Addition of payer-based data expands the scope of information available to the patient and provider to support clinical decision-making and care planning
- Improves quality of information shared by using FHIR standard



PDex Information Sources/Flow

Payer to Payer APIs

Use Case	Status	Core Capabilities	Regulatory Impacts	Implementer Progress
 Payer Data Exchange	**STU1** Published	Enables a health plan to share key clinical data and patient history with application of patient's choice.	Rules Impact Evaluation Underway CMS Interoperability and Patient Access final rule (CMS-9115-F) — use to make patients' clinical (USCDI) data available to new Payer, named specifically as a proposed resource in 2020 NPRM CMS-9123-P	6 Connectathons
 Coverage Decision Exchange	**STU1** Published	Ability for payer to share active treatment to increase continuity of care. Includes current utilization management decisions and supporting data. Focus is to reduce rework by patient and provider when patient changes coverag	Rules Impact Evaluation Underway Functionality meets requirement for January 1, 2022 initially introduced in CMS Interoperability and Patient Access final rule (CMS-9115-F) — use to make patients' clinical (USCDI) data available to new Payer, referenced as a resource in 2020 NPRM CMS-9123-P	6 Connectathons

Emerging or Future Use Cases

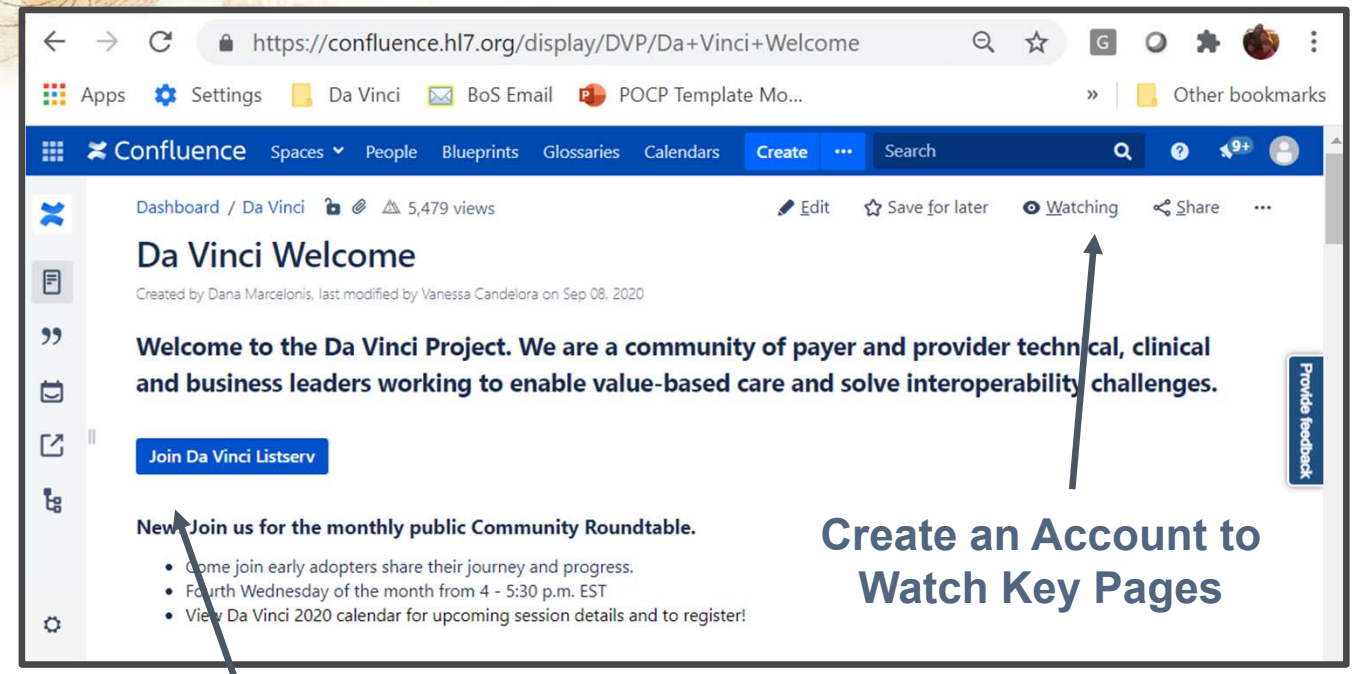
Use Case	Status	Core Capabilities	Regulatory Impacts	Implementer Progress
 Risk Based Coding	Discovery	Create framework for trading partners to exchange the necessary data required for chronic illness documentation, attestation and maintenance	None	Public calls starting in February of 2021
 VBC Cost Performance Reports	Identifying Participants	Timely and accurate information exchange within the performance period. Focus on information that only a payer would have financial targets, spend, CCFs and quarterly quality payments. Information at lowest level of granularity. Access via APIs.	None	N/A
 Performing Laboratory Reporting	TBD	Goal is to share clinical details of specific lab results between providers, payers and lab partners. Only a small fraction of lab data flows today, Define framework to expand breadth and scope of data exchange.	None	N/A
 Patient Data Exchange	TBD	Enable exchange of patient reported data to payer and provider partners.	None	N/A

