Understanding HL7® FHIR® for Non-Technical Healthcare Executives

What Do We Mean by Non-Technical?

Agenda

- **Welcome and Introductions**
  - Jen Covich Bordenick, CEO, *eHealth Initiative and Foundation*
- **Introduction to HL7® FHIR® - What Is It?**
  - Micky Tripathi, President and CEO, *Massachusetts eHealth Collaborative*
- **How Does This Help Payers?**
  - Patrick Murta, *Solutions Architecture Fellow, Enterprise Architecture, Humana*
- **How Does This Help Providers?**
  - Steven R. Lane, MD, MPH, FAAFP, *Family Medicine, Palo Alto Medical Foundation; Clinical Informatics Director, Privacy, Information Security & Interoperability, Sutter Health*
- **The Future of HL7® FHIR®**
  - Chuck Jaffe, MD, PhD, *CEO, HL7*

Goal of Workshop

- To help non-technical healthcare executives (financial, clinical and policy) understand the value of HL7 FHIR®; and
- Support the adoption of HL7 FHIR® and DaVinci by providers and payers.

One More Thing

Evaluation

- Rate the presentations
  - How well did you understand the information presented?
  - What concepts would you like more information on?
- What additional questions do you have?

An Introduction to FHIR

Micky Tripathi, President and CEO, *Massachusetts eHealth Collaborative*

December 16, 2019

MAeHC
Massachusetts eHealth Collaborative

Why should you care about FHIR?

1. **Rapidly gaining acceptance as the standard of the future**

2. **Using interoperability approaches that have powered the internet economy in other domains (APIs and Platforms)**

3. **It's not just a technology, it's an industry-wide community of innovative users and developers**

4. **Spurring large influx of technology and consumer companies into healthcare seeking to connect to EHRs for novel clinical and business opportunities**

Standards/Patterns

HL7 V2 (labs, ADTs)

ANSI X12

NCPDP

Direct (SMTP)

IHE/SOAP

HL7 V3 (CCDA)

APIs

HL7® FHIR®

OAuth2/OIDC

Networks/Transactions

Lab results

Event notification systems

surescripts

HIPAA transactions

DirectTrust

Public and Private HIEs

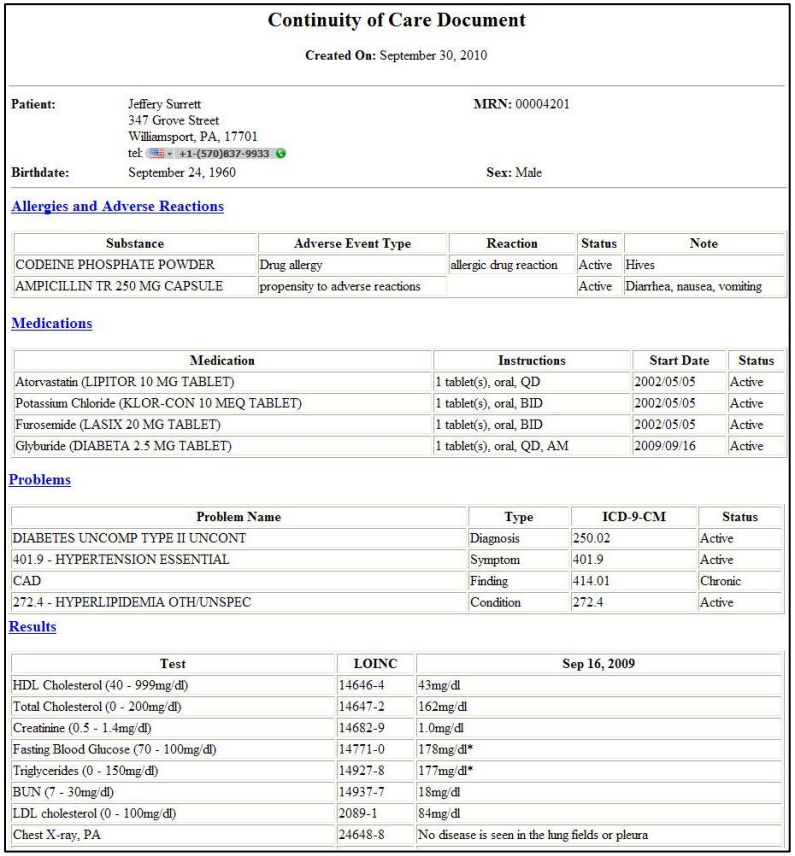
eHealth Exchange

carequality

commonwell HEALTH ALLIANCE

Apps

CCD: The Standard that Everyone Loves to Hate



Continuity of Care Document

Created On: September 30, 2010

Patient: Jeffery Surrett
347 Grove Street
Williamsport, PA, 17701
tel: +1-(570)837-9933
MRN: 00004201

Birthdate: September 24, 1960
Sex: Male

Allergies and Adverse Reactions

Substance	Adverse Event Type	Reaction	Status	Note
CODEINE PHOSPHATE POWDER	Drug allergy	allergic drug reaction	Active	Hives
AMPICILLIN TR 250 MG CAPSULE	propensity to adverse reactions		Active	Diarrhea, nausea, vomiting

Medications

Medication	Instructions	Start Date	Status
Atorvastatin (LIPITOR 10 MG TABLET)	1 tablet(s), oral, QD	2002/05/05	Active
Potassium Chloride (KLOR-CON 10 MEQ TABLET)	1 tablet(s), oral, BID	2002/05/05	Active
Furosemide (LASIX 20 MG TABLET)	1 tablet(s), oral, BID	2002/05/05	Active
Glyburide (DIABETA 2.5 MG TABLET)	1 tablet(s), oral, QD, AM	2009/09/16	Active

Problems

Problem Name	Type	ICD-9-CM	Status
DIABETES UNCOMP TYPE II UNCONT	Diagnosis	250.02	Active
401.9 - HYPERTENSION ESSENTIAL	Symptom	401.9	Active
CAD	Finding	414.01	Chronic
272.4 - HYPERLIPIDEMIA OTH/UNSPEC	Condition	272.4	Active

Results

Test	LOINC	Sep 16, 2009
HDL Cholesterol (40 - 999mg/dl)	14646-4	43mg/dl
Total Cholesterol (0 - 200mg/dl)	14647-2	162mg/dl
Creatinine (0.5 - 1.4mg/dl)	14682-9	1.0mg/dl
Fasting Blood Glucose (70 - 100mg/dl)	14771-0	178mg/dl*
Triglycerides (0 - 150mg/dl)	14927-8	177mg/dl*
BUN (7 - 30mg/dl)	14937-7	18mg/dl
LDL cholesterol (0 - 100mg/dl)	2089-1	84mg/dl
Chest X-ray, PA	24648-8	No disease is seen in the lung fields or pleura

- **The Continuity of Care Document (CCD, aka CCDA) is the standard vehicle for electronic exchange of medical records among providers today**
  - Contains pre-defined set of commonly requested medical record data
- **Good:**
  - Comprehensive, logically organized (Medications, Problems, etc), contains computable data, can be read in standard browser
- **Bad:**
  - All-or-none bundle of data, forces sharing of more data than necessary, hard to sift through, not fully standardized across EHR systems, unique to healthcare

Example: Sears Website from 1997

Place an Order

SEARS CANADA

Do you already have a Sears Canada catalogue? You can use the form below to select items from it, and add them to your shopping basket. Just fill in the blanks, and press "Add to Basket" when you are finished.

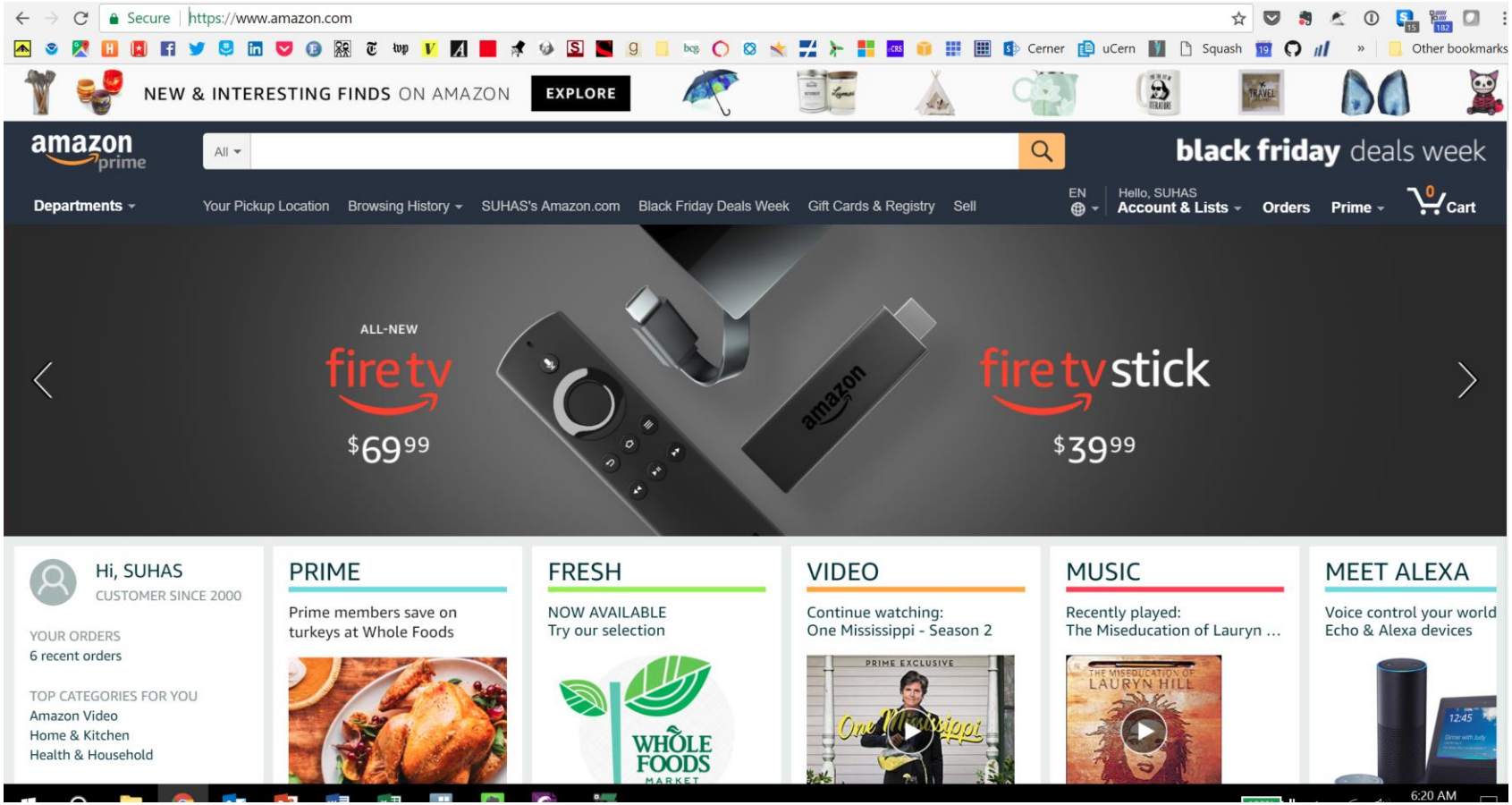
Not sure how to order? See How to Order before you start.

