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STRATEGIC HEALTH INFORMATION EXCHANGE COLLABORATIVE

Patient Centered Data Home™

David Kendrick, MD, MPH
CEO, MyHealth Access Network
SHIEC Board of Directors

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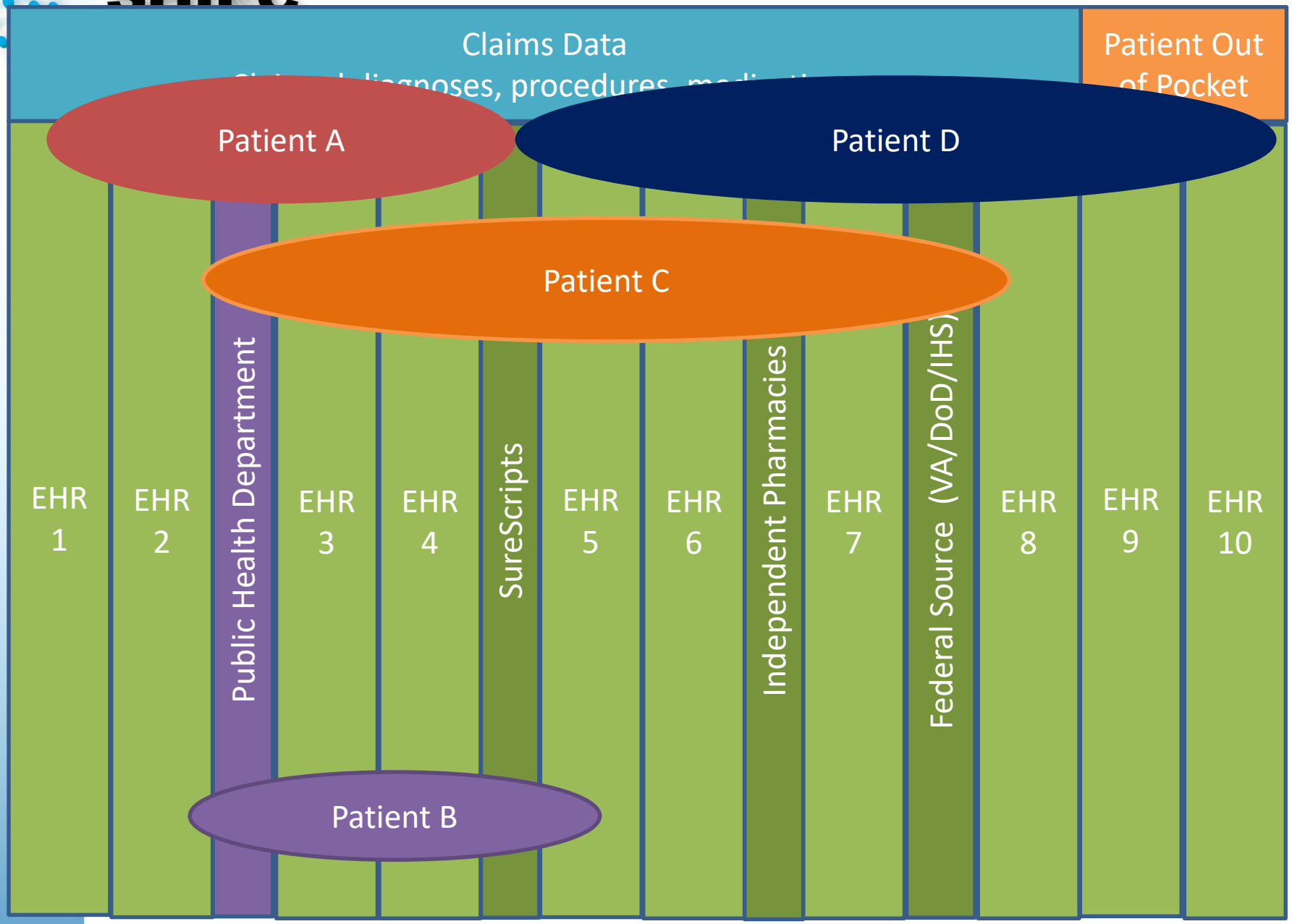
Interoperability happens at the speed of trust.



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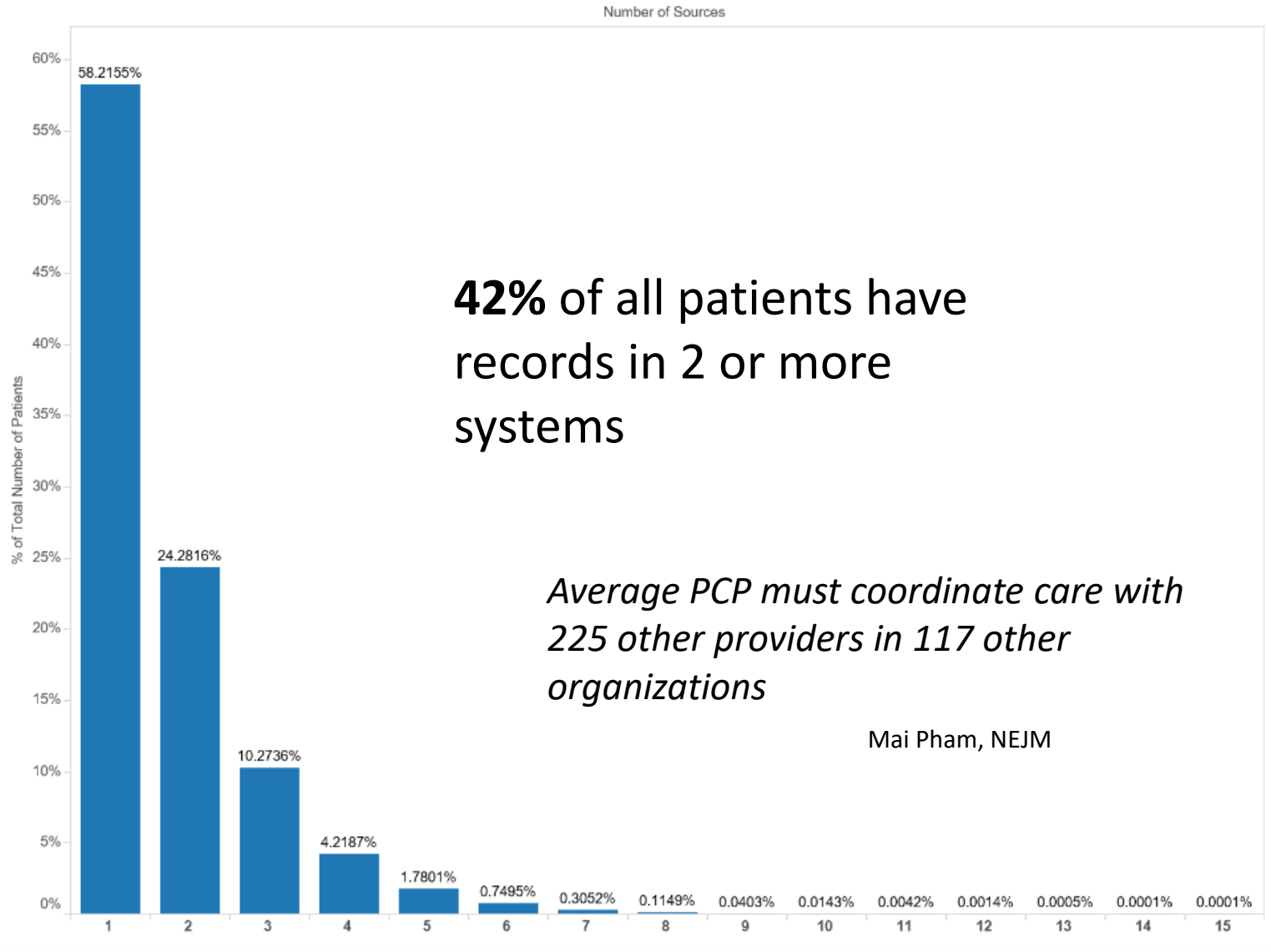
Fragmentation quantified



