

A Leadership Moment:

Entering the “Consumer-First” Delivery Reform Era

Aneesh Chopra
@aneeshchopra



COVID-19 a National Moment for Change



Coronavirus: A Look Inside RUSH University Medicine's 'Forward Triage Area'

By **Charlie Wojciechowski** • Published 4 hours ago • Updated 4 hours ago



RUSH University Medicine's Forward Triage Area is a converted Ambulance Bay designed to minimize contact between potential Coronavirus patients and other hospital patients and staff.



CDC 2019-nCoV ID: Form Approved: OMB: 0920-1011 Exp. 4/23/2020

.....PATIENT IDENTIFIER INFORMATION IS NOT TRANSMITTED TO CDC.....

Patient first name _____ Patient last name _____ Date of birth (MM/DD/YYYY): ____/____/____

.....PATIENT IDENTIFIER INFORMATION IS NOT TRANSMITTED TO CDC.....

Human Infection with 2019 Novel Coronavirus Person Under Investigation (PUI) and Case Report Form

Reporting jurisdiction: _____ Case state/local ID: _____
Reporting health department: _____ CDC 2019-nCoV ID: _____
Contact ID ^a: _____ NNDSS loc. rec. ID/Case ID ^b: _____

a. Only complete if case-patient is a known contact of prior source case-patient. Assign Contact ID using CDC 2019-nCoV ID and sequential contact ID, e.g., Confirmed case CA102034567 has contacts CA102034567 -01 and CA102034567 -02. ^bFor NNDSS reporters, use GenV2 or NETSS patient identifier.

Interviewer information

Name of interviewer: Last _____ First _____

Affiliation/Organization: _____ Telephone _____ Email _____

Basic information

What is the current status of this person? <input type="checkbox"/> PUI, testing pending* <input type="checkbox"/> PUI, tested negative* <input type="checkbox"/> Presumptive case (positive local test), confirmatory testing pending† <input type="checkbox"/> Presumptive case (positive local test), confirmatory tested negative† <input type="checkbox"/> Laboratory-confirmed case† <small>*Testing performed by state, local, or CDC lab.</small>	Ethnicity: <input type="checkbox"/> Hispanic/Latino <input type="checkbox"/> Non-Hispanic/Latino <input type="checkbox"/> Not specified Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female	Date of first positive specimen collection (MM/DD/YYYY): ____/____/____ <input type="checkbox"/> Unknown <input type="checkbox"/> N/A Did the patient develop pneumonia? <input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No Did the patient have any other COVID-19 related symptoms (ICU)?	Was the patient hospitalized? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If yes, admission date 1 ____/____/____ (MM/DD/YYYY) If yes, discharge date 1 ____/____/____ (MM/DD/YYYY) Was the patient admitted to an intensive care unit (ICU)?
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

“When a provider orders a COVID 19 test (based on suspicion of disease) we ask that they complete the PUI form and fax it to the local health department. At that point it gets transcribed into a REDcap database so that we can track testing and results.” – State Public Health official

Telemedicine, Patient Registries @ Center

Doctors and Patients Turn to Telemedicine in the Coronavirus Outbreak

The use of virtual visits climbs as a way of safely treating patients and containing spread of the infection at hospitals, clinics and medical offices.



Dr. Meeta Shah, an emergency room doctor taking video calls at Rush University

BIOMEDICAL RESEARCH PROTOCOL

Protocol Title:

Longitudinal, Observational Registry of Persons Under Investigation for SARS-CoV2: The RUSH-COVID-19 Study

Principal Investigator:

Bala N. Hota, MD; Professor of Medicine (Internal Medicine), Rush University. Bala_Hota@rush.edu

Version Date: March 8, 2020

evidation

Evidation on behalf of Heartline

The HEARTLINE Study is a research study, from Johnson & Johnson in collaboration with Apple, to analyze the impact of Apple Watch® on the early detection and diagnosis of atrial fibrillation (AFib), and the potential to improve outcomes including the prevention of stroke.