	Item Description	Page Number	Catalogue no.	Size	Col	Qty	Price (Each)
1						1	
2						1	
3						1	
4						1	
5						1	

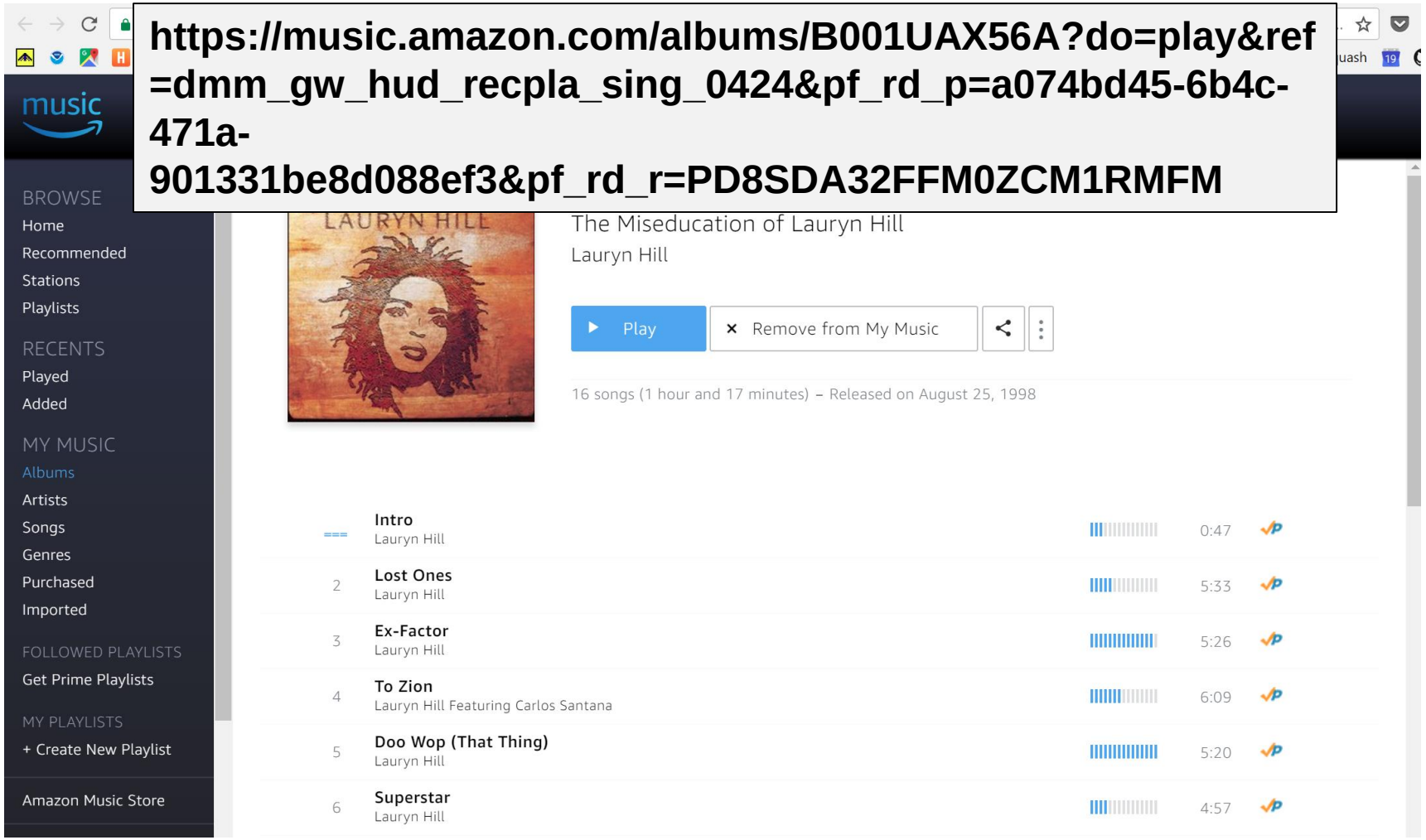
Press Add to Basket to add these items to your shopping basket, or reset to clear your items and start again.

Press Review Shopping Basket to see your current choices.

Example: Amazon Website from 2019



https://music.amazon.com/albums/B001UAX56A?do=play&ref=dmm_gw_hud_recpla_sing_0424&pf_rd_p=a074bd45-6b4c-471a-901331be8d088ef3&pf_rd_r=PD8SDA32FFM0ZCM1RMFM



FHIR: The Standard that Everyone Loves (for Now)

Created out of "Fresh Look" project at HL7 to rethink the paradigm of health care standards

Based on modern internet conventions

- RESTful API – same browser-based approach as used by Amazon, Facebook, google, Twitter, etc
- Flexible to any type of data, text, documents, images
- Flexible to sending and requesting

Attractive to developers from outside of healthcare

- Bringing new voices into health care to help innovate at internet speed
- Allows web- and app-based approaches that are highly useful, usable, and familiar to users

plat•form (*n*): a group of technologies that are used as a base upon which other applications, processes, or technologies are developed

Apple will let you keep your medical records on your iPhone

- Apple is moving deeper into health care with a service that lets users view their medical records.
- COO Jeff Williams tells CNBC that "Apple doesn't see the data unless the consumer chooses to share it."
- About a dozen hospitals have signed up, as have medical-record vendors.

Christina Farr | @chrissyfarr
Published 8:31 AM ET Wed, 24 Jan 2018 | Updated 2:21 PM ET Thu, 25 Jan 2018

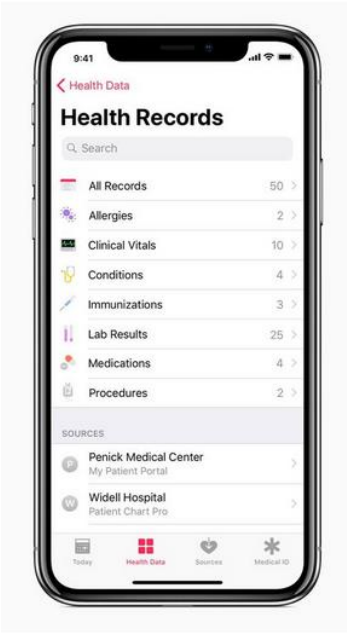
CNBC

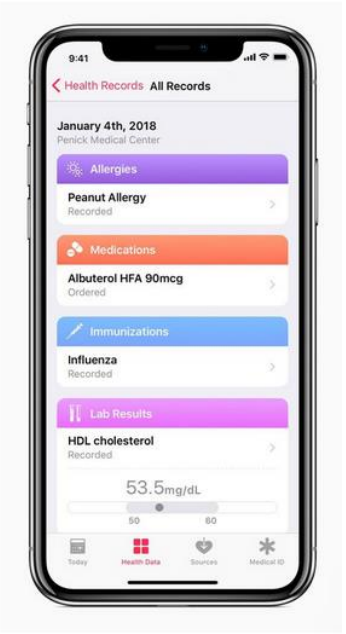
TECH INDUSTRY

Apple brings Health Records API to developers, researchers

Users will be able to share health data with third-party apps.

BY SEAN KEANE / JUNE 5, 2018 5:36 AM PDT





Expanding the Ecosystem

The ease, familiarity, and rapid embrace of FHIR is spurring the development of embedded FHIR capabilities in EHR systems, as well as the creation of stand-alone apps that can connect to EHR systems

Provider-Provider (B2B)

- e.g., expand functionality and usability of EHRs

Provider-Patient (B2C)

- e.g., tools to help patients better manage their own care

Payer-Patient (B2C)

- e.g., tools for price and quality information

Provider-Payer (B2B)

- e.g., expand ability for cross-sharing of clinical and claims info

Technology Vendors

- Accenture
- Apple
- Allscripts
- athenahealth
- Cerner
- Change Healthcare
- eClinicalWorks
- Epic
- Humana
- MEDITECH
- Microsoft
- Optum
- Surescripts

Provider Organizations

- Beth Israel Deaconess Medical Center
- Intermountain Health
- Mayo Clinic
- Partners Healthcare
- SMART at Boston Children's Hospital

Staff (current and past)

- Prime contractor: HL7
- FHIR initiatives: Grahame Grieve, Josh Mandel, Brett Marquard, Eric Haas
- OAuth initiatives: Dixie Baker, Josh Mandel
- Project Management: Micky Tripathi, Jennifer Monahan

Current FHIR Accelerator Projects

	Resources	Use Cases
HL7 FHIR ARGONAUT PROJECT	USCDI data elements	Provider-Provider Provider-Patient
carin Creating Access to Real-time Information Now through Consumer-Directed Exchange	Common Payer Data Set (Blue Button plus additional commercial payer data)	Payer-Patient
DA VINCI HL7 FHIR	Administrative and clinical data elements	Administrative and clinical data elements
CodeX Common Oncology Data Elements eXtensions	Oncology terminology	Provider-based oncology use cases
gravity PROJECT	SDOH terminology	Use cases requiring SDOH data

FHIR Being Rapidly Embraced

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Thank you!

Micky Tripathi
Massachusetts eHealth Collaborative

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mtripathi@maehc.org
@mickytripathi1
781-907-7206

Q&A

- Options to ask questions:
  1. Raise your hand and we can connect you through the video function or “unmute” your line
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FHIR – A Health Plan's Perspective

Why, how, and, yes, it's a big deal

Patrick Murta - Fellow, Solution Architecture

Enterprise Architecture

Agenda

01 | **Why** is FHIR important to health plans and how can it help?

02 | **Why** now?

05 | **What** can I do with FHIR that I was not able to achieve before?

06 | **How** do I get ready for FHIR?

07 | **Does** FHIR support my organizational goals?

08 | **Who** in my organization should manage the process of adopting and implementing FHIR?

09 | **What** are the costs of adoption and is it complicated?

New Research

FierceHealthcare

HOME | HOSPITALS & HEALTH SYSTEMS | TECH | PAYER | FINANCE | PRACTICES | SPECIAL REPORTS

Hospitals & Health Systems

Up to $935B in U.S. healthcare spending wasted, says study from Humana, University of Pittsburgh

by Tina Reed | Oct 7, 2019 11:00am

Read Full Article

The authors also found estimates of the potential to cut waste—for instance, through insurer-clinician collaboration and data interoperability—ranged from $191 billion to $282 billion, or 25% of the total cost of waste.

Why FHIR is Important to Health Plans

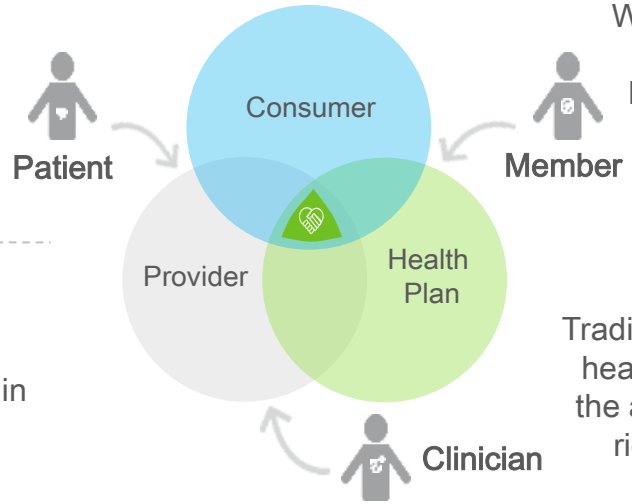
The healthcare ecosystem is undergoing an evolution to expand past traditional Health Plan data and integrate deeper with Providers and Consumers for a more robust data set and more integrated experiences.

Consumer

With increasing abilities to generate, aggregate, and manage their own health data, we increasingly look to consumers for **mediated and generated health data**

Provider

As the quarterback for a patient's care, providers contribute **clinical data from patient interactions** captured in the EMR



Health Plan

Traditionally the key financiers of health, health plans are playing a larger role in the actually delivery of health and are a rich source of **claims, authorizations, and care management data**

Providers, Health Plan and Consumers are key, active interoperability stakeholders

Why FHIR® Now?