Join the Da Vinci Community

Slide 14

GU [2]24 Can we merge 29 and 30 into 1 title slide?
Guest User, 1/27/2021

Join the Community



Create an Account to Watch Key Pages

Sign Up for Listserv for Project Updates

Orientation Resources for Public New to Da Vinci

Getting Started

1. Register for Confluence
2. Sign up for Listserv
3. Find Implementer Pages
4. Download IGs and Resources
5. Watch for Meetings, Connectathons
6. View Demo and Testimonial Recordings
7. Access Reference Implementation Code, Sandboxes

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Back Up Slides

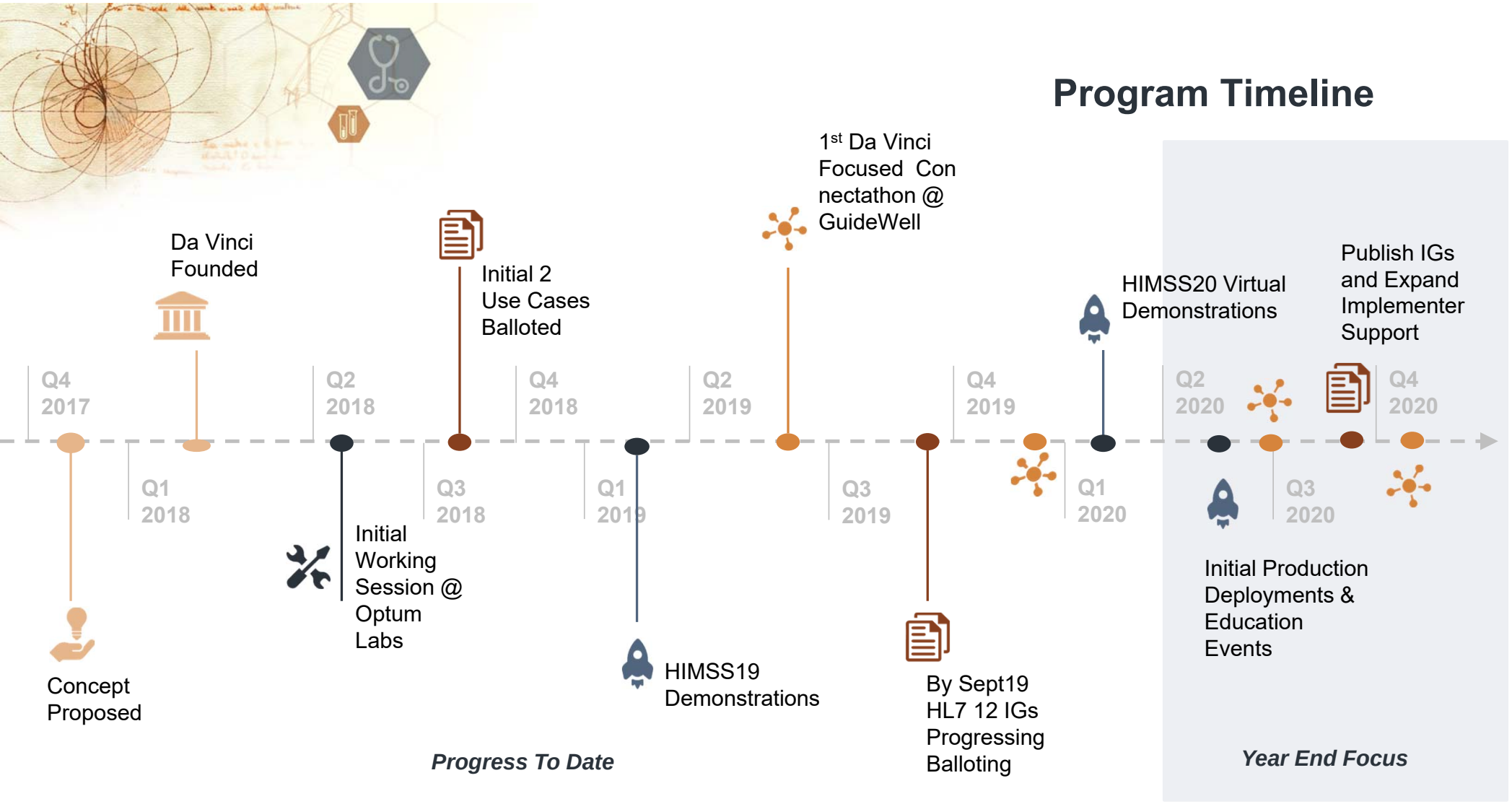
ANSI Antitrust Policy

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.

