Session 3: Emerging Data Strategies for Supporting Shared Decision-making Between Providers and Patients

Presenters:

Subject Matter Experts

- **Abhinav Shashank** – Co-Founder and Chief Executive Officer, Innovaccer
- **David C. Kendrick, MD, MPH, FACP** – Chief Executive Officer, MyHealth Access Network, Inc., and Chair, Department of Medical Informatics, University of Oklahoma
- **Charles DeShazer, MD** – Physician Executive, Healthcare Innovator, and Former Chief Quality Officer, The Cigna Group
- **Thomas H. Lee, MD, MSc** – Chief Medical Officer, Press Ganey Associates, Inc.

Session 3: Emerging Data Strategies for Supporting Shared Decision-making Between Providers and Patients

Abhinav Shashank

Co-Founder and Chief Executive Officer,
Innovaccer

innovaccer

Integrating Data-Driven Tools Into Physician Workflow

Abhinav Shashank, CEO & Cofounder, Innovaccer

Why Innovaccer?

- Built Innovaccer to solve healthcare's greatest structural challenge: disconnected data.
- Led the creation of the Data Activation Platform (DAP) used by over 1,600 hospitals and clinics, now launched Gravity by Innovaccer™, the intelligence platform for healthcare.
- Passionate about building a healthcare system that is data-rich, workflow-integrated, and deeply human.

The Core Belief – Data Alone Isn’t Enough

Shared decision-making isn’t just about access to data, it’s about access to the right information at the right moment in the clinical workflow.

Healthcare generates **30%** of the world’s data but little of it is actionable at the point of care.

For providers and patients to truly collaborate, data must be curated, contextualized, and consumable.

This is what Gravity by Innovaccer and our data activation approach enables.

What We've Learned

OVERLAY APPROACH

Instead of replacing EHRs or CRMs, we overlay copilots and agents on top of them.

Aggregate data across systems of record (EHR, claims, labs, CRM, HR, financial, SDoH).

Harmonize data into longitudinal patient records.

KEY PRINCIPLES

Tools must be embedded in clinician workflows (no extra portals).

Must provide contextual nudges (not more alerts).

Must be flexible to work across any tech stack, any care or setting.

Strategies That Work

Full Data Context

Every decision must be rooted in a complete patient picture, clinical, social, behavioral.

Zero Workflow Disruption

Insights appear natively in tools already used, like Epic, Oracle Health (Cerner), or even Outlook.

System-Agnostic Architecture

The platform connects to multiple systems of record, creating an overlay rather than adding another silo.

Integrated Feedback Loops

Use AI to learn from clinician choices to improve suggestions over time.

Enable Policy Propagation

Embed evidence-based guidelines and regulatory priorities into point-of-care decisioning.

Myths vs Facts

MYTH	FACT
More data = better decisions.	Only curated context supports good decisions.
Clinicians don’t want tech.	They want tech that saves time and supports care.
Integration takes years.	With overlays and standards, it takes weeks, not years.
Shared decision-making isn’t measurable.	It drives measurable outcomes in engagement, adherence, and cost.

Real-World Outcomes

Organization	Outcome
Orlando Health	**86%** engagement rate → **~3,000** screenings → **$907K** revenue boost
Adventist HealthCare	**15.8%** fewer readmissions → **$674K** cost avoidance + **$1.8M** MSSP savings
Central Maine Medical Center	**23%** drop in 30-day readmissions → **$3M** value generation across value-based contracts
PSW a population health company	**12%** fewer ED visits (UTI-related) → **16.7%** SNF use ↓ → **8.1%** shorter LOS
Banner Health	**$4M** saved via vendor rationalization → **70%** lower IT spend
Texas Health Plan (Senior Care)	**14%** HCC gap closure improvement → **1,673** RAF pts gained → **10,497** codes recaptured

What We Need from Policymakers

Drive True Interoperability

Advance CMS Aligned Networks, and other data sharing networks. Make it easier for platforms to aggregate data across systems.

Incentivize Contextual Tools

Move from rewarding "data capture" to rewarding actionable insights delivered in real time. Data shouldn't be a moat for anyone.

Support Overlays, Not Just Overhauls

Encourage the use of platforms that sit atop existing infrastructure, reduce tech fatigue, limit unwanted system of record lock-in for physicians and providers.

Key Takeaways

To truly empower patients, we must first empower physicians, clinicians, and providers, with the right data, at the right time, in the right place.

Shared decision-making needs activated data. Curated, contextual, and in the workflow.

Integration is possible and scalable. Our customers are doing it today.

We need regulatory tailwinds to accelerate adoption and ensure equitable access.


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David C. Kendrick, MD, MPH, FACP

Chief Executive Officer,
MyHealth Access Network, Inc., and
Chair, Department of Medical Informatics,
University of Oklahoma

Architecting a Consumer-Centric Health System:

Health Data Utilities as Critical National Health Infrastructure

David C. Kendrick, MD, MPH

Chair, Department of Medical Informatics

University of Oklahoma School of Community Medicine

Agenda

Part 1: The Ante . . . Required Infrastructure

A. Integrating Data-Driven Tools Into Physician Workflow

   Question 1: *What are approaches that can be taken to integrate data-driven tools into the physician workflow?*

B. Supporting Clinical Decision-making

   Question 2: *How can clinical support tools be used to promote enhanced communication between primary and specialty care providers?*

C. Data Innovations to Promote Shared Decision-making Between Providers and Patients

   Question 3: *What are data-driven strategies for providers to effectively implement shared decision-making?*

D. Measuring Improvements in Patient Engagement and Outcomes

   Question 4: ***What are approaches*** *to develop and implement measures of successful patient engagement and empowerment?*

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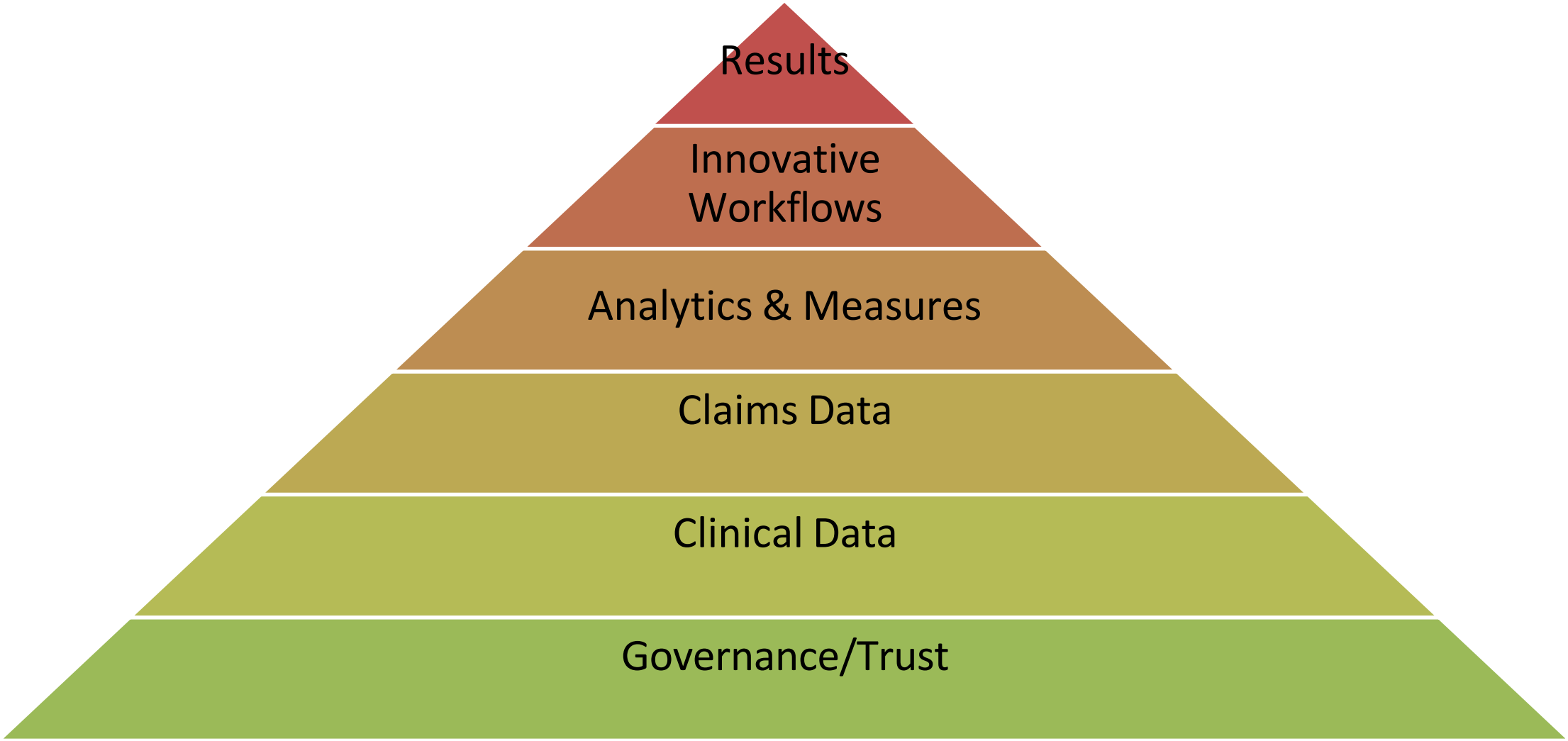
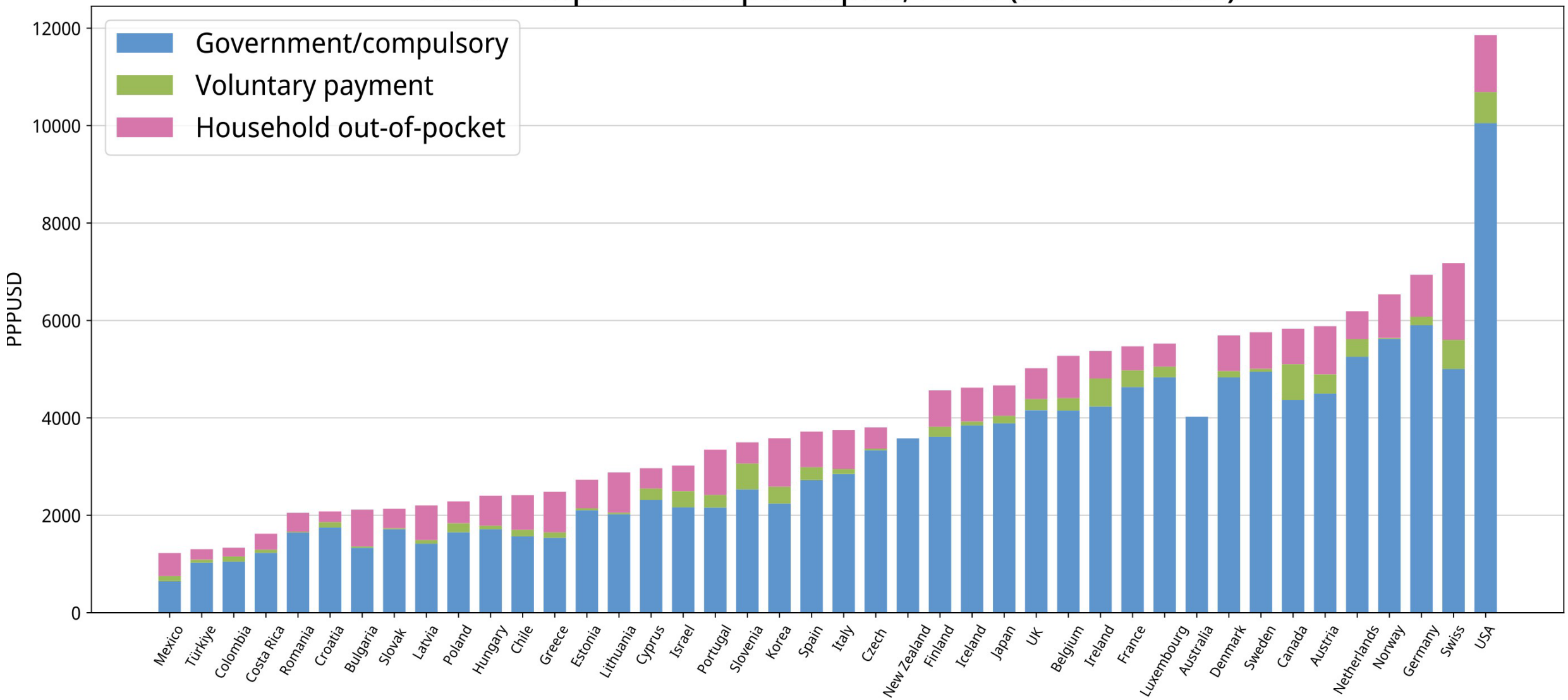
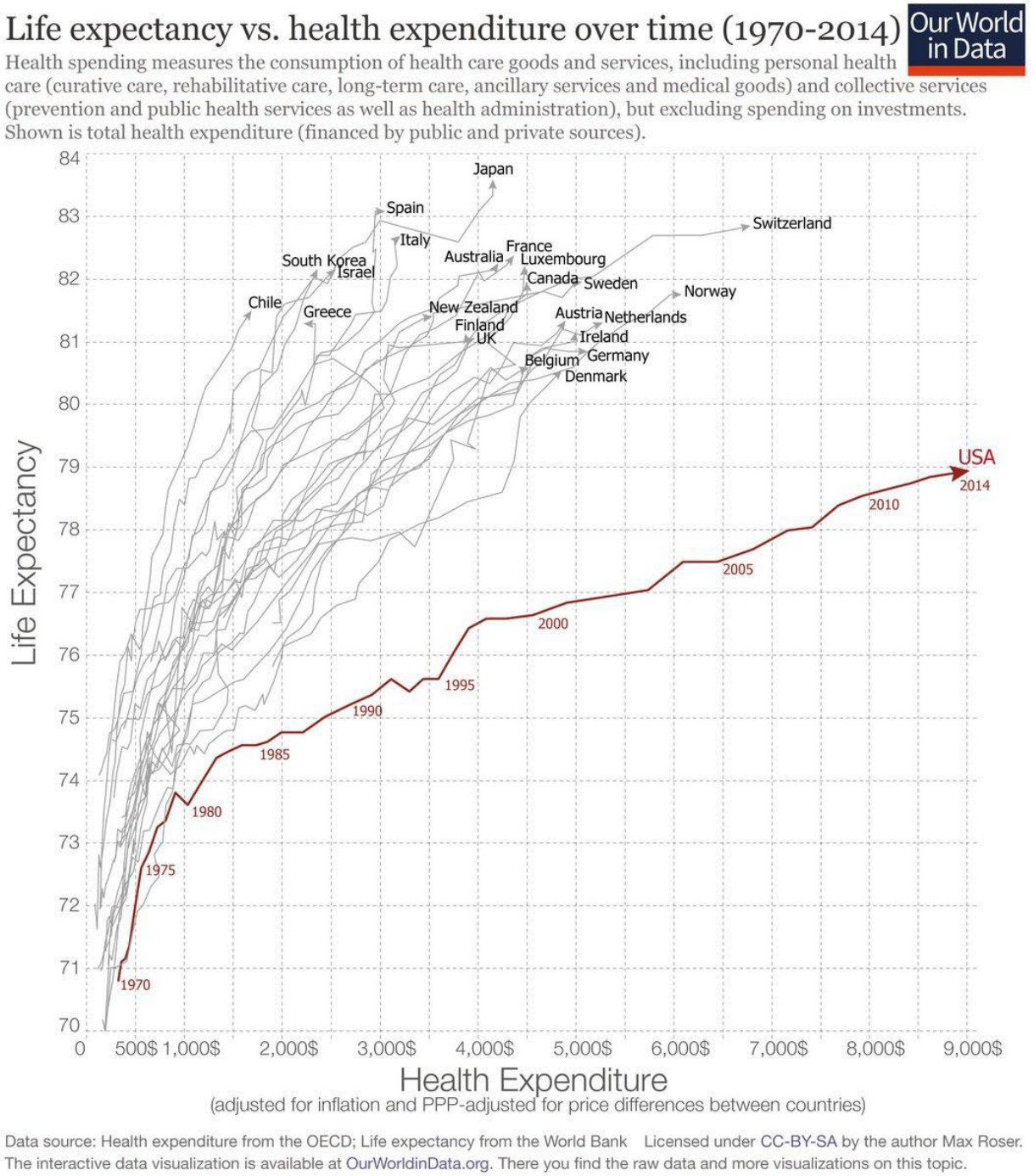
Critical National Health Infrastructure



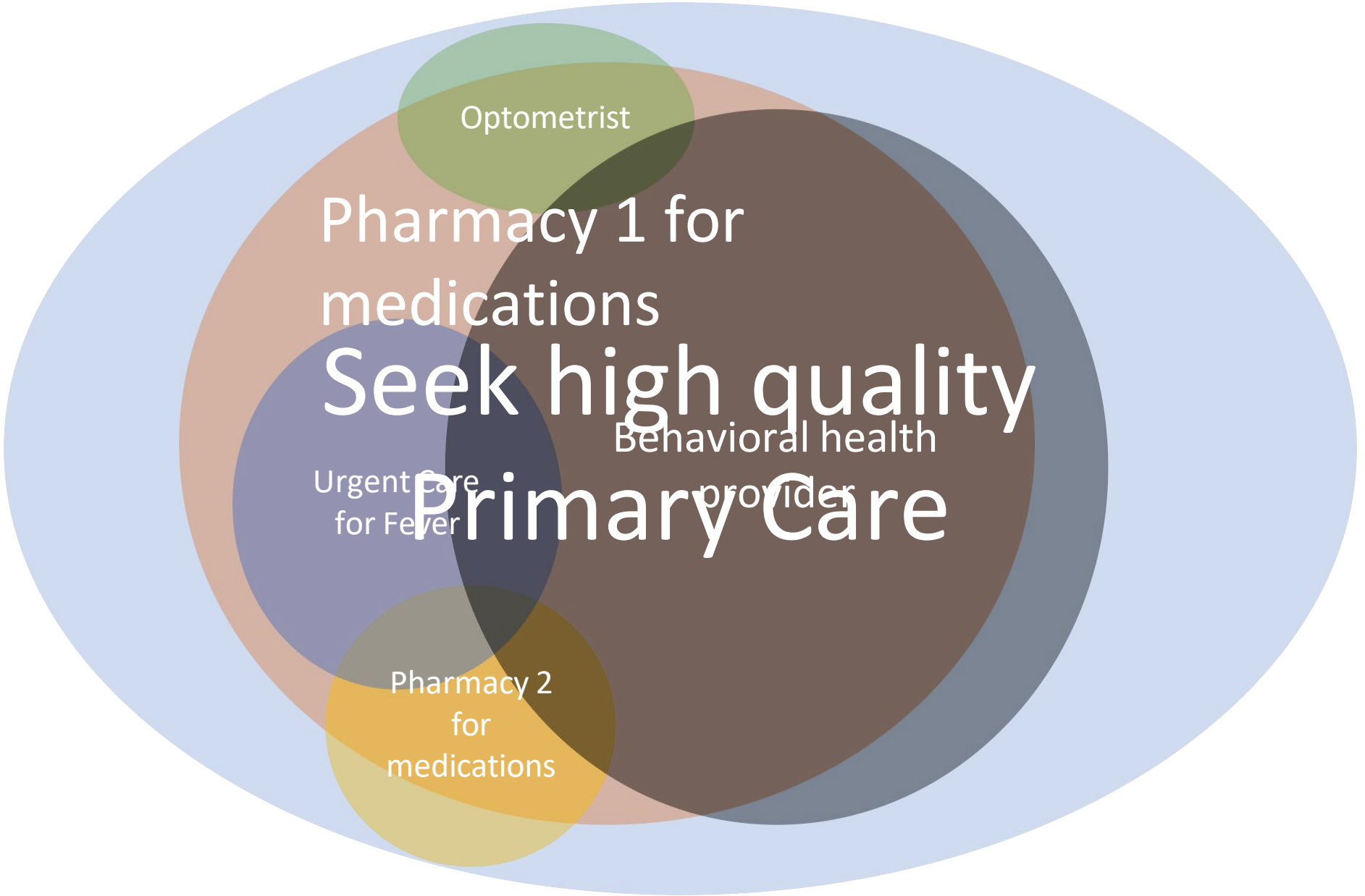

Health expenditure per capita, 2020 (OECD Health)
Government/compulsory
Voluntary payment
Household out-of-pocket
PPPUSD
12000
10000
8000
6000
4000
2000
0
Mexico
Türkiye
Colombia
Costa Rica
Romania
Croatia
Bulgaria
Slovak
Latvia
Poland
Hungary
Chile
Greece
Estonia
Lithuania
Cyprus
Israel
Portugal
Slovenia
Korea
Spain
Italy
Czech
New Zealand
Finland
Iceland
Japan
UK
Belgium
Ireland
France
Luxembourg
Australia
Denmark
Sweden
Canada
Austria
Netherlands
Norway
Germany
Swiss
USA

Are we getting what we're paying for?