Inflection point in interoperability

in·flec·tion point

noun

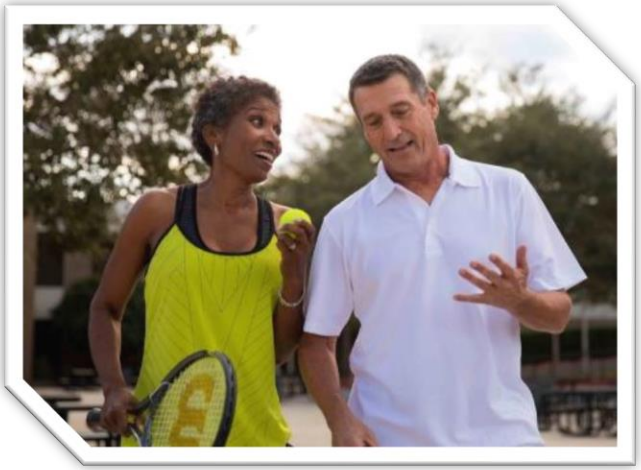
1. Mathematics

a point of a curve at which a change in the direction of curvature occurs.

2. US

(in business) a time of significant change in a situation; a turning point.

- Enable integrated care delivery across the spectrum
- Shift to value based care
- Adoption is increasing as FHIR is becoming the standard
- Industry initiatives
- CMS & ONC support and proposed rules
- Blue Button 2.0 momentum
- Less expensive to build and maintain
- Helps with long standing issues as well as new innovation
- Enable data liberation, democratization, and data liquidity



What can I do with FHIR? | Overview

FEW EXAMPLES

- In workflow medication review
- Care alerts
- Clinical summaries
    - Labs
    - Problem lists
    - Gaps in care
- Analytics
- Prior authorization streamlining
- Blue Button app

CONVERGENCE POINT VIA FHIR

INTEGRATED CARE DELIVERY IN THE HOME

Using contemporary FHIR integration technologies to deliver the medication list right when it is needed for the in-home visit is the differentiator. **Right data at the right time** and in the right place at the point of care.

MEDICATION ADHERENCE

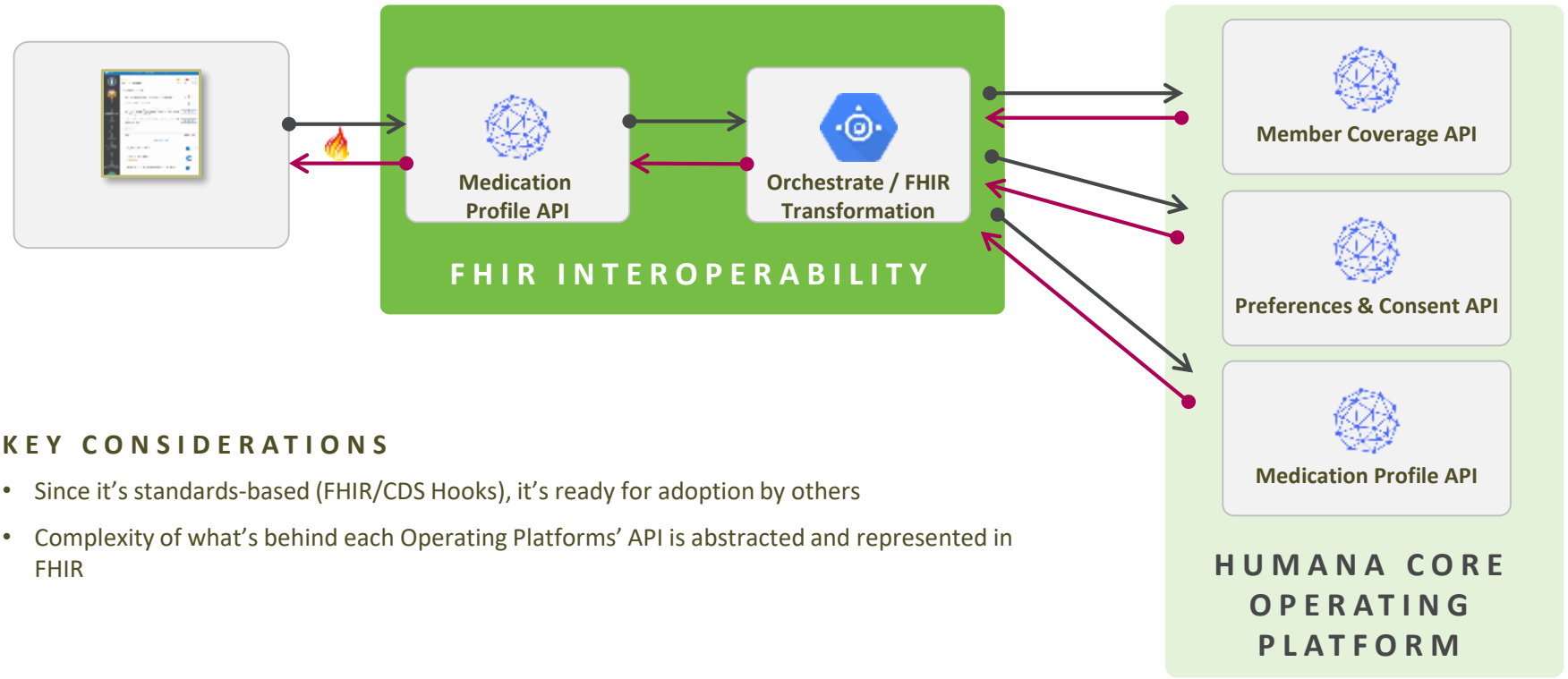
Medication adherence is important, if not the most important, in overall health and **preventing admits and readmits.**

OML is a unique, curated medication list which if used at the right time in clinical workflow, can be of extreme value.

IN-HOME ASSESSMENTS

Our **practitioners spend 60 quality and high-fidelity minutes with our members**. This is a unique opportunity to reconcile and update a medication list and to educate and inform the patient.

GET MEDICATION PROFILE | Example



KEY CONSIDERATIONS

- Since it's standards-based (FHIR/CDS Hooks), it's ready for adoption by others
- Complexity of what's behind each Operating Platforms' API is abstracted and represented in FHIR

How do I get ready for FHIR? | Overview

KEY CONSIDERATIONS

- Learn about it and get involved!
- Organizational assessment
    - Organizational mindset
    - Organization strategy - How does my organization view interoperability?
- Technical capacity – Do I have the appropriate technical foundation?
    - Is my technical base API-enabled?
    - Do I need training?
    - Data liberation
    - Do I need an integration platform?

Does it support your organizational goals? |

Overview

KEY CONSIDERATIONS

- What are your organization goals and vision for the future?
- Is interoperability a burden or a strategy?
- How is interoperability positioned as a strategy?
- How do you view data liberation and democratization?
- What is your vision of integrated care delivery and your role in that ecosystem?

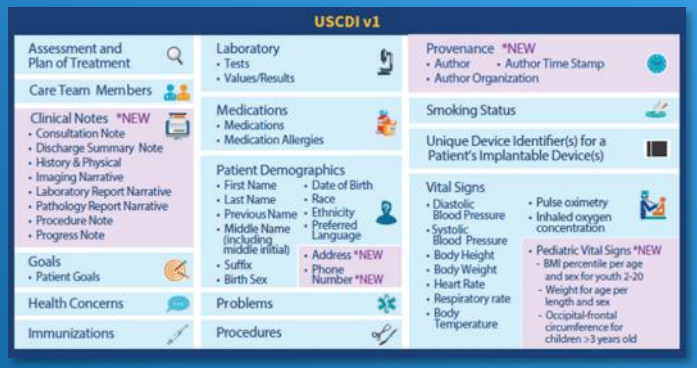
Considerations

Organizational Mindset
Is interoperability and data democratization part of your organization mindset?

Organizational Strategy
Is interoperability and integration an organizational strategy or simply a technical must do? Do you have cross-departmental buy-in?

Technical Strategy
Does your technical strategy encompass integration, interoperability and data democratization?

How Are You Planning For Rules Which Are Not Final?
Do you appreciate the intent and spirit of the rules? Have you considered a planned approach? How will this work blend or weave into existing projects? Are you planning for hyper-connectedness?



Consumer Mediation

Workflow integration w/ SMART on FHIR apps

Data liberation & democratization w/ ecosystem pub/sub

Broader consideration of FHIR data models

Organization Interoperability

Who should manage the FHIR implementation? | Overview

KEY CONSIDERATIONS

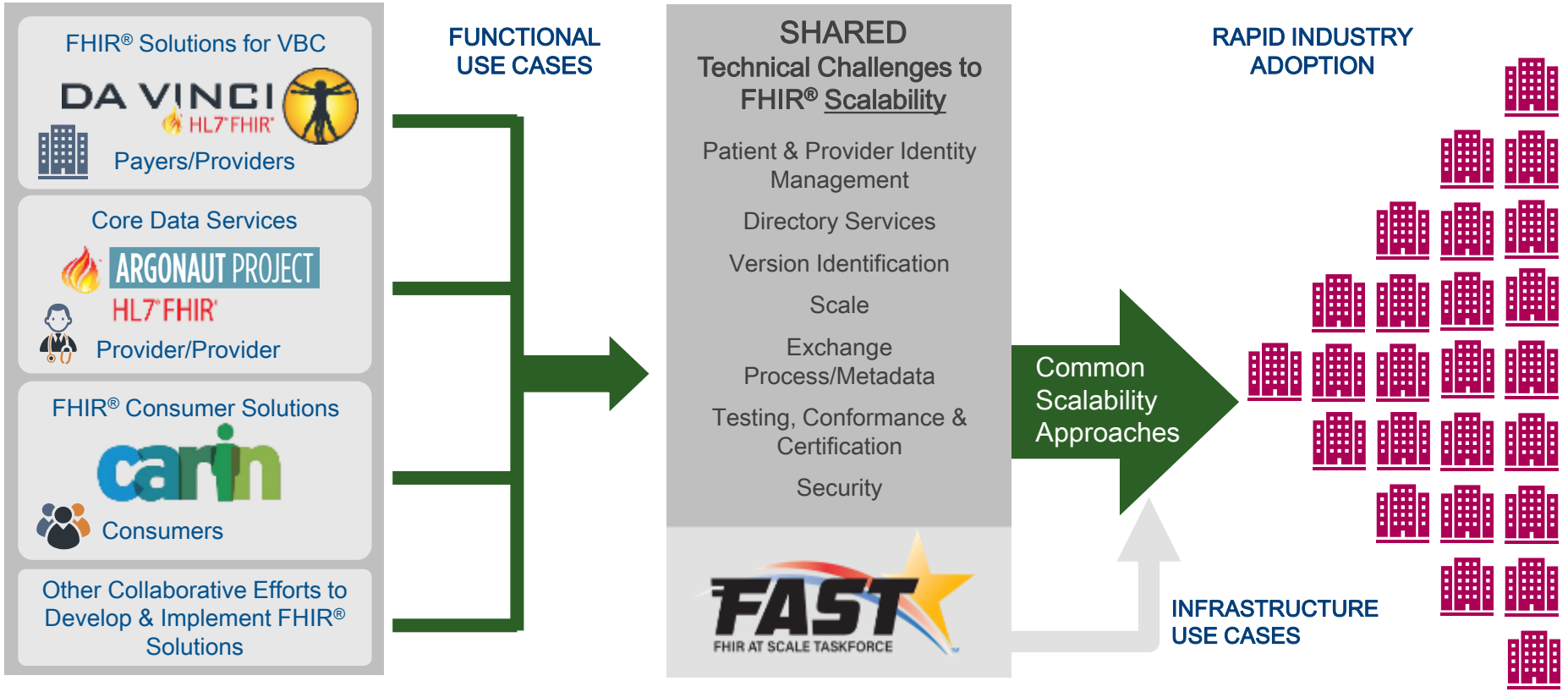
- Enterprise business and technical executive sponsors
- Enterprise cross-departmental steering committee
- Enterprise FHIR enablement team versus departmental enablement teams