[Read less](#)

Research

Open Data as Infrastructure

in 2015

\$11,117,003

Ophthalmology

Total payments

Provider's Services at a Glance, 2015

Types of services provided by

Category	Total reimbursed by Medicare	Percent of total reimbursements by Medicare
Drugs	\$9,058,512	81.5%
Surgeries and procedures	\$968,328	8.7%
Exams and medical services	\$883,228	7.9%
Evaluation and management	\$141,303	1.3%
Other	\$23,153	0.2%
Imaging tests	\$2,930	<0.1%

Note: Category totals may not add up to a provider's total payments because information about a provider's specific services to fewer than 11 Medicare patients is suppressed by Medicare.

Provider's Services in Detail, 2015

Service performed on more than 10 patients:

Procedure	Number performed	Number of Medicare patients	Average Medicare reimbursement per procedure	Total Medicare payments for procedure
Injection, ranibizumab, 0.1 mg	28,760	722	\$307.90	\$8,855,204
Injection of drug into eye	5,880	924	\$89.81	\$528,083

Select a year for which to view in vs. out of network spend for the selected ACO(s).

Year2018

Network Utilization

Out of Network

In Network

% In vs. Out-of-Network Spend, Overall

ACO	In Network	Out of Network
Collaborative Care of Florida LLC (A1539/..)	25%	75%
National Benchmark	26%	74%
Piedmont Clinic ACO LLC (A3250/A02768)	9%	91%

ACO: MaineHealth Accountable Care Organization (A1290/A14573)

Part A % In-Network Spend: 60%

Part B % In-Network Spend: 62%

Shining Light on What Works

Calling All Innovators – Health Care Innovation Challenge Open for Great Ideas

Medicare diabetes prevention program helps a few hundred instead of hundreds of thousands

POLITICO

58%
OF NEW
CASES OF
TYPE 2
DIABETES
CAN BE PREVENTED
THROUGH PROGRAMS LIKE THE
YMCA'S DIABETES
PREVENTION PROGRAM

the ymca

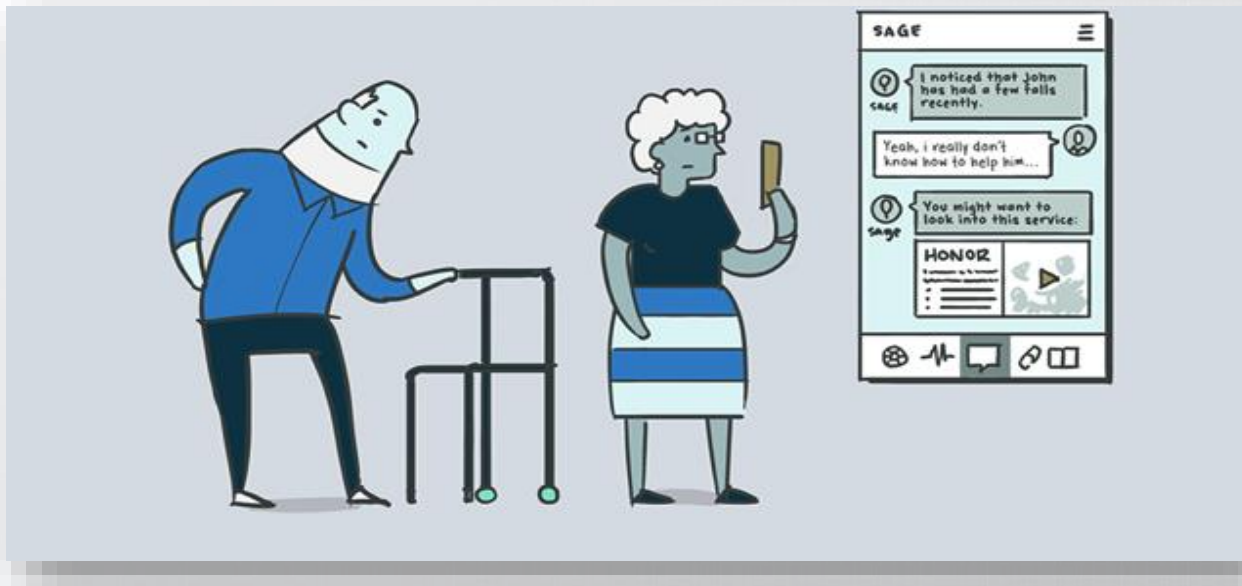
Source: National Institutes of Health Diabetes Prevention Program Trial (2002)

ymca.net/diabetes

“...statistically significant gross savings...totaling \$2,650.” - CMS Actuary on a ~5,600 beneficiary trial, resulting in national availability in 2018