42% of all patients have records in 2 or more systems

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

Mai Pham, NEJM

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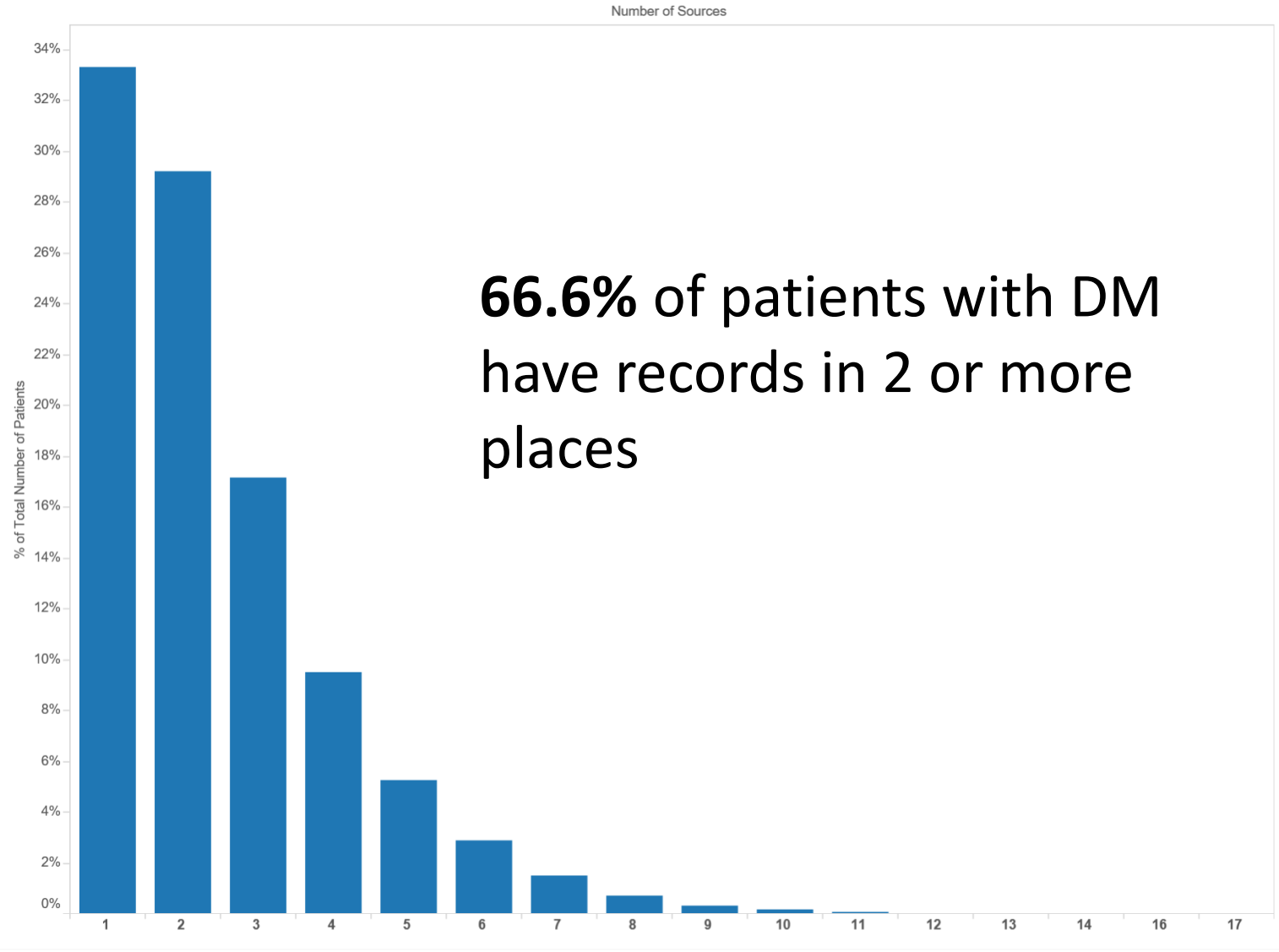
Fragmentation: Pt's with Diabetes



66.6% of patients with DM have records in 2 or more places

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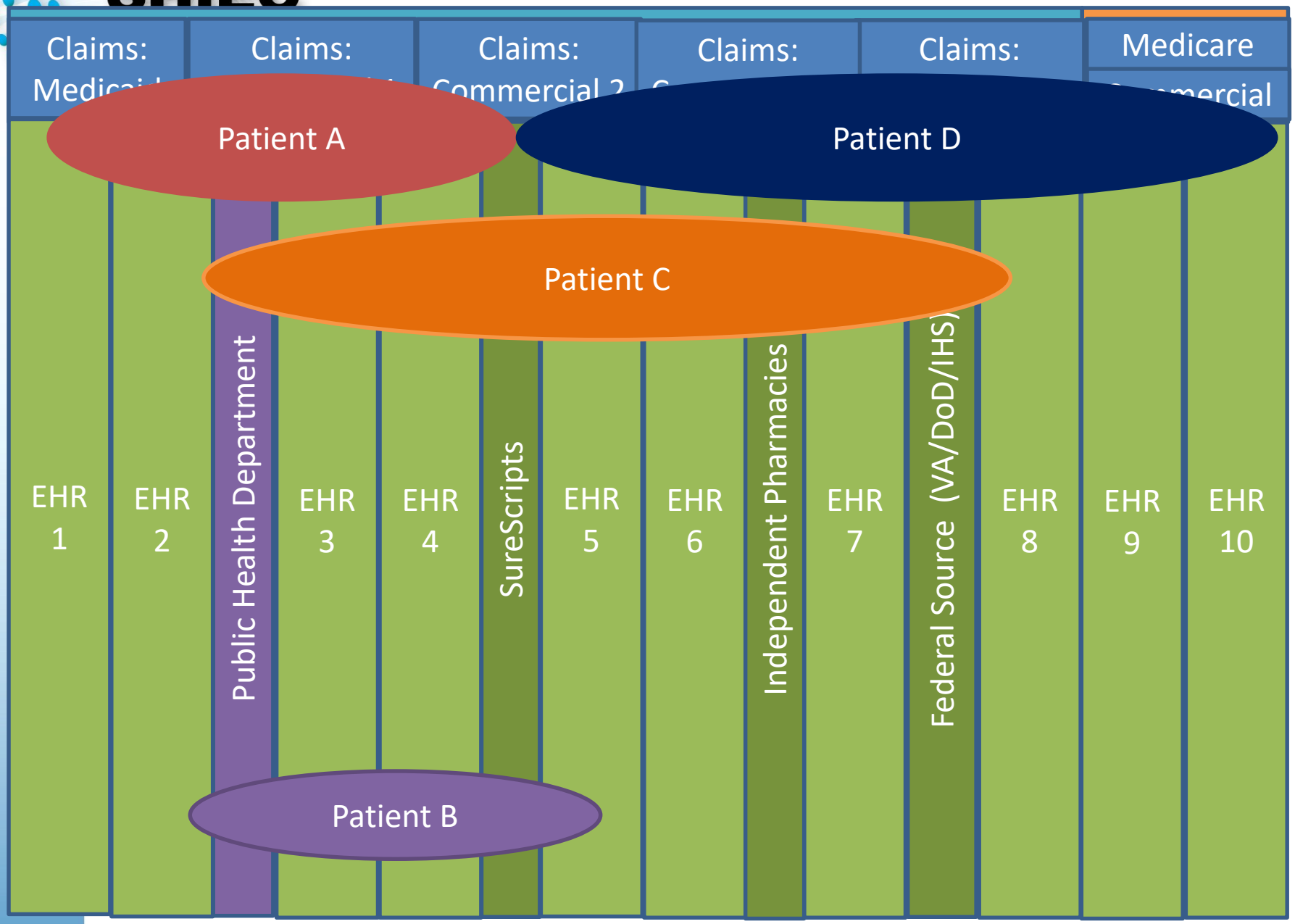

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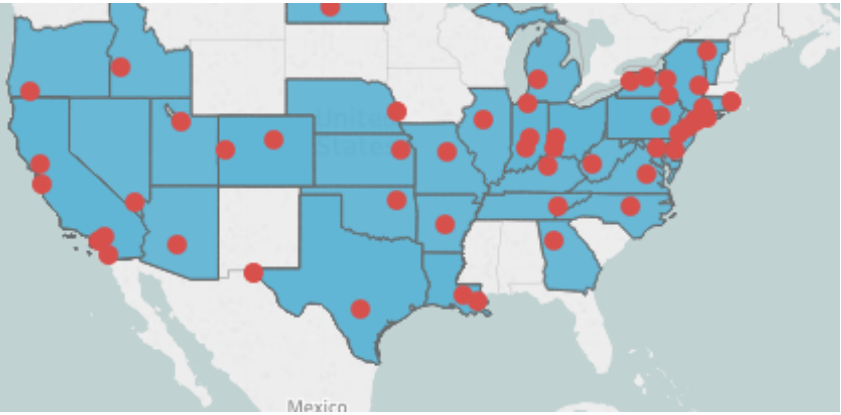
The details . . .

- 54 member HIE's across 34 states
- Provide person-centric health records
- Unbiased data trustees focused on better health
- Altogether currently serve >195M patients
- Rapid growth from foundation 2 years ago
- 29 strategic business and technology partners



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Critical Infrastructure

- SHIEC's HIE's provide critical infrastructure for interoperability
  - Identity matching and resolution
  - Impartial "wiring" for information routing
  - Tools for data quality improvement
  - Multi-organizational trust agreements
  - Governance inclusive of
    - Those who receive care
    - Those who deliver care
    - Those who pay for care
  - More than health*care*:
    - behavioral health
    - social determinants of health