What costs should I expect & is it complicated? | Overview

KEY CONSIDERATIONS

- Is this an enterprise strategy for your organization or ‘regulatory’ must-do?
- Are your technical teams positioned for RESTful FHIR APIs?
- Training from a business, data, and IT perspective should be considered
- A FHIR or interoperability platform may be considered
- Data liberation costs from legacy platforms are a consideration
- The complication level depends upon
    - Current technical stack
    - Current technical capacity and maturity
    - Your organizational approach to FHIR (strategy versus purely technical)

Resources & involvement



Q&A

Options to ask questions:

1. **Raise your hand and we can connect you through the video function or "unmute" your line**
2. **Ask the question through the chat box**

A Provider's Perspective on FHIR

eHealth Initiative FHIR Workshop

December 17, 2019

Steven Lane, MD, MPH

Clinical Informatics Director, Privacy, Information Security & Interoperability

Sutter Health

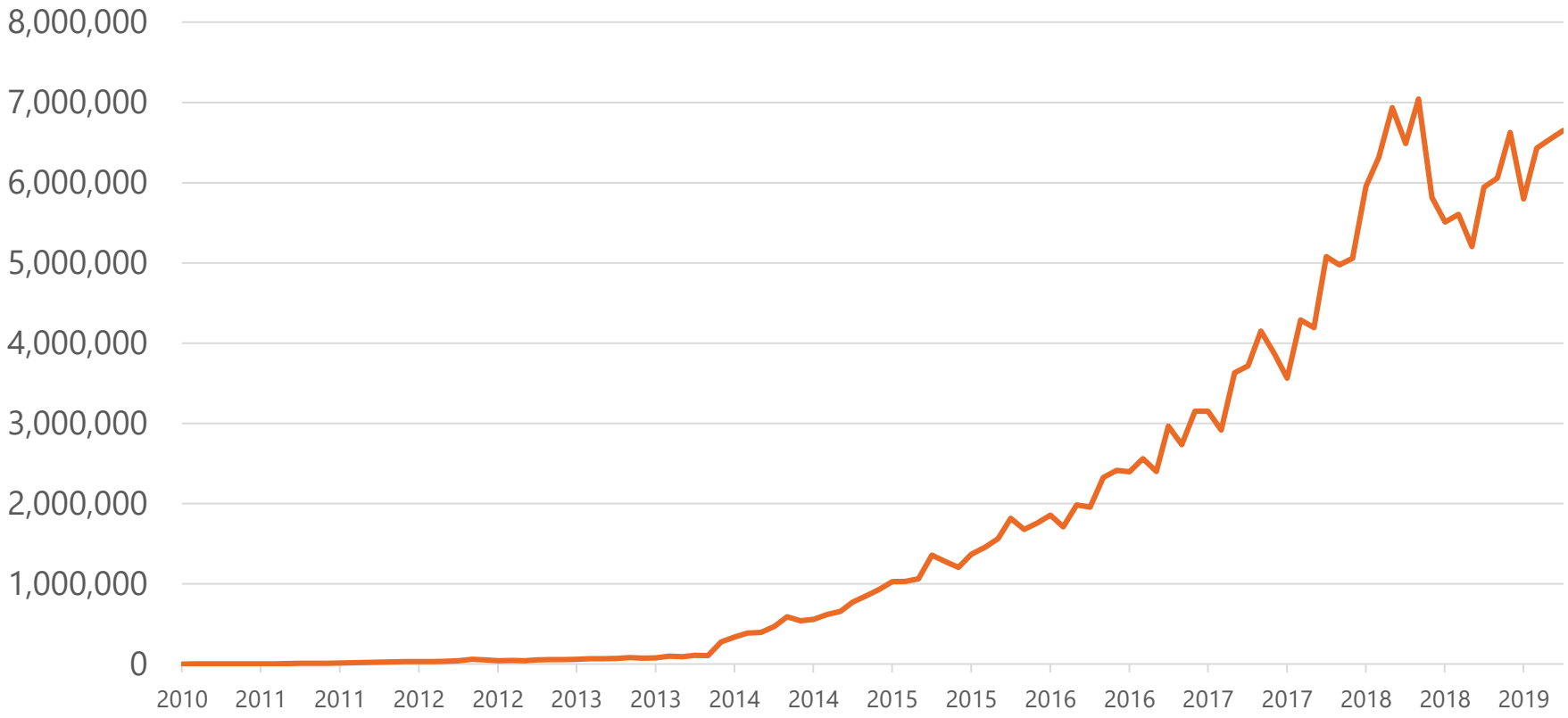
Why is FHIR® important to providers?

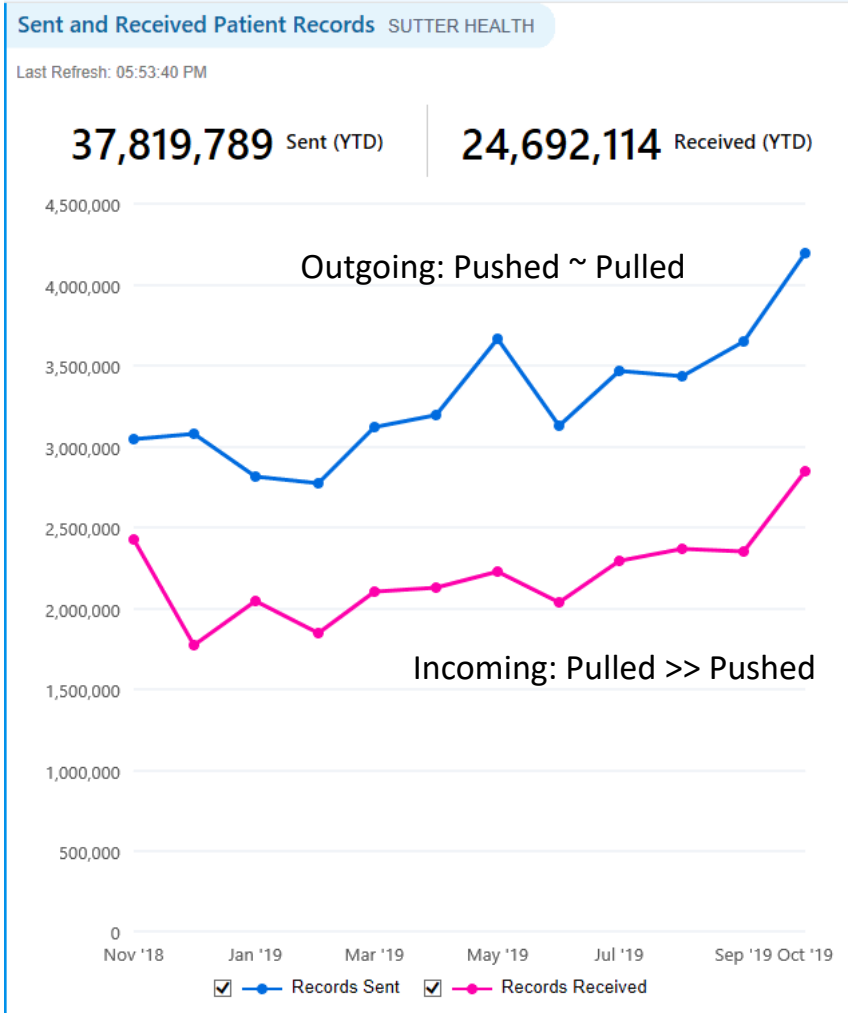
- Purpose-built for healthcare
- Modern web-base data structure, transport and security
- Supports exchange of specified data
- Allows a user to request just the data of interest
  - Minimum Necessary
- Rapid development
- Federal policy support for expanding use

Sutter's Interoperability Experience

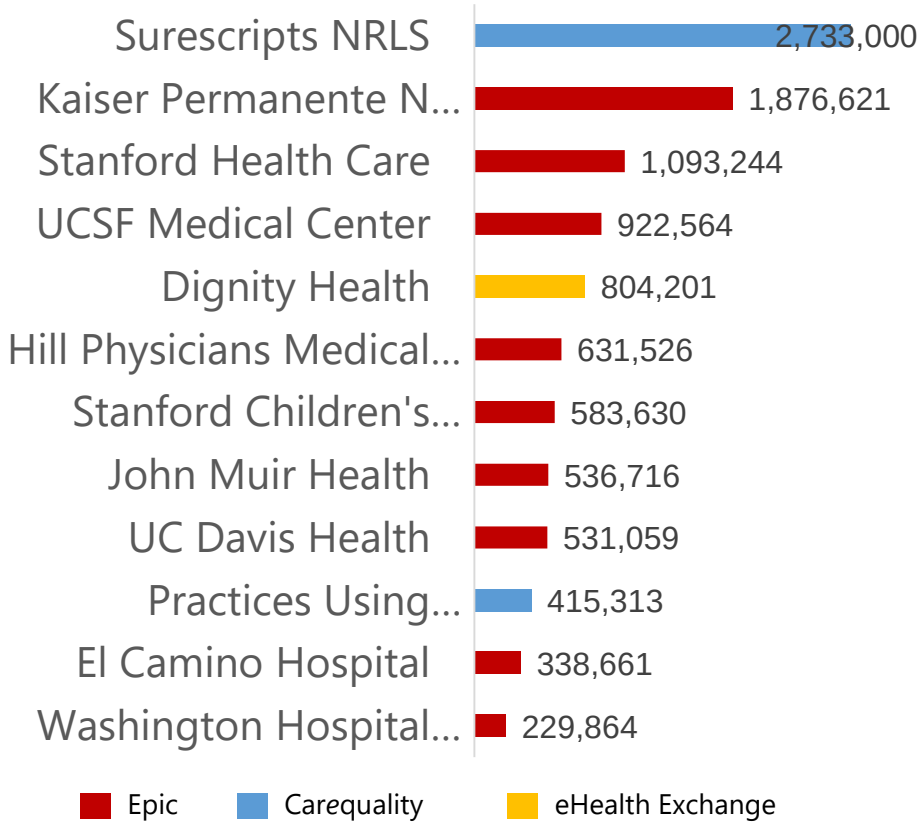
- Interfaces
  - 4,000 – 16% with external entities
  - E.g., Electronic Registry Reporting – Imms, public health, cancer, quality
- Secure File Transport
  - 50K / day
  - 2,600 routes to external entities
- EHR access
  - *SutterLink* portal – 10K community providers, coroners, billers, etc.
- National Networks
  - Epic Care Everywhere
  - eHealth Exchange
  - Direct – 50K messages / mo.
- California Trusted Exchange Network
  - Patient Unified Lookup System for Emergencies (PULSE)
- Car*e*quality Framework
  - CommonWell, etc.
- HIE / HIOs – Regional, proprietary
  - Community provider data access via national networks
  - Collective Medical Technologies – Emergency Department high utilizers
- APIs / FHIR
  - 11 APIs managed through gateway
- Patient Portal
  - 2001 - First in the country