Code	2018	Q1 2019
G9890	124	15
G9891	220	363
G9873	38	127
G9874	32	73
G9878	28	14
G9879	27	-
G9875	21	219
G9880	-	43
G9876	-	15
G9881	-	21
Patients Treated:		
	202	396

Atop the Agenda: Supplier or Fiduciary?



CMS proposes to include consumer “gainsharing” payments in MLR calculations when one chooses lower-cost, higher-value providers, starting in 2020; possible catalyst for consumer decision support applications.

Medicare's Blue Button apps



Project Seamless

Welcome to your everything-health guide, built just for you. Our new mobile experience organizes your health care, connects you to a dedicated care team and offers personal insights to help you live the best life possible.

[Read more](#)

[Research](#)

[Appointments](#)

[Organize & Share](#)

[Website](#) [Email](#)

[\(855\) 895-1158](#)

[Terms of service](#) [Privacy Policy](#)



Humana

Humana's Rx Calculator uses your Medicare prescription data to quickly determine annual drug and premium costs when shopping for a Humana plan.

[Read more](#)

[Find Plans](#)

[Organize & Share](#)

[Website](#) [Email](#)

[Not provided](#)

[Terms of service](#) [Privacy Policy](#)



Prominence Health Plan

Make shopping for Medicare plans easier by using your previous doctors, pharmacies and Medicare prescription history to help inform and expedite your Medicare health plan shopping experience with Prominence.

[Read more](#)

[Find Plans](#)

[Organize & Share](#)

[Website](#) [Email](#)

[\(833\) 630-3902](#)

[Terms of service](#) [Privacy Policy](#)



Rush University Medical Center

The MyRush Mobile is a platform for keeping patients connected to and engaged with Rush Health Network in order to easily and collaboratively manage their health and wellness.

[Read more](#)

[Symptoms](#)

[Appointments](#)

[Organize & Share](#)

[Website](#) [Email](#)

[\(312\) 563-6600](#)

[Terms of service](#) [Privacy Policy](#)

The “Consumer-First” Delivery Reform Era

My Take on the Rules

1

**Payers “Up First” to Publish,
Demand Standardized Data**

2

**“Bulk” Requirements for Payer /
Providers Extend Infrastructure**

3

**“All Data Elements” to Consumer
Apps w/ IP Provisions**

4

**Balancing Privacy w/ a Consumer’s
Right of Access**

5

**Open Data for Price, Quality
Transparency**

A Leadership Moment

Mount Sinai Accelerates Data-driven
Discovery and Patient Care with New
Chief Data Officer Role



Mount Sinai Accelerates Data-driven Discovery and Patient Care with New Chief
Data Officer Role

#1) Payers “Up First,” Push Demand Signal

Institutions that support health records on iPhone (beta)

A growing list of healthcare institutions support health records on iPhone, enabling you to view important data such as immunizations, lab results, medications, and vitals directly in the Health app.

We’re working with more hospitals and clinics to support health records. Health institutions might have multiple hospitals and clinics that support health records, which are listed in the Health app.

Richard M. Adams, DPM - Family Foot Care (Texas)

<https://www.richardadamsdpm.com>

Community Health Systems (nationwide) - including AllianceHealth (OK), Bayfront Health (FL), Commonwealth Health (PA), Lutheran Health Network (IN), Merit Health (MO), Northwest Health (AR), Physicians Regional (FL), Tennova Healthcare (TN)

<http://www.chs.net>

Cone Health (North Carolina)

<https://www.conehealth.com>



CMS envisions payers to drive “demand signal” by noting, “...there will be downstream impacts from the Patient Access API requirements on the relationship between payers and their contracted health care providers. It will be up to each payer's discretion to address whether this information needs to be included in contracts with providers.”