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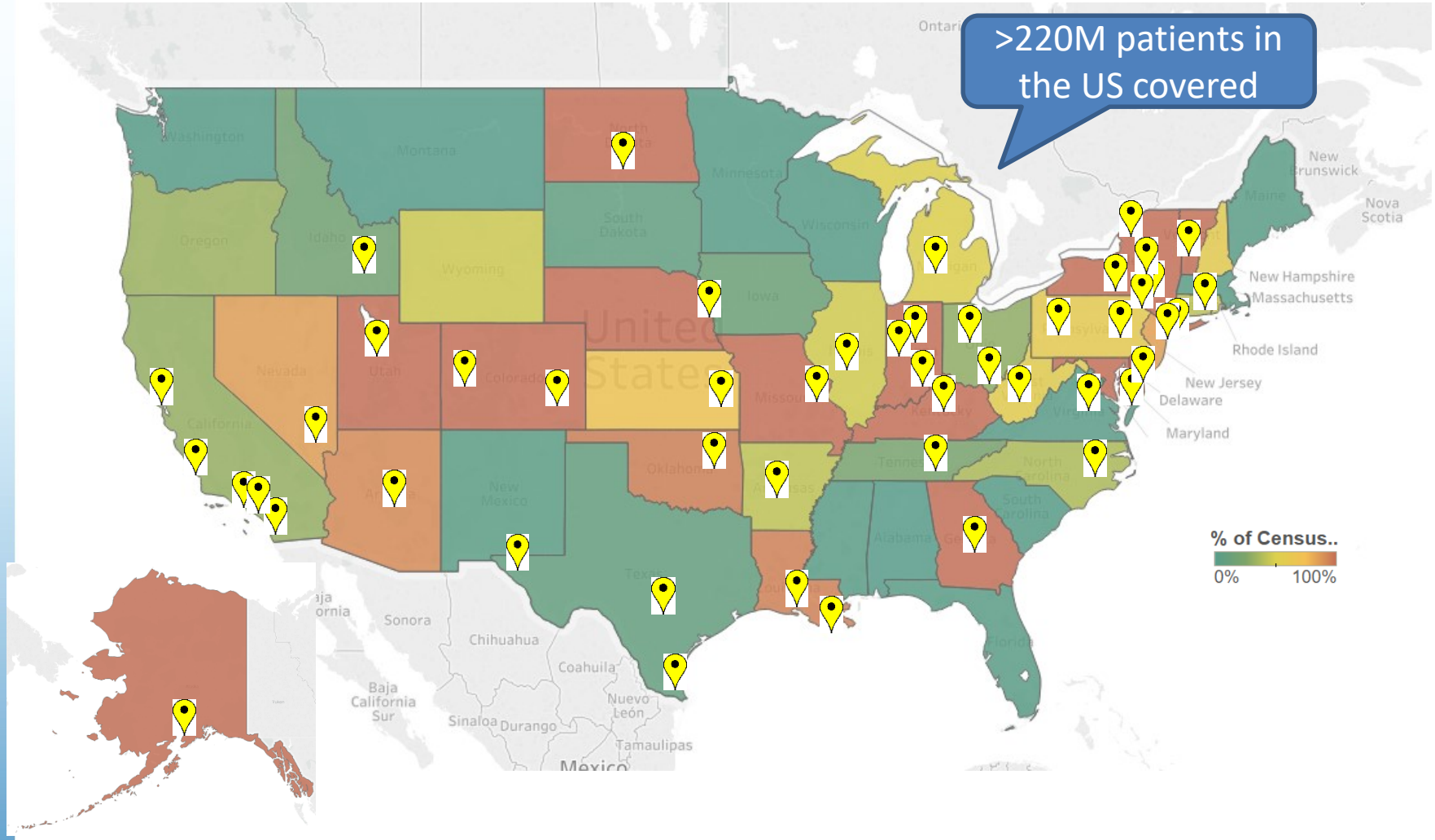
Percent of US Population Served



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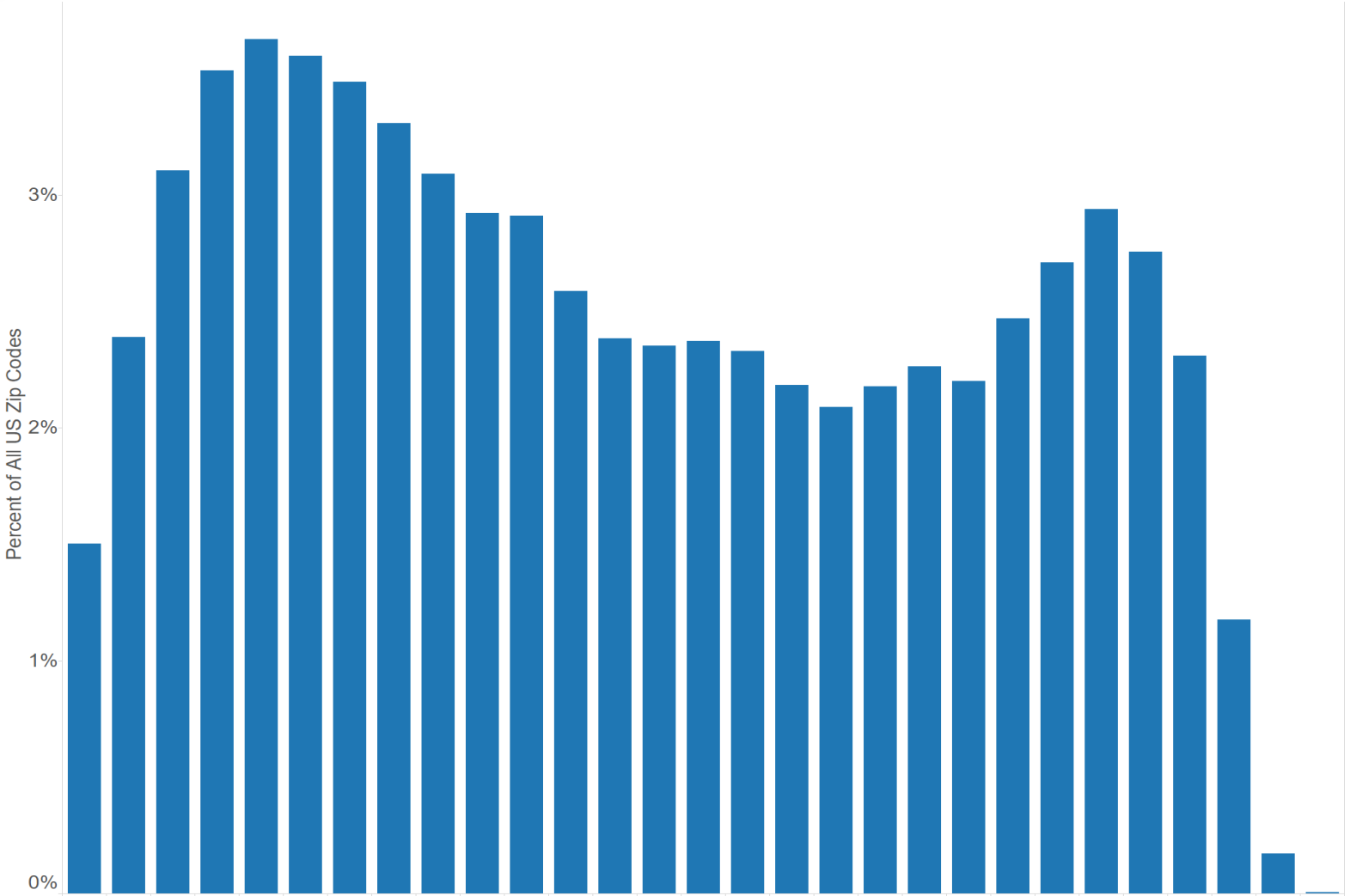
Number of HIE's serving patients in each US zip code



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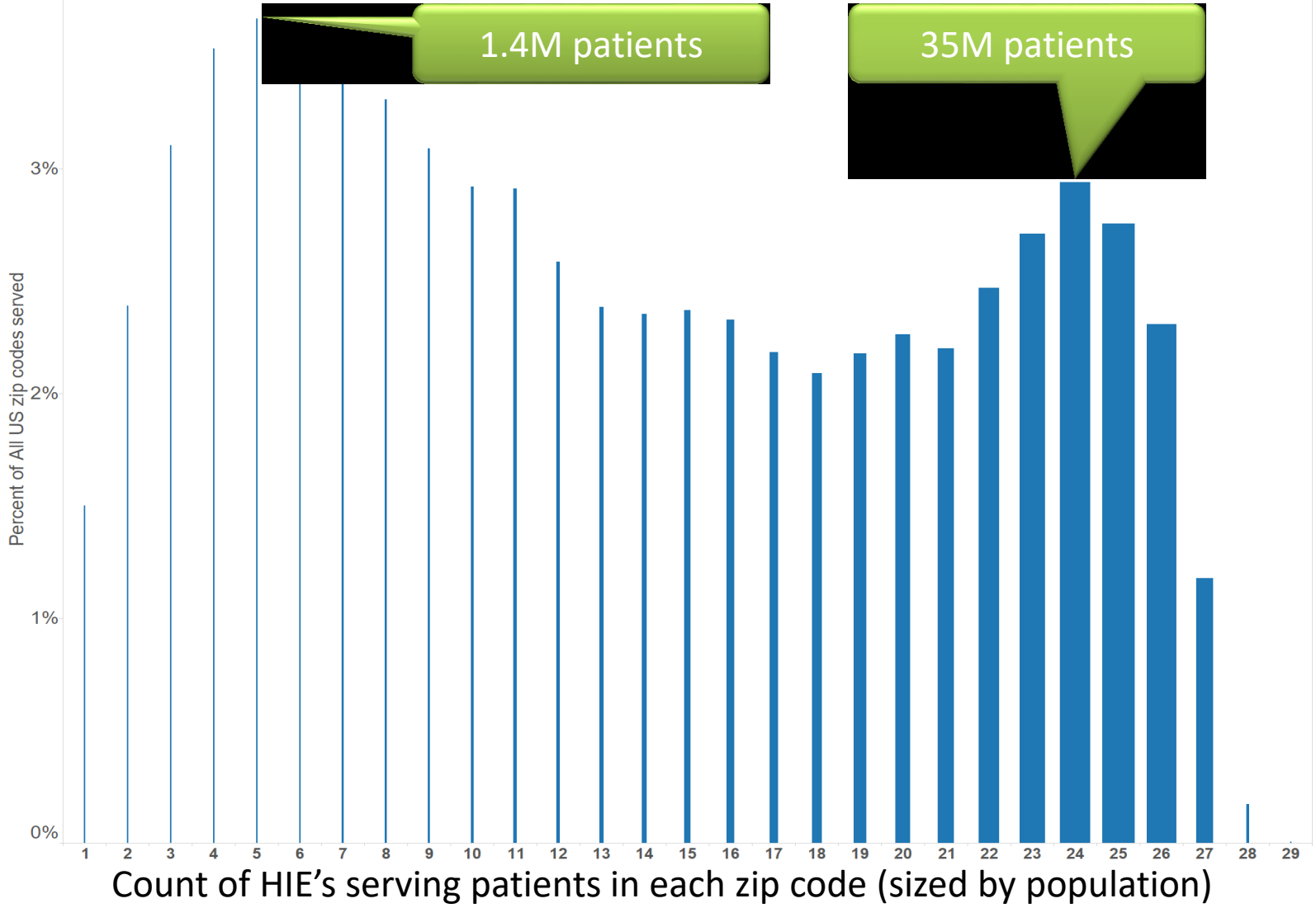

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3 key questions

- Where did my patients get care?
  - (where do I need to query to get the information?)
- When did my patients get care?
  - (who is getting it *right now* that I don't know about)?
- Who is the patient that got care?
  - (do my identifiers for the patient match all of the other organizations'?)