Monthly Patient Record Exchange @ Sutter

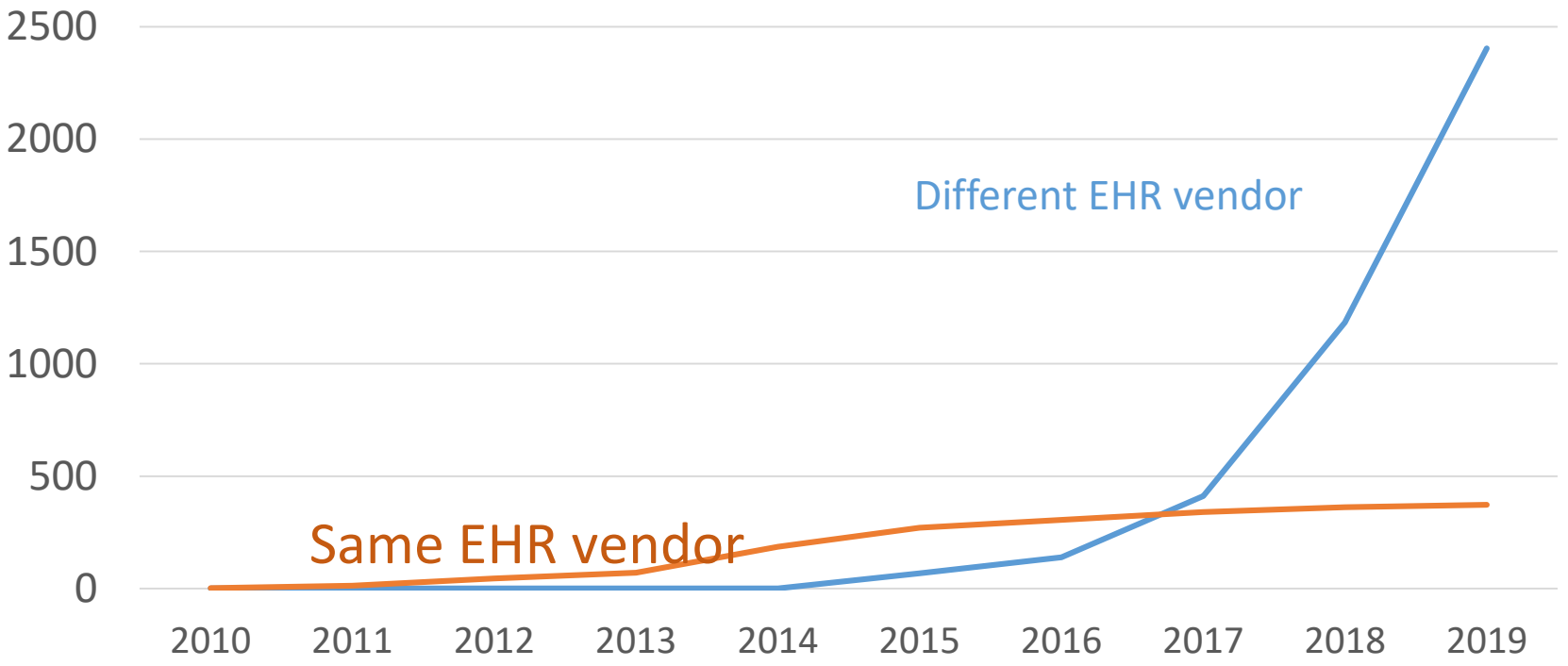




Top Trading Partners - By Patient Links



Unique Trading Partners

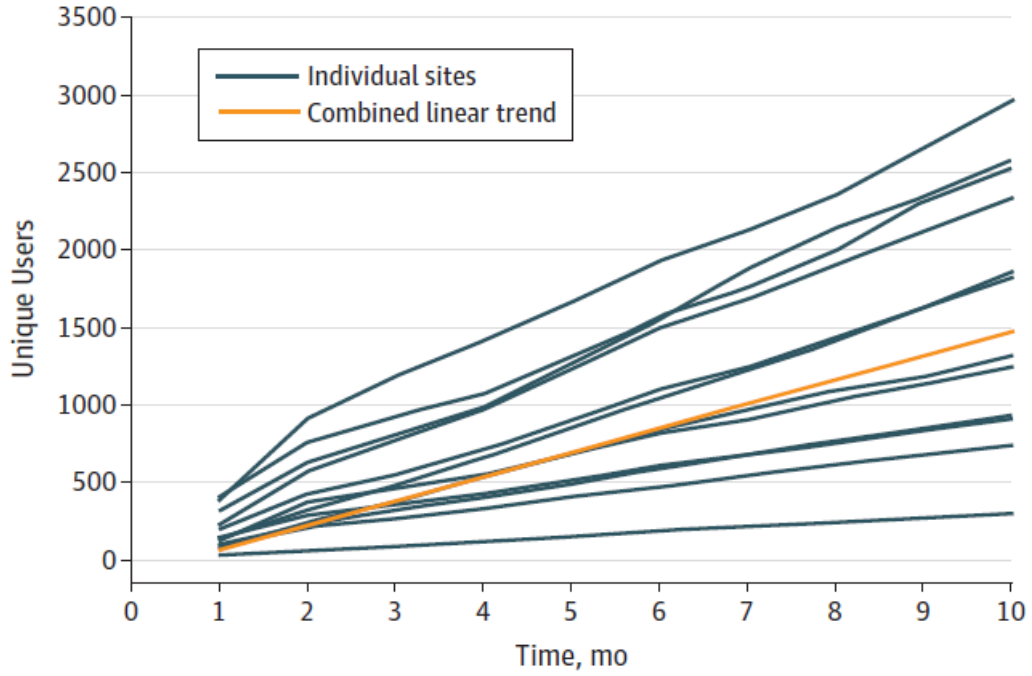


Patient Access & Consumer-mediated Exchange

- Based on HIPAA individual right of access to health data
- Early FHIR® success
  - Blue Button 2.0 – CMS making claims data available to Medicare beneficiaries via APIs, FHIR Apps
  - Consumer-facing apps:
    - Apple Health Records
    - CommonHealth for Android
    - Etc.

Patient-facing API Access Metrics

- 12 health systems' go-live experience (Adler-Milstein J, Longhurst C, JAMA, 08/2019)



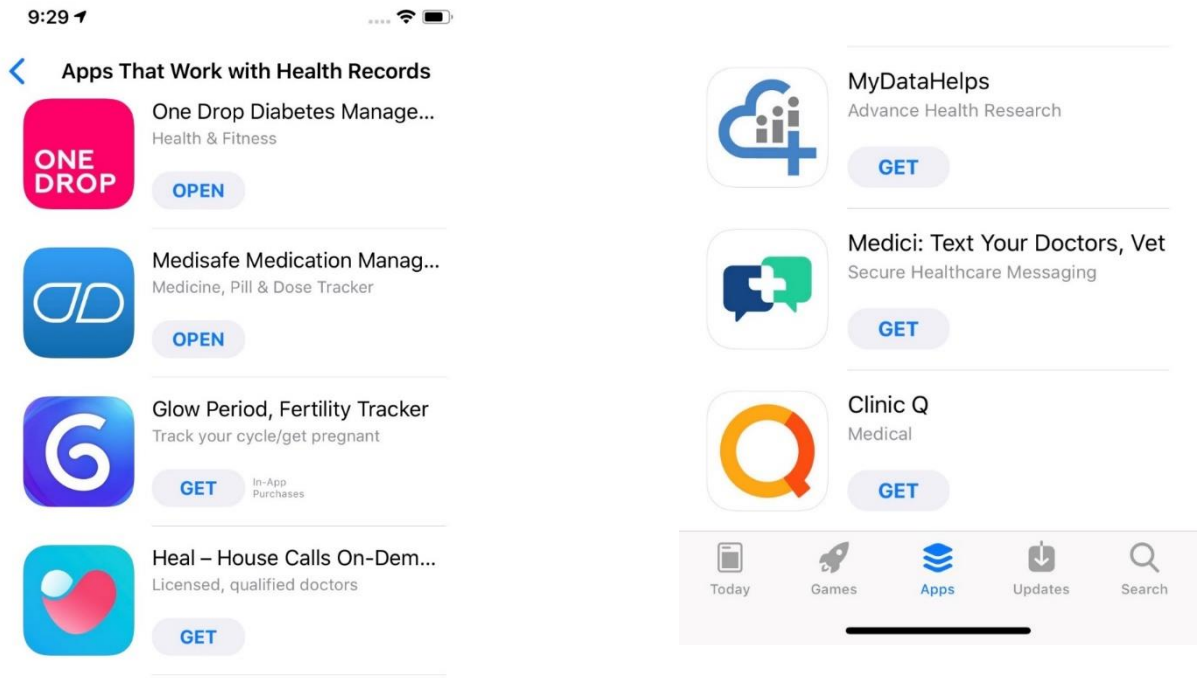
Take away: Slow uptake by patients during the first year after go-live

Apple Health Records

- Apple Health Records
  - Healthcare organizations offer FHIR® API-based access to data from multiple vendors – AthenaHealth, Cerner, Epic, VA
  - LabCorp and Quest lab data access / integration
  - 412 organizations/practices live a/o 12/02/2019
  - Data maintained in iOS, NOT by Apple
  - Individuals allow apps to access and use data collected in personal record

Apps leveraging Health Record Data

- 7 Patient facing apps:



Evolving FHIR Use Cases

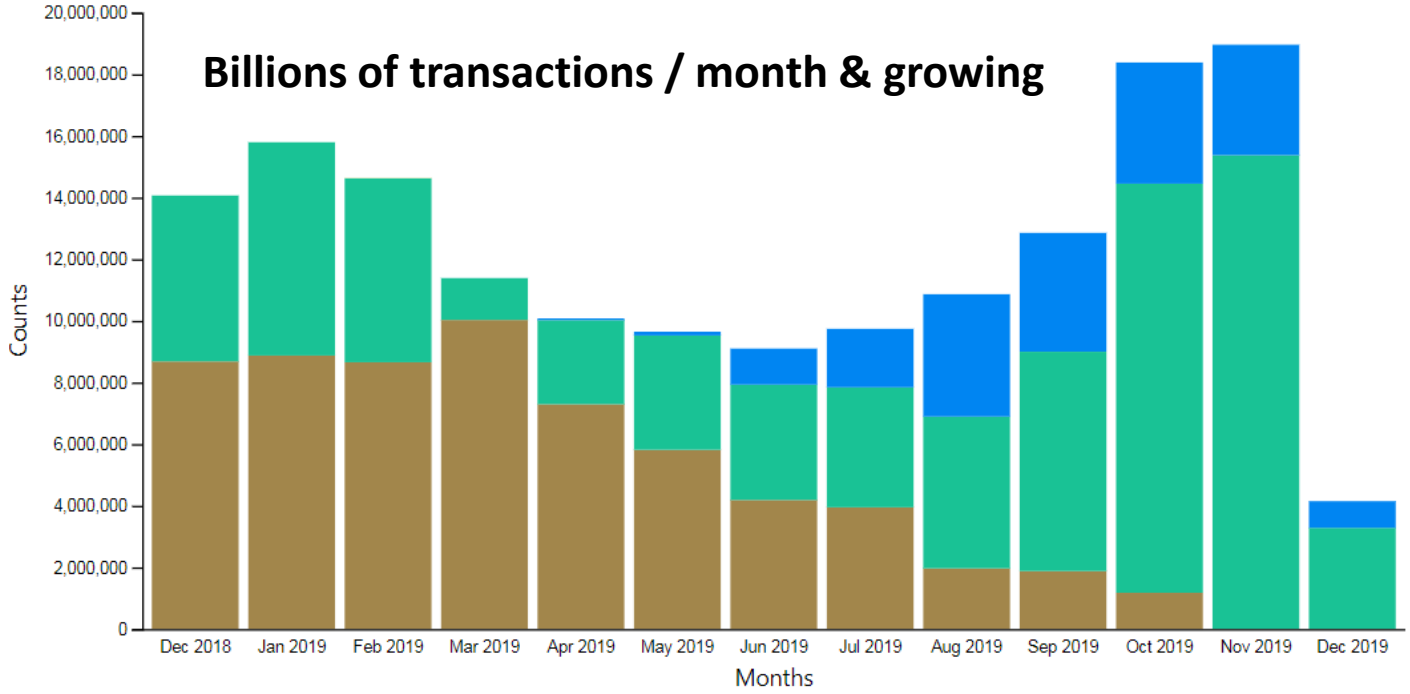
- EHR applications
  - Argonaut Project – clinical notes, assessments, bulk data access
  - SMART – Substitutable Medical Apps, Reusable Technology (>70 apps)
- Payer-Provider Exchange
  - CMS Beneficiary Claims Data API (BCDA) and Data at the Point of Care (DPC)
  - Da Vinci Project – Commercial payers
- Other FHIR Accelerator Projects
  - Gravity Project – Social Determinants of Health
  - PACIO – Post-Acute Care Interoperability Project
  - Vulcan – Research