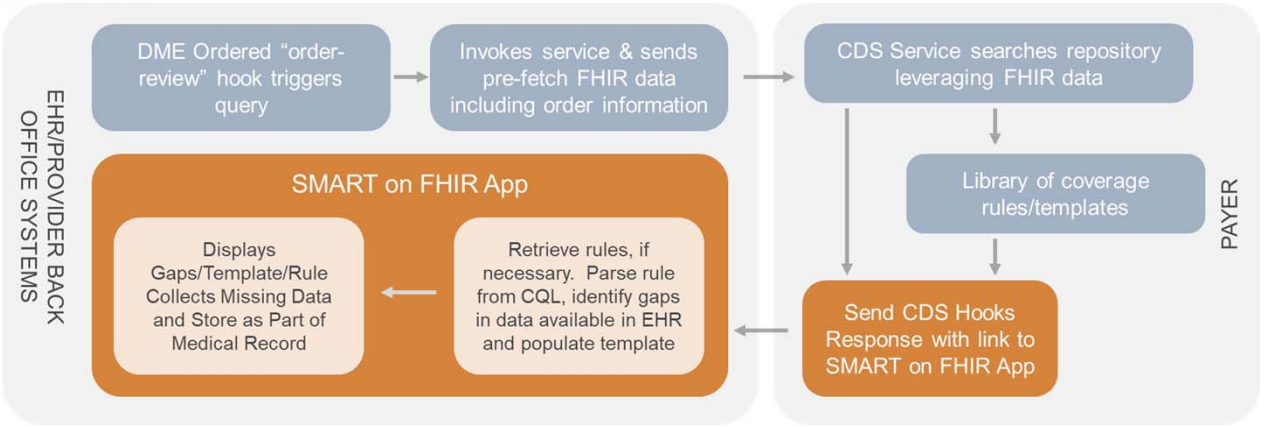
ANSI nevertheless recognizes that it must not be a vehicle for individuals or organizations to reach unlawful agreements regarding prices, terms of sale, customers, or markets or engage in other aspects of anti-competitive behavior. ANSI's policy, therefore, is to take all appropriate measures to comply 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

Program Timeline



Coverage Requirements Discovery (CRD)/ Documentation Templates & Rules (DTR)

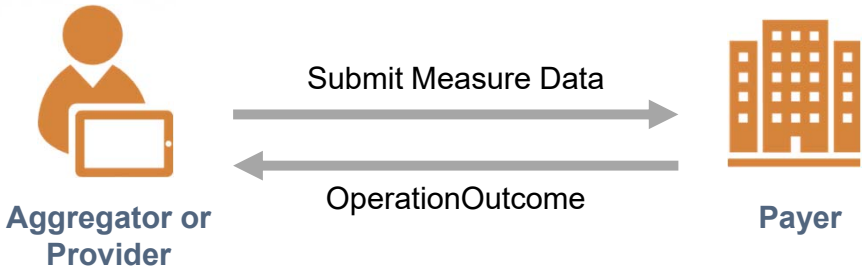


Benefits

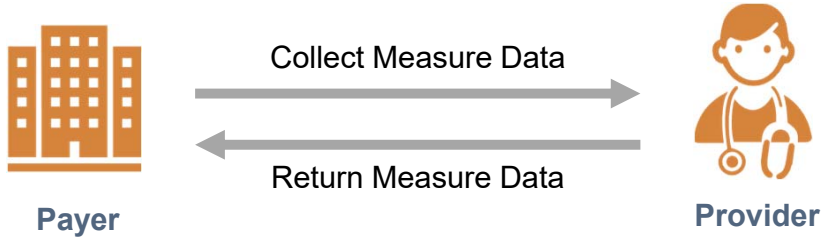
- Takes guesswork out of patient specific coverage by sharing authorization or process requirements in workflow
- Improves transparency of patient and procedure specific rules to provider and patient
- Exposes information about patient benefits when care team is most likely with or near patient, so options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