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Patient Centered Data Home™: The Vision

- Standards based, cost effective, scalable data exchange model
- Links existing HIE systems together
  - Maintain patient-centric data view
- Provides comprehensive real time patient information
  - Requires ability to PUSH
- Answers the three key questions
  - Who, When, Where
- Resolve identity across HIE's
  - Singe "universal" identifier not required
- Preserves local governance and protects local stakeholders– honors local data use policies
- Enhances data aggregations required for quality reporting and shift to Value Based Payment Models

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PCDH Core Principles

Every person deserves to have their complete, longitudinal health record available whenever and wherever it is needed for decisions that affect their health or well-being

- **Local Governance (and trust relationships) preserved**
- **Identity management processes sustained and coordinated**
- **Existing data use agreements honored**
- **Privacy and consent models maintained**
- **Business models preserved and expanded**
- **Technical architecture preserved**
- **Use cases outside of PCDH encouraged**

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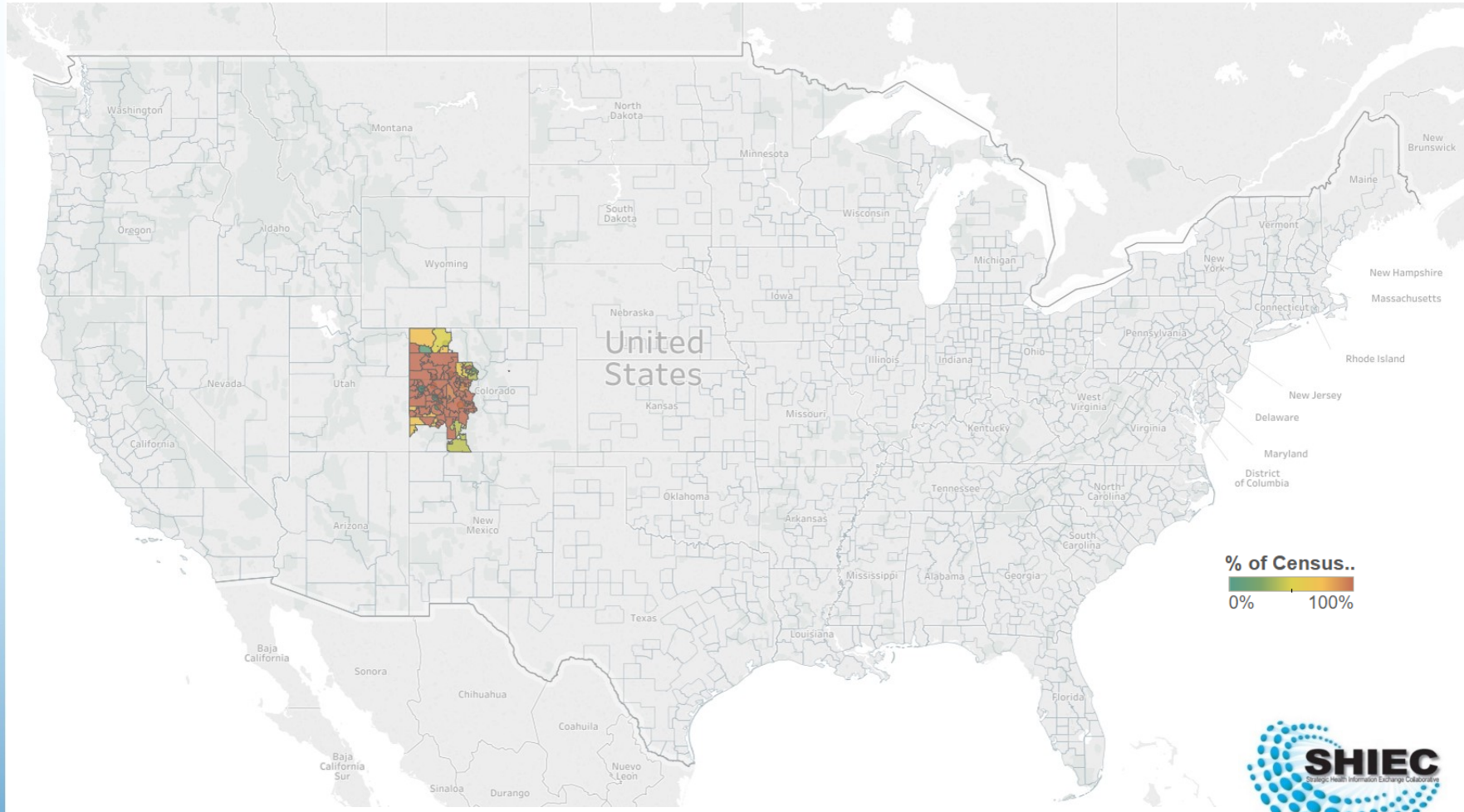
Information
Exchange
Collaborative

PCDH: How it works



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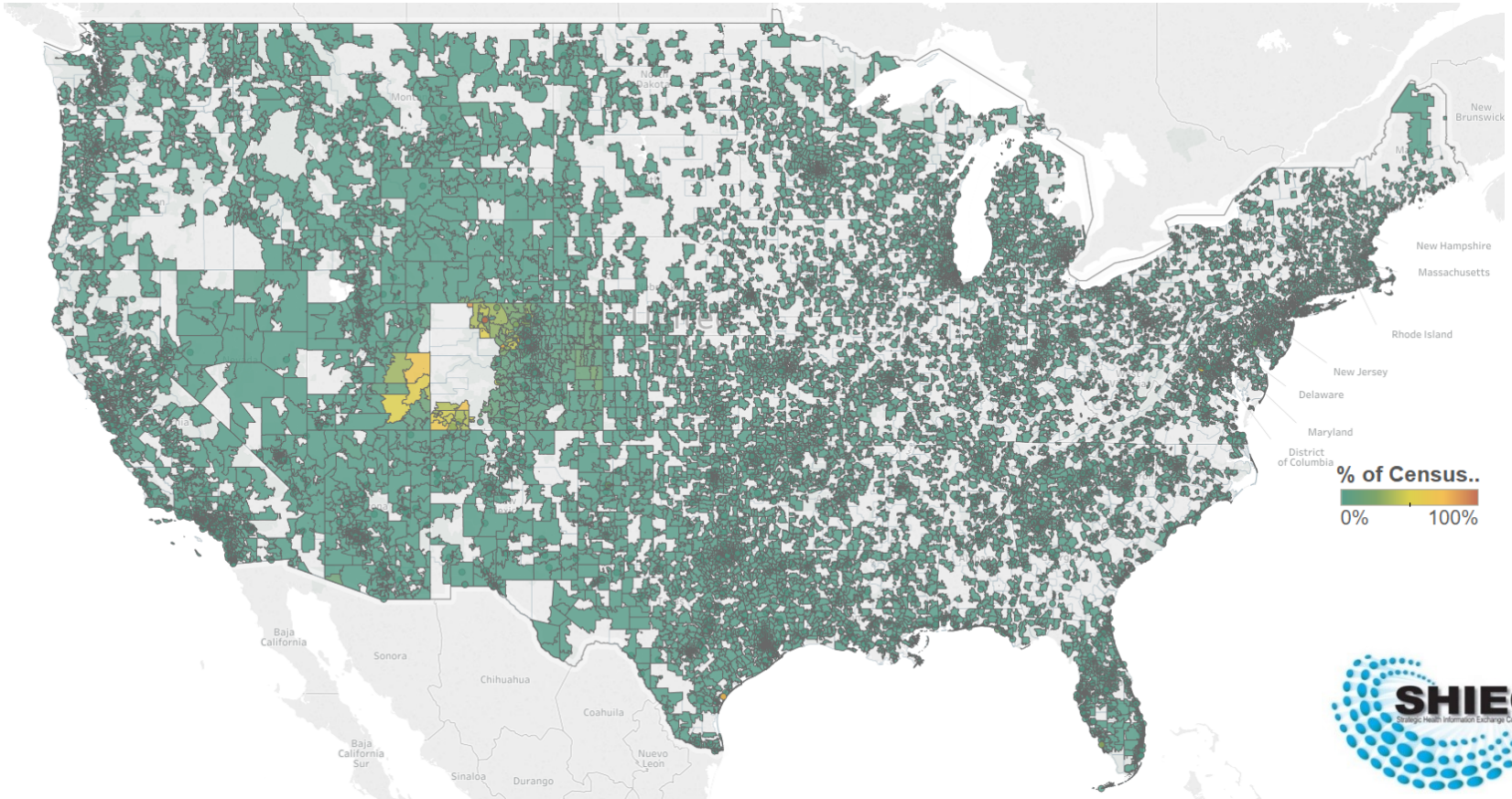
Health
Information
Exchange
Collaborative