APIs invoked by 17 Apps in past year @ Sutter

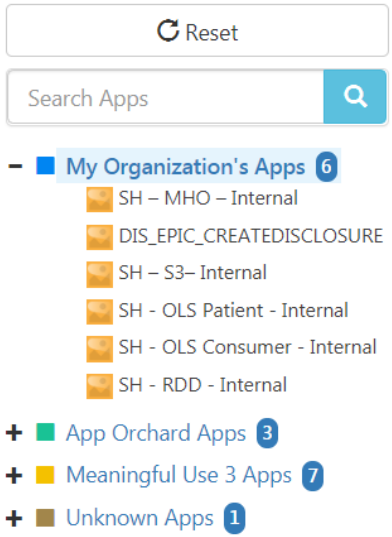
Reset

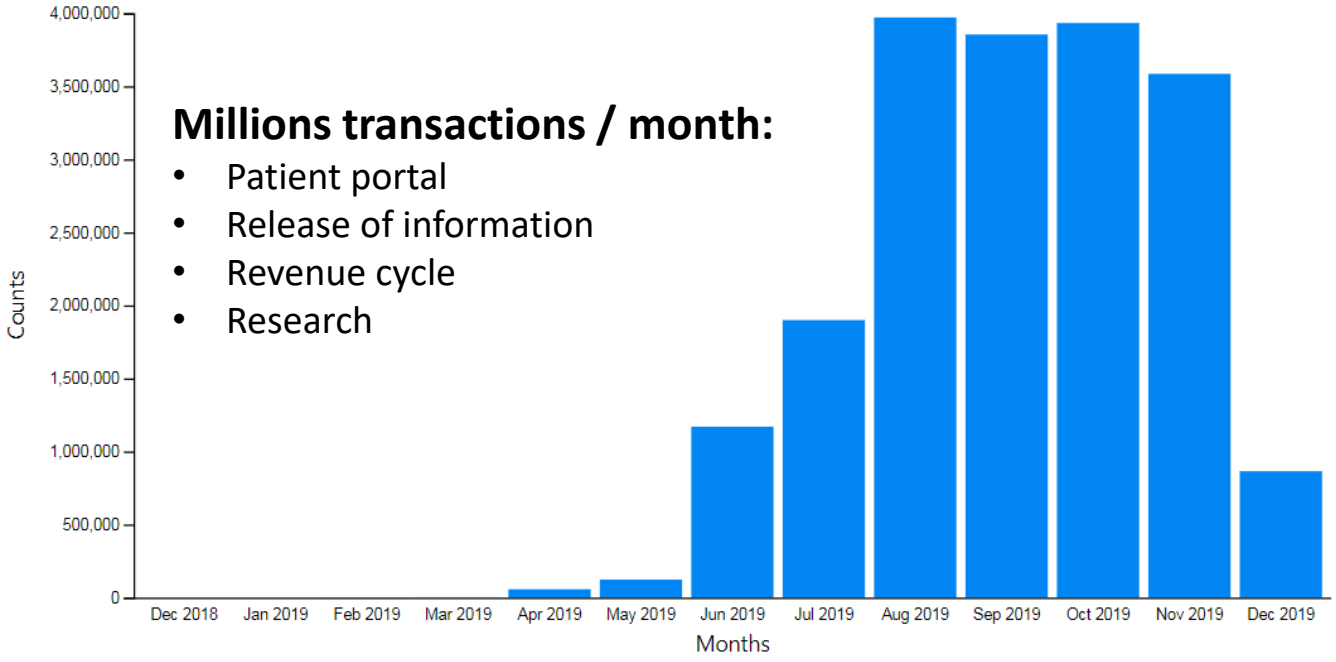
Search Apps

+ My Organization's Apps 6
+ App Orchard Apps 3
+ Meaningful Use 3 Apps 7
+ Unknown Apps 1



APIs invoked by internal apps



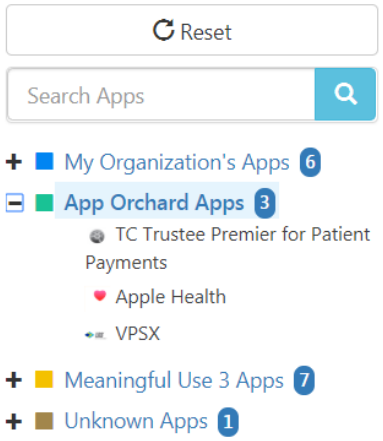


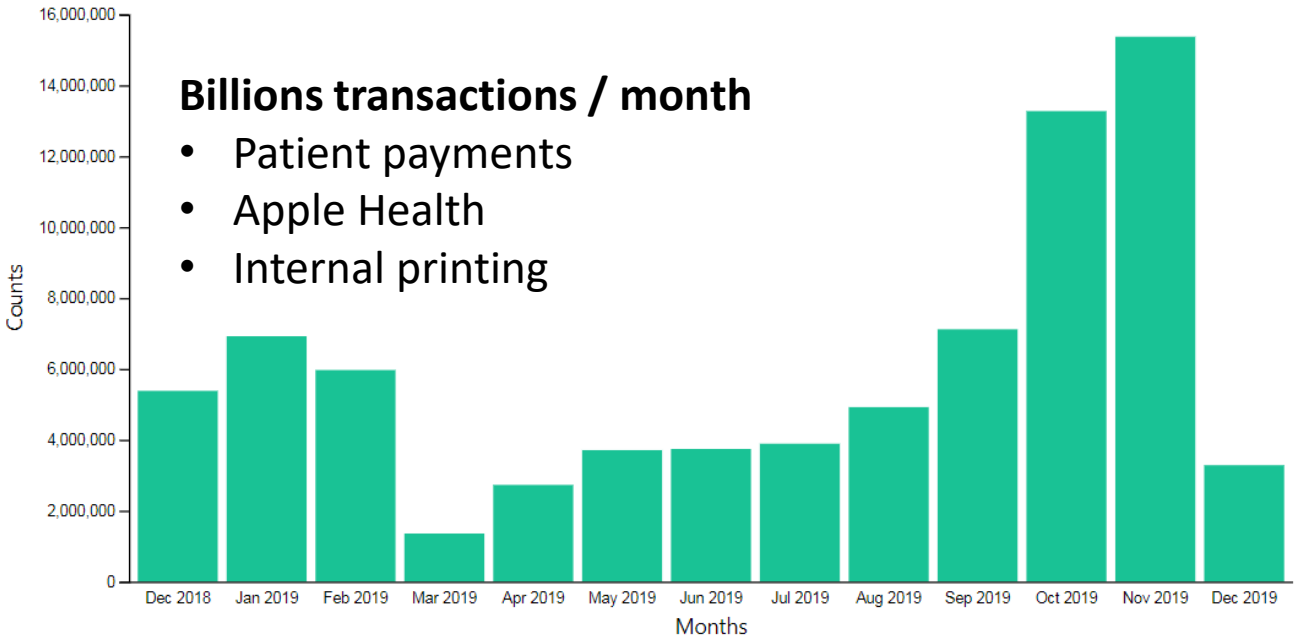
Millions transactions / month:

- Patient portal
- Release of information
- Revenue cycle
- Research

API usage data for **My Organization's Apps** for **the past year**

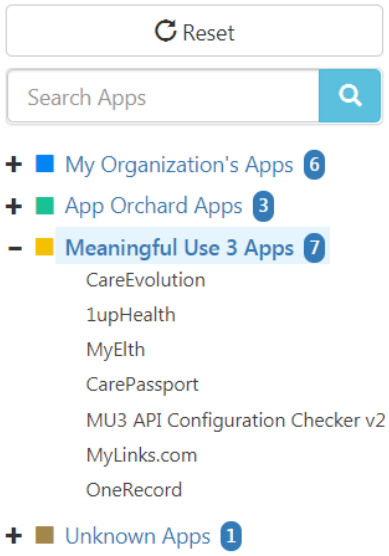
APIs invoked by vendor-supported apps

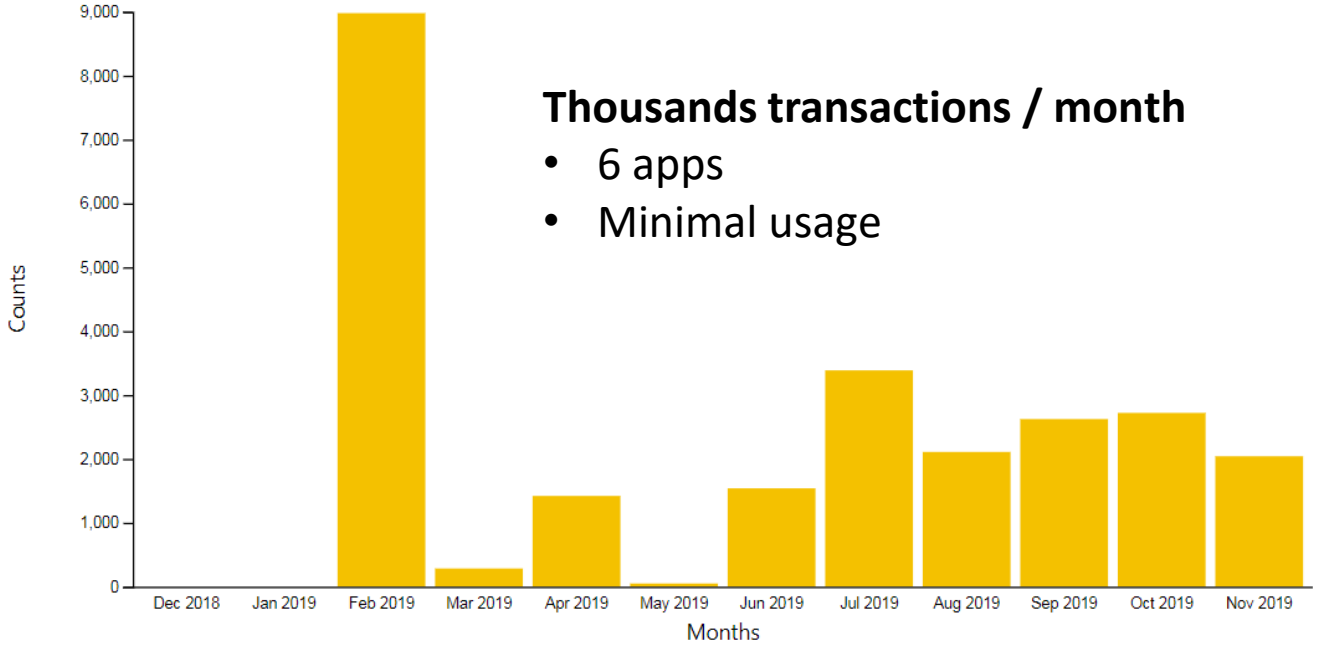




API usage data for **App Orchard Apps** for **the past year**

APIs invoked by patient directed apps





Thousands transactions / month

- 6 apps
- Minimal usage

API usage data for **Meaningful Use 3 Apps** for **the past year**

How can FHIR support Providers' organizational goals?