Data Exchange for Quality Measures

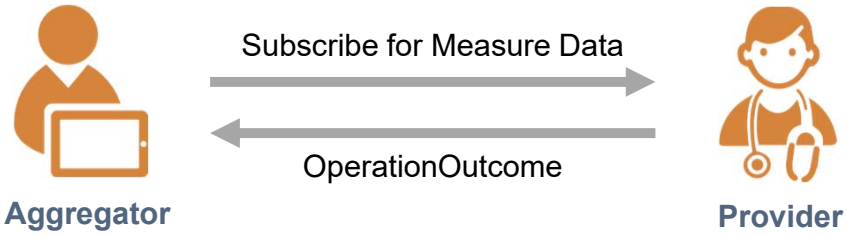
1. Submit



2. Collect



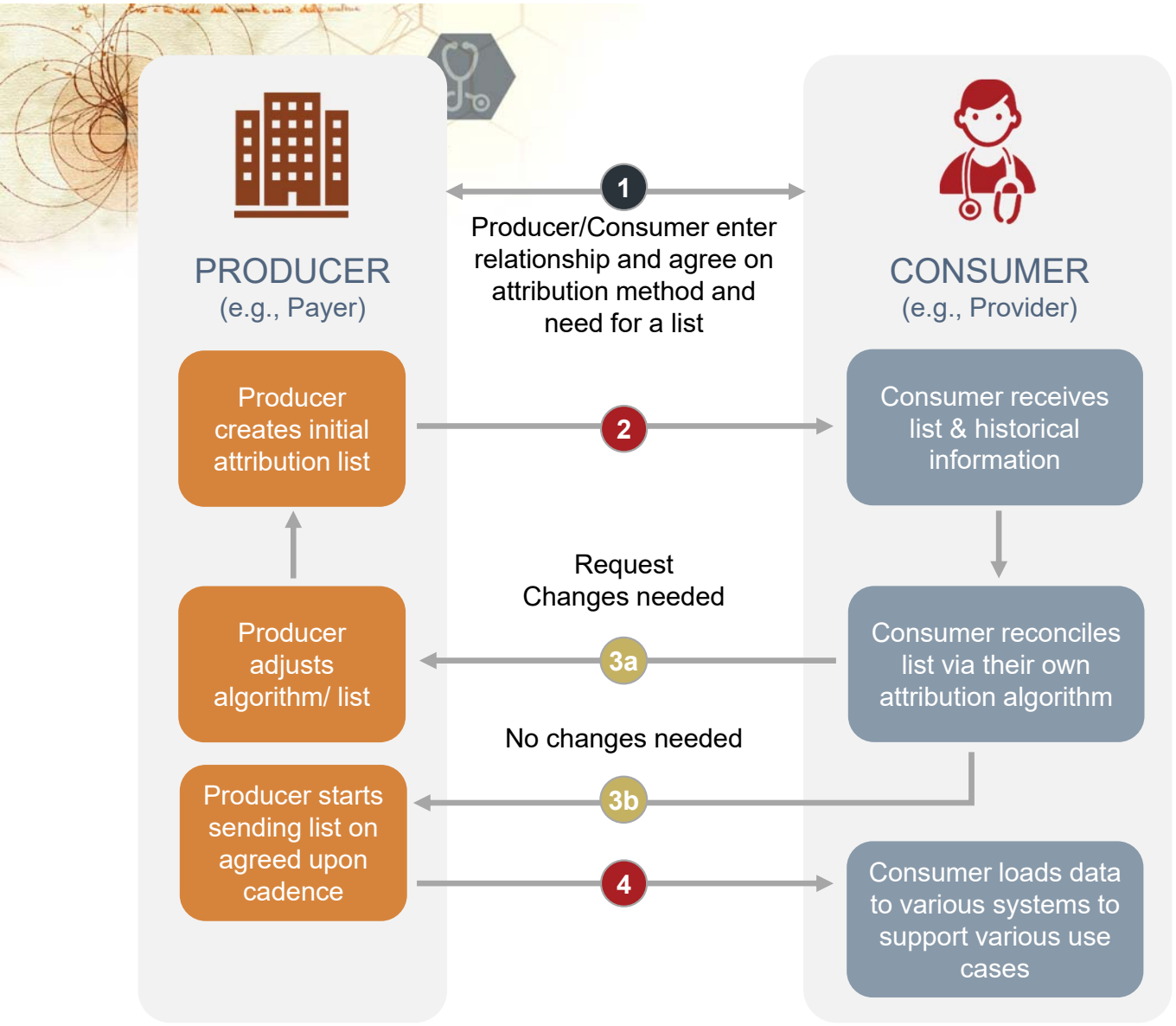
3. Subscribe (future)



Benefits

- Quality measures are defined as computable artifacts
- Framework automates data collection and quality measure reporting
- Eases the burden of identifying quality measures applicable to specific patients
- Minimizes the burden of manual data abstraction for measure reporting