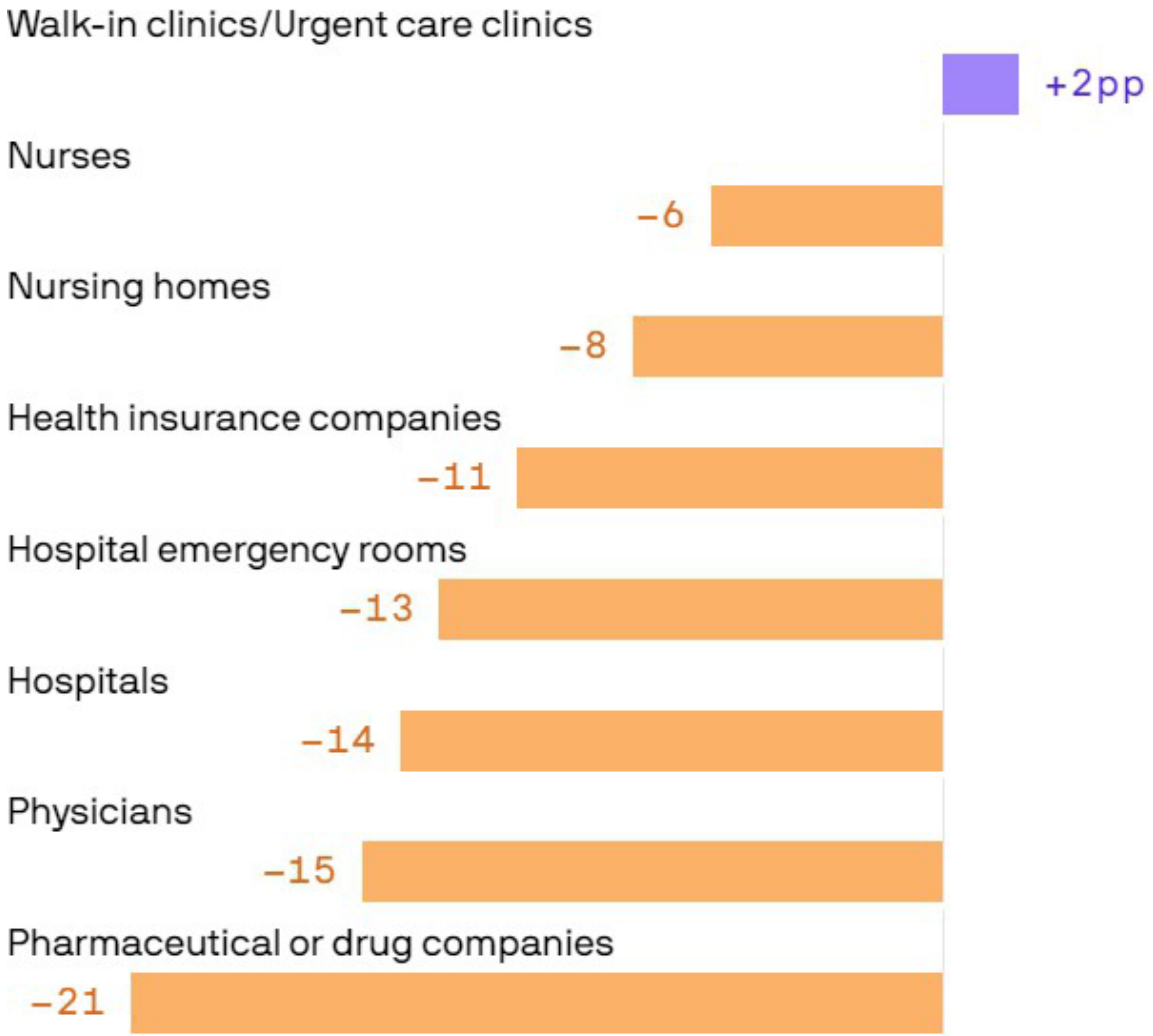
Many programs, common deliverables = Provider Burden

Many providers, same patient = PATIENT Burden



Change in share of U.S. adults who say healthcare players are providing excellent or good quality services

In percentage points; Survey of at least 1,000 U.S. adults in 2010 compared to 2023



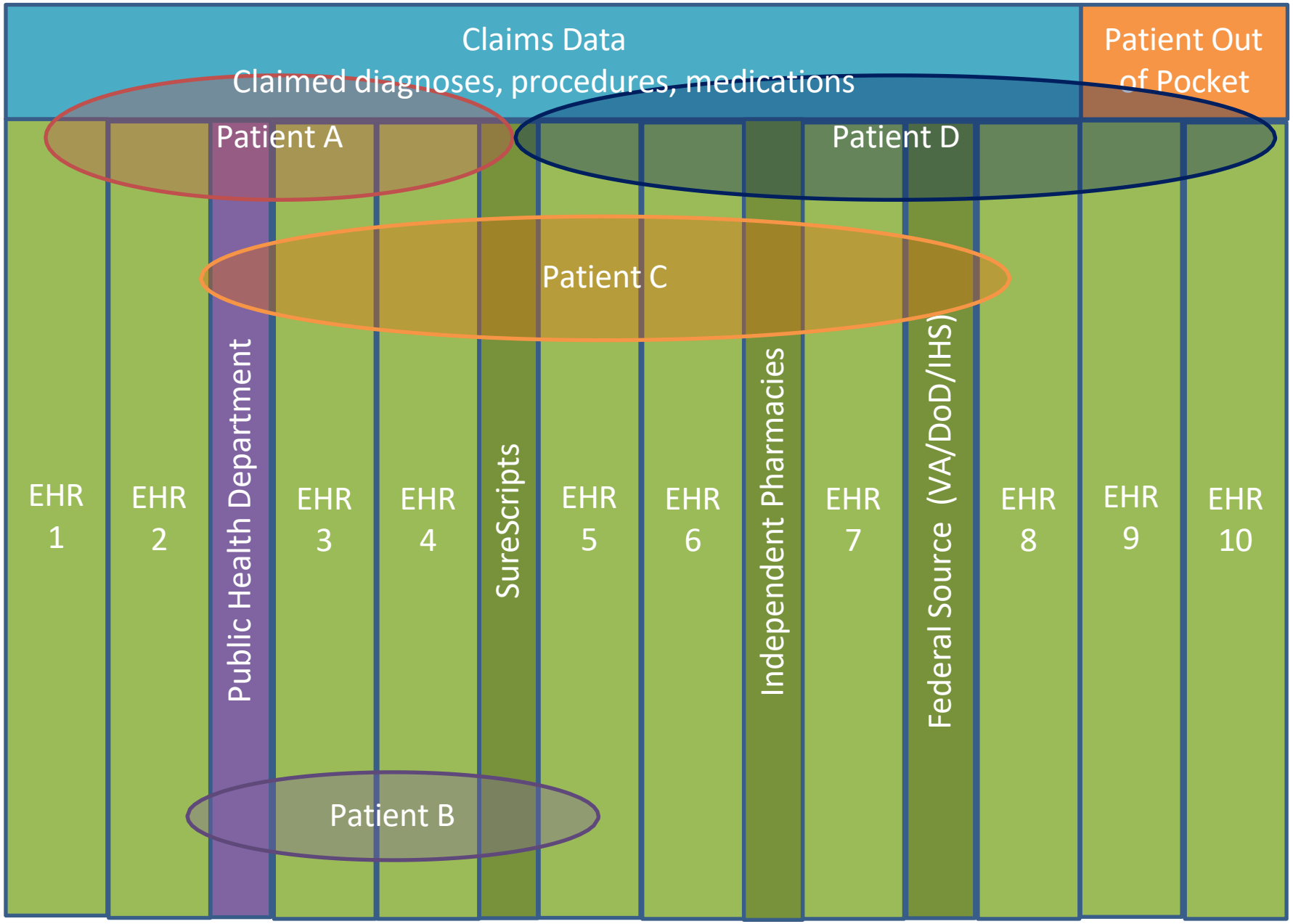
Data: Gallup; Note: 2010 wording was walk-in clinics. 2023 results are average of walk-in clinics and urgent care clinics.; Chart: Axios Visuals

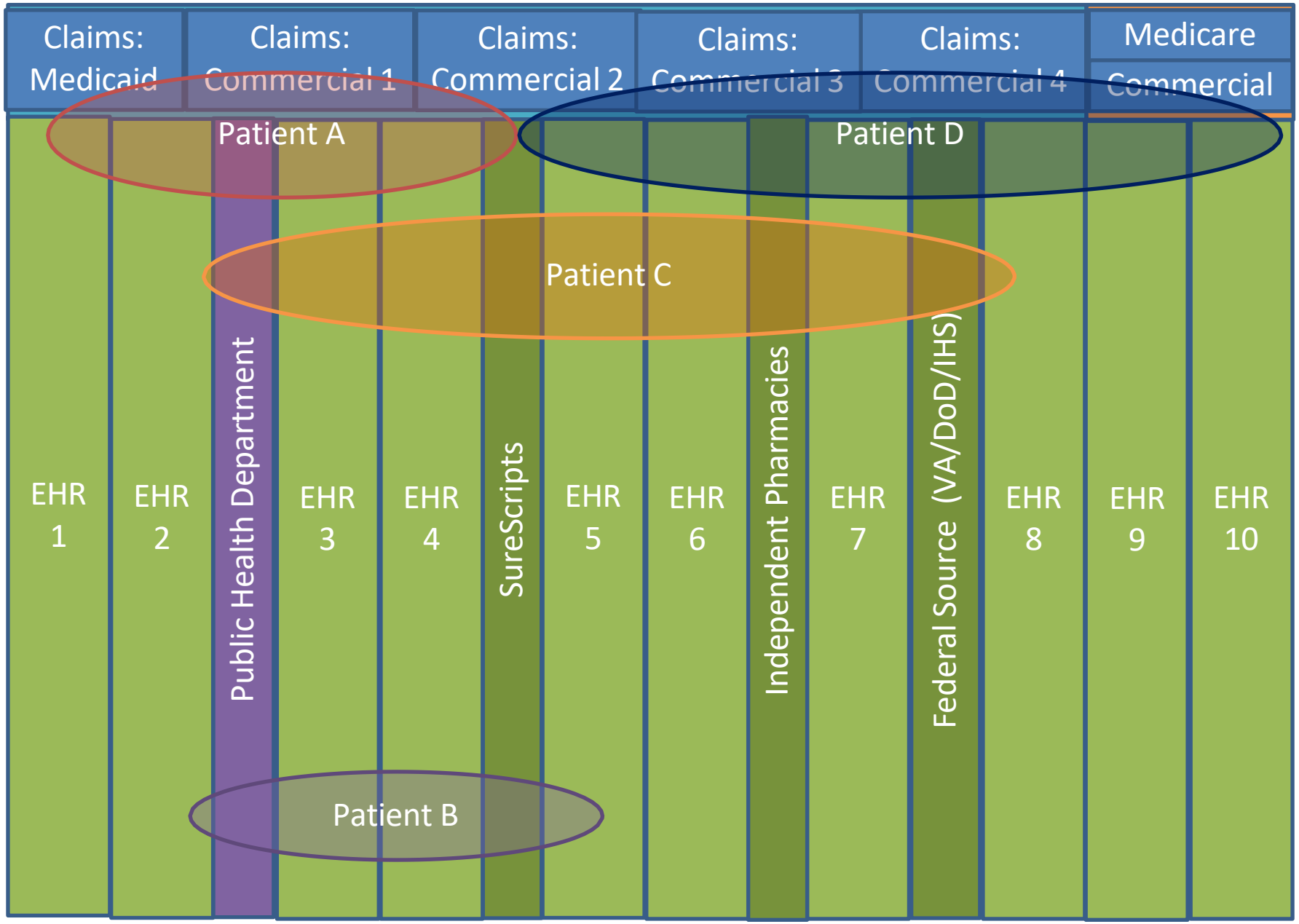
How Do Americans Try To Pay Their Medical Debt?

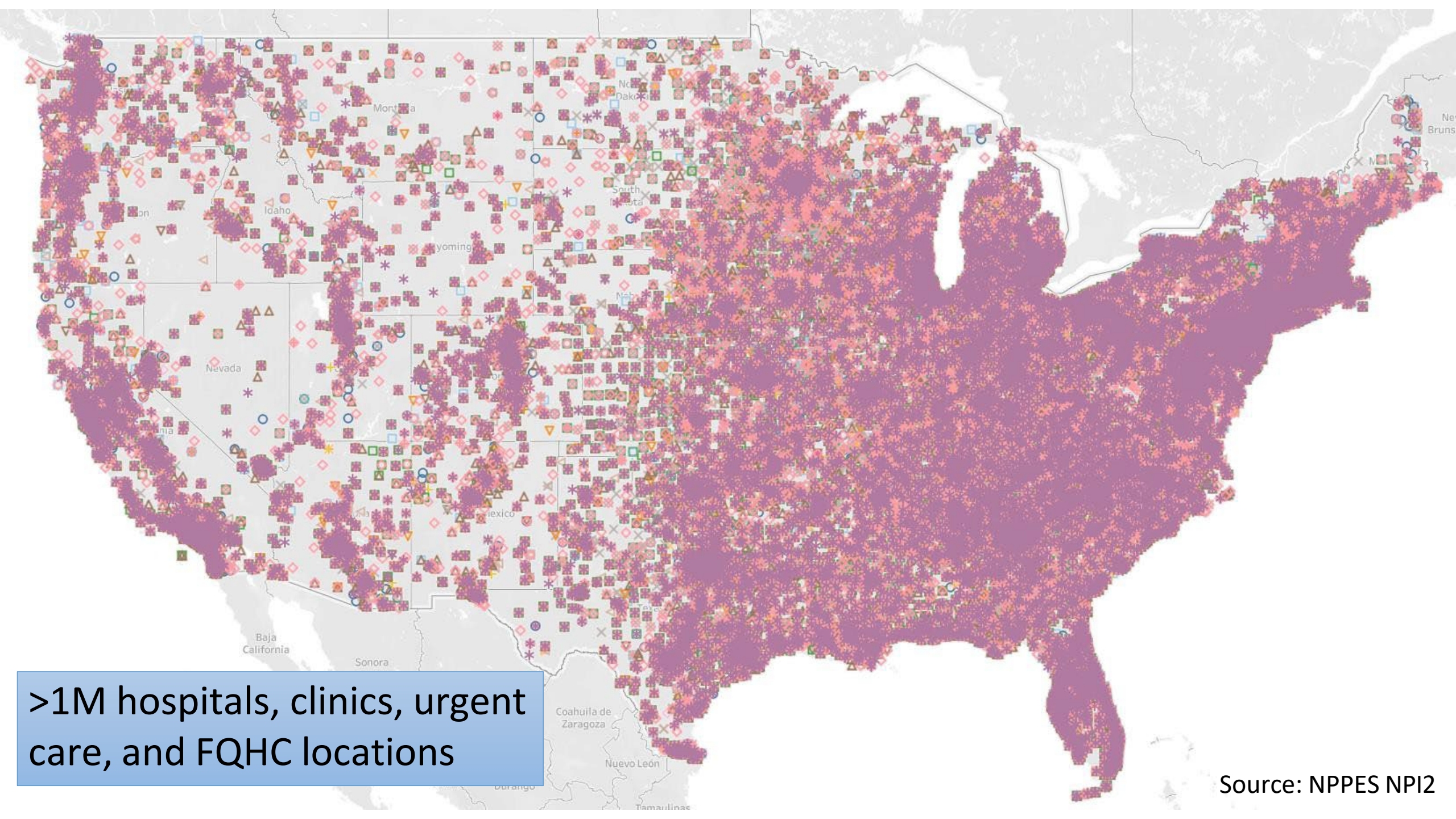
Actions Reported by Americans with Medical Debt Problems

SOURCE - KAISER FAMILY FOUNDATION, 2018

SingleCare


Claims Data
Claimed diagnoses, procedures, medications
Patient Out of Pocket
Patient A
Patient D
Patient C
Patient B
EHR 1
EHR 2
Public Health Department
EHR 3
EHR 4
SureScripts
EHR 5
EHR 6
Independent Pharmacies
EHR 7
Federal Source (VA/DoD/IHS)
EHR 8
EHR 9
EHR 10

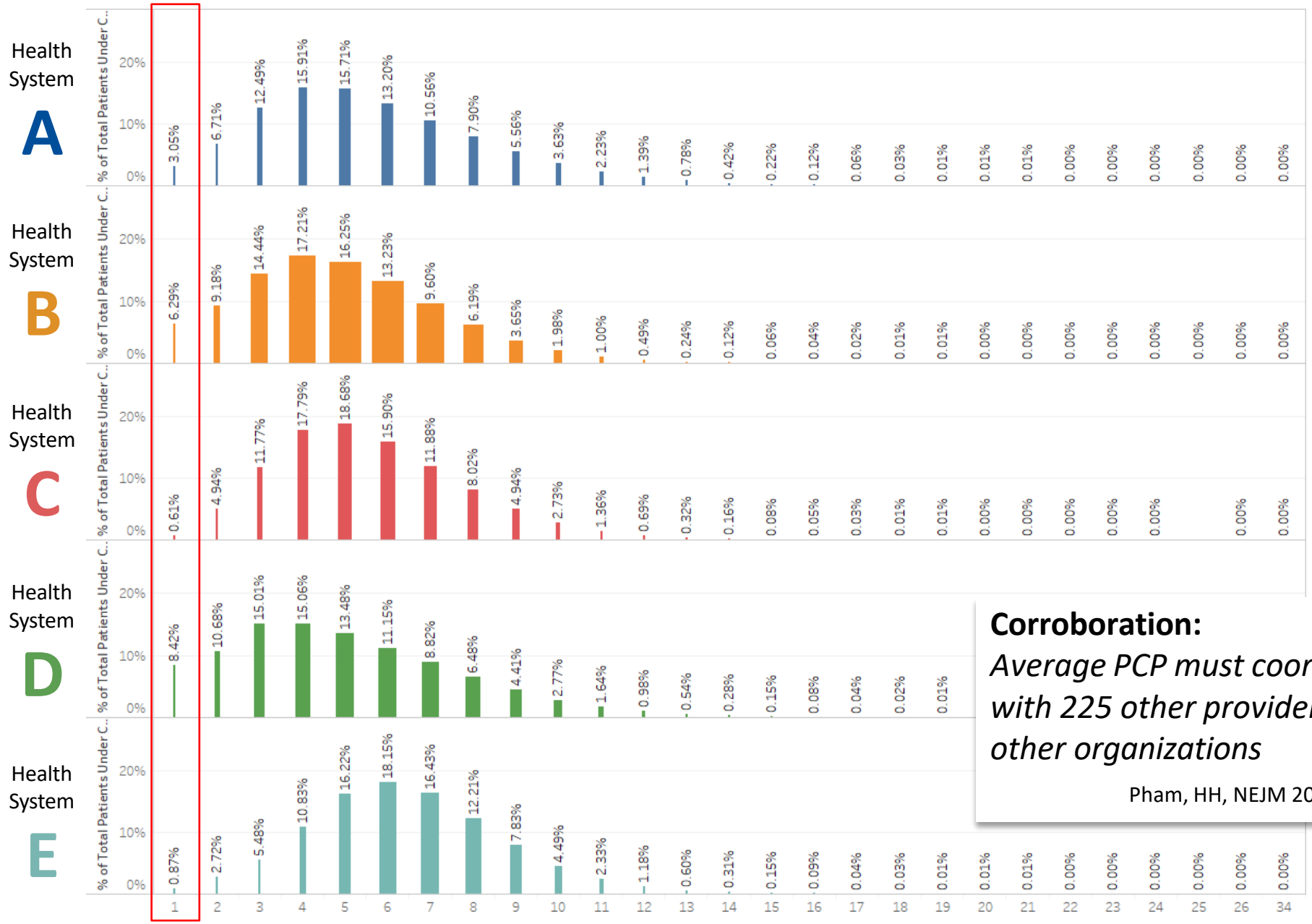

Claims: Medicaid
Claims: Commercial 1
Claims: Commercial 2
Claims: Commercial 3
Claims: Commercial 4
Medicare Commercial
Patient A
Patient D
Patient C
Patient B
EHR 1
EHR 2
Public Health Department
EHR 3
EHR 4
SureScripts
EHR 5
EHR 6
Independent Pharmacies
EHR 7
Federal Source (VA/DoD/IHS)
EHR 8
EHR 9
EHR 10



>1M hospitals, clinics, urgent care, and FQHC locations

Source: NPPES NPI2

Data fragmentation by health system



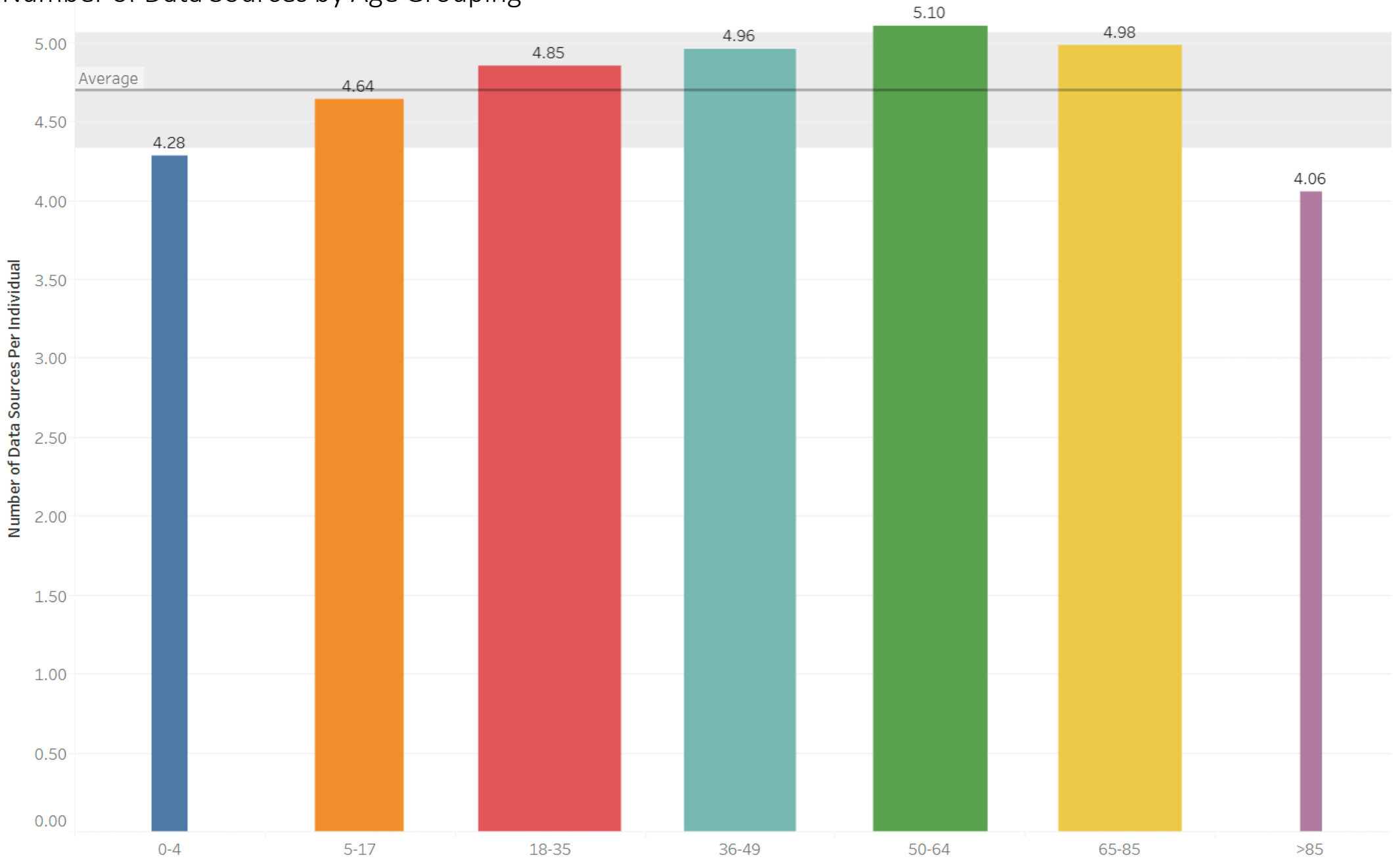
Corroboration:

Average PCP must coordinate care with 225 other providers in 117 other organizations