TECH

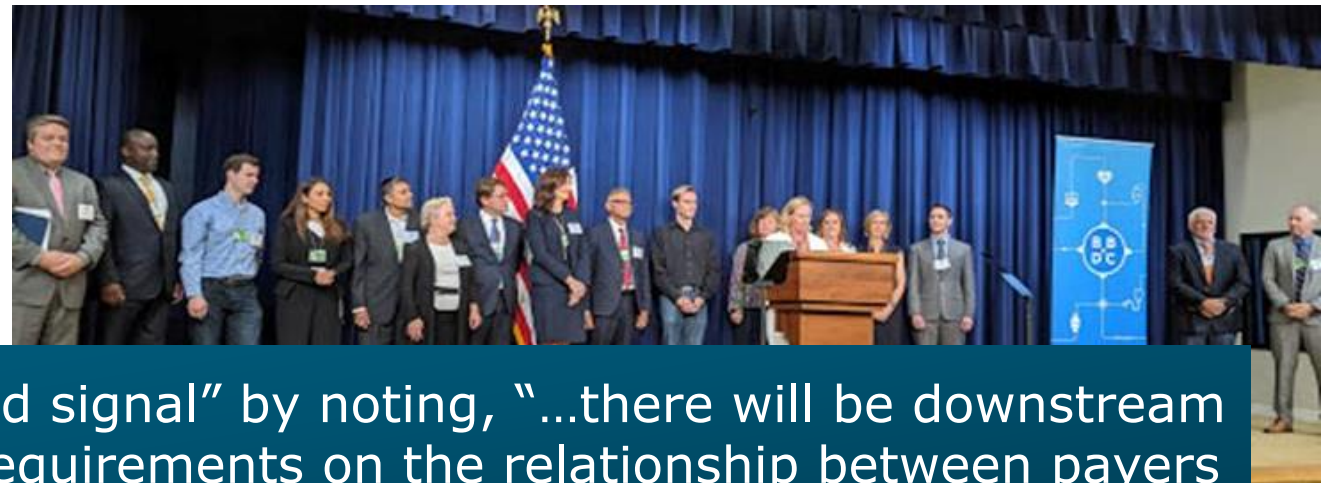
Big Tech is teaming up with health care companies to make it easier for you to see your health history

PUBLISHED TUE, JUL 30 2019 • 5:05 PM EDT | UPDATED AN HOUR AGO



Christina Farr
@CHRISSYFARR

SHARE



#2) Extending FHIR for “Bulk” Applications



The Standard

The Official Blog of Health Level Seven® International

Leading Healthcare Stakeholders Commit to Real-World Testing of HL7’s FHIR Bulk Data Implementation Guide

Aug 7, 2019 10:38:22 AM / by Charles Jaffe, MD, PhD



Tweet



Share



Like 0



Share

On July 30, as part of the second Blue Button Developers Conference at the White House, a broad coalition of health systems, health plans, and other health IT stakeholders committed to real-world testing of the soon to be published HL7® FHIR® Bulk Data implementation guide (IG).

The announcement was made on stage by HL7 International CEO Dr. Charles Jaffe, later joined by Steven Posnack from [ONC](#) and Dr. Shafiq Rab of Rush University System for Health. More than 20 early adopters who have committed to advance this important use of [HL7 FHIR](#) were identified.

Source: <https://blog.hl7.org/leading-healthcare-stakeholders-commit-to-real-world-testing-of-hl7-fhir-bulk-data-implementation-guide>

John X. Doe
Male, 66 year old, 7/12/1953
MRN: 8000595
Bed: A7N-AN747-A
Cur Location: OSTEO-X-RAY
Code: Not on file (no ACP docs)

Isolation: None
(1) Admission Med Rec Not Complete
Allergies: Sulfu (Sulfonamide Antibiotics)

Patient Class: Inpatient
Accom Code: Private
Current Time in Obs: None
Primary Cvg: MEDICARE/PART B...

CrCl: No successful lab value found.