PCDH: How it works



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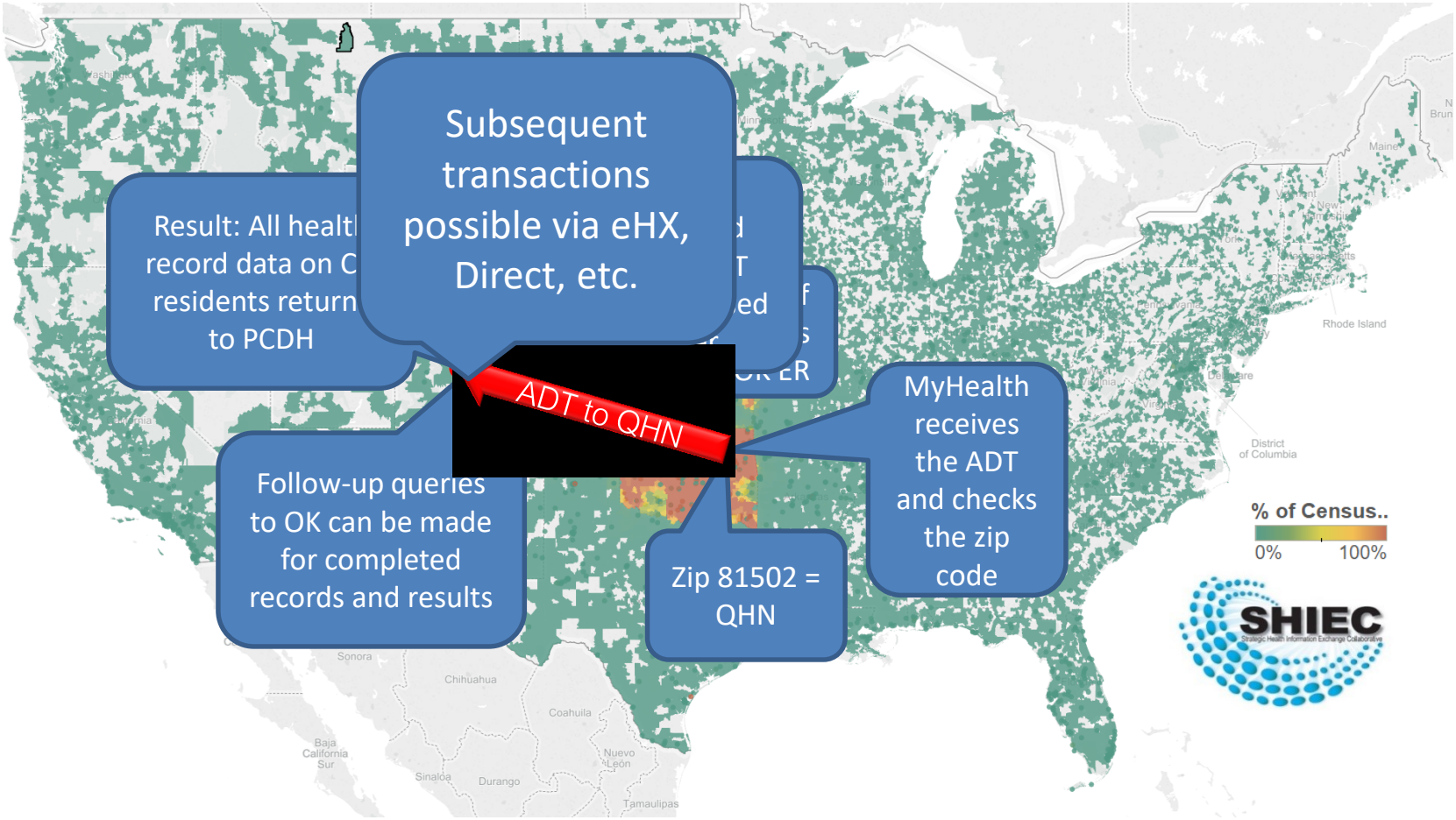
PCDH: How it works



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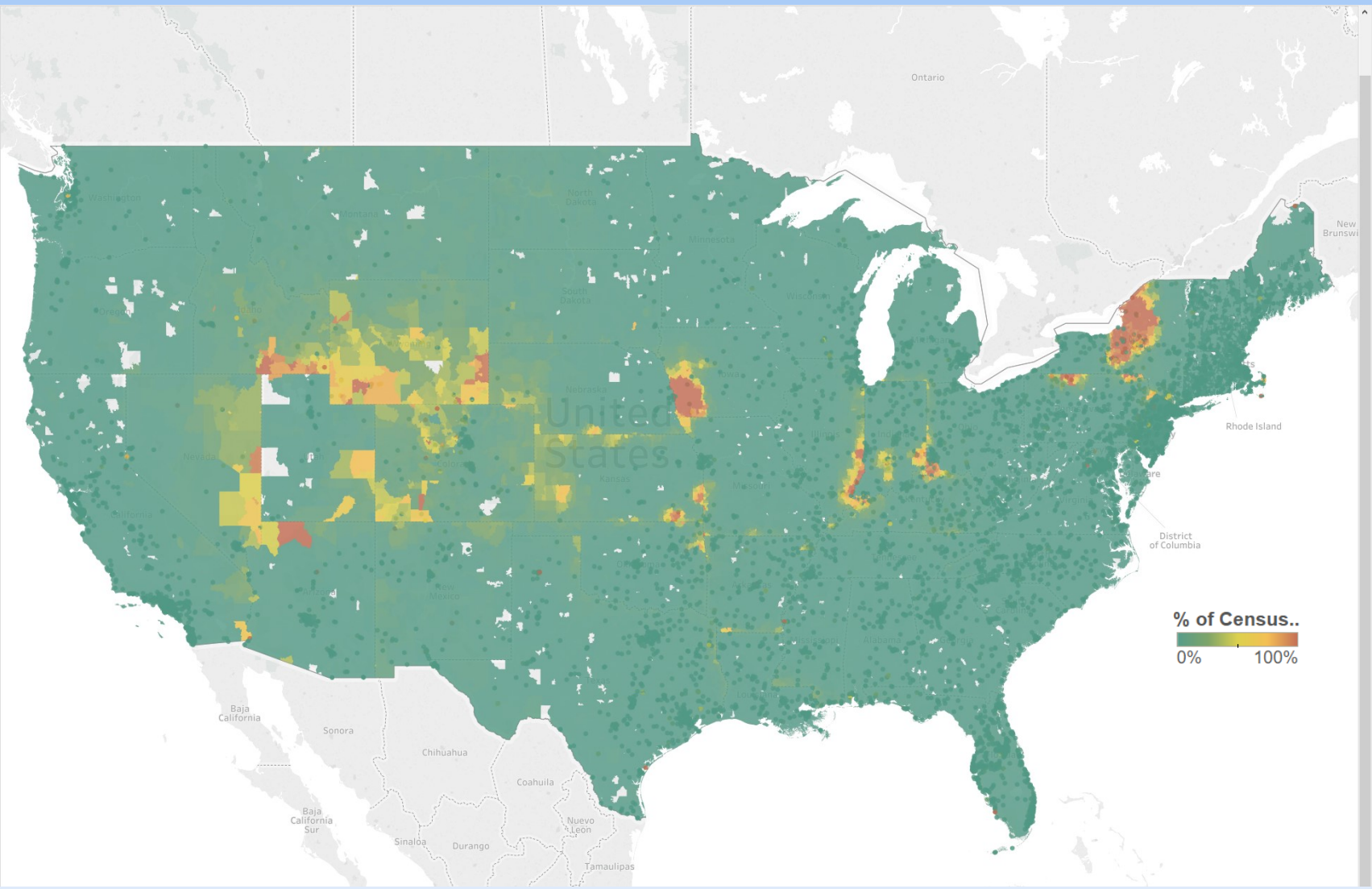
Care outside the PCDH's: ~20M patients



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Implications of PCDH

Centralization of all data on each patient in their PCDH enables:

- Nationwide ADT alerting (with complete histories)
- More accurate care gap analysis (support quality)
- More accurate quality measures (support VBPM's)
- National patient identity assurance
- Possibility of centralized patient consent management
- Patient access to their entire record in one place– for the first time (patient empowerment & engagement)

Costs:

- Relatively little– must maintain governance, geographic relationships, and minimal technology

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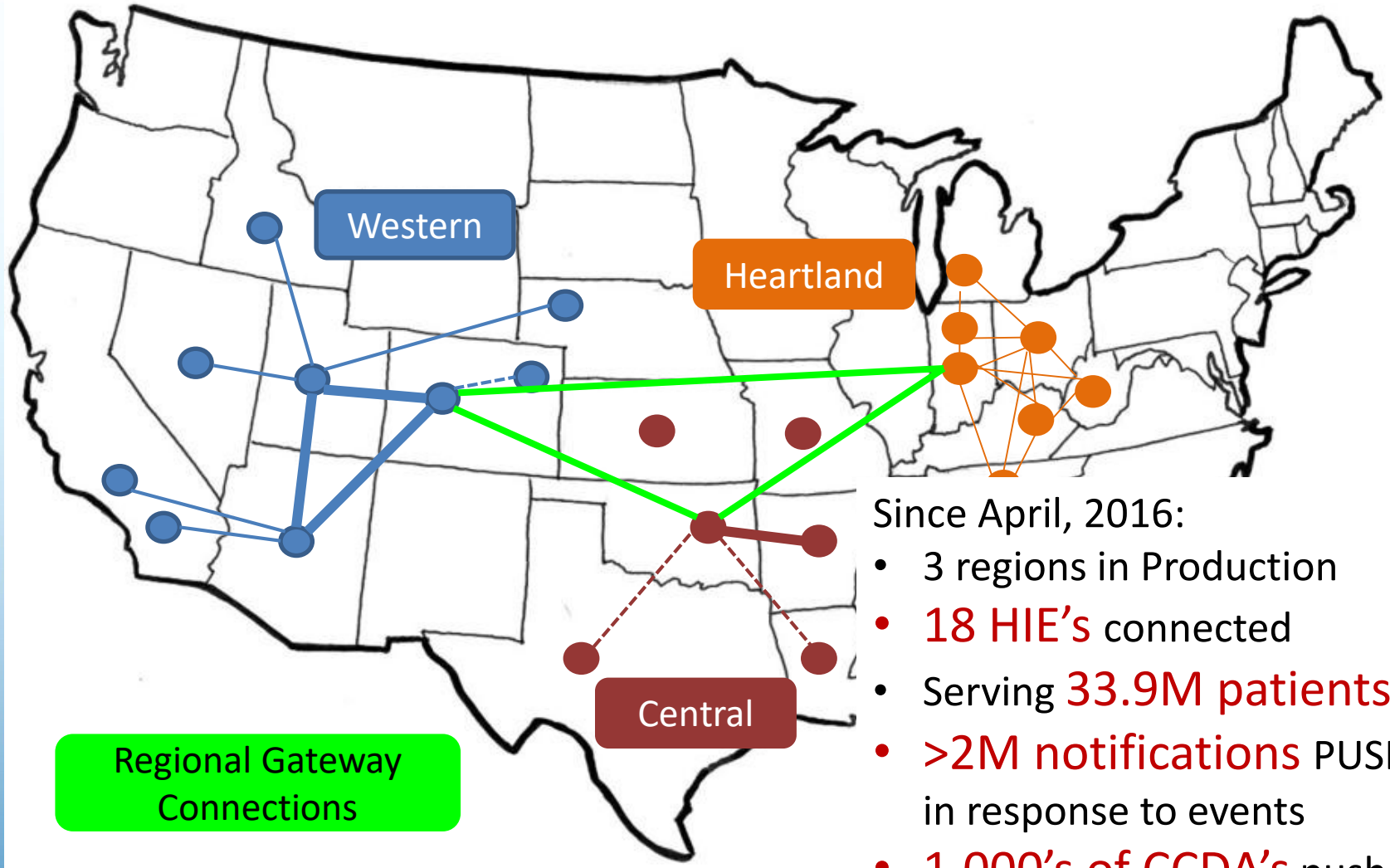
PCDH: Current State