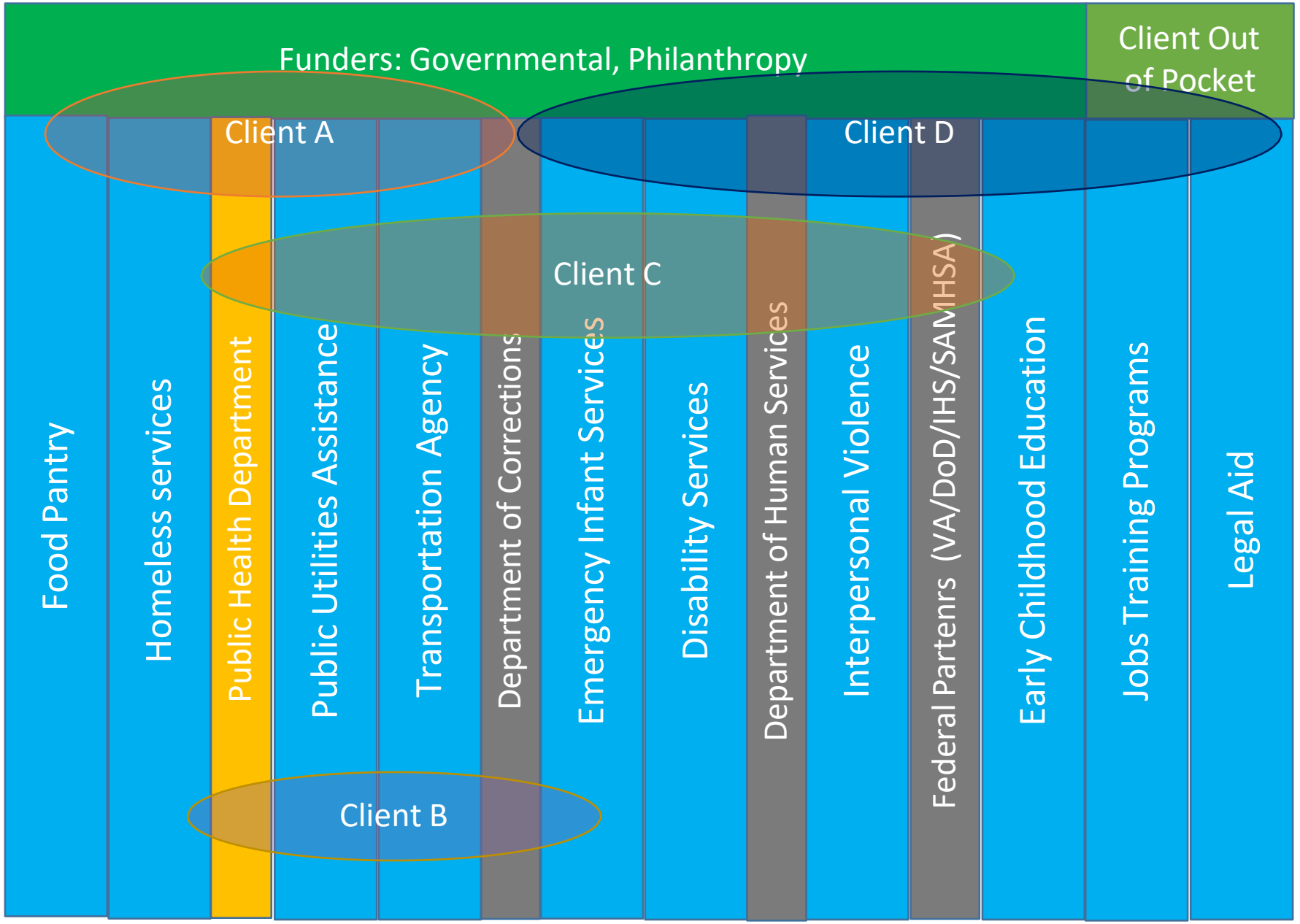
Pham, HH, NEJM 2007; 356: 1130-1139

Fragmentation by CDC Age Grouping for Clinical Data

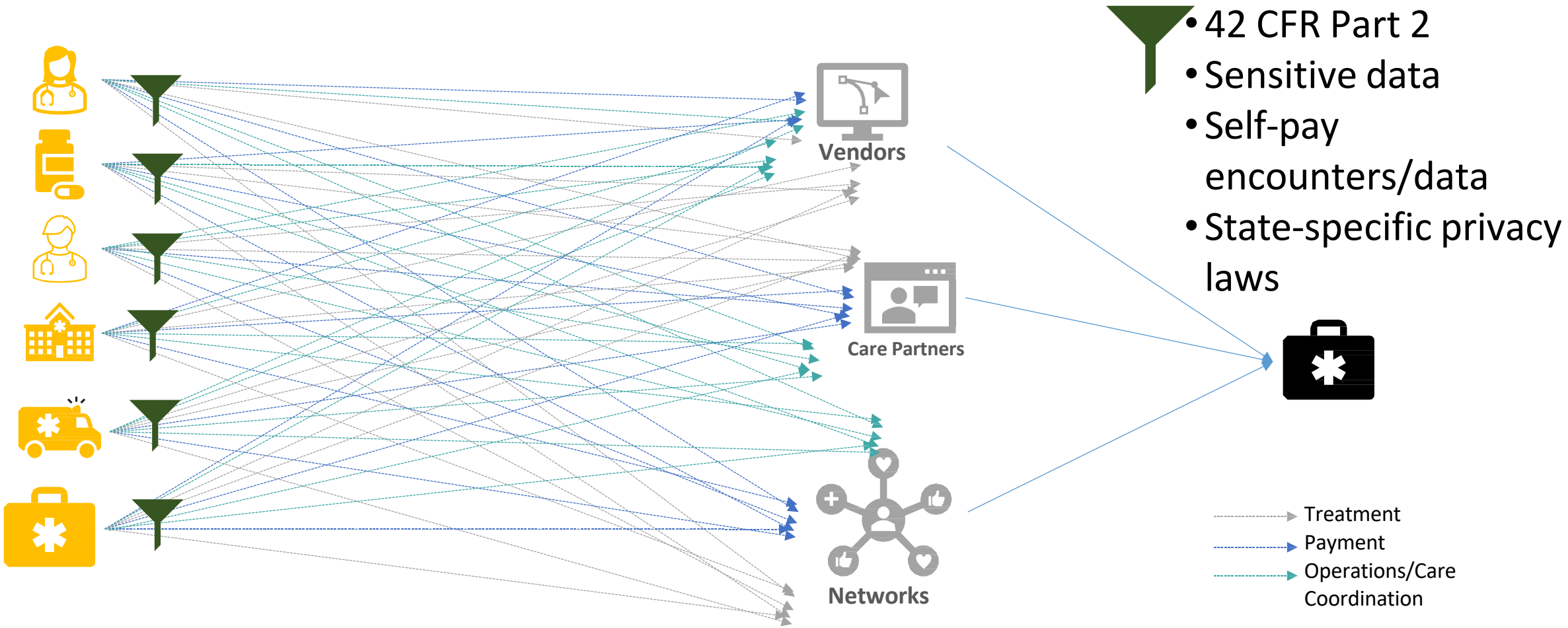
Number of Data Sources by Age Grouping



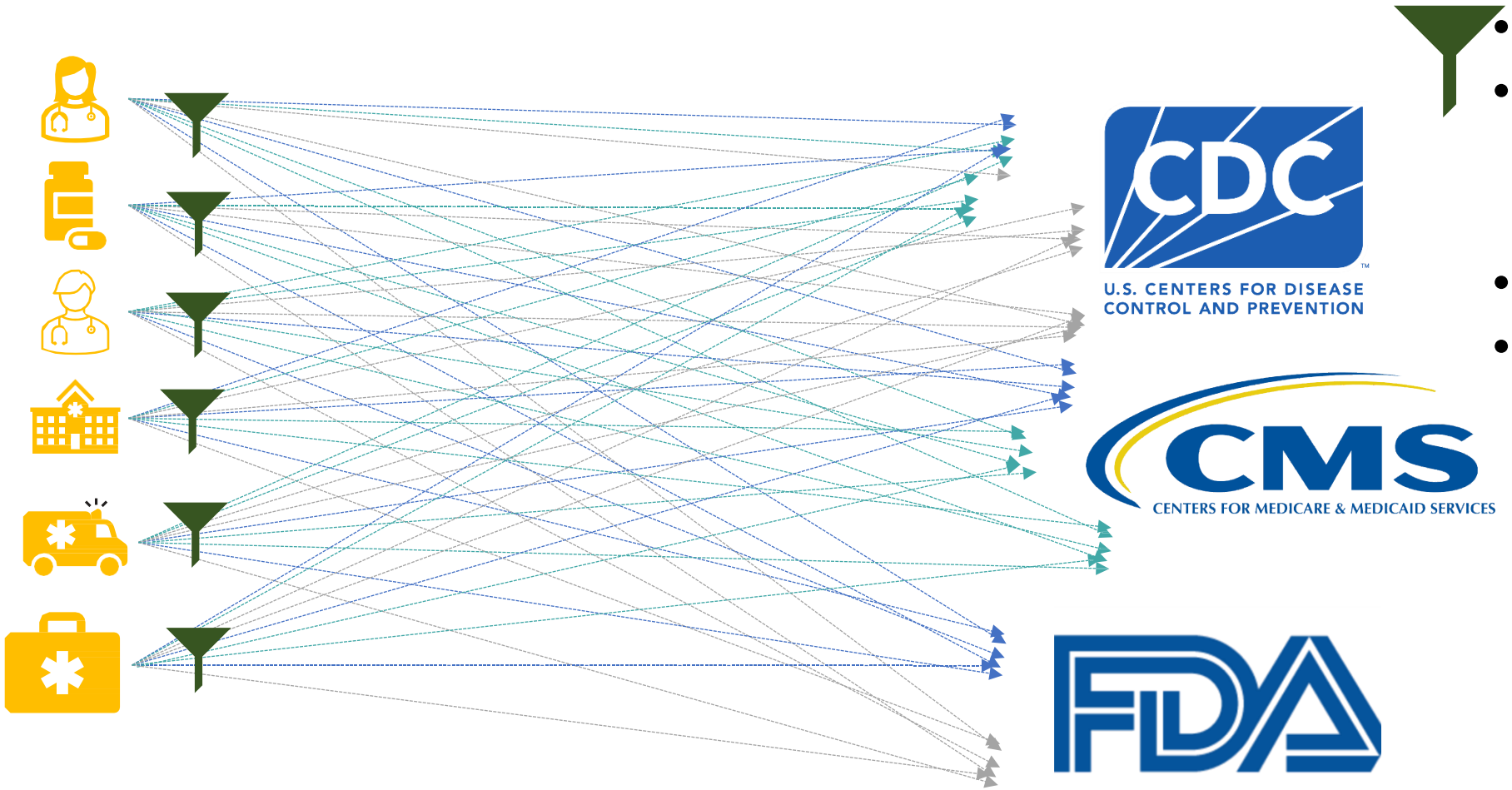
Non-medical drivers of health



Providers face daunting connectivity expectations



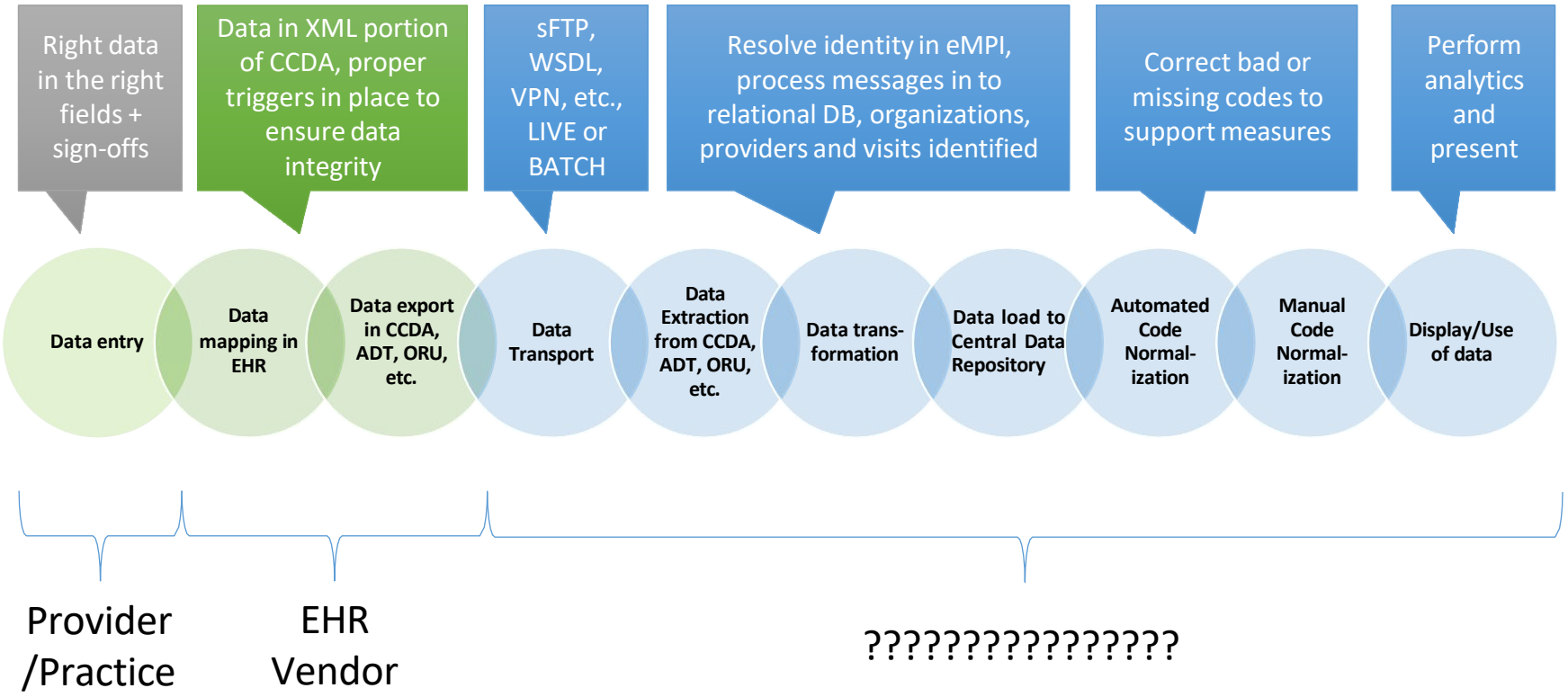
Current Federal Health Data Architecture



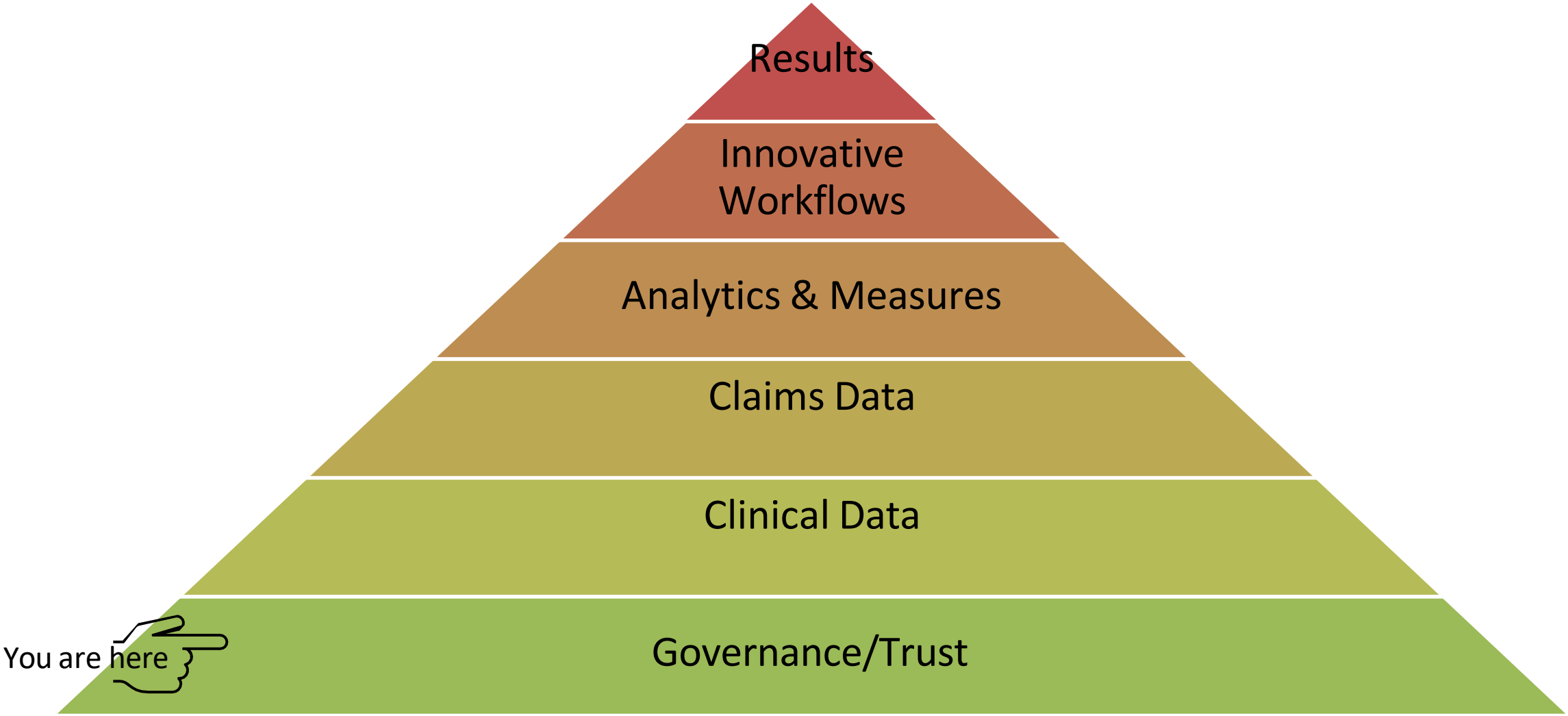
- 42 CFR Part 2
- State-specific federal reporting & privacy laws
- Patient Consent
- Provider preferences

Alerting
Quality
Monitoring

Data Quality: Chain of evidence

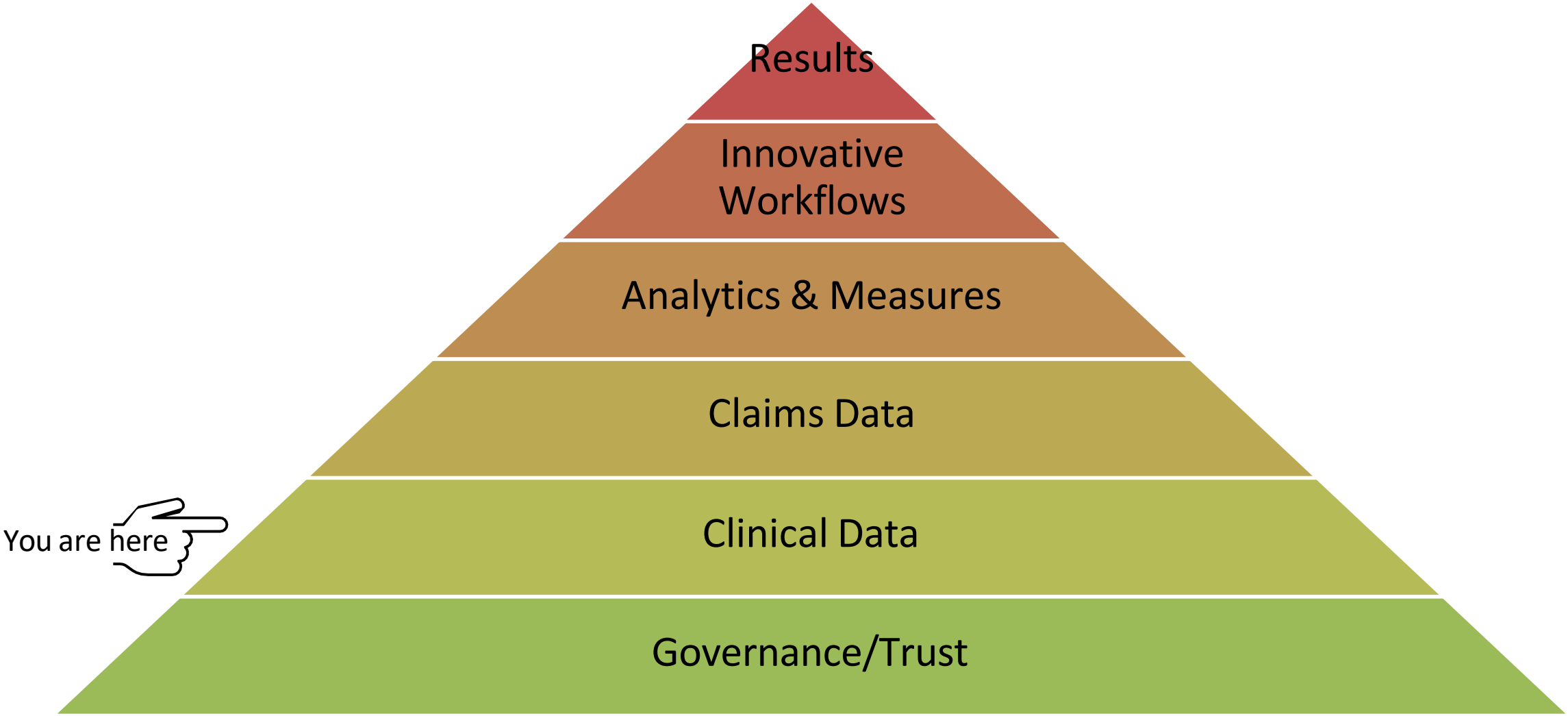


Critical National Health Infrastructure



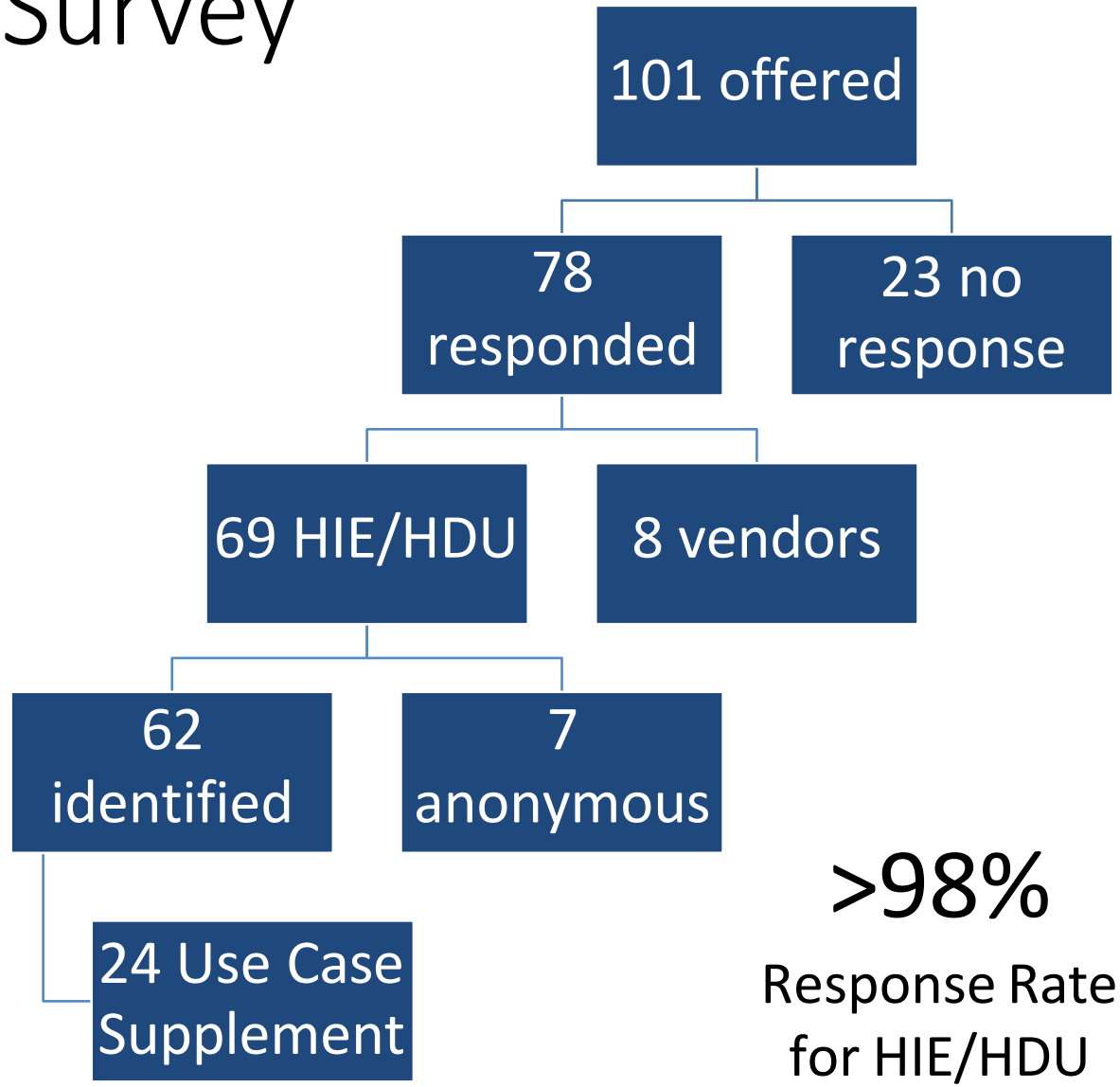
Critical Voices In Governance

Critical National Health Infrastructure



Annual ASTP/UCSF HIE Survey

- ASTP Funded, UCSF primary center, CIVITAS supplemental
- Self-reported by networks
- Two components
  - Main survey: ~500 questions
  - CIVITAS Supplement: ~500 questions
- Added additional questions targeting key Use Cases
  - CSRI Supplement