Risk Based Contract Member Identification



Benefits

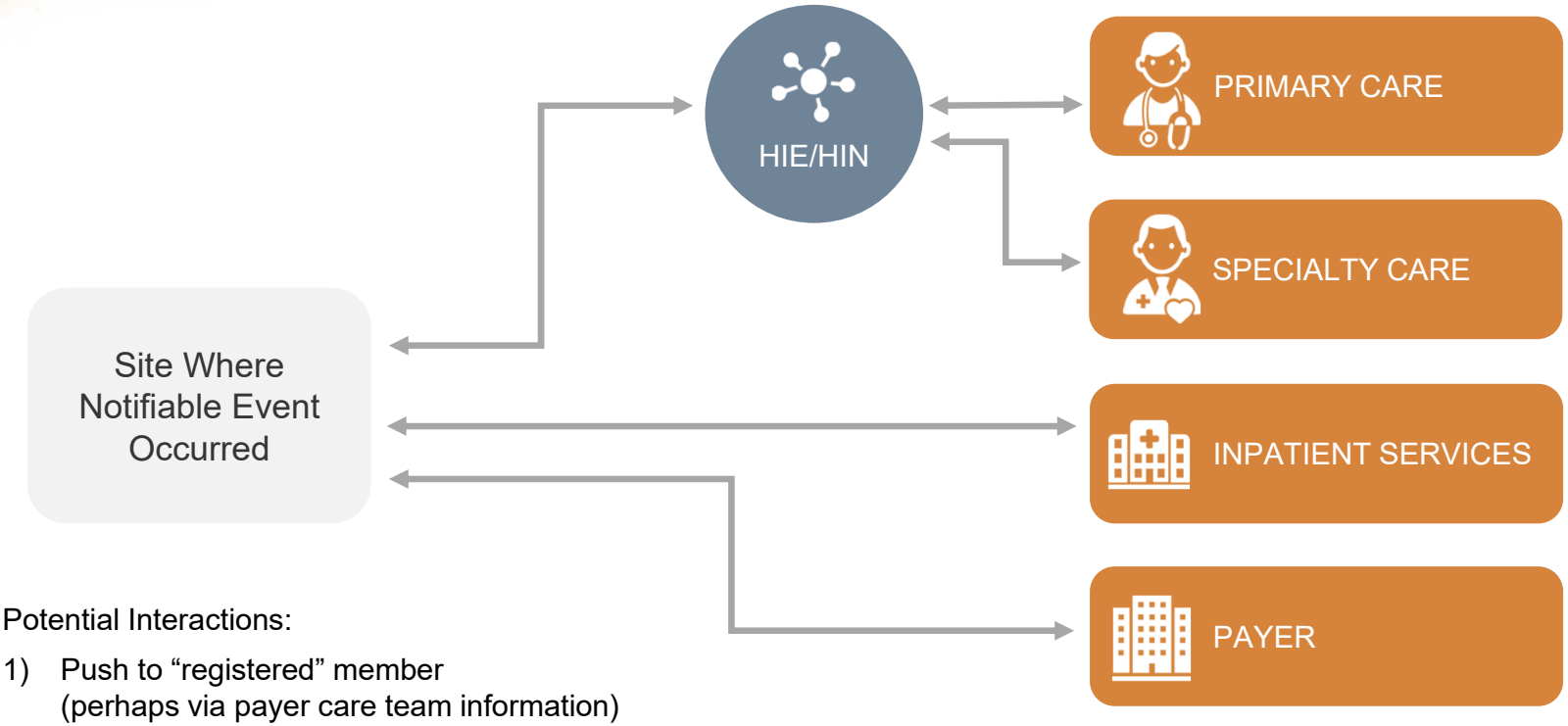
- Allows the provider and payer to establish and maintain an accurate list of patients that are attributable to the provider
- Attribution list supports exchange of other information including gaps in care and quality measures
- Creates common format across payers and providers, reducing waste and maintenance