ADMITTED: 11/8/2019 (31 D)
No active principal problem
Hanak, Michael Anthony, MD
Attending

Ht: 175.3 cm (5' 9.02")
Last Wt: 80.3 kg (177 lb 0.5 oz) >7 days
Dosing Wt: —
BMI: 26.13 >1 day
NO NEW RESULTS, LAST 36H

ACTIVE MEDS (2)
PRN (2)

Rush - CMS Data at Point of Care

Diagnosis

SERVICE DATE	DIAGNOSIS	DIAGNOSIS TYPE
2014-09-01	1. LOC OSTEOARTH NOS-L/LEG (71534)	The single medical diagnosis that is most relevant to the patient's chief complaint or need for treatment. (principal)
2014-08-01	1. PREMATURE BEATS NEC (42769) 2. ATRIAL PREMATURE BEATS (42741)	The single medical diagnosis that is most relevant to the patient's chief complaint or need for treatment. (principal)
2014-09-01	1. COR ARTH UNSP VSL NTV/GIT (41400)	The single medical diagnosis that is most relevant to the patient's chief complaint or need for treatment. (principal)
2014-12-01	1. ATRIAL FIBRILLATION (42731) 2. PREMATURE BEATS NEC (42769)	The single medical diagnosis that is most relevant to the patient's chief complaint or need for treatment. (principal)
2014-12-01	1. OPN ANGL BRDRLN LO RISK (36501)	The single medical diagnosis that is most relevant to the patient's chief complaint or need for treatment. (principal)

Primary Visit Coverage

Payer	Plan	Sponsor Code	Group Number	Group Name
MEDICARE	PART B - MEDICARE	907		

Primary Visit Coverage Subscriber

ID	Name	SSN	Address
20140000007475	JOHNSON, CMS	xxx-xx-9999	1788 Tanglewood Lane Naperville, IL 60440

#3) A “Roku Moment” for Health Records

2015 Edition Common Clinical Data Set

Patient name
Sex
Date of birth
Race
Ethnicity
Preferred language
Smoking status
Problems
Medications
Medication allergies
Laboratory tests
Laboratory results
Vital signs
Procedures
Care team members
Immunizations
Unique Device identifiers
Assessment and Plan of Treatment
Goals
Health concerns

Public Channel / Preview and Publish

Manage My Channels | Preview and Publish

Common Clinical Data Set

Cancer Data Set

Open Notes

Imaging

Preview

We recommend previewing your channel. You can preview your channel by clicking the "Preview" button below.

Roku Developers

Interactive Care Plan

Discharge Notification

Net Pricing (Network Status)

Publish Your Public Channel

Once your channel set up is complete, click the "Publish" button below.

✓ Properties

Opportunity for industry leadership on how to meet EHI Export in standards-based, IP-free method; new “content & manner” clause allows EHR vendors to negotiate licensing agreements for proprietary APIs within 3 years, but requires a standardized alternative as backstop

#4) Transformation @ Pace of Trust



Popular

Latest

The Atlantic

TECHNOLOGY

Google's Totally Creepy, Totally Legal Health-Data Harvesting

Google is an emerging health-care juggernaut, and privacy laws weren't written to keep up.