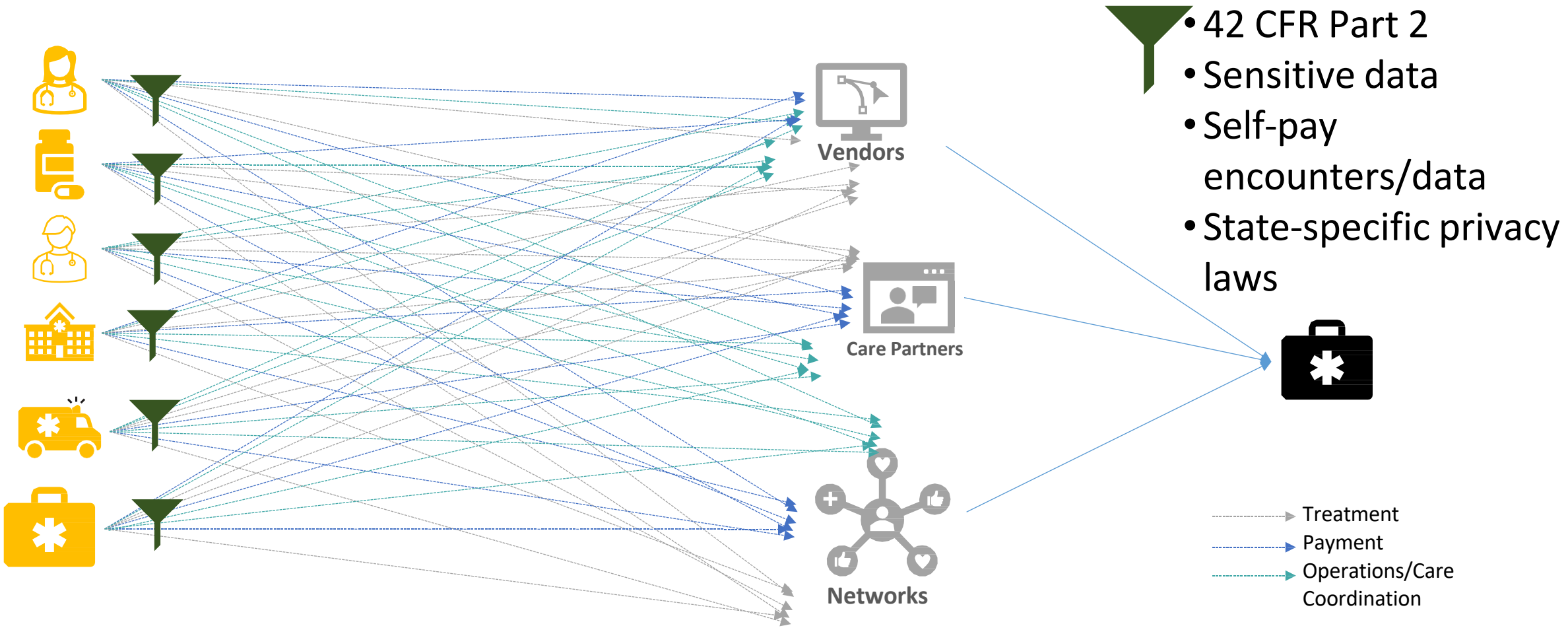
>98%

Response Rate for HIE/HDU

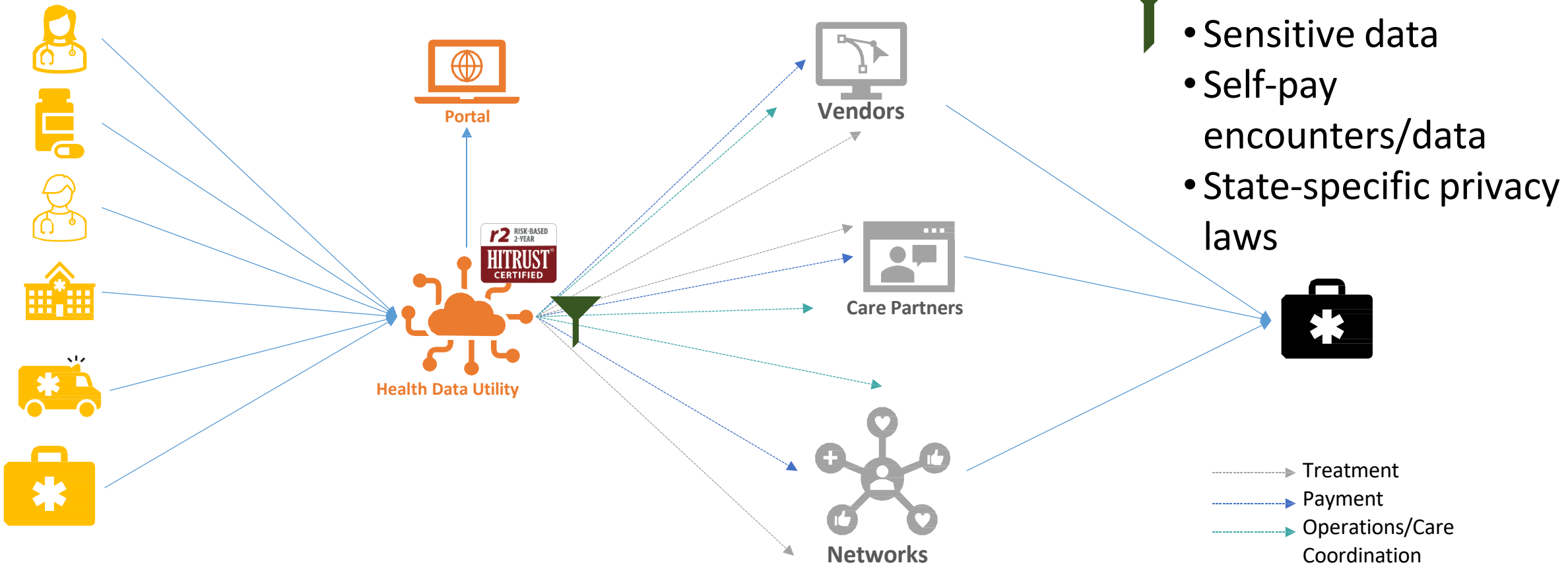
HIE/HDU Population Coverage

- Zip code level mappings of HIE/HDU populations
  - Electronic Master Patient Index counts
    - Unique Individuals
    - Non-unique Individuals
  - Core Network Service Area
- Fragmentation of Data/Care by Networks
- 53/69 networks provided data (77% response with data in *1 week*)

General Approach to 3rd Party Data Connections



General Approach to 3rd Party Data Connections



- 42 CFR Part 2
- Sensitive data
- Self-pay encounters/data
- State-specific privacy laws

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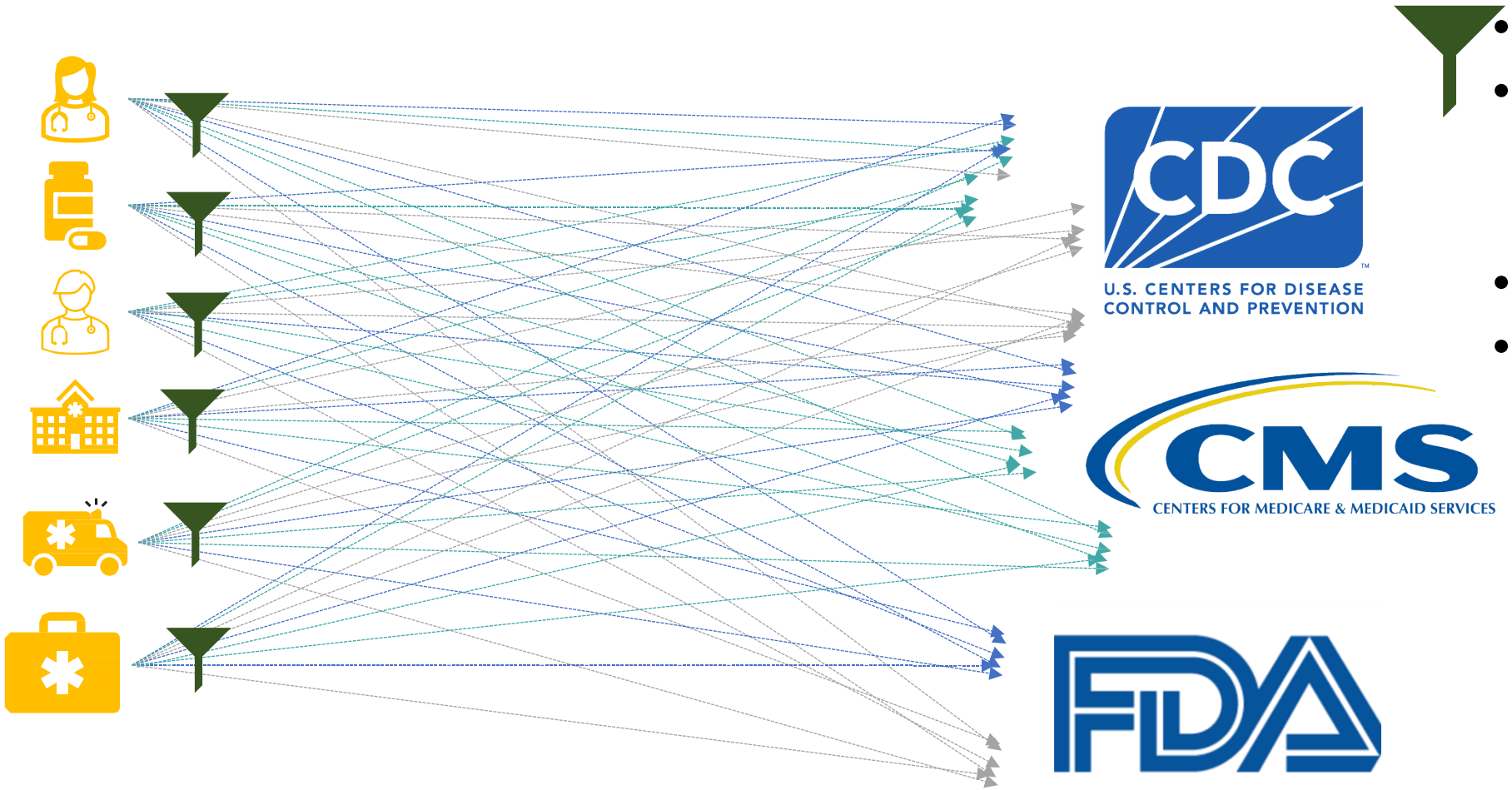

- 42 CFR Part 2
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Alerting
Quality
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HDU enabled Federal Health Data Strategy

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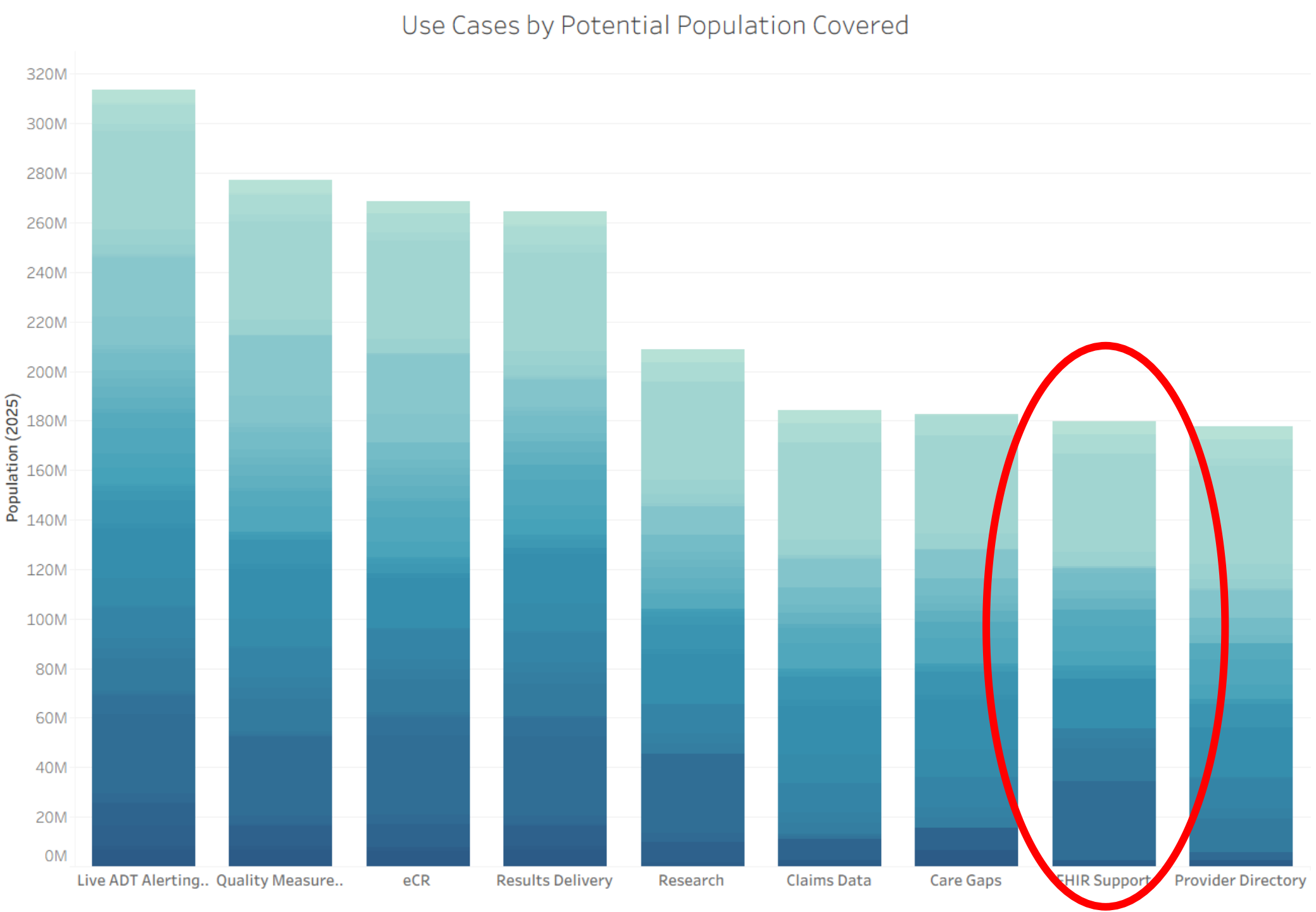
Alerting
Quality
Monitoring


Use Cases by Potential Population Covered
Population (2025)
320M
300M
280M
260M
240M
220M
200M
180M
160M
140M
120M
100M
80M
60M
40M
20M
0M
Live ADT Alerting..
Quality Measure..
eCR
Results Delivery
Research
Claims Data
Care Gaps
FHIR Support
Provider Directory

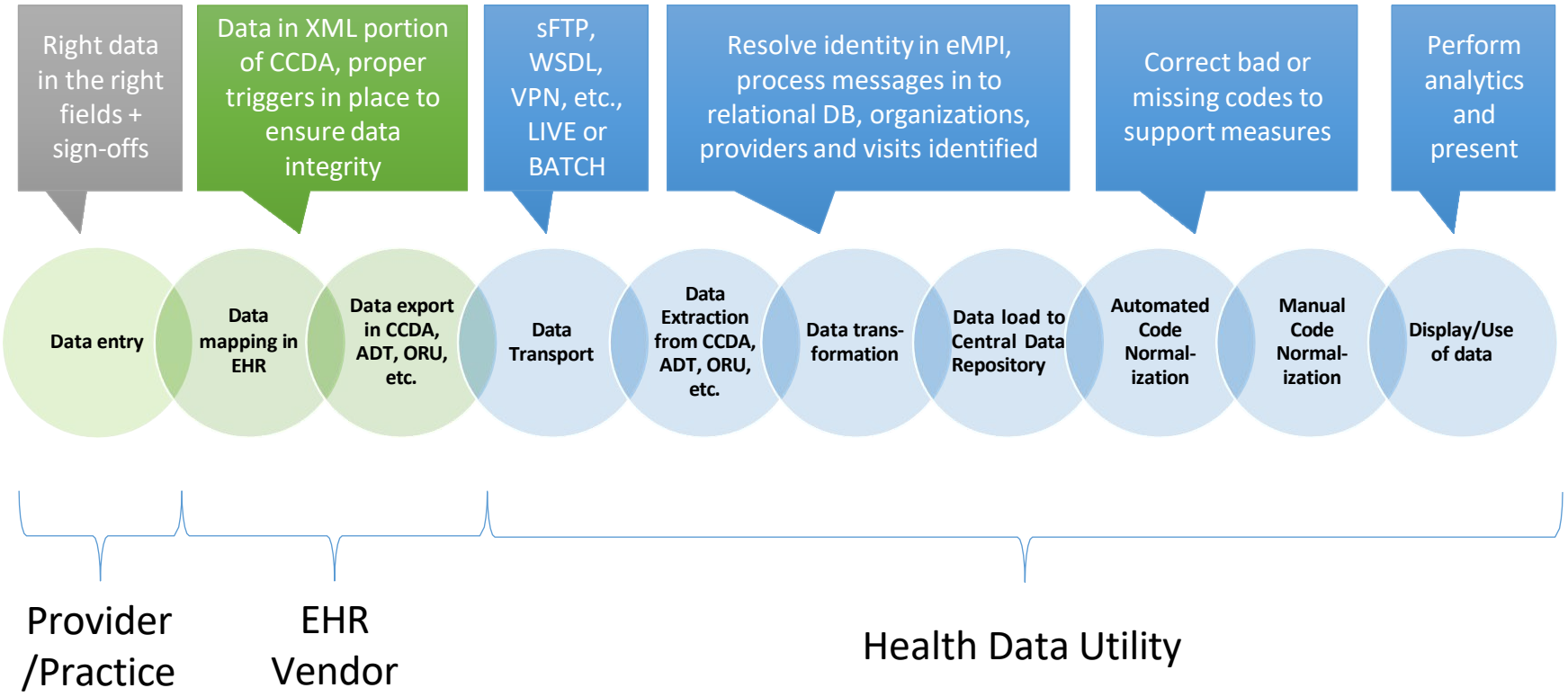
All FHIR is not created equally . . .

Table 2. Benchmark results: number of resources exported in each test, with measurements of total time, resources per minute, and seconds needed to export 1 patient's complete record on average.