- Cut costs
  - Operational efficiencies
    - Access to clinical and business data
    - Quality measurement and reporting
    - Release of information
    - Interoperability – Interface implementation and maintenance
- Improve patient care
  - More complete clinical data
  - Efficiency of access to and integration of relevant data
  - Efficient workflows – Coverage determination, price transparency, prior authorization

What can you do with FHIR now, that you couldn't do before?

- Internal apps
  - Patient portal functionality – Scheduling
  - Research
- Patient facing apps
  - Data access beyond portal and CCD download/send
- Interoperability with other stakeholders
  - Rev Cycle – Payment processing
  - HIM – Release of Information

What Is Sutter Doing to Get Ready for FHIR?

- Educating and engaging
  - Patient Experience – Portal
  - IS – Applications, analytics, interfaces, infrastructure
  - Data Management / Governance
  - Population Health
  - Health Plans
  - Privacy & Information Security
  - Health Information Management
  - Clinical leaders
- What did you budget? Did you have to hire people?
  - Not yet
- Does it cost money, is it complicated, will it work with my current infrastructure?
  - FHIR server(s)
  - Data mapping

A *FHIR Storm* for Providers?

- High level of hype and confusion
- Rapid engagement by multiple stakeholders
- Multiple use cases
  - Internal
  - Other providers
  - Patients
  - Payers
  - Etc.
- Evolving government requirements
- Variable vendor adoption and support
- Opportunity to impact through engagement and early adoption

Opportunity: Data Sharing with Payors

- Multiple permitted use under Treatment, Payment & Operations
  - Care/case management
  - Concurrent review
  - Prior authorization
  - Care gap identification and management
  - Risk adjustment
  - Quality metric reporting
  - Billing
  - Claims adjudication

- Multiple technical solutions – vary by payer and use case
  - Reports / data extracts, interfaces, EHR access / reports, fax, telephone, etc.

Payer-Provider Data Exchange Concerns

- Concerned that clinical data shared for permitted purposes to be repurposed and used against them (e.g., Contracting) or their patients (e.g., Underwriting / benefits determination)

- Desire legal agreements and/or technical solutions to prevent repurposing of data beyond treatment, payment and healthcare operations

FHIR Resources for Providers

- Da Vinci Project
  - http://www.hl7.org/about/davinci/index.cfm
- CMS Blue Button 2.0
  - https://bluebutton.cms.gov
- CMS Data at the Point of Care Pilot
  - https://dpc.cms.gov/docs
- ONC FHIR at Scale Taskforce (FAST)
  - https://oncprojectracking.healthit.gov/wiki/pages/viewpage.action?pageId=43614268
- Best FHIR Resources Blog
  - https://datica.com/blog/best-fast-healthcare-interoperability-fhir-resources/

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Q&A

- Options to ask questions:
  1. Raise your hand and we can connect you through the video function or “unmute” your line
  2. Ask the question through the chat box

eHI FHIR Workshop

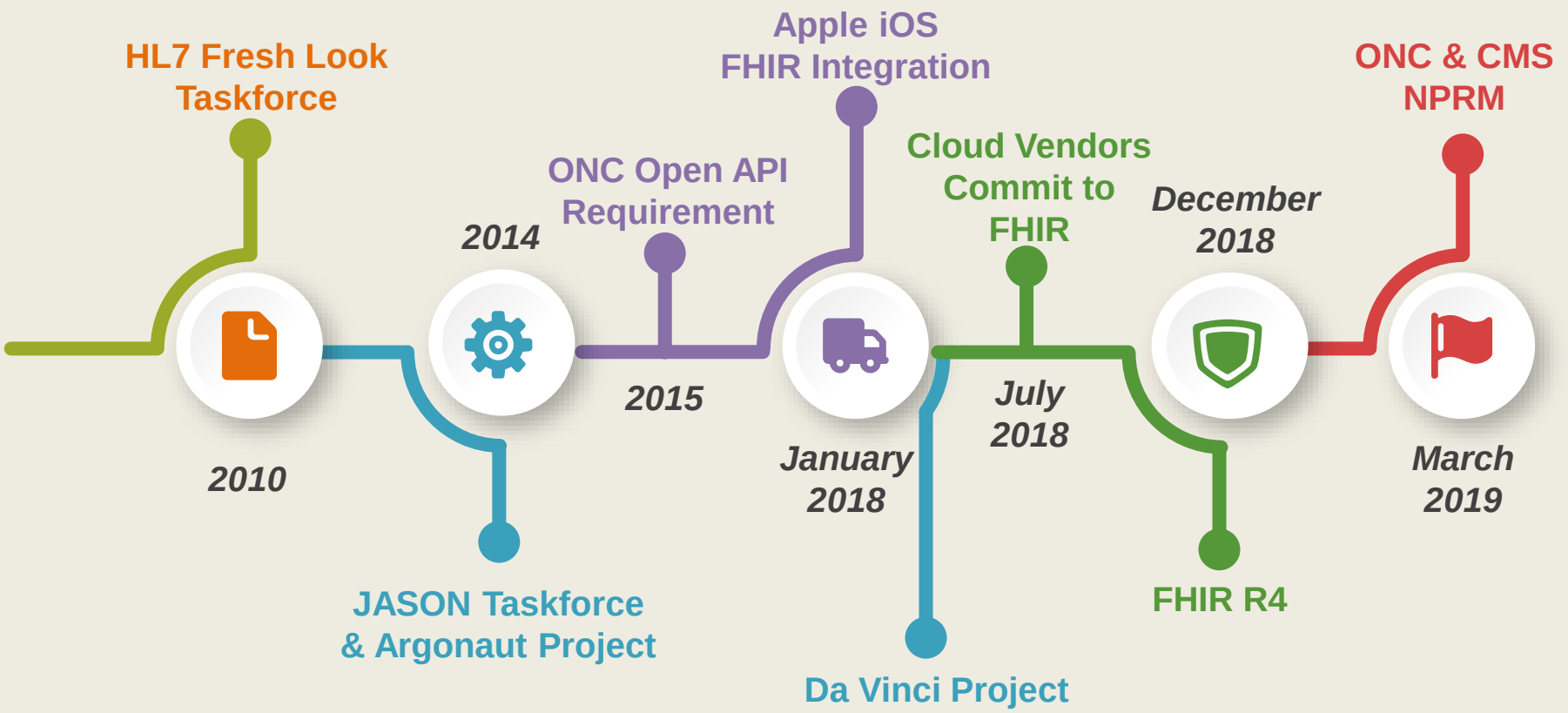
Charles Jaffe, MD, PhD
CEO, HL7

17 December 2019

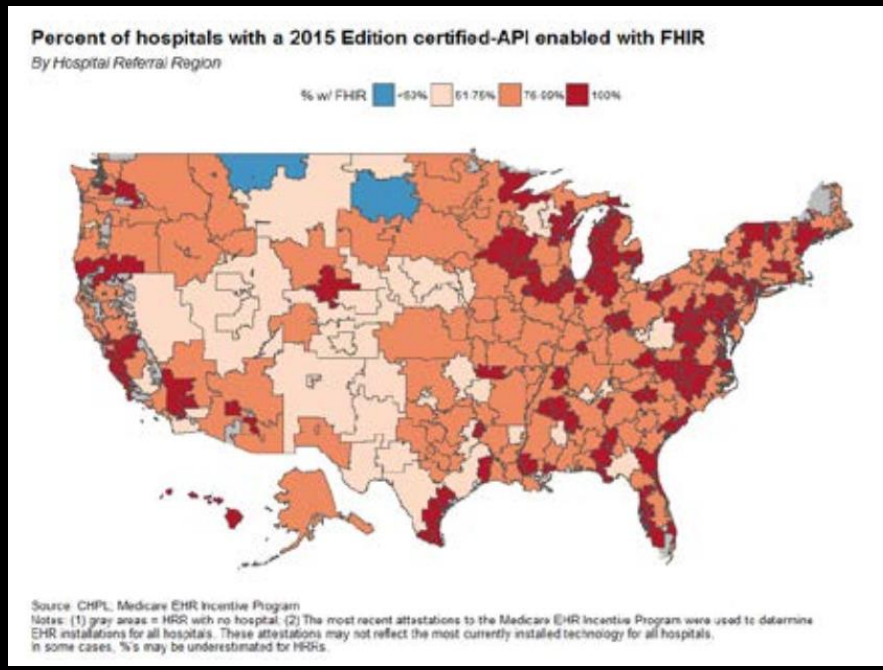
“The best way to predict the future is to invent it.”

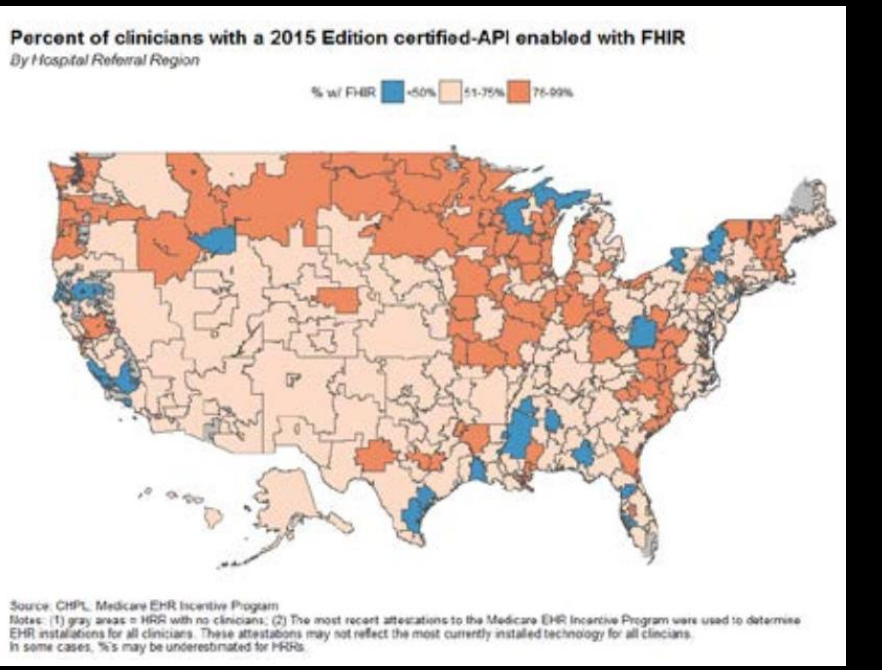
Alan Kay
Address to PARC, 1971

HL7 FHIR US Timeline



HL7 FHIR US Heat Map





Over half of certified health IT developers are using HL7 FHIR
These includes 87% of hospitals and 70% of eligible clinicians.
This, despite the fact that FHIR was NOT required for EHR Certification

Health IT
Advancing America's Health Care

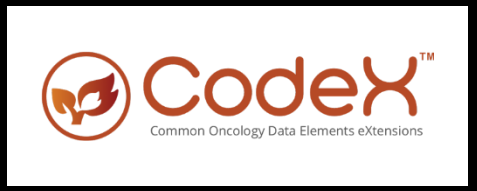
My coach said
that I kick
like a girl.

I told him that if
he tried harder,
he could too.

Mia Hamm

HL7 FHIR Accelerator Program

Assists implementers across the health care spectrum in the creation of FHIR Implementation Guides and other informative documents.



Argonaut Project

Argonaut IG's are now utilized around the world for international data exchange.