SIDNEY FUSSELL NOVEMBER 14, 2019

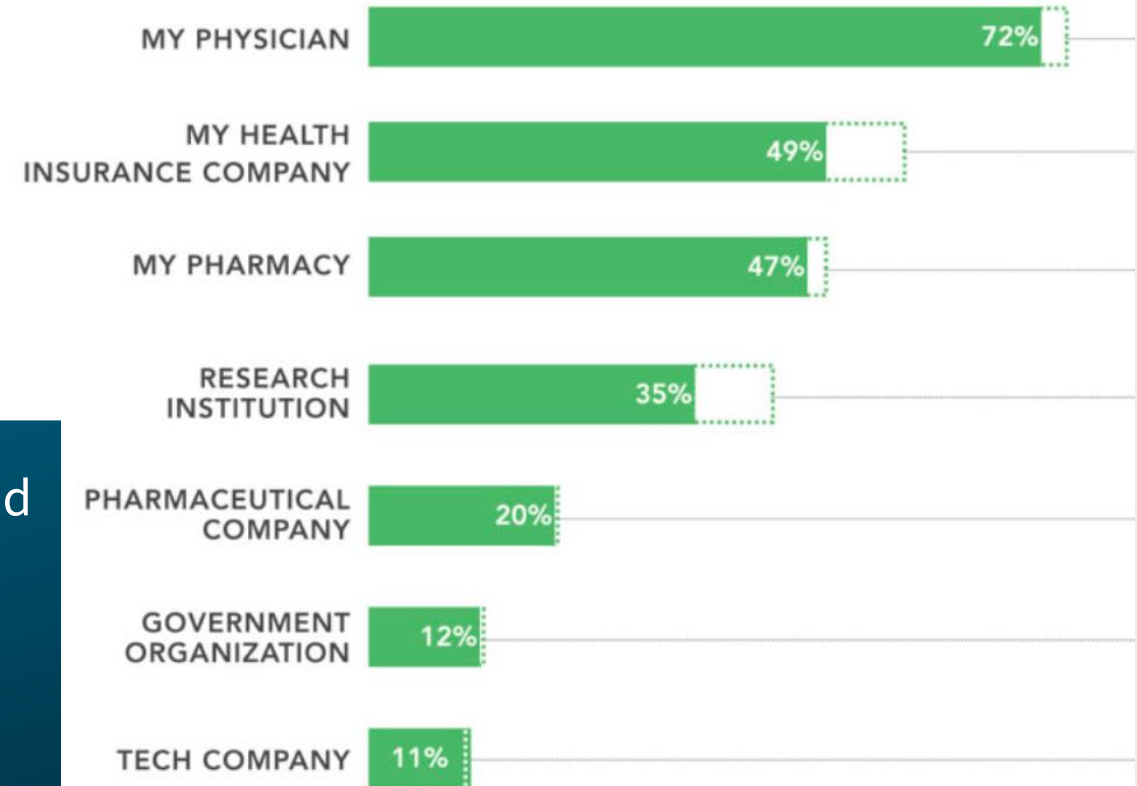


“Beyond HIPAA:” Contractually bind third-party vendors and contractors to our privacy policies and prohibit use or disclosure of user information (including de-identified, anonymized or pseudo-nymized data) for any undisclosed purposes without express consent from the user.

CONSUMER SENTIMENT ON DATA SHARING AND SECURITY

By entity, 2017-2018

WILLINGNESS TO SHARE HEALTH DATA WITH ENTITY*



#5) Open Data for Physician Ratings

Provider Scorecard

Aneesh Chopra, MD

Orthopedic Surgeon
NPI: 1750388741







CareJourney Medical
Washington-Arlington-Alexandria-DC-VA-MD-WV CBSA

170 / 243

i Patients with Episodes / Patients Seen

Cost Analytics *i*

Performance Index: 2/5

Episode Type	Volume		Trend <i>i</i>	Cost		CareJourney Average O/E Ratio <i>i</i>
	Relative to Benchmark			Relative to Benchmark		
Major Hip and Knee Replacement		128 38	↑		\$23,851 \$20,366	1.17
Hip and Knee Except Joint		22 15	↓		\$51,937 \$33,093	1.56
Major Reattachment of Limb		22 24	↑		\$21,840 \$20,646	0.96
Total		170 77	↑		\$27,506 \$22,502	1.20