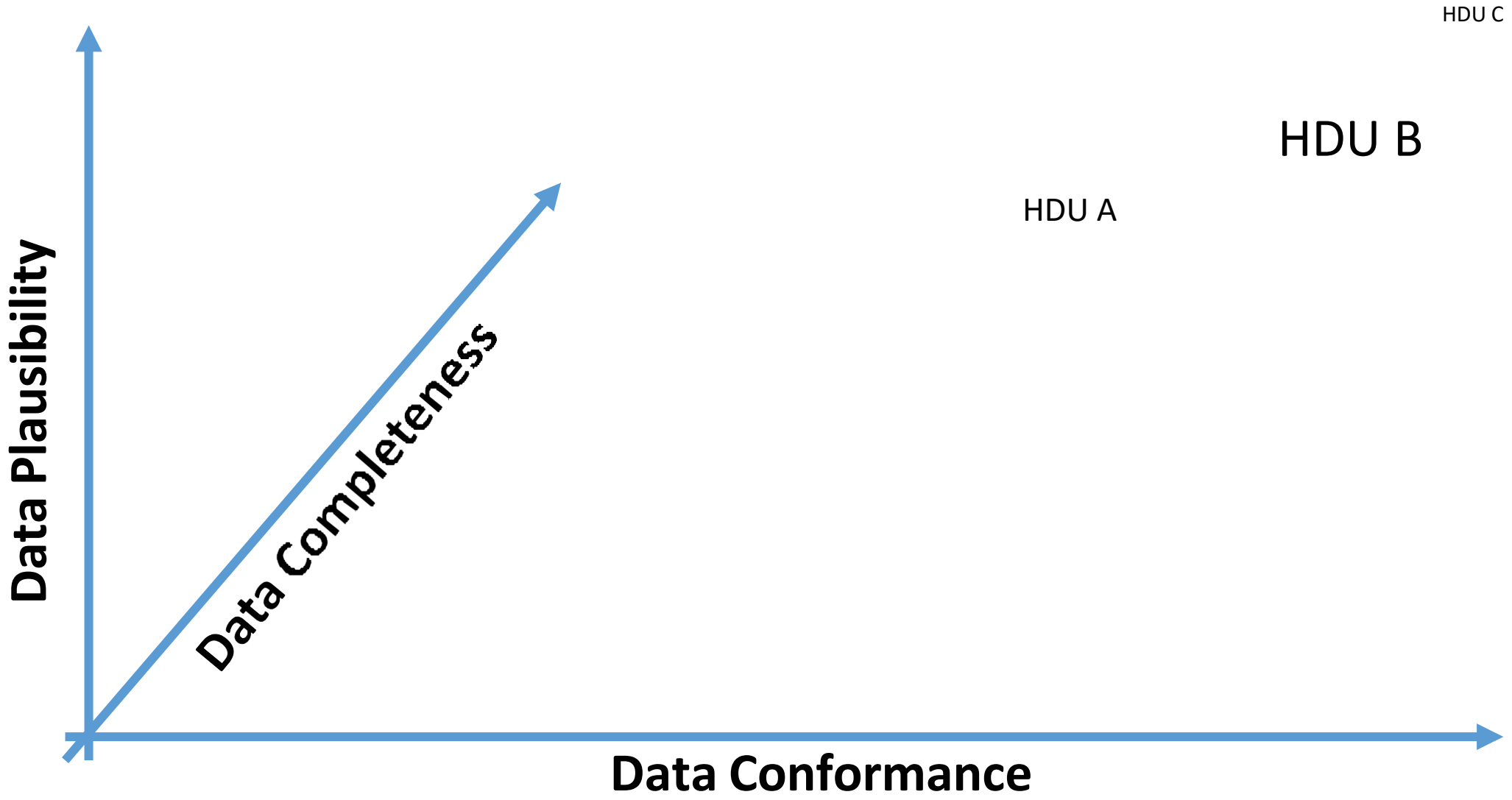
Site	Client	P	E	O	C	D	M	R	Total hours	Resources per minute	Seconds per patient
Site 1 (Cerner)	SoF	4376	180 971	4 365 361	97 117	Errors—0	347 605	4 995 430	13.1	6350	10.8
Site 1 (Cerner)	Bulk FHIR	4376	180 971	4 366 797	97 116	301 078	347 593	5 297 931	8.1	10 838	6.7
Site 1 (Cerner)	Bulk FHIR	10 244	541 226	11 701 214	271 617	1 494 026	973 404	14 991 731	34.2	7300	12.0
Site 1 (Cerner)	Bulk FHIR	13 462	547 811	12 577 800	304 693	1 659 861	991 942	16 095 569	32.5	8261	8.7
Site 2 (Epic)	SoF	892	169 902	1 058 451	256 113	214 654	136 098	1 836 110	5.9	5187	23.8
Site 2 (Epic)	Bulk FHIR	907	181 493	1 448 415	173 754	461 601	150 076	2 416 246	25.9	1555	102.8
Site 2 (Epic)	SoF	2686	1 104 900	6 103 568	1 502 393	1 286 443	726 654	10 726 644	73.4	4792	98.3
Site 3 (Epic)	SoF	1173	250 879	988 092	333 917	327 839	365 195	2 267 095	4.6	8214	14.1
Site 3 (Epic)	Bulk FHIR	1269	Errors—0	3 978 688	347 782	Errors—0	399 573	4 727 312	27.9	2827	79.1
Site 3 (Epic)	Bulk FHIR	4217	Errors—0	Errors—0	1 165 583	Errors—0	1 465 153	2 634 953	20.3	2163	17.3
Site 4 (Epic)	SoF	1021	16 737	61 633	209 533	20 723	12 117	321 764	6.8	787	24.0
Site 4 (Epic)	Bulk FHIR	1020	153 684	661 101	134 102	Errors—0	88 870	1 038 777	34.5	502	121.8
Site 4 (Epic)	Bulk FHIR	5059	2 064 125	7 611 121	1 915 051	Errors—0	1 212 564	12 807 920	83.7	2550	59.6
Site 4 (Epic)	SoF	8311	1 261 097	4 374 770	4 363 954	Errors—0	1 803 446	11 811 578	90.2	2183.2	39.1
Site 4 (Epic)	Bulk FHIR	10 189	3 863 233	33 667 978	3 867 079	Errors—0	3 961 808	45 370 287	330	2291.4	116.6
Site 5 (HIE custom)	Bulk FHIR	2 403 820	11 497 279	92 479 812	11 902 665	23 225 023	94 308	141 602 907	215.8	12 215.7	0.3

Abbreviations: P = patients, E = encounters, O = observations, C = conditions, D = document references, M = medication requests, R = total resources, FHIR = Fast Health Interoperability Resources, SoF = SMART on FHIR testing suite, HIE = Health Information Exchange.

Data Quality: Chain of evidence



3 Dimensions of Data Quality



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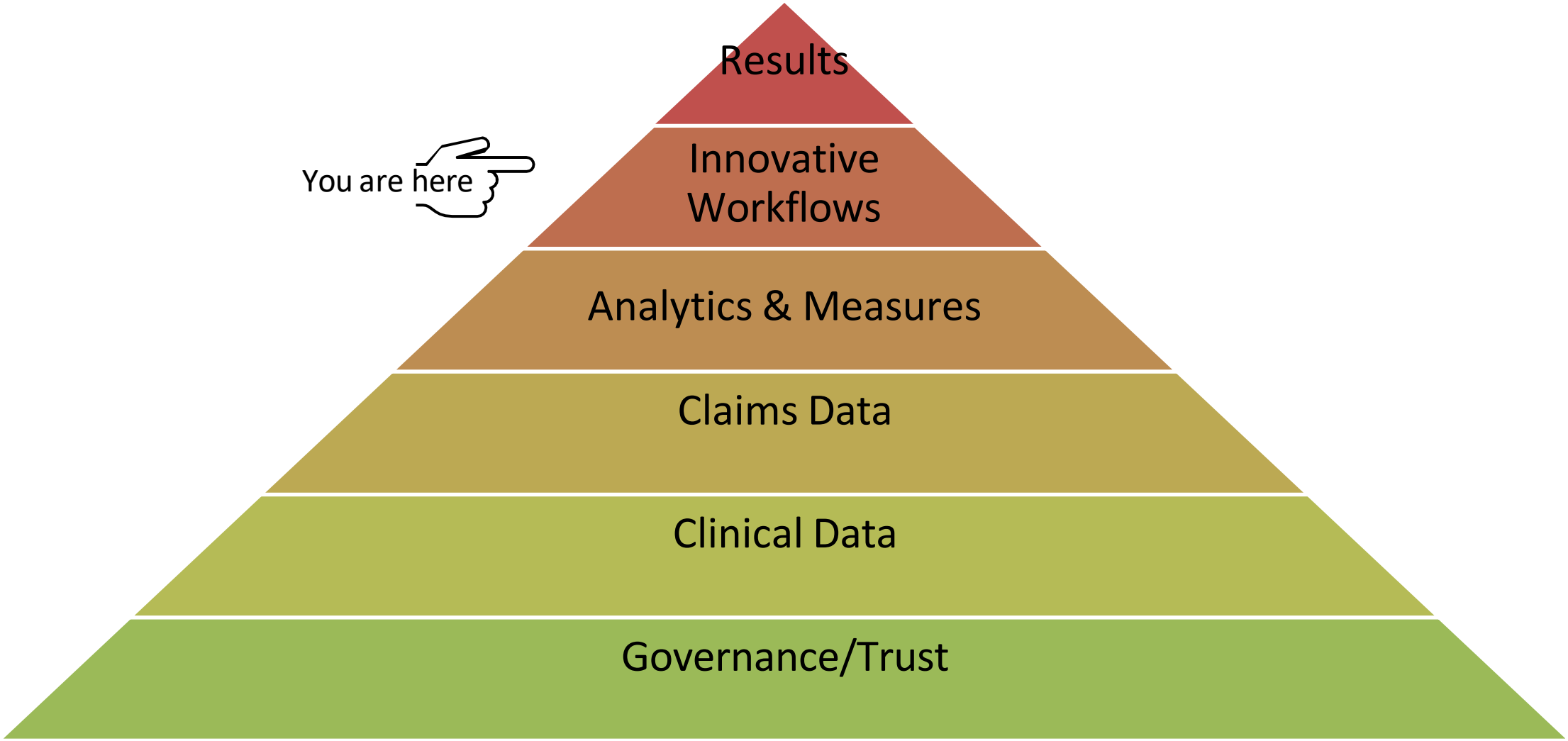
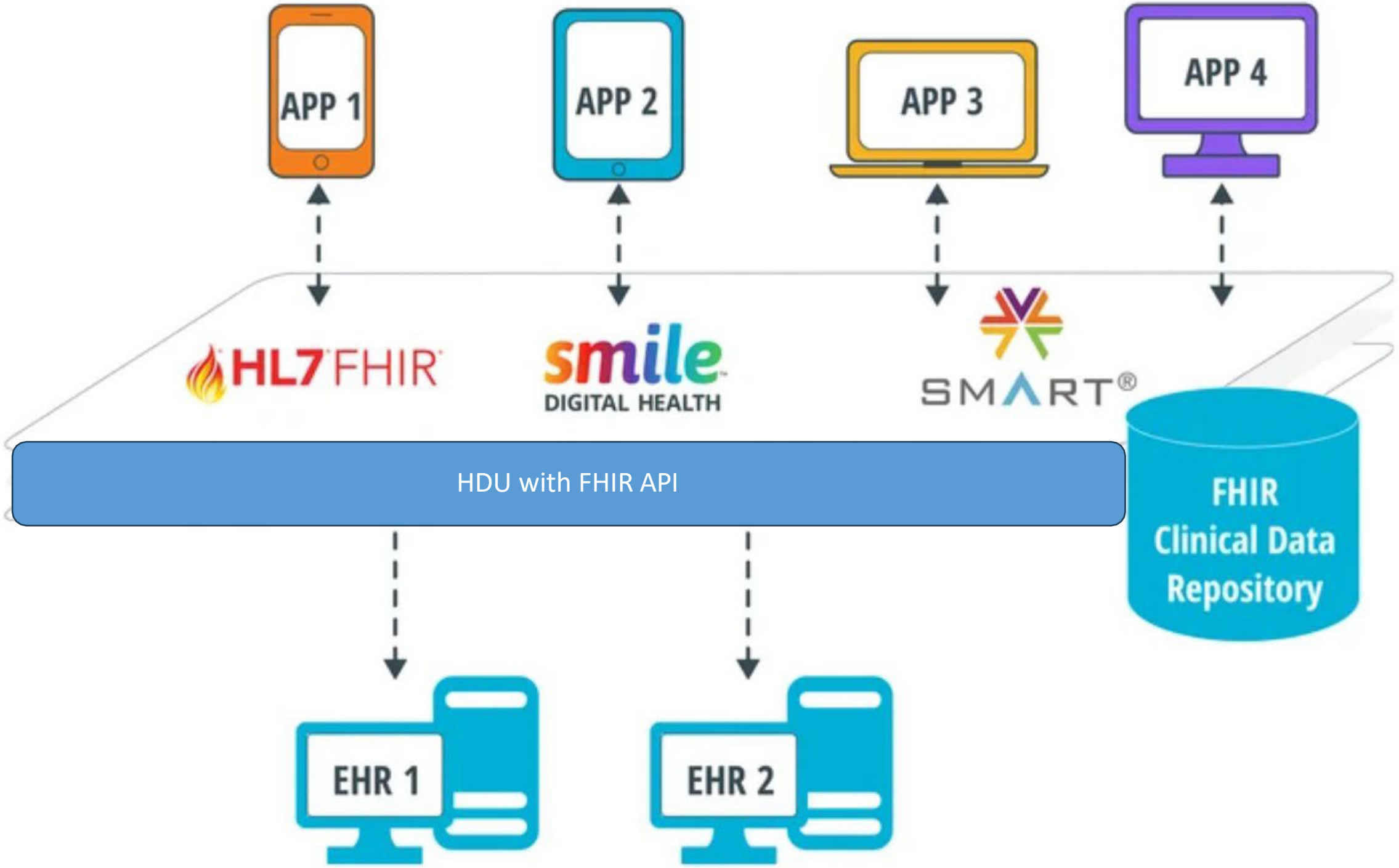



APP 1
APP 2
APP 3
APP 4
HL7 FHIR
smile
DIGITAL HEALTH
SMART®
HDU with FHIR API
FHIR
Clinical Data
Repository
EHR 1
EHR 2

Featured Apps
All Apps

APPLICATION TYPE
CATEGORIES
Care Coordination
Clinical Research
Data Visualization
Disease Management
Genomics
Medication
Patient Engagement
Population Health
Risk Calculation
FHIR Tools
COVID-19
Telehealth
AMIA 2025

OS SUPPORT
FHIR SUPPORT
SPECIALTY
PRICING
DESIGNED FOR
EHR SUPPORT

ASCVD Risk Calculator

View

Cerner Corporation

The ASCVD Risk Calculator is a tool that estimates a 10-year and/or lifetime cardiovascular risk score and how to potentially reduce risk.

OS: Web **Specialties:** Cardiology **Designed for:** Patients & Clinicians

Bilirubin Chart

View

Intermountain Healthcare

Demonstration app designed to help clinicians treat newborn hyperbilirubinemia appropriately.

OS: Web **Specialties:** Pediatrics **Designed for:** Clinicians

BP Centiles v2

View

Interopion

Updated version of the open source BP Centiles app.

OS: Web **Specialties:** Cardiology, Pediatrics **Designed for:** Clinicians

Caren mHealth

View

Caren, LLC

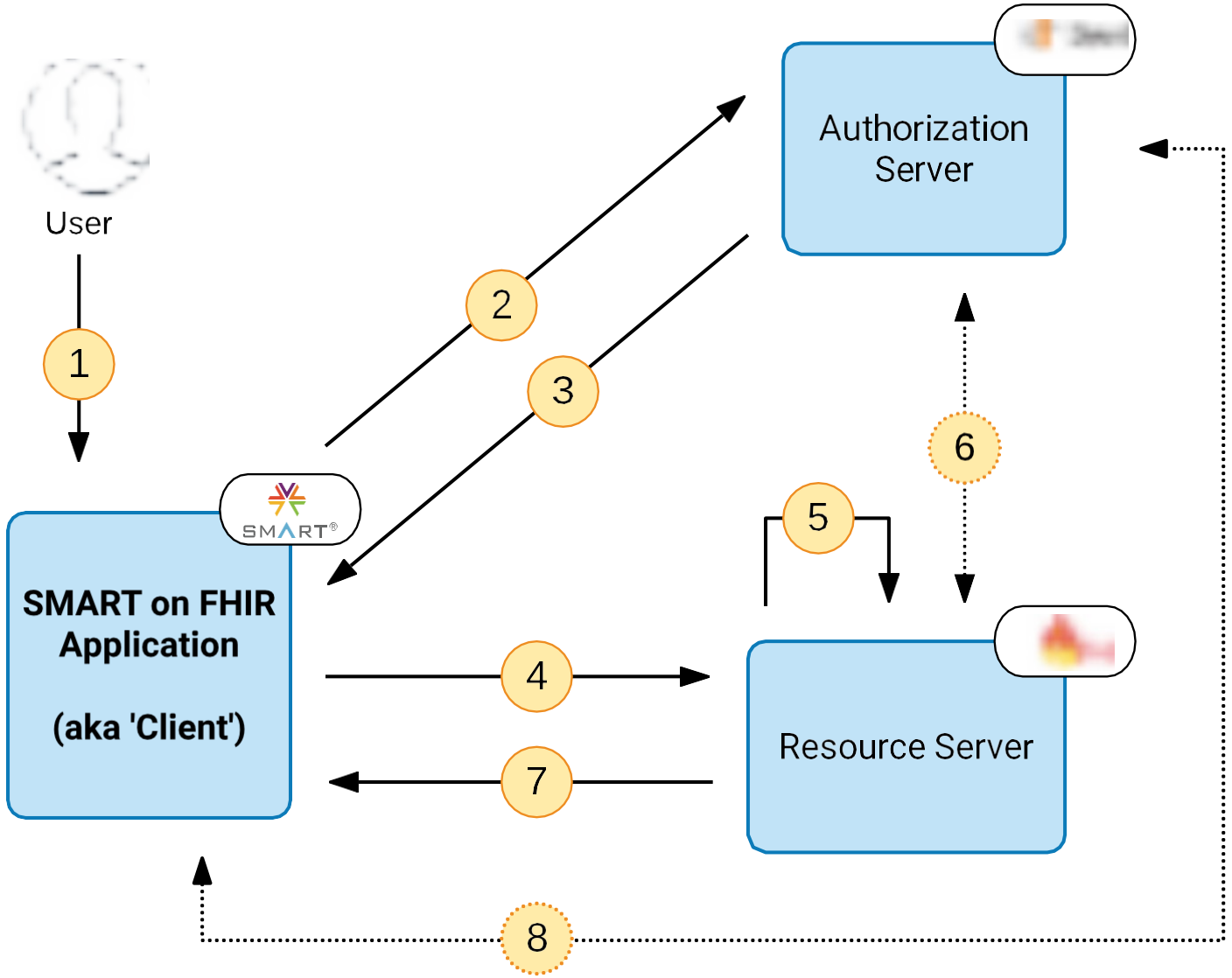
Caren mHealth collects real world health data including data from at-home medical devices, wearables, and patient-reported outcomes.

OS: iOS, Android, Web **Specialties:** Pulmonary, Primary care, Cardiology **Designed for:** Patients & Clinicians

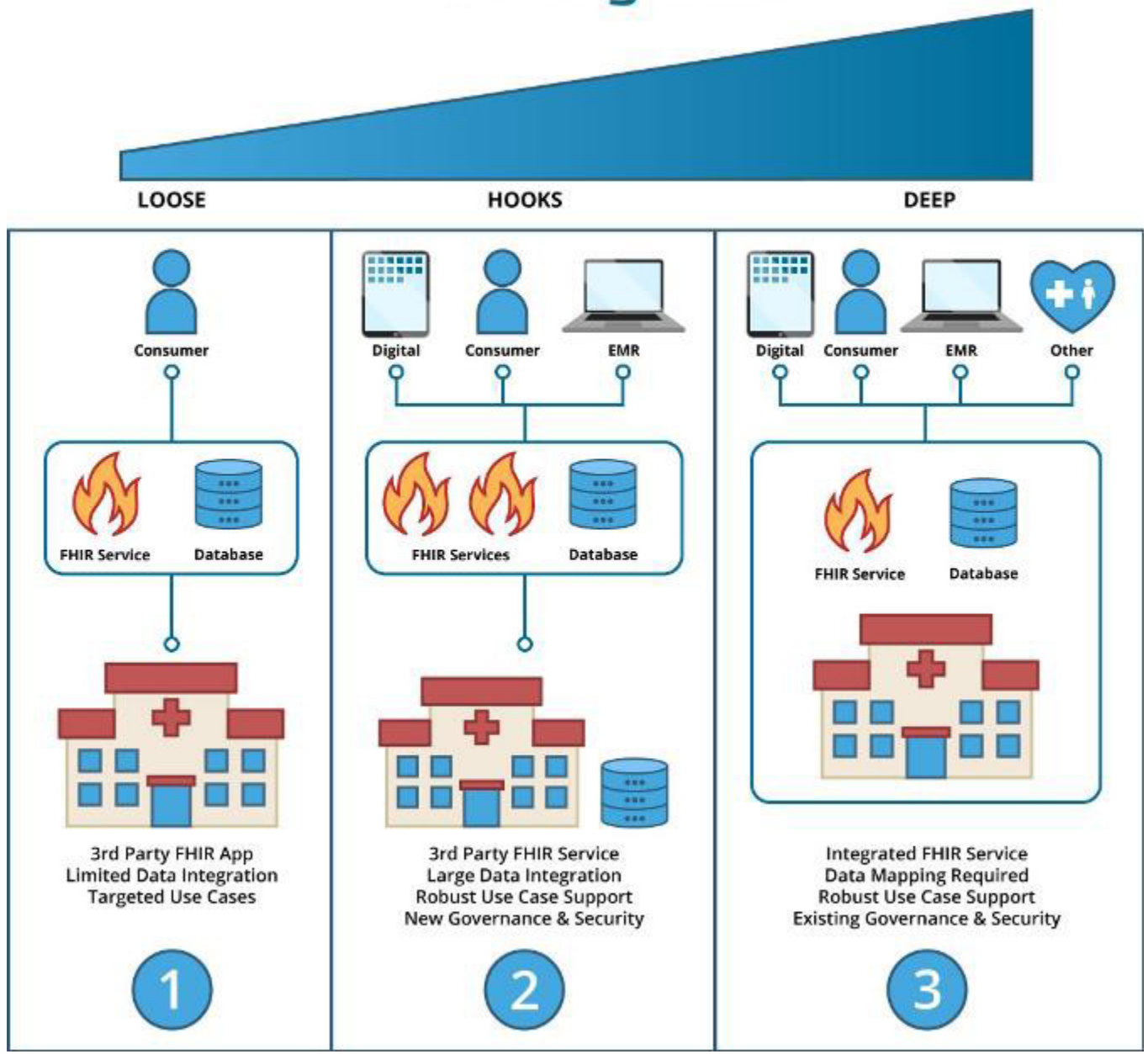
SMART Integration of Tools into Workflow

- Data scoped
- Actions integrated
- Fit for purpose visualizations and presentations:
  - Making choices or decisions
  - Educating

SMART on FHIR Single Sign On: Access in Context



FHIR Integration



A SMART Evolution

2009

NEJM: *No Small Change for the Health Information Economy* - introduces the API

White Paper: "... Fostering Development of an "iPhone-like" Platform..."

iTDotHealth meeting with government, vendors, academia

2010

$15M SHARP grant to the SMART Team

Draft SMART API released (RDF data models)

Cardiac Risk app becomes first SMART app

2011

SMART Apps Contest on Challenge.gov, promoted by White House. First health-related apps challenge

SMART Sandbox launched

2012

BP Centiles: First SMART App in production at Boston Children's Hospital

2013

Release of SMART on FHIR Genomics

SMART team joins FHIR development effort

2014

Release of SMART on FHIR specification

Launch of SMART Advisory Committee with diverse stakeholders committed to SMART on FHIR ecosystem

JASON Task Force report recommends a public API for healthcare

Argonaut project launched to implant SMART in EHRs

2015

2015 EHR certification and meaningful use 3 final rules require patient access via API

Launch of SMART App Gallery

Launch of SMART CDS Hooks, a decision support specification

2016

Precision Medicine Initiative Sync for Science uses SMART API

21st Century Cures Act makes APIs a requirement for certified HIT, incorporating language from the SMART team

Cerner launches SMART on FHIR Developers Sandbox

2017

Allscripts and EPIC launch SMART on FHIR developers sandboxes

Project Argonaut commits to CDS-Hooks implementation

SMART Team, ONC & HL7 launch the SMART FLAT FHIR bulk data project

Carin Alliance focuses on implementing

2018

Apple adds SMART support to its Health App for patient access to medical data

CMS launches Blue Button 2.0 using SMART for API access to Medicare claims

Dept of Veterans Affairs to incorporate SMART on FHIR support into next-generation EHR platform

CMS pilots SMART bulk data FLAT FHIR export

SMART on FHIR published as an HL7 standard

2019

CMS commits to SMART Bulk Data specs

Microsoft launches SMART on FHIR API in its Azure product

Final rule from ONC specifies SMART as the universal apps API to implement 21st Century Cures

3 Cloud vendors at White House commit to SMART and FHIR open APIs

Veterans accessing health records using Apple's SMART on FHIR Health App

2020

SMART Markers Framework for Patient Generated Data

2021

Information blocking rules take effect

Epic launches initial version of SMART/HL7 Bulk FHIR Access API

SMART Health Cards established as a verified credential standard

VCI initiative establishes SMART Health Cards as an industry standard for vaccine credentials

The Commons Project releases the SMART Health Card verifier.