Current IG

Future version IG

Out of band process

Notifications

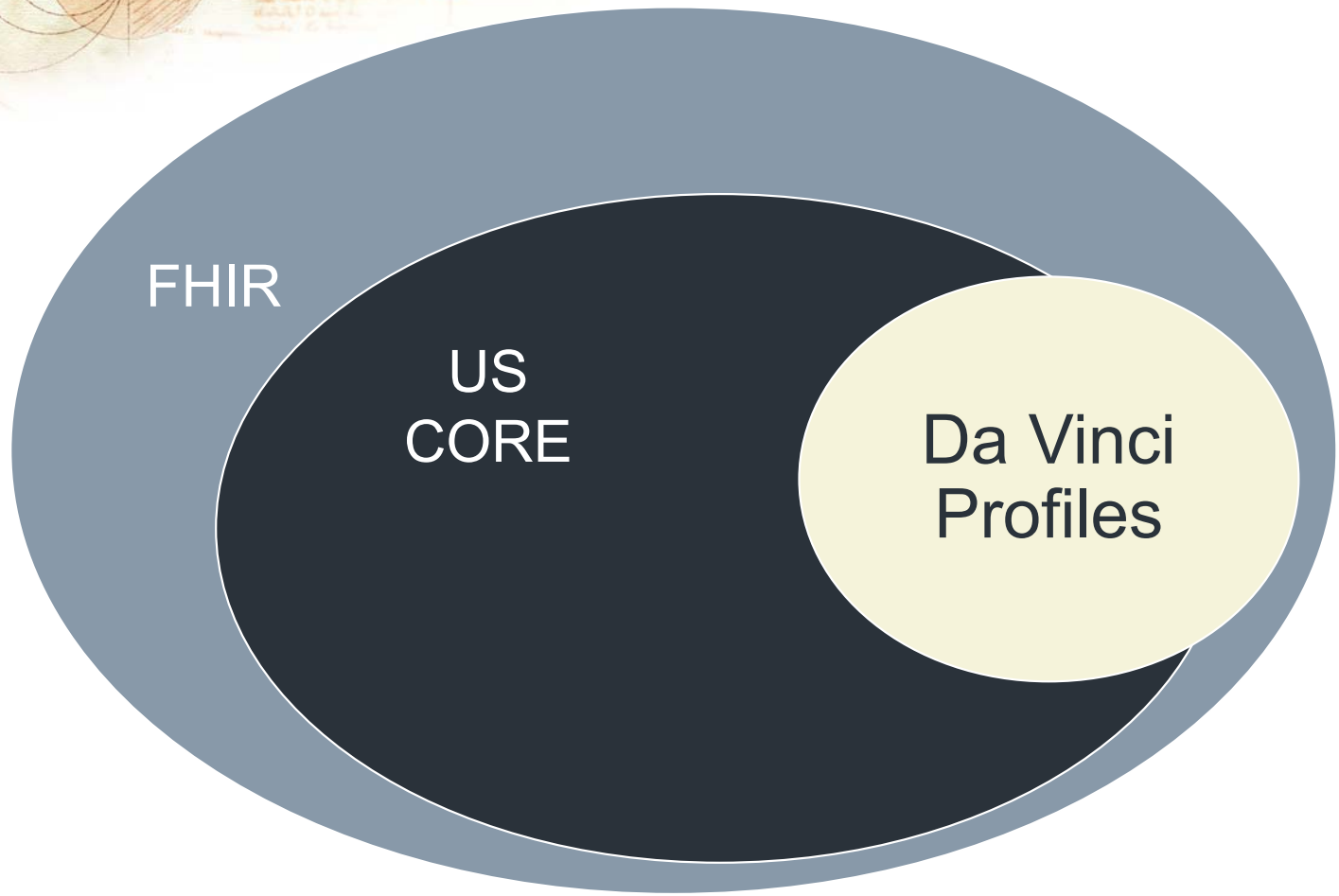


Any care team member can be connected directly or via an intermediary (e.g., HIE)

Potential Interactions:

1) Push to “registered” member (perhaps via payer care team information)
2) Push to intermediary

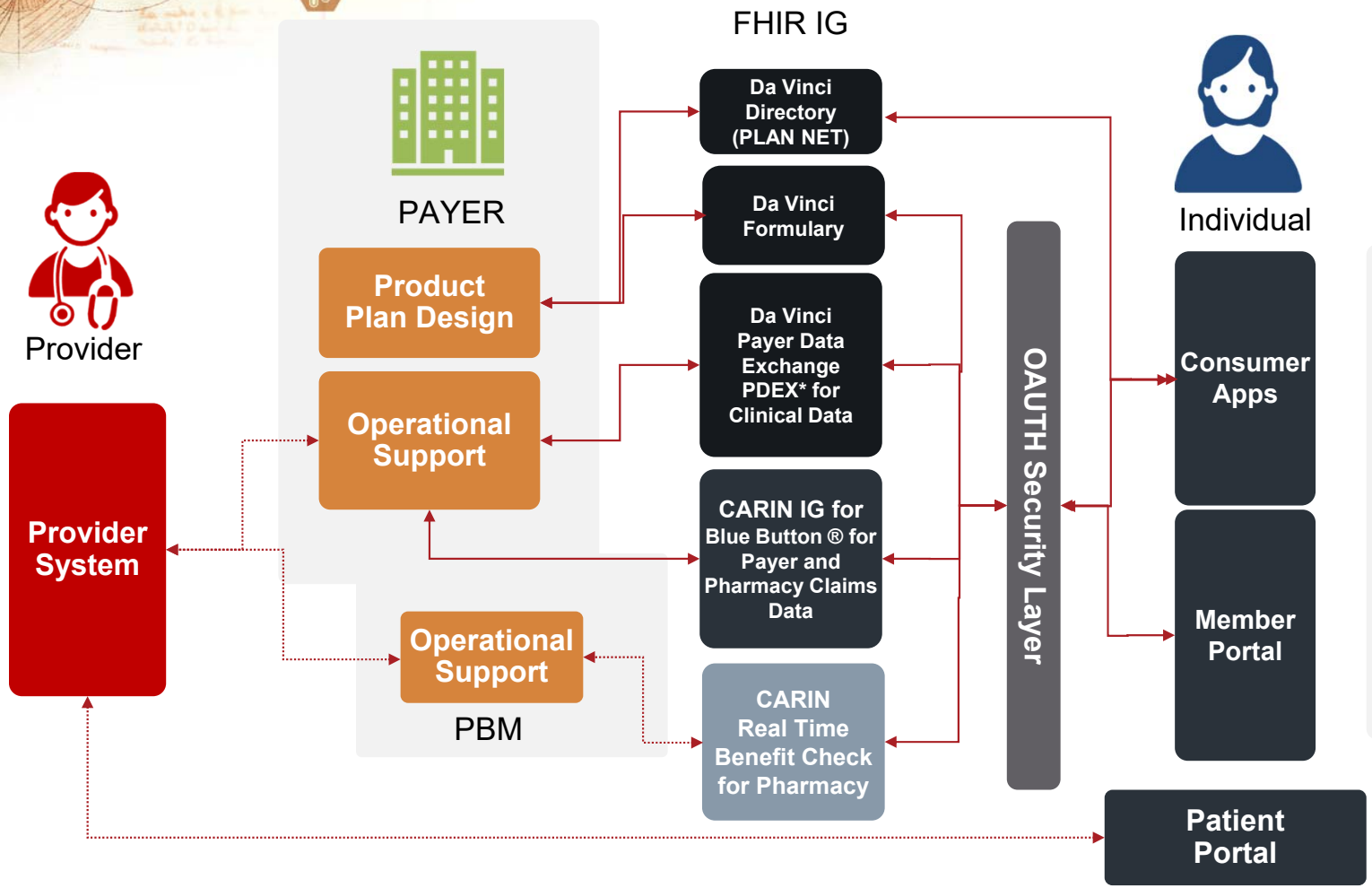
Health Record Exchange (HRex)