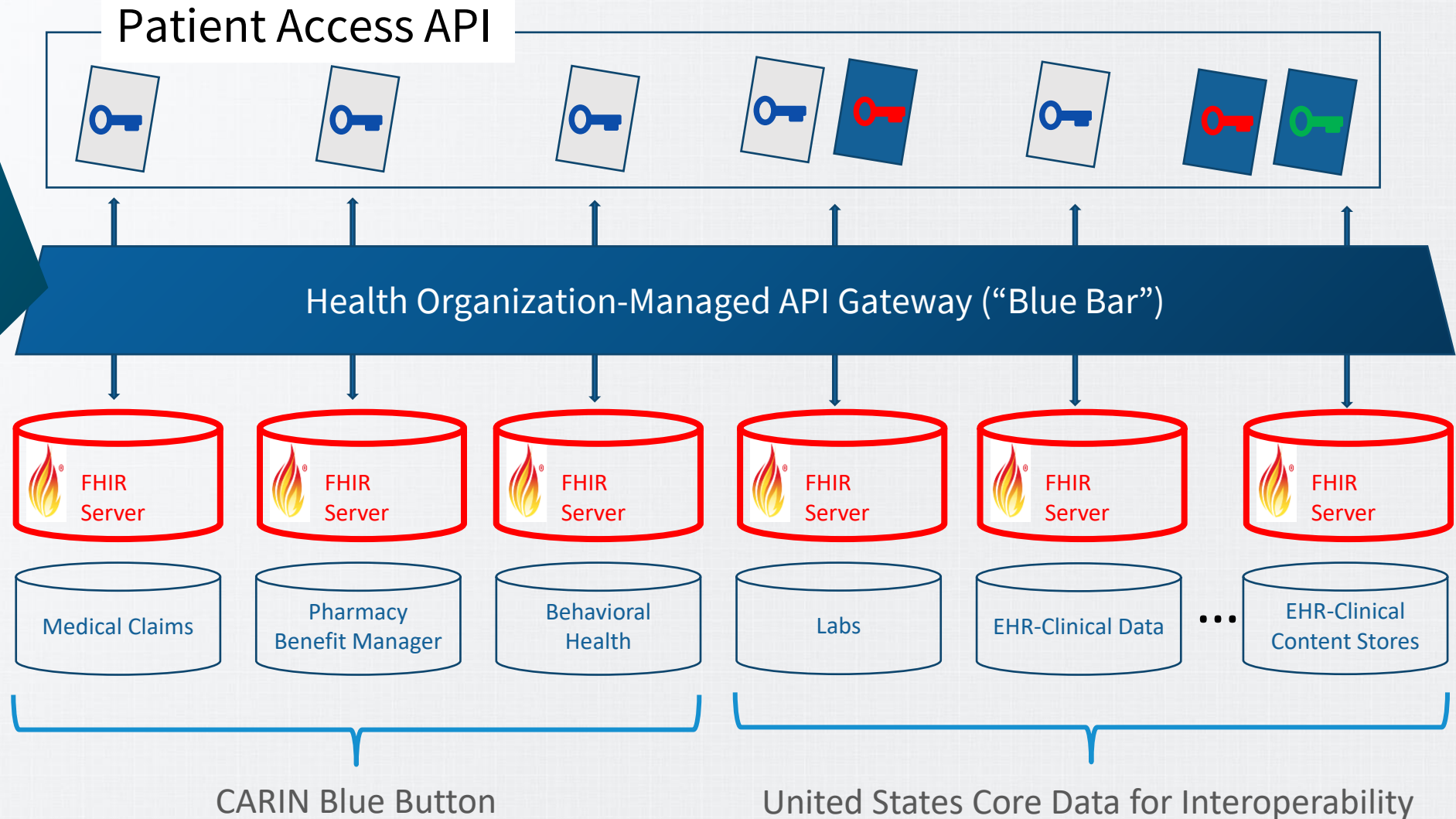
Quality Analytics *i*

Outcome Index: 2/5

Outcome Measures	Eligible Patients		Trend <i>i</i>	Rate		Percentile
	Relative to Benchmark			Relative to Benchmark		
Hospital Acquired Conditions		128 38	↑		10% 12%	0.46
Mortalities		22 15	↓		11% 25%	0.43
Readmissions		22 24	↑		22% 25%	0.69

Importance of Data “De-Coupling” from EHR

ONC embraces “de-coupling” data access from EHR: “Certified API Developers must grant API Information Sources (i.e., health care organizations) the independent ability to permit API Users to interact with the certified API technology deployed by the API Information Source.”