2022

Support for SMART on FHIR and Bulk FHIR APIs required in all certified HIT

2023

Support for full export of Electronic Health Information

Cumulus, an open source data lakehouse powered by Bulk FHIR and AI

Cumulus CDC Data Modernization (five health system-public health pairs)

2024

HTI-1 Final Rule requirements for Bulk FHIR and SMART app launch

2025

CumulusQ: open source tools to understand FHIR data quality

EHR Good Neighbor community resources

SMART®

COSRI
Clinical Opioid Summary with Rx Integration

Marcus Aurelius
DOB: 1975-JUN-17
MALE

New Patient Search

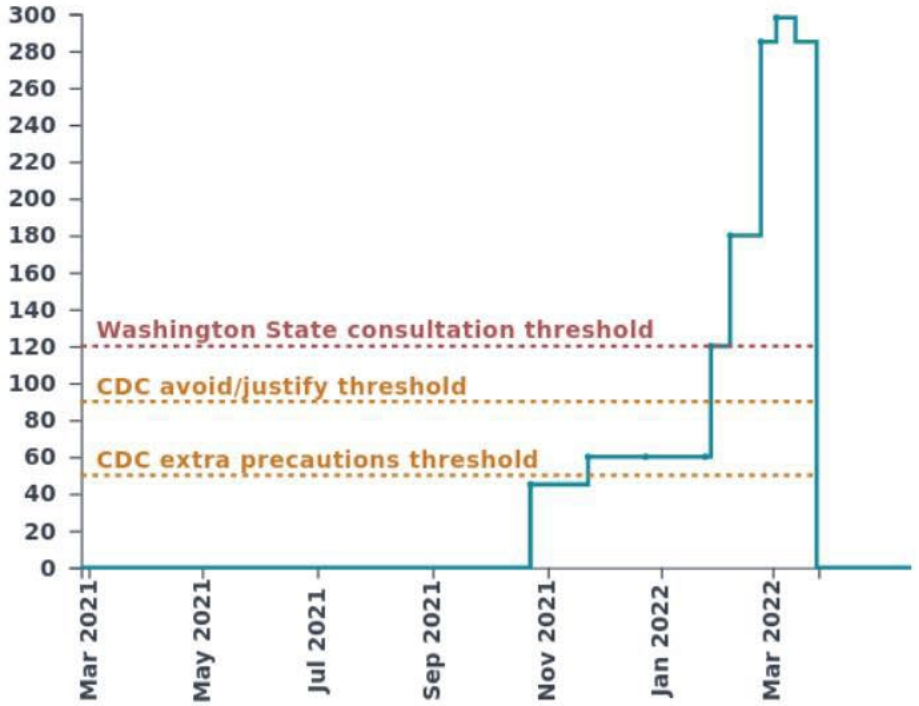
Washington State Department of Health

Clinical Opioid Summary with Rx Integration

LIMITATIONS Guidance **not intended** for **palliative**, **inpatient**, or **active cancer care**.

Patient Risk Overview

Morphine Equivalent Dose (MED)



MED today **0 (2022-10-21)**
Most recent MED **285 (2022-03-25)**
Average MED in the last 60 days **0**
Average MED in the last 90 days **0**

Prescription Summary

Class	# Rx	# Prescribers	# Pharmacies
Opioids	9	3	3
Benzodiazepines	0		
Non-benzo Sedatives/Hypnotics	0		
Muscle Relaxants	0		
Stimulants	0		
Anti-Convulsants	0		
Steroids	0		

Patient Risk Assessment

- **No urine drug screen date found for this patient. Please check the first controlled substance prescription to determine if they are due for their 12 month drug screen.**
- **No controlled substance agreement found for this patient.**
- **Absence of non-opioid medications.**
- **Absence of non-pharmacologic treatments.**

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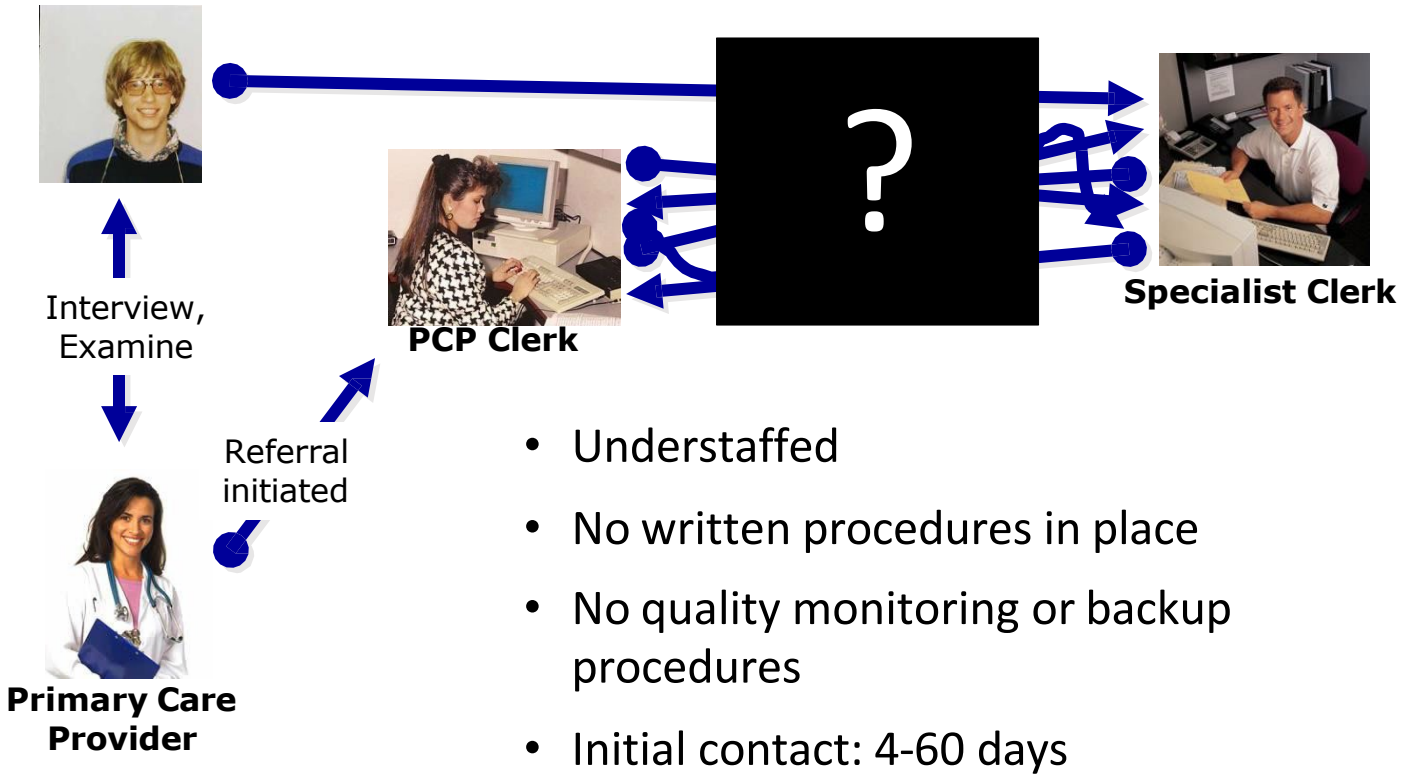
Pre-Doc2Doc Care Transition Management



- Understaffed
- No written procedures in place
- No quality monitoring or backup procedures
- Initial contact: 4-60 days
- 50 to 3,000 referrals behind
- Many simply dropped

Consultant

Results

- Patients receiving an online consult had a significant reduction in PMPM cost of care when compared with themselves as historical controls:
  - *$140.53 Pre Consult vs. $78.16 Post Consult*
  - *Net savings of* ***$62.37, p=0.021***
- Compared with patients who received a referral but NOT a consult:

Cost Type	Mean PMPM Cost Change	Mean Percentage Change
Facility Costs (UB92)	-$13.00	-20%
Professional Costs (HCFA 1500)	-$108.04	-34%
Pharmacy Costs (PBM)	-$9.14	-14%
Total Costs	-$130.18	

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Atrial Fibrillation Treatment Options to Lower Stroke Risk

Patient Options

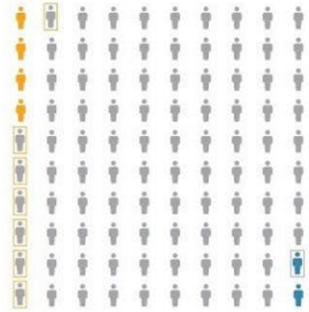
Patient | Assessment | Options

KEY DATA | OPTION GRID

No Treatment | Warfarin | Apixaban | Dabigatran | **Rivaroxaban** | Edoxaban | LAAC | 1 year | 100 people

Rivaroxaban dose should be reduced to 15 mg daily when creatinine clearance is 15 to 50 mL/min (currently 34 mL/min).

For 100 people like you over 1 year with rivaroxaban:



4 Have Ischemic Strokes, 96 Do Not

- 4 Ischemic strokes with apixaban
- 7 Avoid ischemic strokes due to apixaban

2 Have major bleeds, 98 do not

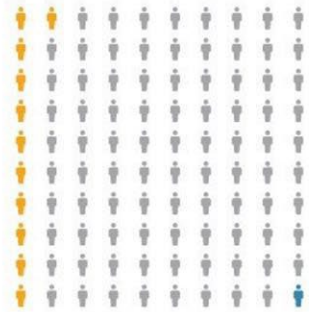
- 1 Major bleeds with or without treatment
- 1 More major bleeds due to apixaban

Other

- No stroke and no major bleed

No Treatment | Warfarin | Apixaban | Dabigatran | Rivaroxaban | Edoxaban | LAAC

For 100 people like you over 1 year with no treatment:



11 Have Ischemic Strokes, 89 Do Not

- 11 Ischemic strokes with no treatment

1 Have major bleeds, 99 do not

- 1 Major bleeds with no treatment

Other

- No stroke and no major bleed

References | More About This Tool | Last Update: Mar 17, 2022

DynaMed Decisions' Clinical Decision Tools are reviewed on an ongoing basis and updated to reflect the latest evidence.

Patient Options

PATIENT QUESTIONS	No Treatment	Warfarin	Dabigatran	Rivaroxaban	Api
What does the option involve?	No treatment means you will not take medicine or use a device to lower your risk of stroke due to blood clots.	Warfarin is a medicine that makes it less likely for the blood to clot. You will take a pill once a day. Avoid large changes in what you eat and drink.	Dabigatran is a medicine that makes it less likely for the blood to clot. You will take a pill twice a day.	Rivaroxaban is a medicine that makes it less likely for the blood to clot. You will take a pill once a day.	Apix less take
Will I need blood tests?	No	You will need regular blood tests to check how well the medicine is working. Your healthcare professional may change how much medicine you take.	You may need blood tests to check how well your kidneys are working.	You may need blood tests to check how well your kidneys are working.	You how
What is my risk of stroke due to blood clots?	About 8 of 100 people (8%) have a stroke due to blood clots within 1 year.	About 3 of 100 people (3%) have a stroke due to blood clots within 1 year.	About 2 of 100 people (2%) have a stroke due to blood clots within 1 year.	About 3 of 100 people (3%) have a stroke due to blood clots within 1 year.	Abou strok
What is my risk of major bleeding needing treatment?	Fewer than 1 of 100 people (less than 1%) have a serious bleed within 1 year.	About 1 of 100 people (1%) have a serious bleed within 1 year.	About 1 of 100 people (1%) have a serious bleed within 1 year.	About 1 of 100 people (1%) have a serious bleed within 1 year.	Fewe 1%) h
Are there other risks and	Does not apply	You might have nose or gum bleeding.	You might have nose or gum bleeding.	You might have nose or gum bleeding.	You

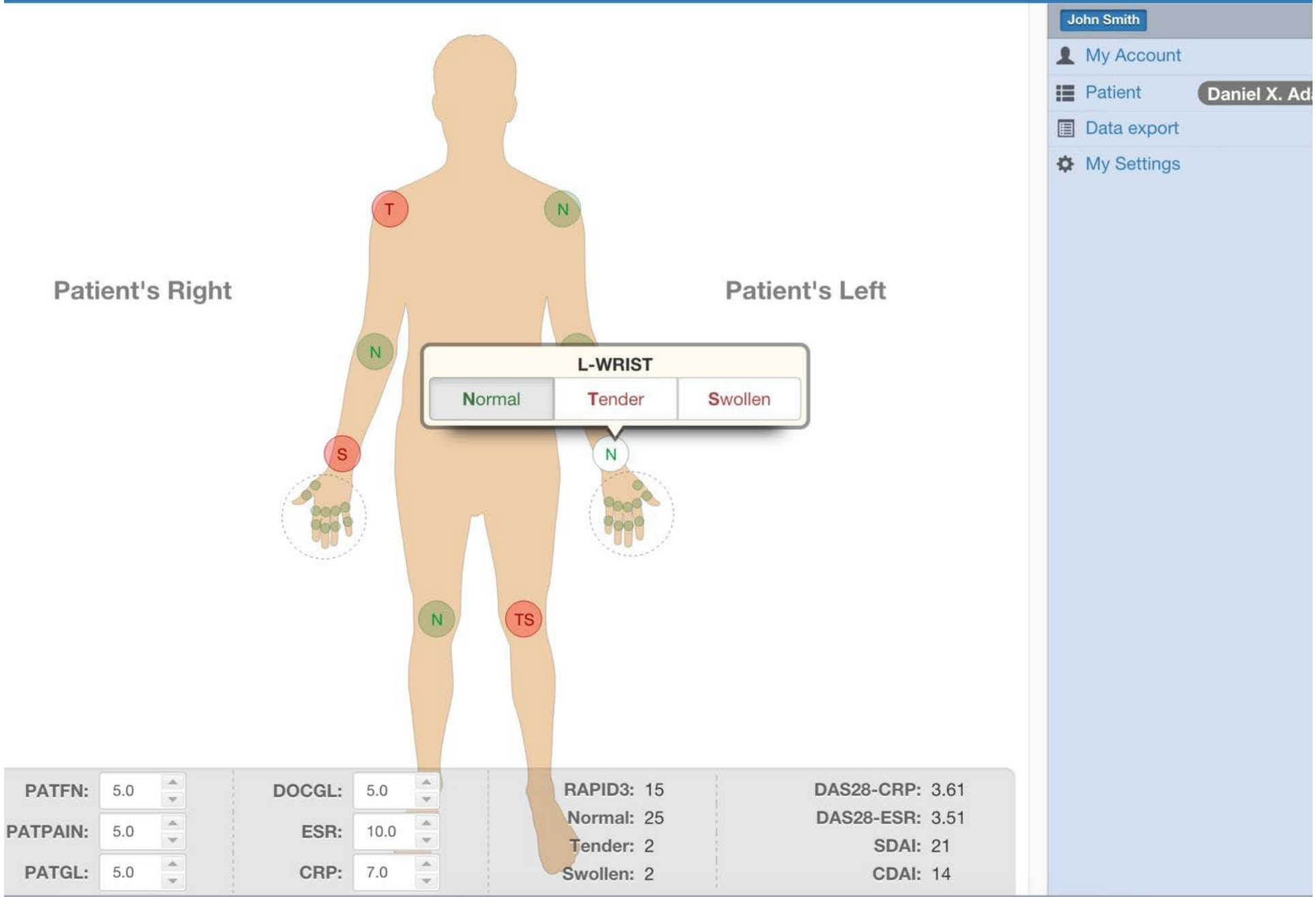
OVER THE PAST WEEK, were you able to:	Without **ANY** difficulty	With **SOME** difficulty	With **MUCH** difficulty	**UNABLE** to do
a. Dress yourself, including tying shoelaces and doing buttons?	0	1	2	3
b. Get in and out of bed?	0	1	2	3
c. Lift a full cup or glass to your mouth?	0	1	2	3
d. Walk outdoors on flat ground?	0	1	2	3
e. Wash and dry your entire body?	0	1	2	3
f. Bend down to pick up clothing from the floor?	0	1	2	3
g. Turn regular faucets on and off?	0	1	2	3
h. Get in and out of a car, bus, train, or airplane?	0	1	2	3
i. Walk two miles or three kilometers, if you wish?	0	1	2	3
j. Participate in recreational activities and sports as you wish?	0	1	2	3
k. Get a good night's sleep?	0	1.1	2.2	3.3
l. Deal with feelings of anxiety or being nervous?	0	1.1	2.2	3.3
m. Deal with feelings of depression or feeling blue?	0	1.1	2.2	3.3

2. How much pain have you had because of your condition OVER THE PAST WEEK? Please indicate below how severe your pain has been

6.5

NO PAIN 0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5 6 6.5 7 7.5 8 8.5 9 9.5 10 PAIN AS BAD AS IT COULD BE

CLIN DAT on SMART



Duke PillBox

Patient Name: Daniel X. Adams
Birth Date: 1925-12-23
MRN: 1288992

Create New Exercise | View Last Exercise

Please review PillBox medication list and dosing schedule for accuracy, and make adjustments as needed

Medication	Interval		Quantity
Lisinopril 20 MG Oral Tablet	① Once a day - morning	X	2.0
Memantine 10 MG Oral Tablet [Namenda]	② Twice a day	X	1.5
donepezil 10 MG Oral Tablet [Aricept]	① Once a day - noon	X	1.0
Hydrochlorothiazide 50 MG Oral Tablet	① Once a day - morning	X	1.0
potassium citrate 10 MEQ Extended Release Tablet	① Once a day - morning	X	0.5
Triamcinolone 1 MG/ML Topical Cream	⑥ Six times a day	X	Use
Flomax 0.4 mg	Ⓦ Once a week	X	1.0
ActoPlusMet 500/15mg	① Once a day - morning	X	1.0
Estrogens, Conjugated (USP) 0.625 MG Oral Tablet [Premarin]	◯ When Needed	X	1.0

+ Add Medications

✓ LAUNCH PillBox Exercise

 Developed by MedAppTech v2.2.0.beta

Translate pillbox app

ikePillBox English

Daniel X. Adams DOB: 1925-12-23 MRN: 1288

Morning

- **Lisinopril** 20 MG Oral Tablet — 1
- **donepezil** 10 MG Oral Tablet [… — 1

Noon

- **Memantine** 10 MG Oral Tablet… — 1
- **potassium citrate** 10 MEQ Ext… — 1/2

Evening

- **Triamcinolone** 1 MG/ML Topical Cream
- **Estrogens, Conjugated (USP)**… — 1

Bedtime

- **Estrogens, Conjugated (USP)**… — 1
- **Flomax** 0.4 mg — 1/2

Weekly

- **donepezil** 10 MG Oral Tablet [… — 1
- **donepezil** 10 MG Oral Tablet [… — 1

Lisinopril 20 MG Oral Tabl

Memantine 10 MG Oral T.

donepezil 10 MG Oral Ta..

potassium citrate 10 ME..

Triamcinolone 1 MG/ML T

Flomax 0.4 mg

Estrogens, Conjugated (..

Finish Check Hint Help Clear Print

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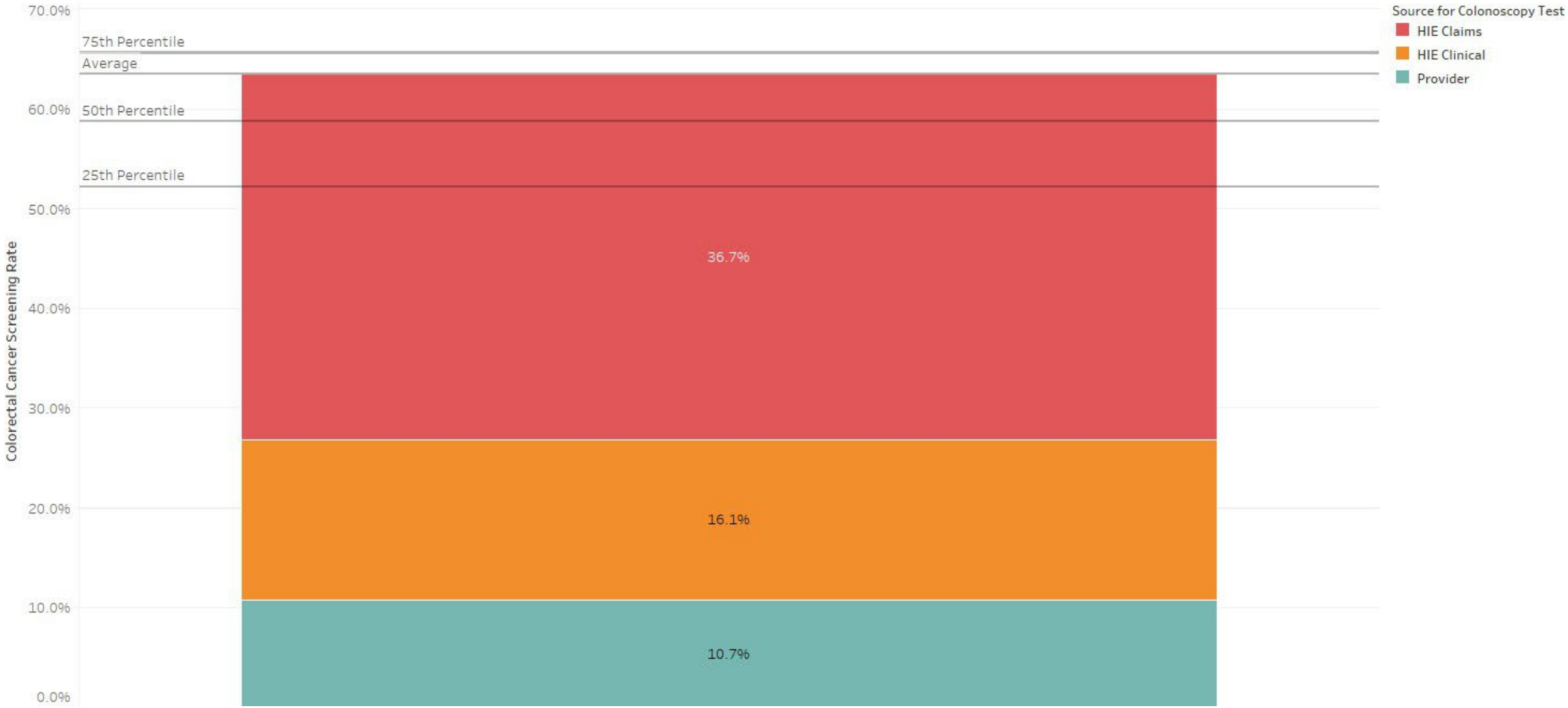
NFQ 0034: Colorectal Cancer Screening Performance Rate Total for Oklahoma Health System as of 06/01/2024

Note: Colonosopy Cancer Screening Tests include Colonoscopy, Flexible sigmoidoscopy, CT colonography, FIT-DNA, and FOBT/FIT.