Benefits

- Creates a consistent framework to exchange clinical data between Providers and Payers
- Enables consistent, constrained use of FHIR and US CORE profiled data specific resources across all Da Vinci data exchange Implementation Guides
- Focuses on nuance of resources like Provenance which differs by collection source, or resources currently not yet in USCDI and US Core e.g., Coverage

Implementation Guides (IG) Options for Patient Directed APIs



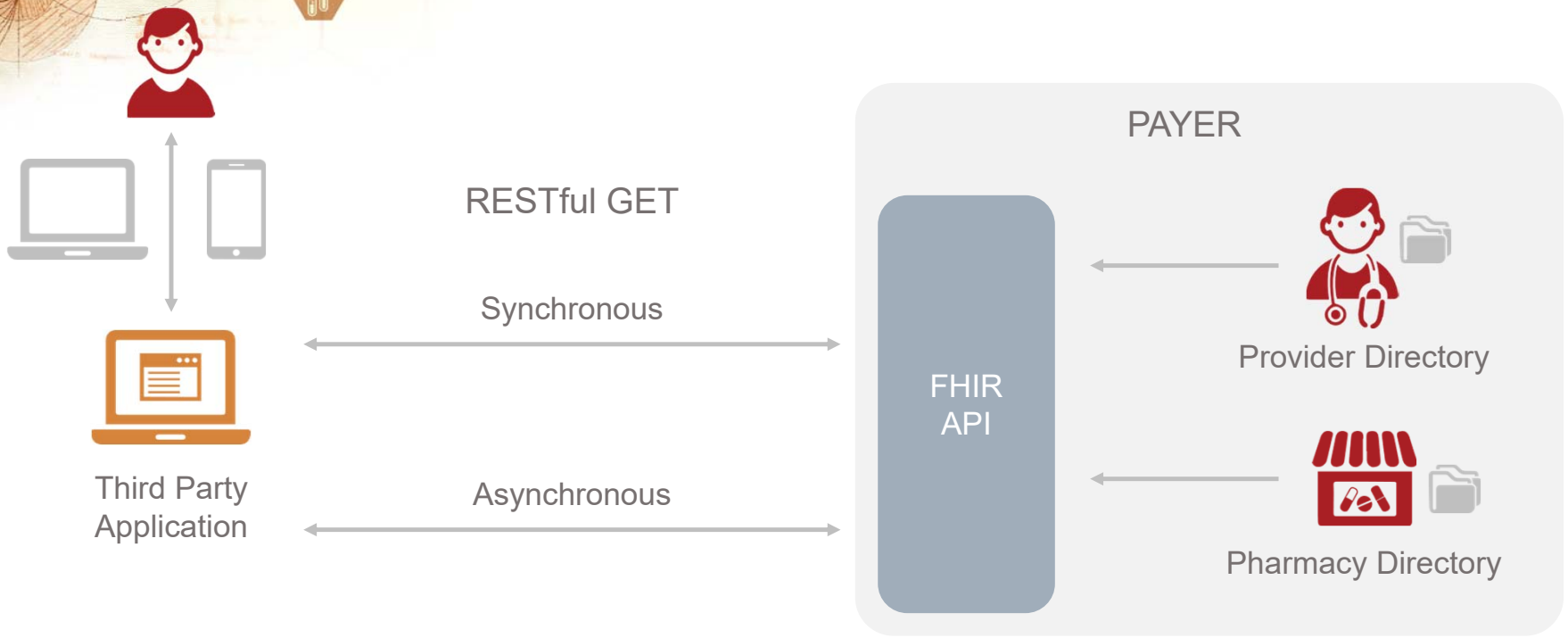
FHIR Resource Definition

- Patient Direct API 1/1/21 Directory Access API
- Other related regulation

FHIR Accelerator Commentary

1. CMS has proposed use of specific guides in December Reducing Burden NPRM
2. FHIR Community is working collaboratively to ensure the specific guides meet needs of the final PAAPI rule and the proposed rule
3. All guides are Draft Standards for Trial Use (DSTU and approved or moving towards a published version of STU1.
4. NOTE: Da Vinci Directory and CARIN Real Time Benefit Check for consumer facing applications does not fall under 7/1/21 Patient Directed API regulations but is called out in NPRM and as a resource on other proposed rules
5. CMS has added provider to payer and payer to payer requirements to leverage this subset and additional named FHIR IGs.

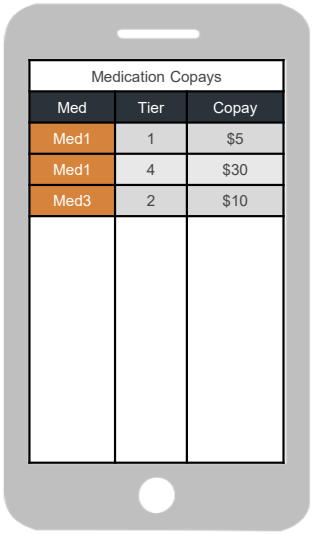
Payer Data Exchange (PDex): Provider Directory



Benefits

- Provides a standard approach for requesting and receiving Provider information based on a patient's Insurance plan
- Enables directory to be called as a service by applications for integration of provider search into workflows
- Supports patients' ability to find providers across multiple plans
- Increases transparency to patients about provider availability in their plan

Payer Data Exchange (PDex): Formulary



What are my medications?