Apple iOS 11.3 & later releases support patient aggregation of clinical information

based upon the Argonaut Project Implementation Guide

HL7® FHIR® ARGONAUT PROJECT

HL7® FHIR®

HL7 FHIR Accelerator Program
Da Vinci Project

Advances “Value-Based Care”
by leveraging FHIR for
the capture of granular clinical data
from patient records
to improve quality, to reduce costs,
and to enhance care management.

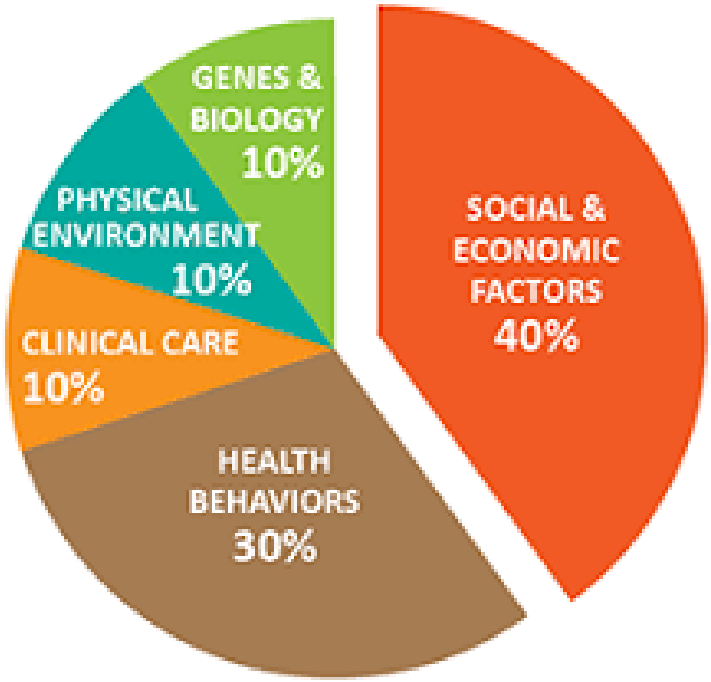
HL7 FHIR Accelerator Program
Gravity Project

A private-sector initiative to
leverage HL7 FHIR
to integrate the
Social Determinants of Healthcare
into the delivery process.

gravity PROJECT

HL7® FHIR®

The Gravity Project will integrate the emerging datatypes of the SDOH into clinical decision making.



DETERMINANTS OF HEALTH

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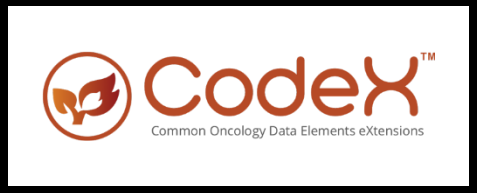
HL7 FHIR Accelerator Program
CodeX Project

A multi-stakeholder community,
leveraging FHIR,
to produce computable data for
CANCER care and research.



HL7 FHIR Accelerator Program Emerging Projects

- Clinical information modeling (AMA)
- Population Health initiatives (CDC)
- Clinical Research programs (NLM)
- Quality Measures on FHIR (NCQA)
- Genomics Collaboratives (Multiple)

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Artificial Intelligence for Health

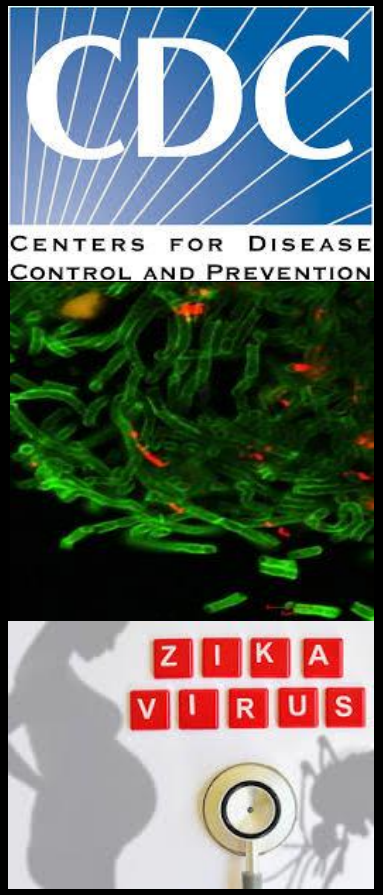
- ONC collaboration with the Agency for Healthcare Research (AHRQ) & Robert Wood Johnson Foundation
- JASON study on the impact of AI on heal[illegible]l h[illegible]car[illegible]

“If you torture data long enough,
it will confess to anything.”

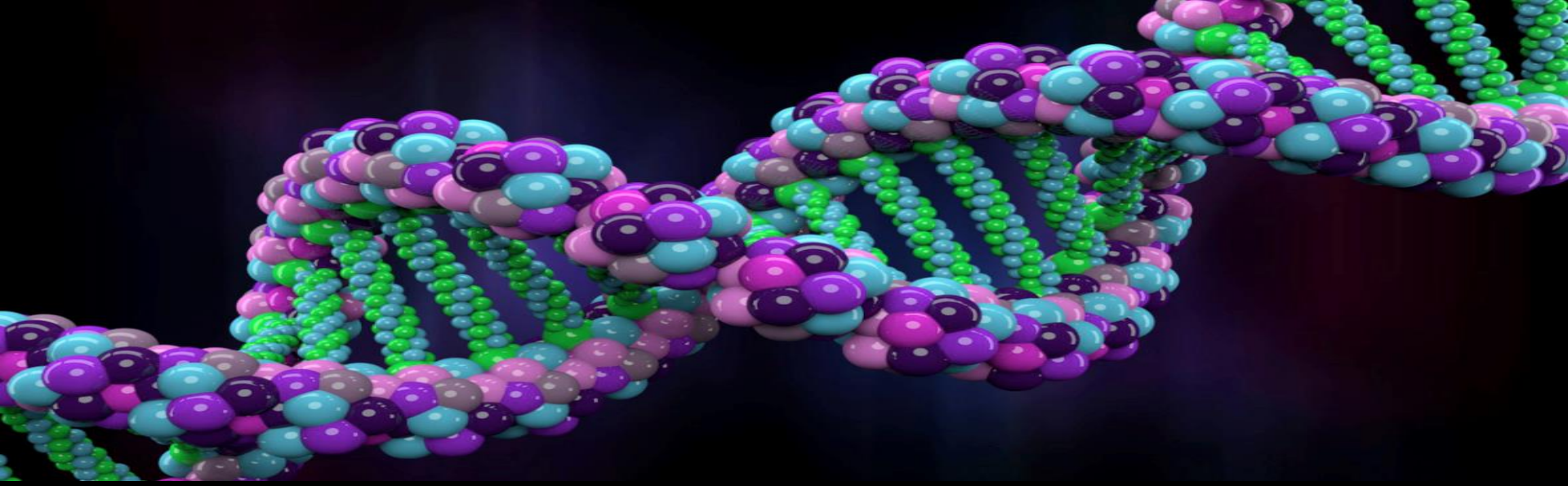
Ronald Coase

HL7® FHIR®

Center for Disease Control
is leveraging FHIR for
Morbidity & Mortality reporting*
and implementing
Bulk Data on FHIR



** Death on FHIR*



Multiple Genomics workstreams within HL7

and partnership with
external Genomics consortia

HL7® FHIR®

“If you’re doing something the same way for ten years, the chances are you are doing it wrong.”

Charles Kettering

International BioPharma
is leveraging HL7 FHIR
for real-world evidence for
clinical trials,
post-marketing bio-surveillance,
and genomics integration.

Vulcan Project

A consortium of private-sector* & public-sector agencies** committed to deploying HL7 FHIR for regulated & non-regulated research.

* TransCelerate Biopharma

** USFDA, NIH, NLM, CTSA

American Medical Association has abandoned its clinical modeling initiative (IMHI) in favor of FHIR.

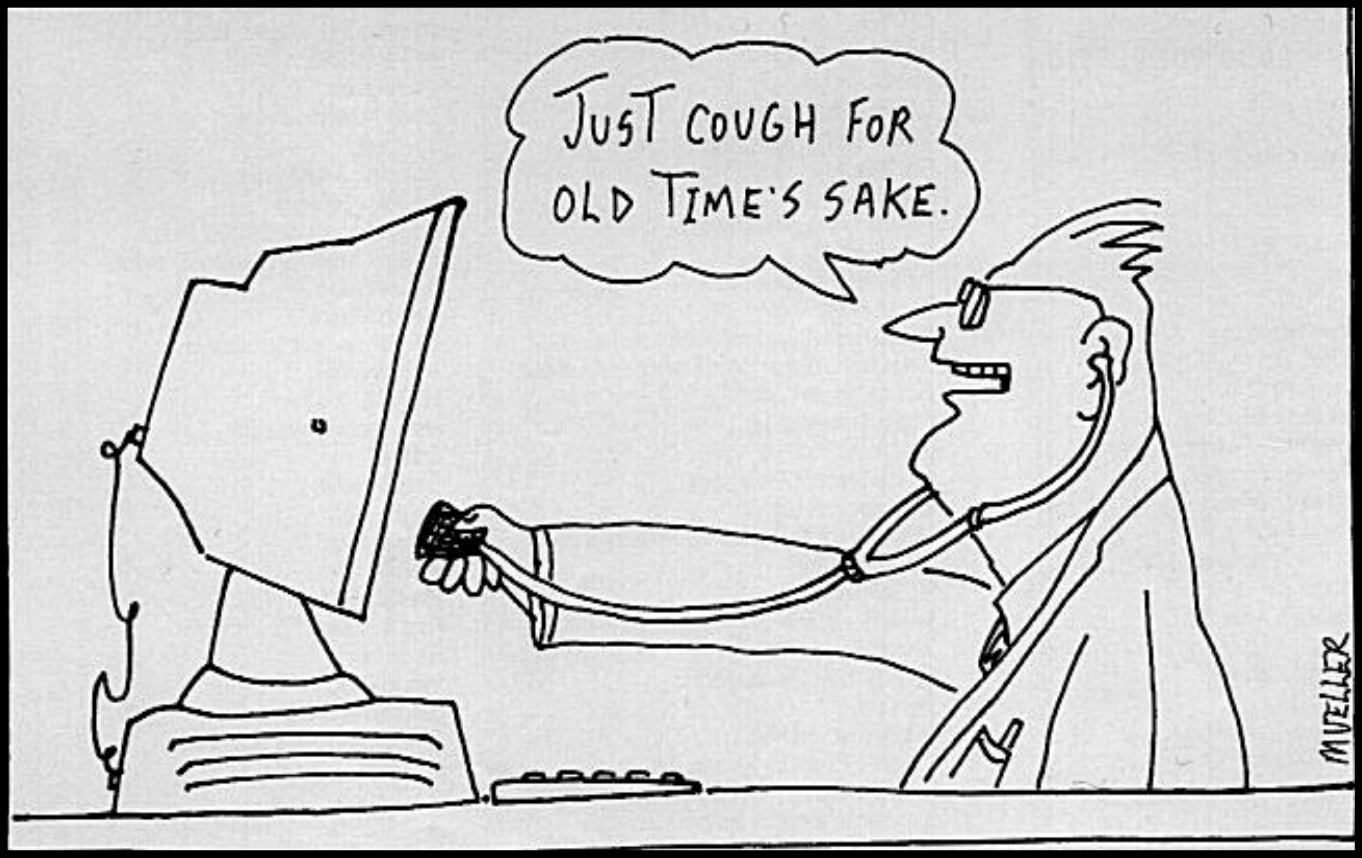
With it, they bring the clinical expertise and global relevance of over 300,000 physicians.

Tech Giants have committed to collaboration on FHIR API for Healthcare Cloud Interoperability

and to implementation of *Bulk Data on FHIR*

HL7 FHIR

Thanks



cjaffe@hl7.org

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