Since April, 2016:

- 3 regions in Production
- 18 HIE's connected
- Serving 33.9M patients
- >2M notifications PUSHED in response to events
- 1,000's of CCDA's pushed

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Growth: National Model with Multiple Regions

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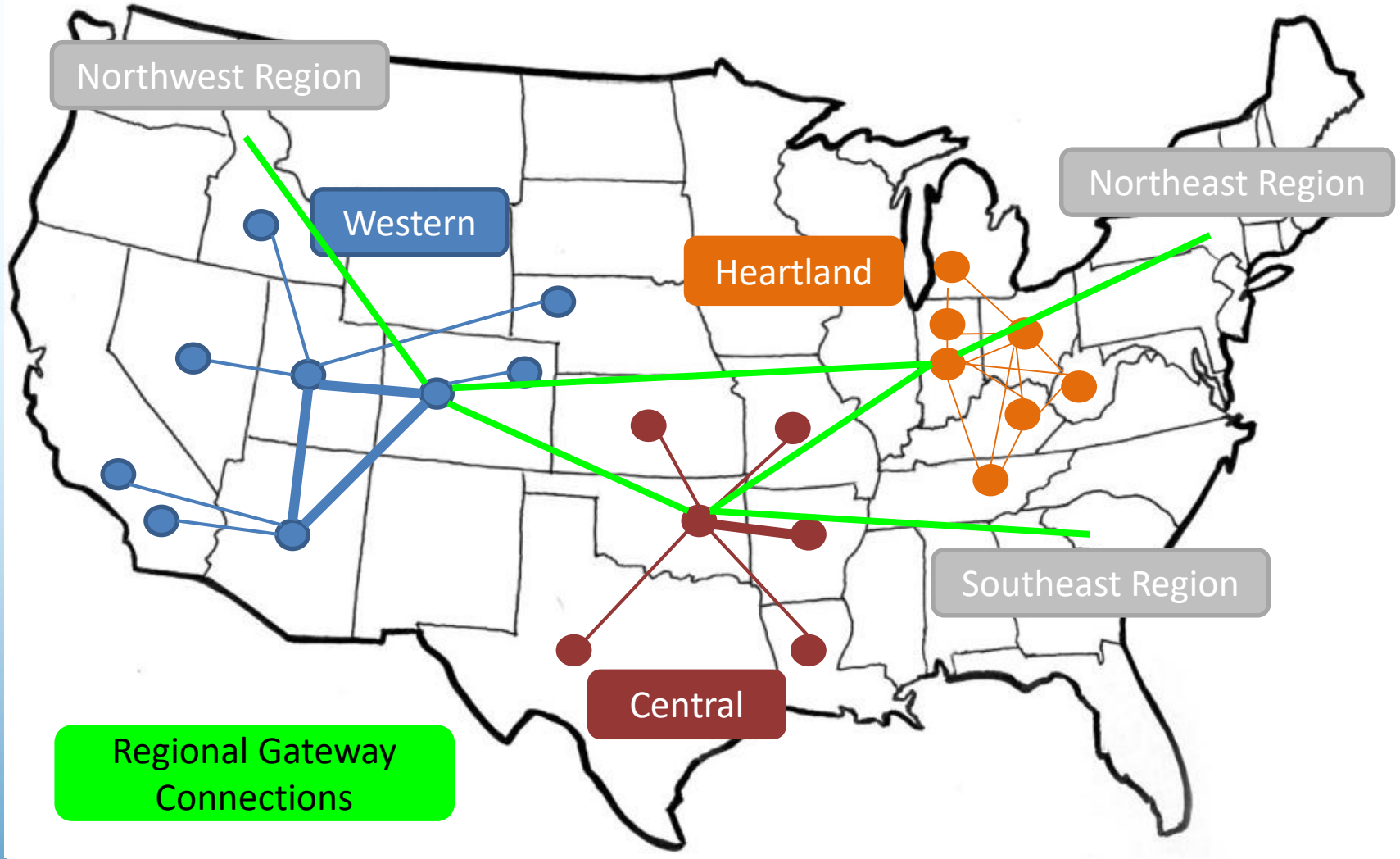

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Embracing and Accounting for CHANGE

- PCDH Governance designed to accommodate marketplace changes
  - New HIE's or regions
  - Consolidation or fragmentation among HIE's
  - Consolidations or fragmentation of regions
  - New kinds of entities to connect
- Trust relationships guide changes

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PCDH Strengths

PCDH Adds Value

- SHIEC's PCDH leverages current national frameworks (eHX, Carequality, DIRECT)
- PCDH (national) Infrastructure
  - supports and enhancing ONC standards
  - Reduces need for single nationwide patient identifier
- Patient Centered Longitudinal Record -
  - Not a provider, payer, or agency centric record
- Supports multiple local and regional use cases

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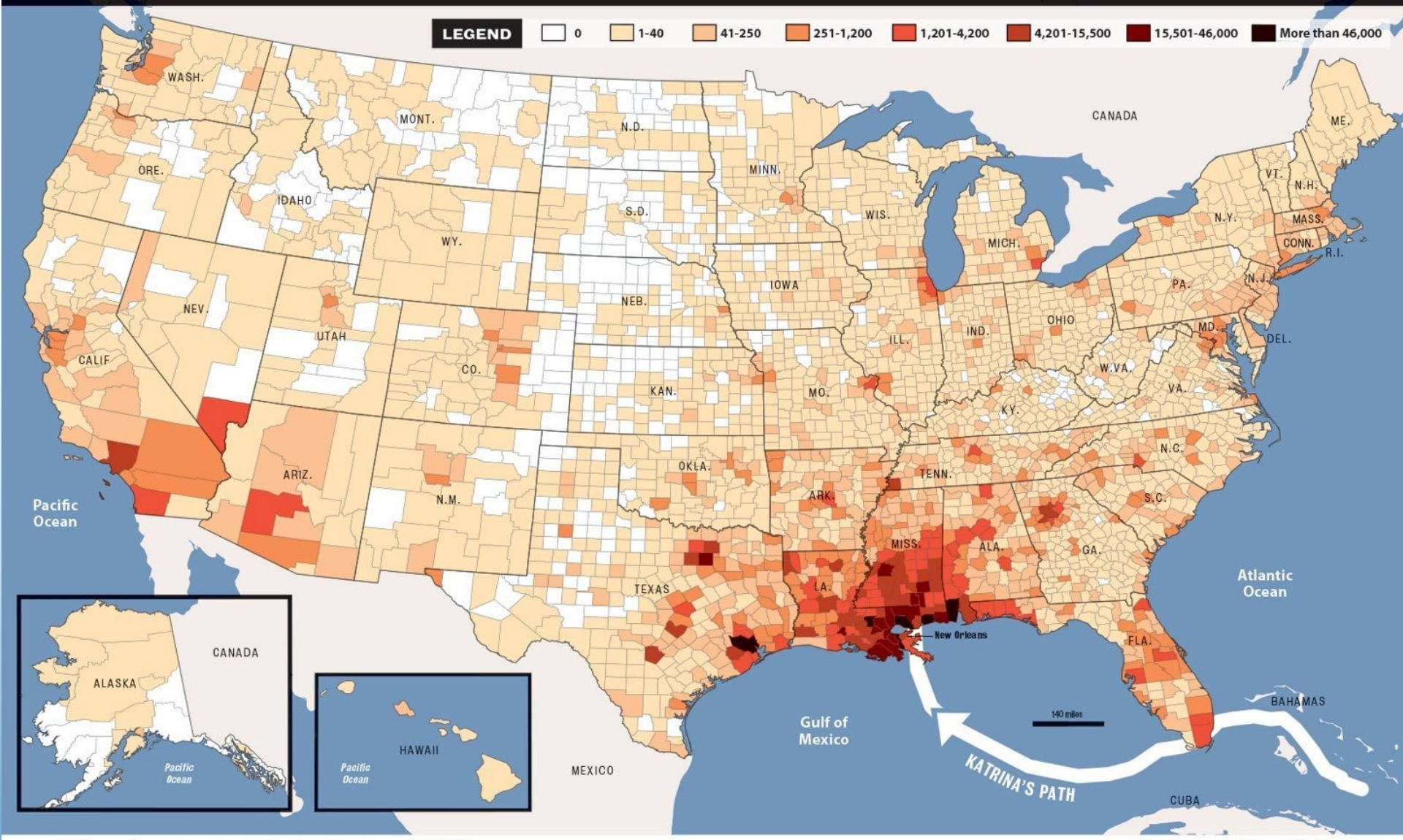
Other initiatives supported

PCDH with real time nationwide alerting enables:

- PDMP Services and medication data to facilitate management of Opioid abuse
- Business continuity support during outages or cyberattacks
- Qualified Clinical Data Registry (QCDR) services to support analytics and MIPS Reporting, Value Based Payment models
- Connect and support behavioral health improvement
- Disaster response support

KATRINA'S EXODUS

The displaced survivors of Hurricane Katrina filed for disaster assistance with FEMA in nearly every county in every state. A look at the distribution of 1.36 million individual applicants who registered with the agency.