Medication1, Medication2, Medication3
RxNorm

Tell me about Medication1

Medication1 info

Tell me about Medication2

Medication2 info

Tell me about Medication3

Medication3 info

Mobile app determines the cost of each medication under patient's current health plan

PROVIDER

Electronic Health Record from Provider

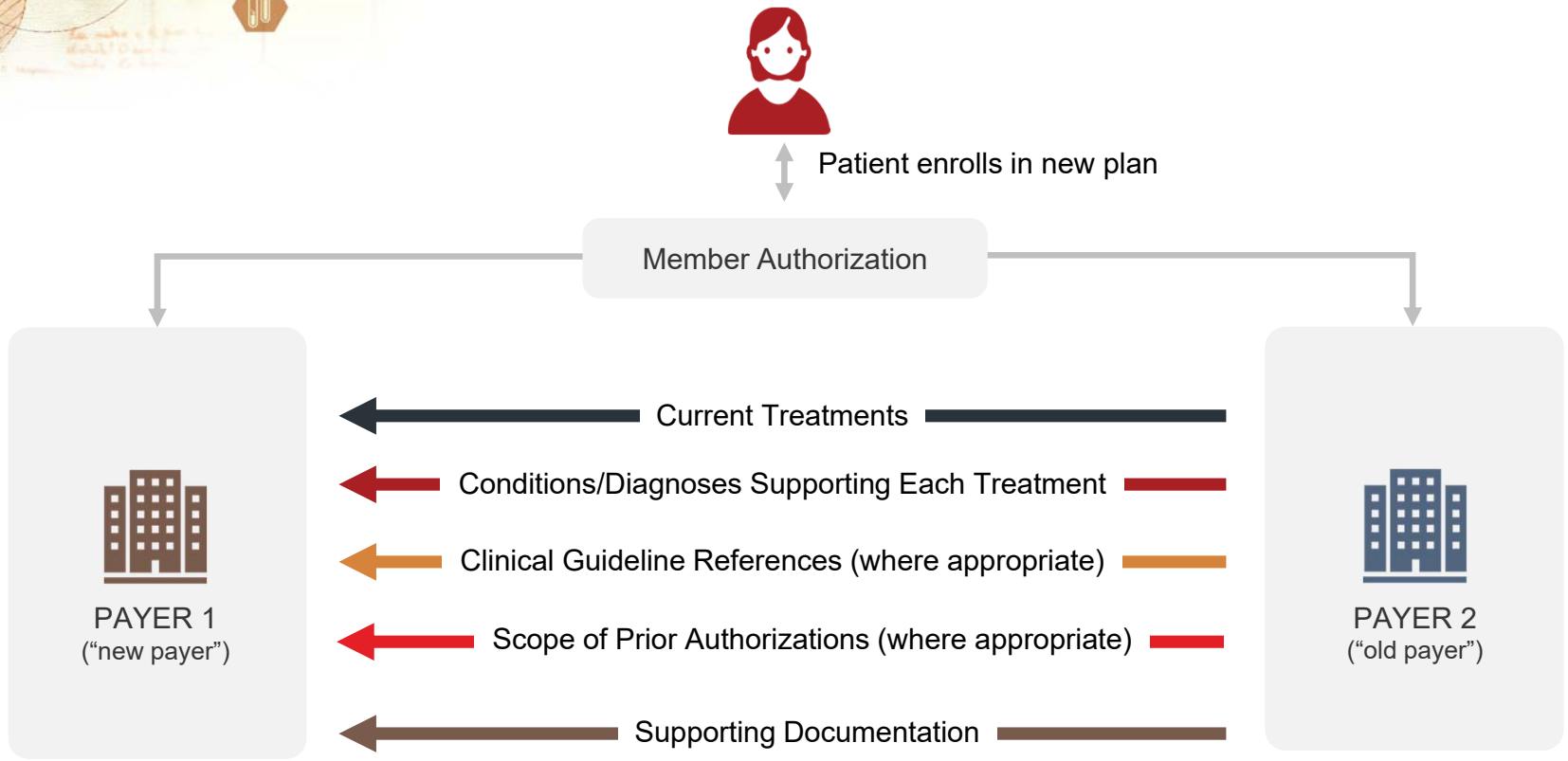
PAYER

Formulary Service

Benefits

- Enables patient and provider applications to understand basic information about their plan or potential plans formulary coverage
- Patients can understand the tier and alternatives for drugs that have been prescribed, and to compare their drug costs across different insurance plans
- Improve transparency for patients shopping new plans, or seeking to understand alternative options vs current PDF
- Free data to be used by consumer facing applications to improve shopping options

Payer Coverage Decision Exchange



Benefits

- Supports continuity of treatment when patients enroll with a new payer by enabling a transfer of "current active treatments" between the prior payer and the new payer
- Reduces the need for providers and/or patients to resubmit supporting documentation to the new payer in order to continue patient treatment
- Reduces interruption in care plan and medication adherence
- Reduces waste and rework by all parties