SDOH Mobile Screening & Referral

1
Clinical Encounter

Patient checks into clinic.

2
SDoH Screening

SDoH Screening text from MyHealth is triggered to patient's cell phone while they are in the waiting room.

3
Process Results

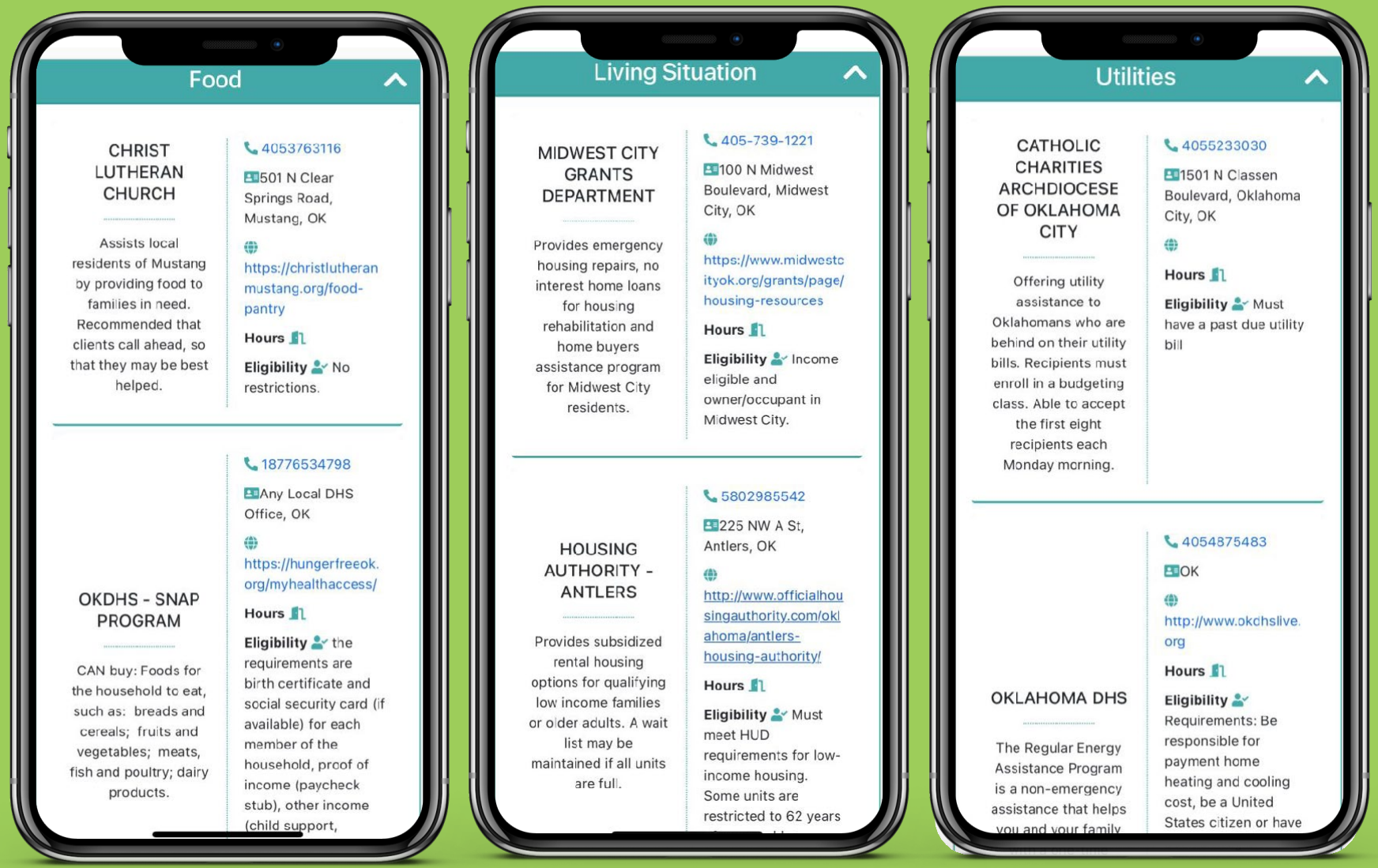
MyHealth processes the results to determine social needs reported.

4
CRS Returned

If a need is reported, a community resource summary is returned via text with information for 3 resources per need identified.

5
Referral Loop Closure

Referral sent to partner for closed loop coordination.



Every community resource summary includes information for 211

Community Resource Summary

Texted back to patient after completion of the screening

MyHealth® ACCESS NETWORK

SDOH Program Metrics

August 2018– May 30, 2024

By the numbers:

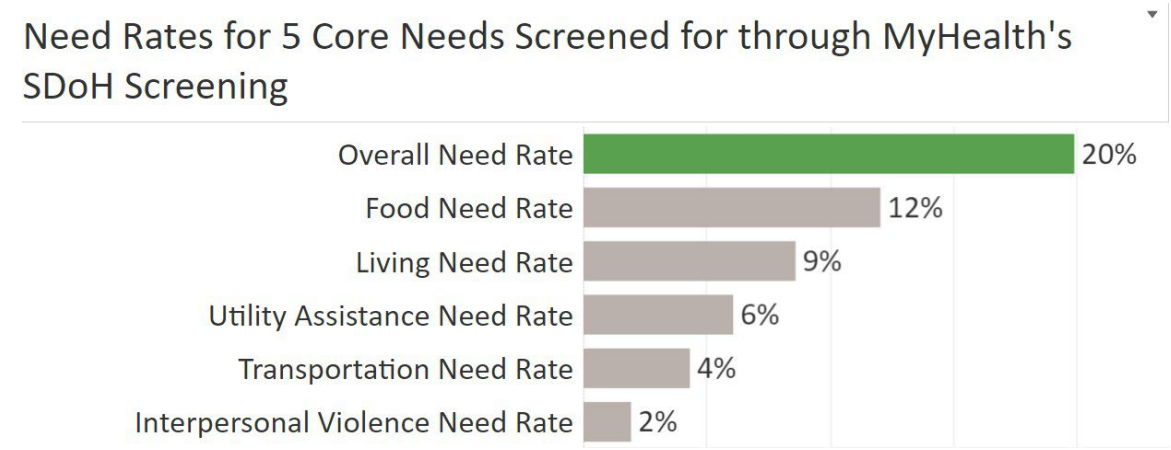
- ✓ **4.6+** million offers to screen
- ✓ **900,000+** responses
- ✓ **300,000+** responses with needs
- ✓ **400,000+** individual needs reported & addressed

Screening Delivery Rate

83%

Screening Response Rate

21%



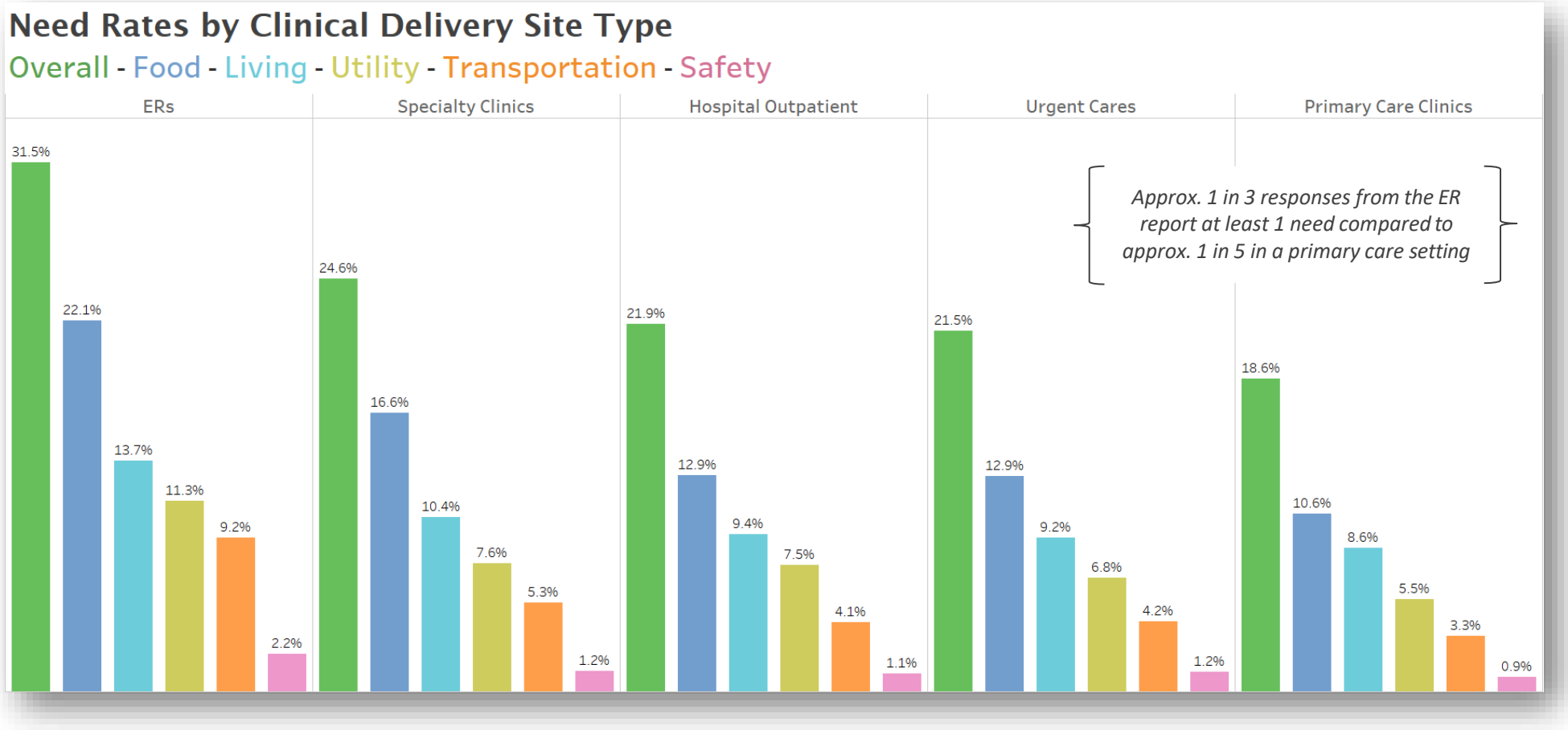
24% of responses report 2+ needs

average of **1.7** needs are reported per need positive screening

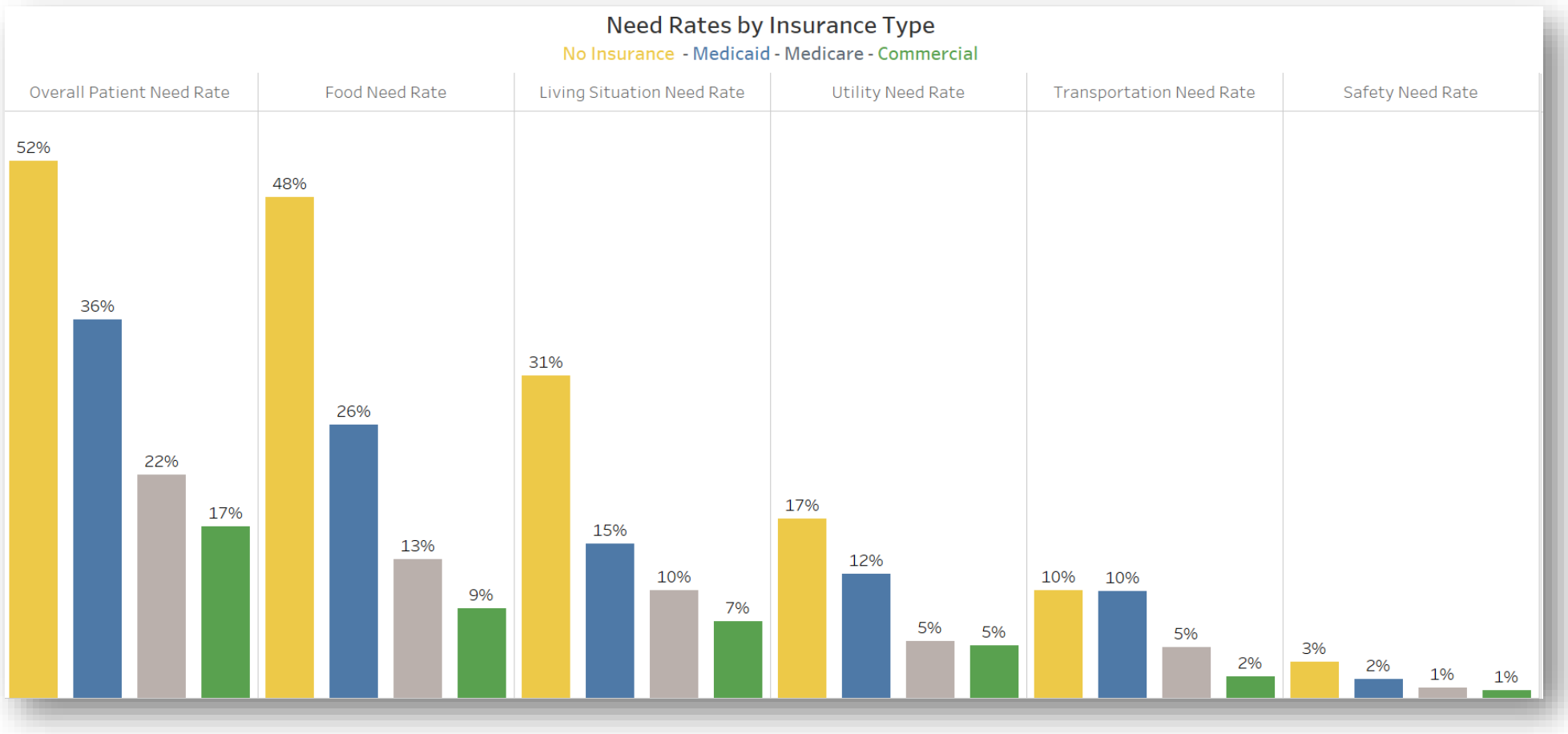
85% of responses with a living need is due to living conditions* rather having a place to stay

**Living condition issues include lack of heating, lead paint or pipes, mold, oven or stove not working, pests, missing or not working smoke detectors, and water leaks*

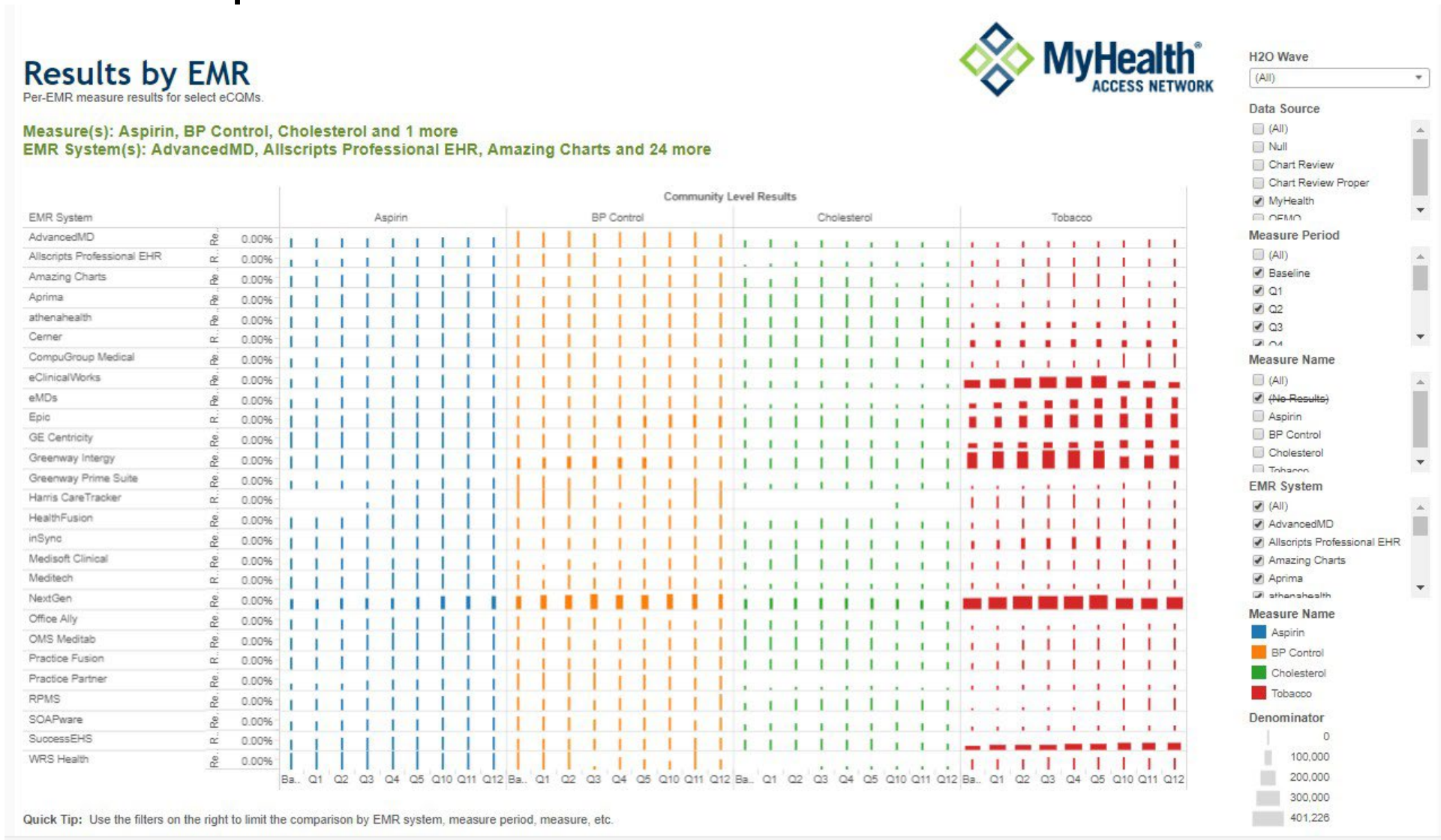
MyHealth AHC Need Rates by Clinical Site Type



MyHealth AHC Need Rates by Insurance Type



Measure performance across many systems and EHR platforms



Questions & Discussion

David-Kendrick@ou.edu

Session 3: Emerging Data Strategies for Supporting Shared Decision-making Between Providers and Patients

Charles DeShazer, MD

Physician Executive, Healthcare Innovator, and
Former Chief Quality Officer, The Cigna Group

Data Innovations to Promote Shared Decision-making Between Providers and Patients

A framework for transforming provider-patient interactions through data-driven approaches that empower patients and enhance clinical decision-making.

Dr. Charles DeShazer

Physician-Executive | AI Strategist | Founder, Nuvanta Consulting Group

Summary: Board-certified internist and nationally recognized C-suite leader with experience across payers (Cigna, Highmark), providers (BayCare, Kaiser Permanente), and tech (Google Health). Now leading Nuvanta Consulting Group, focused on AI-driven healthcare transformation.

Key Highlights:

- Led quality, equity, and AI integration at Cigna as Chief Quality Officer
- Directed global clinical product strategy at Google Health
- Drove enterprise transformation, value-based care and utilization reform at Highmark
- Co-founded Nuvanta to accelerate innovation and impact in healthcare
- 12+ years clinical practice anchoring tech in care delivery

Why Shared Decision-Making Needs Reinvention

Complexity Challenge

Modern healthcare decisions require sophisticated integration of clinical evidence, personal values, and social context, demanding high-trust, high-tech approaches

Data Fragmentation

Providers rarely have access to real-time, holistic patient data during critical care moments, leading to incomplete decision-making

Traditional Patient Role

The traditional healthcare model positions patients as passive recipients rather than active participants in their care journey

Evidence-Based Medicine Limitations

Cookie-cutter care pathways often fail to incorporate individual values, cultural context, and social determinants of health

Principles of Technology That Supports Shared Decision-Making (SDM)

Patient-Centeredness

Aligns with individual goals, values, and preferences—puts the patient at the center.

Transparency & Explainability

Makes recommendations clear and understandable to patients and providers.

Accessibility & Inclusivity

Designed for all literacy levels, languages, and cultural backgrounds.

Clinician-Augmentation

Supports—not replaces—provider judgment and the therapeutic relationship.

Personalization via Data

Uses individual health data to tailor decisions and predict outcomes.

Interactivity & Dialogue

Encourages ongoing two-way communication before, during, and after visits.

Timeliness

Delivers support exactly when needed—at the point of care or between visits.

Ethical & Bias-Aware

Proactively designed to reduce disparities and address algorithmic bias.

Workflow Integration

Embedded into clinical processes without disrupting care delivery.

Continuous Learning

Adapts with new evidence, feedback, and real-world outcomes.