The Era of “Substitutable” Apps

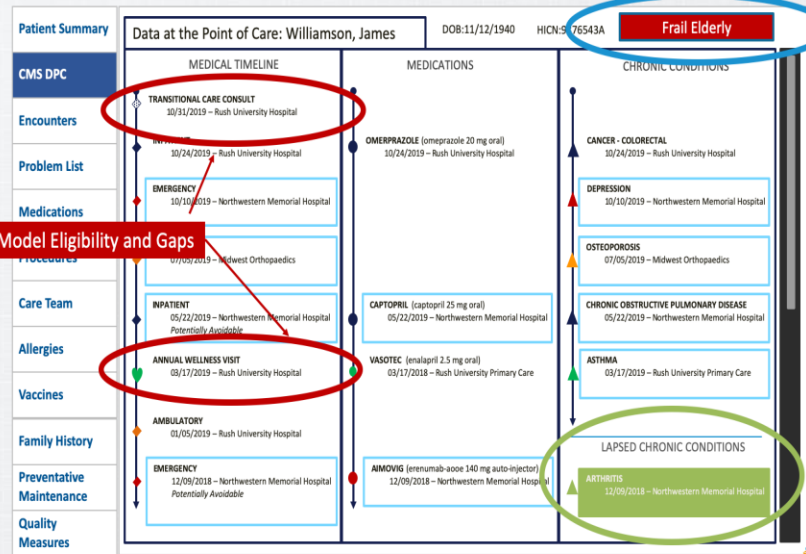
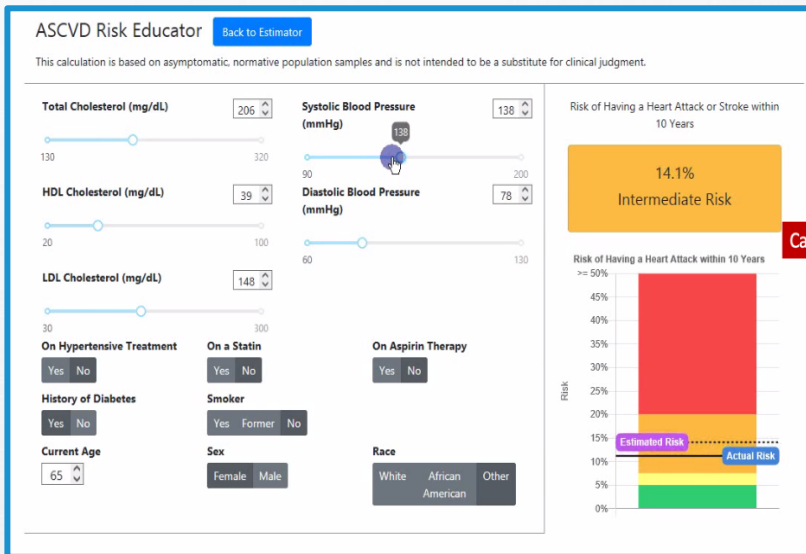
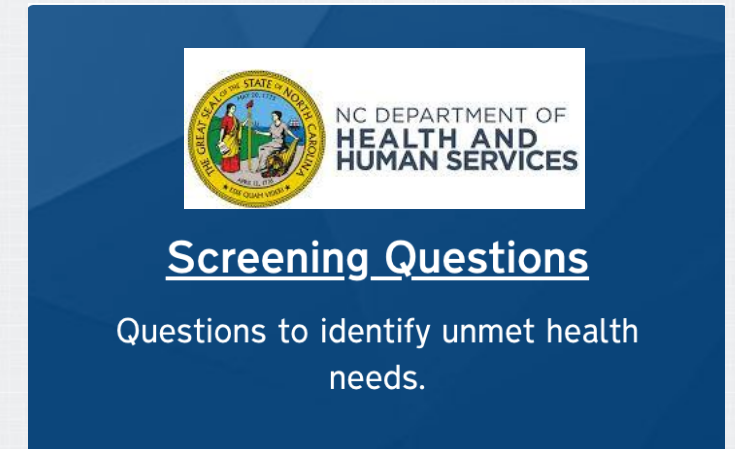
“Active Surveillance” Risk Calculators



Payer “Data @ Point of Care”



SDOH Screening Assessment

The Health Screening app interface, showing a list of screening questions with Yes/No/Other options. The questions cover various health and social determinants of health (SDOH) topics.