Sources: FEMA, Census Bureau, Queens College Sociology Department, New York Times

Dan Swenson, NOLA.com | The Times-Picayune

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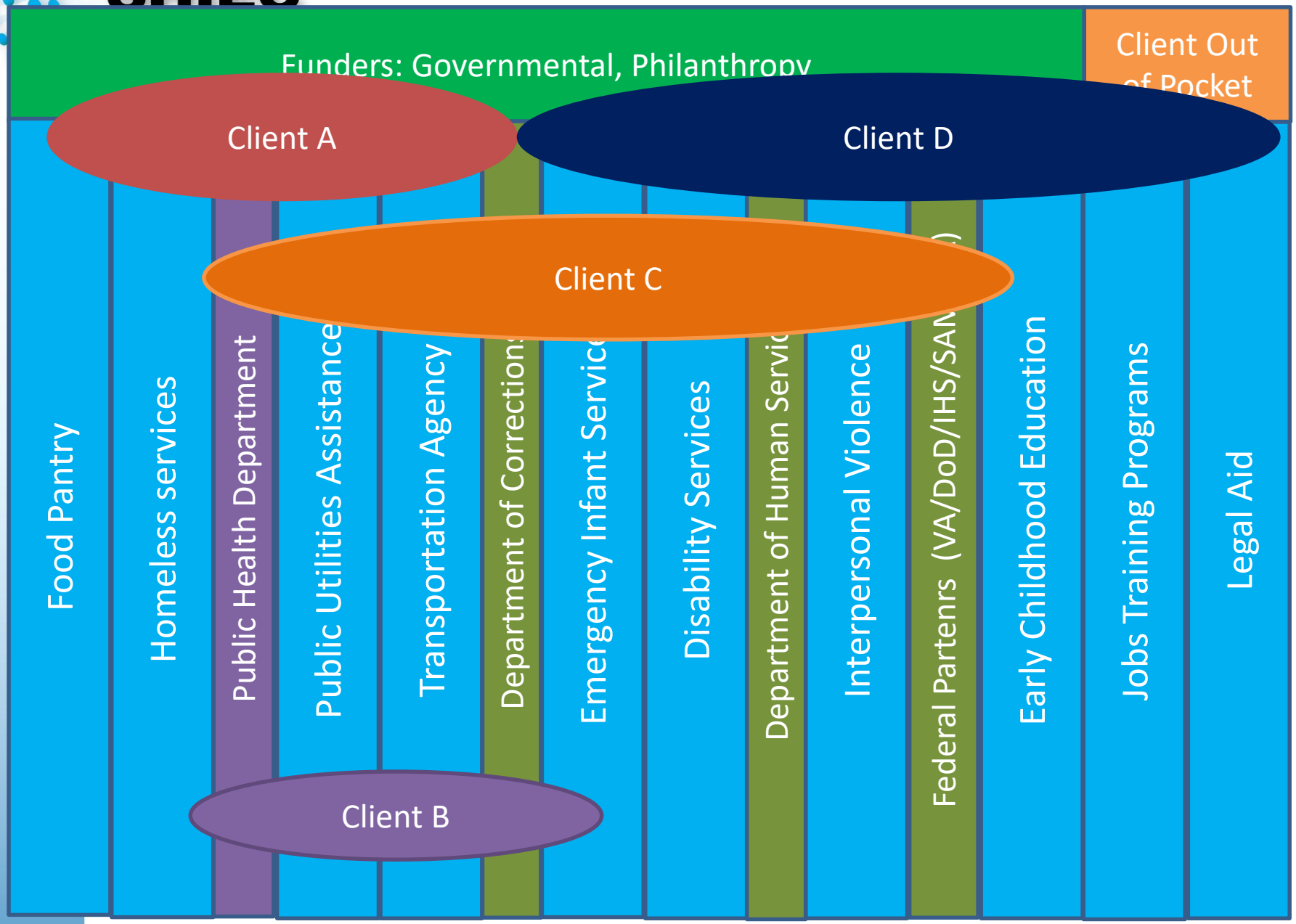
- Track and address health related social needs (AHC)



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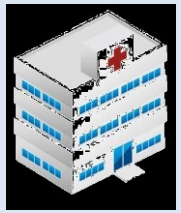
Accountable Health Communities

Clinical Sites

Hospitals



Community Behavioral Health Centers

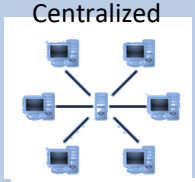
211

Social Determinants
Vital Signs

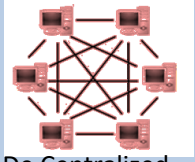
Closed Loops In

Navigators

Centralized



De Centralized



THD

OKC-COUNTY HEALTH DEPARTMENT

Positive SDVS

Social Services Referral Orders (ORM)

MyHealth ACCESS NETWORK

Bridging Organization

Reporting on Service Usage (Customer)

Claims Data (837) & Rosters (834)

CMS CENTERS FOR MEDICARE & MEDICAID SERVICES

Oklahoma HealthCare Authority

Payers

Referrals inbound

Response with Loop Closures

Housing

Transportation

Food

Interpersonal Violence

Utilities

Community Services

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- Connect and support behavioral health improvement
- Disaster response support
- Track and address health related social needs (AHC)
- Enable the generation of new knowledge per 21st Century Cures ACT

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Starting to get fun . . .

Western PCDH Project:
Enlarged interoperability
≈ 10 Million Lives

Arizona: population 6.6M - **HIE: AzHeC**
- MPI: 5.9M
- 21 hospitals and health systems
- 2 reference labs and imaging centers

Utah: population 3M - **HIE: UHIN**
- MPI: 1.8M
- All 4 of the major health systems and most clinics/labs
- 80% of all providers

Western CO: Population.5M - **HIE: QHN**
- MPI: .6M with Clinical Data
- 12 Hospitals, all reference labs and imaging centers
- 94% of all providers

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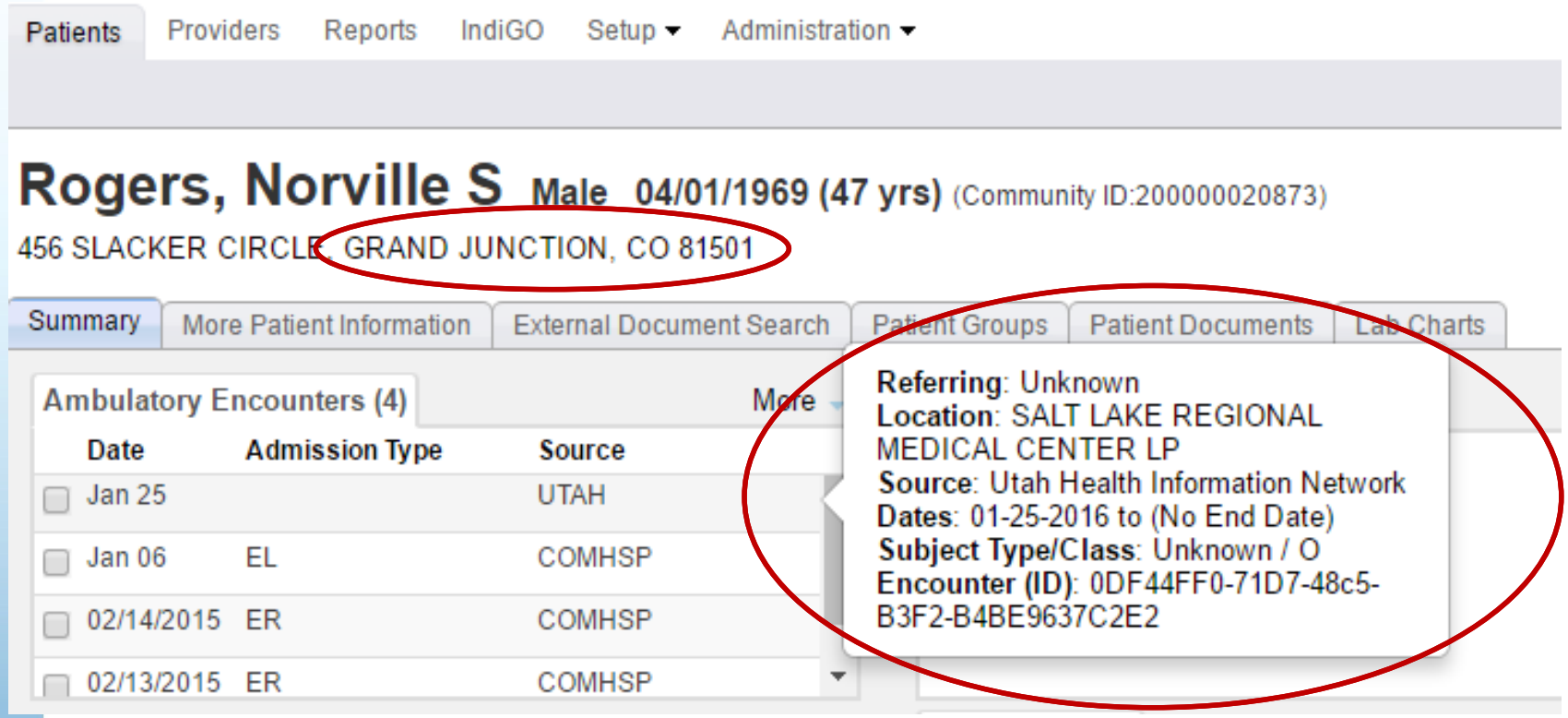
What do Providers See?