Emerging Best Practices

Human + Tech Partnerships

- **Collaborative Care Planning**

  Structured digital templates used during visits to co-create care plans, ensuring alignment between clinical recommendations and patient priorities

- **Value Visualization**

  Interactive tools that make treatment tradeoffs visible (time commitment, out-of-pocket costs, side effect profiles) to facilitate informed choices

- **Conversational Intelligence**

  Training clinicians using AI-analyzed real patient dialogues to enhance empathetic communication and shared understanding

- **Predictive Intervention**

  Using predictive analytics to identify decision points before clinical deterioration, creating opportunities for proactive shared decision-making

Emerging Best Practices: Case Studies in SDM Technology

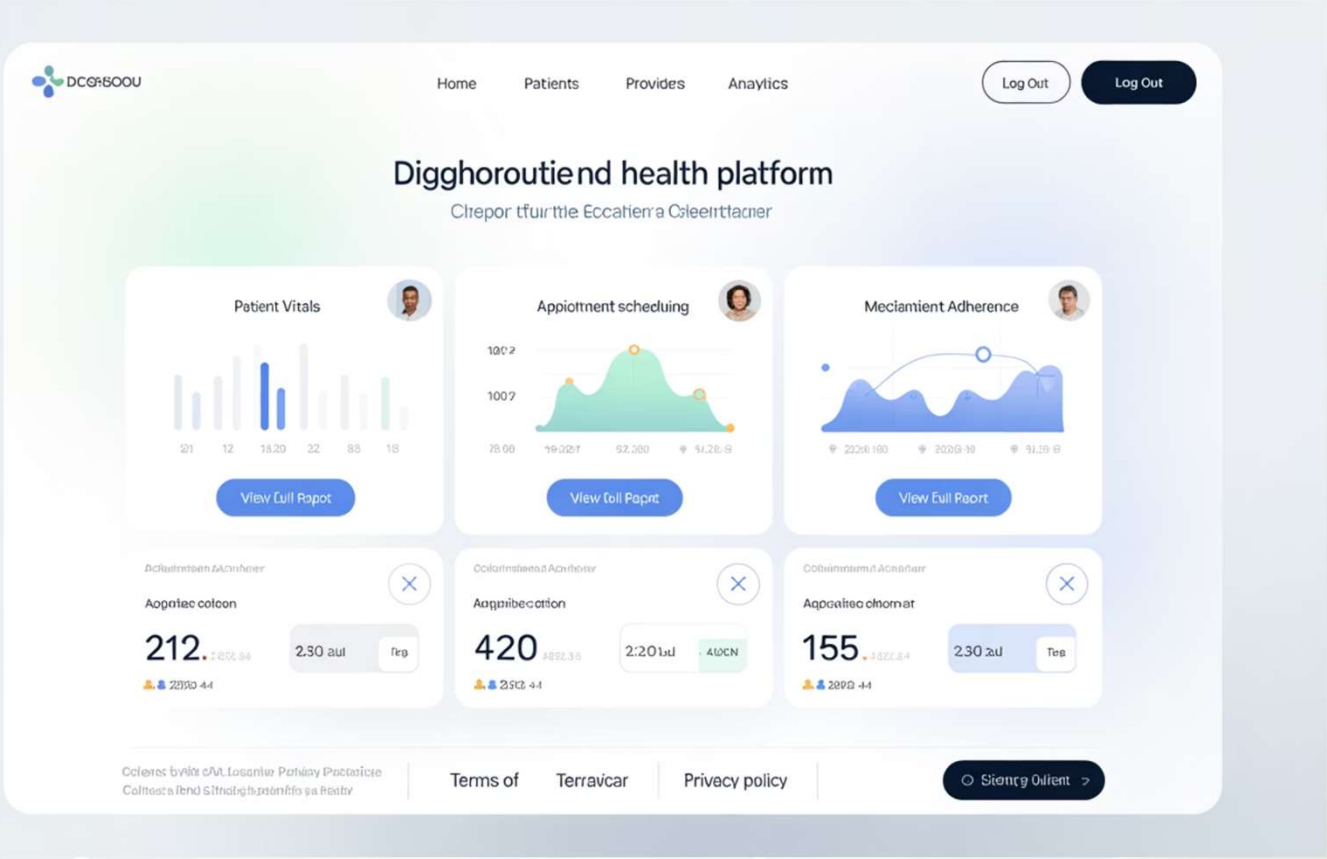
Innovations leveraging AI and data are creating new opportunities for shared decision-making across various healthcare settings.

Tool / Organization	Use Case	How It Supports SDM
Penda Health AI Consult	LLM copilot detects errors during primary care visits	Improves diagnostic accuracy; reinforces guideline-aligned options, saving time for deeper patient dialogue.
Cedars-Sinai K Health AI	Chatbot-driven intake & recommendations in Connect clinics	Frees clinician time from administrative tasks for more value-based discussions with patients.
NHS England C the Signs	AI flags hidden cancer risks in primary care	Prompts earlier, proactive conversations between providers and patients, boosting early detection rates.
CarePre (China)	AI shows “what-if” outcomes for chronic care plans	Makes complex treatment trade-offs visually clear to patients via interactive simulations and scenarios.
Aifred Health	AI for antidepressant selection	Facilitates personalized, shared medication decisions in mental health by providing data-driven insights.

These examples highlight the diverse applications of technology in empowering both providers and patients in the shared decision-making process.

Empowering Shared Decisions

By embracing **data innovations** and **patient-centered technology**, we can redefine shared decision-making, fostering a healthcare ecosystem where providers and patients collaborate for optimal outcomes.



Let's continue to build a future where every health decision is a truly shared one, informed by the best available data and personalized to each individual's needs and values.

Session 3: Emerging Data Strategies for Supporting Shared Decision-making Between Providers and Patients

Thomas H. Lee, MD, MSc

Chief Medical Officer,
Press Ganey Associates, Inc.

PressGaney

Measuring Improvement in Patient Engagement and Outcomes

a PG Forsta company

Thomas H. Lee, MD, MSc

Chief Medical Officer, Press Ganey

Editor-in-Chief, NEJM Catalyst

Physician, Brigham and Women's Hospital

Faculty, Harvard Medical School and Harvard T.H. Chan School of Public Health

PressGaney

Key Findings From 10.5 Million Surveys During 2024

Experience scores are stable or trending upward.

Teamwork is a top driver of the inpatient experience.

Perceptions of safety are powerful predictors of LTR.

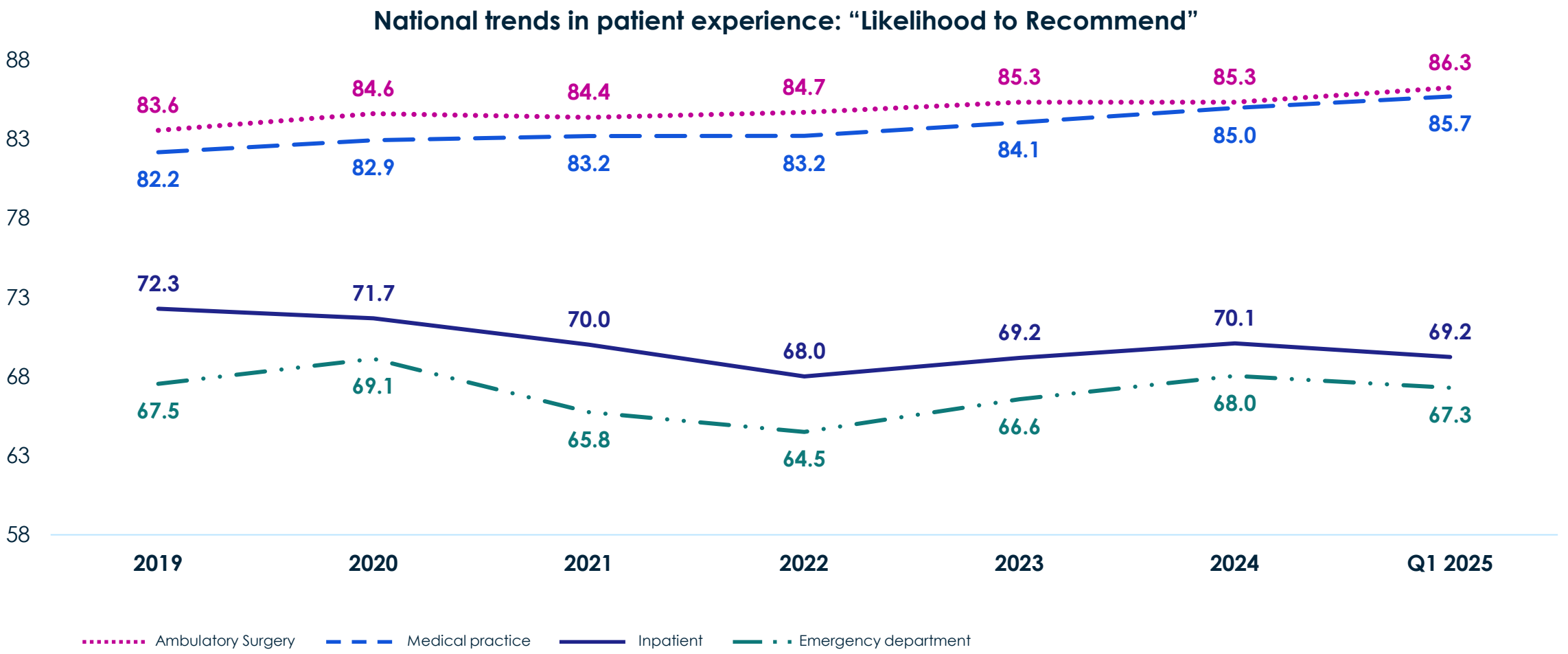
When care is equitable, experience improves.

Segmentation is essential for improvement

Building social capital with patients improves outcomes and efficiency

The big picture:

National patient experience measures continue to improve



Data: Likelihood to recommend as measured by HCAHPS

What earns patients' trust?

In 2023, one factor emerged as the strongest correlate of trust* in every setting in PG data

U.S. analysis of key drivers of Likelihood to Recommend by setting

Emergency

- Staff worked together*
- Cared about you as a person
- Attention to your needs
- Treat with courtesy/respect

Inpatient

- Staff worked together*
- Response to concerns
- Attention to your needs

Med Practice

- Staff worked together*
- Concern for questions/worries
- Explanation of condition/problem
- Include in decisions

Clinic

- Staff worked together*
- Treat with respect/dignity
- Response to concerns
- Trust skill of staff

Amb. Surgery

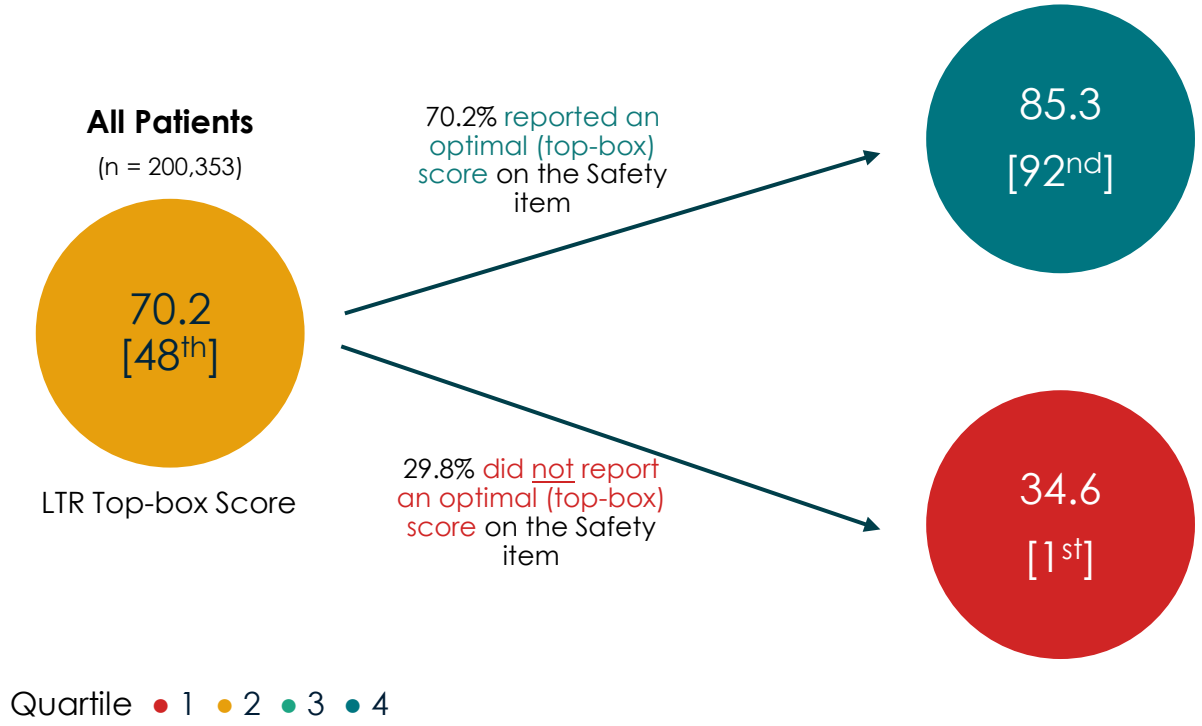
- Staff worked together*
- Response to concerns
- Nurses" concern for comfort
- Provider response to concerns/questions

Urgent Care

- Staff worked together*
- Provider listened
- Explanation of condition/problem
- Include in decisions

Safety is a patient experience imperative

Among inpatients who report feeling "very safe" (70.2%), LTR top-box scores are 85.3. But when that sense of safety falters, LTR plummets to 34.6—a score below the 1st percentile.



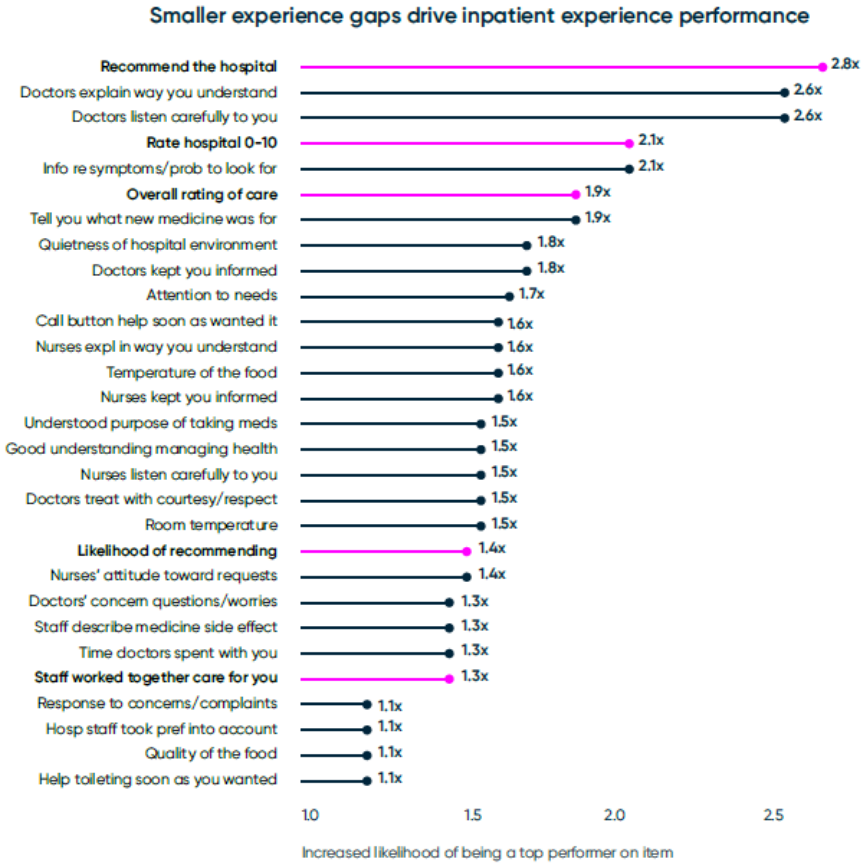
Among inpatients who feel "very safe" **(70.2%)**, top-box LTR scores reach **85.3**.

When that feeling is absent, LTR drops below the **1st percentile** to **34.6**.

Source: Inpatient HCAHPS & Integrated surveys received from 2024 CY.

Equity and Excellence Are Intertwined

Organizations that integrate equity and patient experience strategies achieve higher consistency across all facets of the patient experience, as well as strong loyalty among all patients.



Hospitals with the **smallest gaps in PX scores** across racial and ethnic groups are **2.8x** more likely to rank in the top quartile for LTR.

Segmentation is Critical

Example: HCAHPS by Age Cohort All Measures

Largest Challenges Seen in Discharge Prep, Information and Responsiveness

			All Patients	18 - 34 Yrs'	'35 - 49 Yrs'	'50 - 64 Yrs'	'65 - 79 Yrs'	'80 + Yrs'
GLOBAL	Rate	*Rate hospital 0-10	71.12	-2.08	-5.38	-1.74	1.44	-0.88
	Recommend	*Recommend the hospital	70.22	3.03	-1.05	-0.57	0.5	-2.14
CLINICAL	Discharge Prep	*Staff talk about help when you left	85.13	-2.11	-2.97	-0.36	1.12	-0.69
		*Info re symptoms/prob to look for	88.49	5.69	3.32	2.1	0.13	-5.88
		*Understood purpose of taking meds	59.9	10.41	7.62	3.76	-0.45	-8.9
		*Good understanding managing health	53.07	12.53	7.81	3.63	-0.67	-9.46
CARING BEHAVIORS	Courtesy	*Nurses treat with courtesy/respect	86.2	0.66	-2.67	-1.36	0.84	-1.33
		*Doctors treat with courtesy/respect	86	0.96	-1.65	-0.63	0.46	-1.54
	Inform	*Nurses expl in way you understand	75.86	5.17	1.9	1.89	0.67	-6.32
		*Doctors expl in way you understand	75.73	6.93	3.11	1.93	0.47	-7.26
		*Tell you what new medicine was for	75.16	7.75	3.47	3.37	0.16	-8.3
		*Staff describe medicine side effect	48.16	10.23	6.01	4.15	-1.21	-8.7
	Personalize	*Nurses listen carefully to you	77.52	2.97	-1.21	0.06	0.85	-3.93
		*Doctors listen carefully to you	78.73	4.57	0.29	0.59	0.31	-4.45
	Responsiveness	*Call button help soon as wanted it	63.11	9.97	3.34	1.05	-0.54	-7.85
		*Help toileting soon as you wanted	65.48	11.93	4.52	0.71	-0.87	-5.6
	Choice	*Hosp staff took pref into account	48.48	10.19	5.98	1.96	-0.9	-6.29
OPERATIONAL	Clean	*Cleanliness of hospital environment	73.54	1.04	-0.36	-0.4	-0.16	-2.05
	Quiet	*Quietness of hospital environment	60.09	12.36	4.05	-0.67	-2.2	-4.36

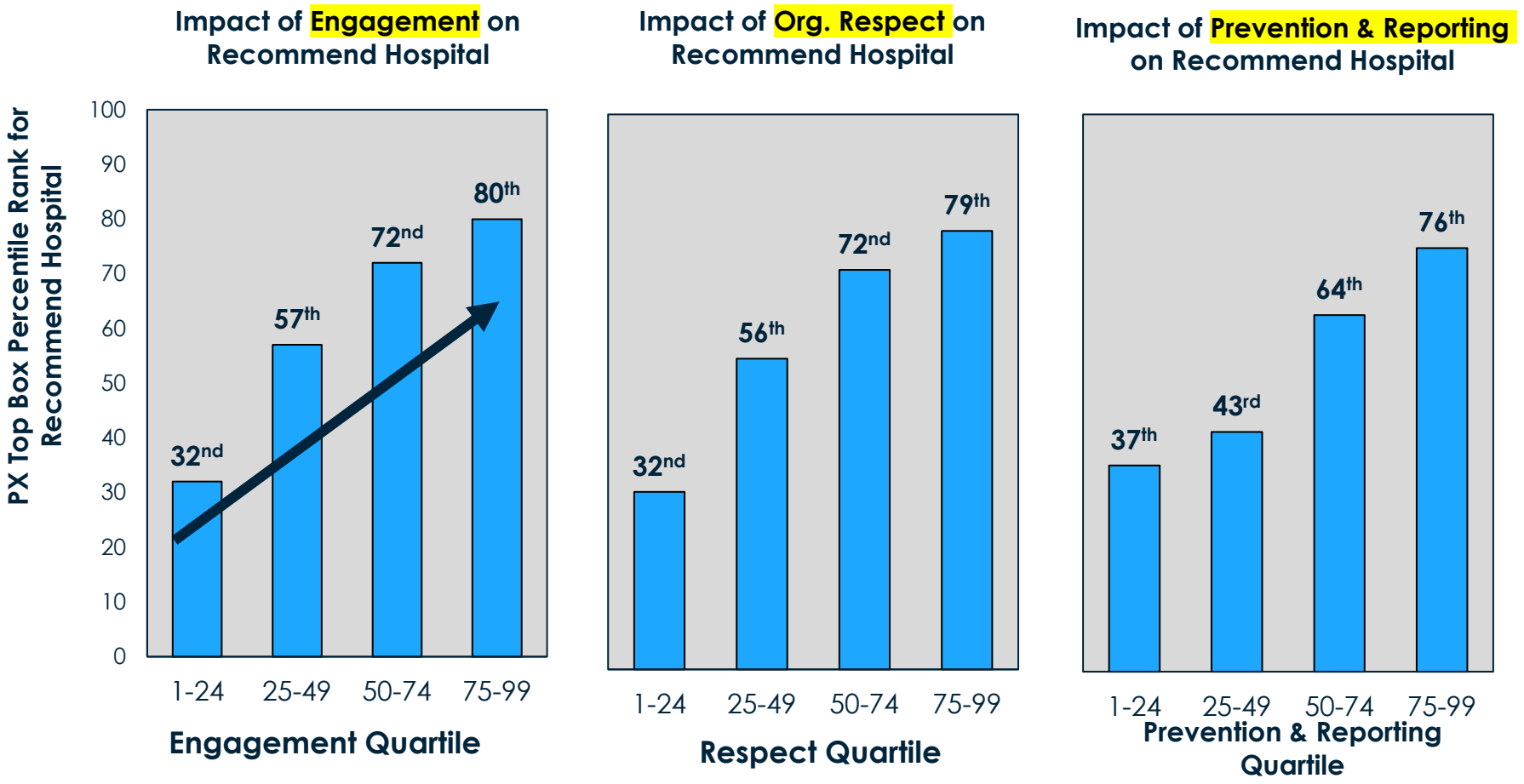
The Currencies of Social Capital at Work

Respect. Trust. Teamwork. High Reliability.

Patients giving top-box responses for **doctors** showing courtesy and respect	Were **24% less likely** to have an ED visit 30 days post discharge Had **12% lower chance** of being readmitted Had **significantly shorter** length of stay (-.41 days).
Patients giving top-box responses for **nurses** showing courtesy and respect	Were **15% less likely** to have an ED visit 30 days post discharge Had **16% lower chance** of being readmitted Had **significantly shorter** length of stay (-.43 days)

Good Things for Patients Go With Good Things for Provider Employees

Top engagement performers are **3x more likely** to be top performers for patient experience



Key Findings From 10.5 Million Surveys During 2024

Experience scores are stable or trending upward.

Teamwork is a top driver of the inpatient experience.

Perceptions of safety are powerful predictors of LTR.

When care is equitable, experience improves.

Segmentation is essential for improvement

Building social capital with patients improves outcomes and efficiency