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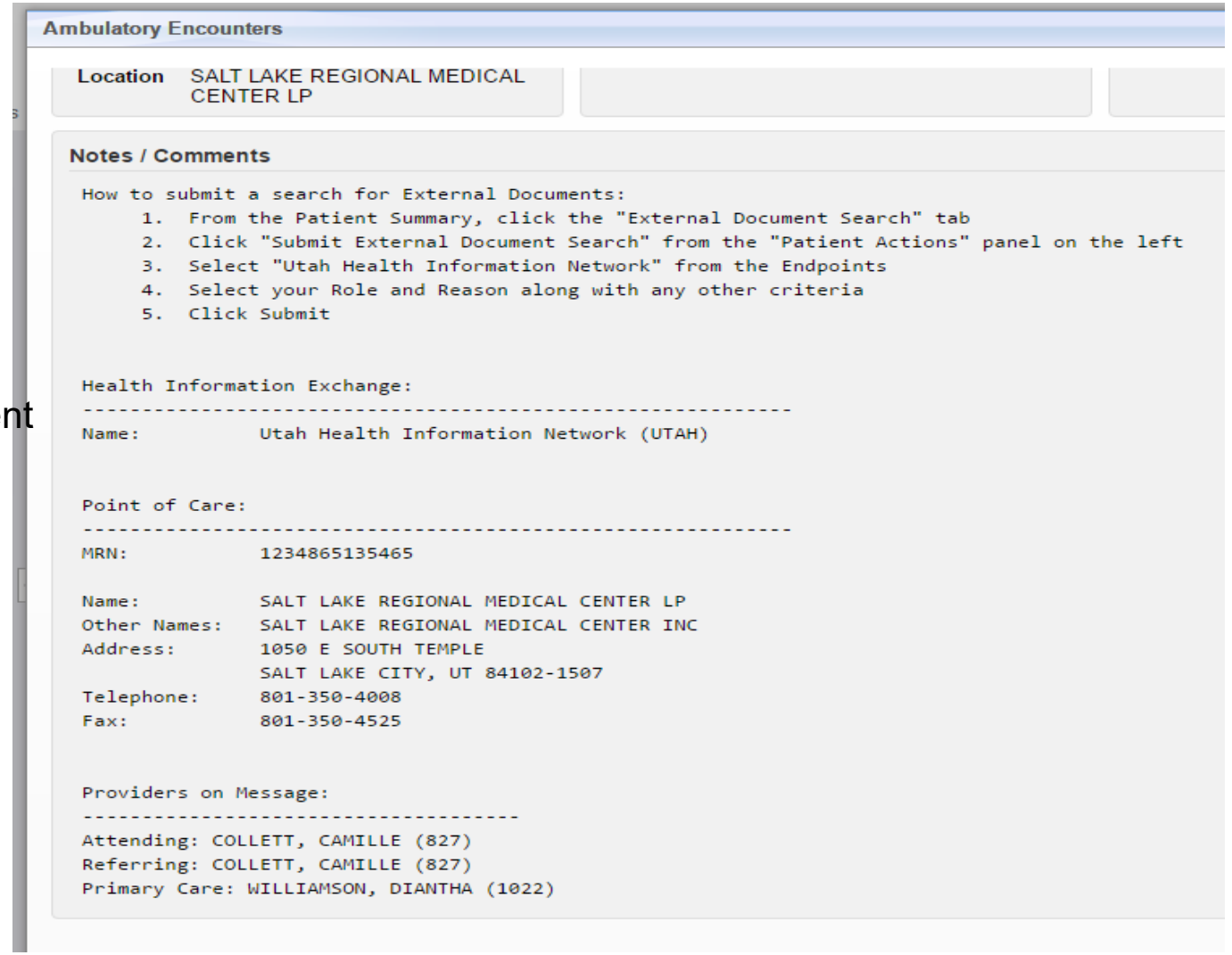
Sample Detail

- Location of care event
- Contact info
- Providers noted



Ambulatory Encounters

Location SALT LAKE REGIONAL MEDICAL CENTER LP

Notes / Comments

How to submit a search for External Documents:

1. From the Patient Summary, click the "External Document Search" tab
2. Click "Submit External Document Search" from the "Patient Actions" panel on the left
3. Select "Utah Health Information Network" from the Endpoints
4. Select your Role and Reason along with any other criteria
5. Click Submit

Health Information Exchange:

Name: Utah Health Information Network (UTAH)

Point of Care:

MRN: 1234865135465

Name: SALT LAKE REGIONAL MEDICAL CENTER LP
Other Names: SALT LAKE REGIONAL MEDICAL CENTER INC
Address: 1050 E SOUTH TEMPLE
SALT LAKE CITY, UT 84102-1507
Telephone: 801-350-4008
Fax: 801-350-4525

Providers on Message:

Attending: COLLETT, CAMILLE (827)
Referring: COLLETT, CAMILLE (827)
Primary Care: WILLIAMSON, DIANTHA (1022)

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Patient: SCOOBERT DOO
DOB: 09/13/1969

Generated at 10/11/2016 10:40 AM for Warner, Richard

sdfgsdfg

Signed by Provider Forms on Monday May 23, 2016 16:08:

Performing Facilities
St Mary's Hospital and Regional Medical Center

Order Type: Diagnostic Imaging Collected On: 05/20/2016 08:14 AM

Status	Placer Order ID	Filler Order ID	Pr
	876543	876543	

TOMO MAM SCREEN BILAT Re
The following ink and pin

Image Link
Pin: 2406
Organizer Notes:

...sample repo

Performing Facilities
Aspen Valley Hospital

Order Type: Clinical Documentation

Status	Placer Order ID	Filler
	4469929zzz4	

Office Visit Reported On:
Organizer Notes:

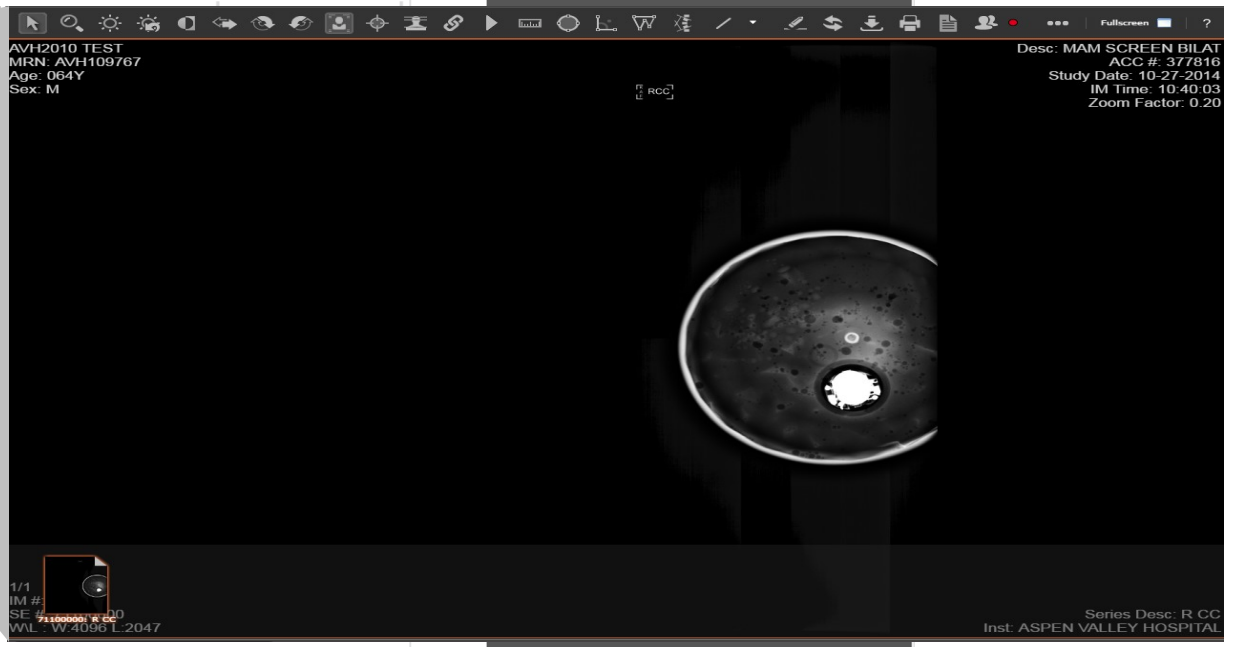
Prohibition on Redisclosure 42 C.F.R.
This information has been disclosed to
confidentiality rules (42 CFR Part 2).
further disclosure of this information un
by the written consent of the person to wh
CFR Part 2. A general authorization for the
NOT sufficient for this purpose. The Federal
criminally investigate or prosecute any alcohol

MIND SPRINGS HEALTH

Flag: General, Low, High
Abnormal: ! Critical: Severe:

Page 3 of 10

Sample CCD with live link to images.



TIVE

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PCDH Value

- It works! It's low cost. It's effective. Users love it.
- Leverages Existing Connectivity & Trust Agreements
  - Local Consent honored
  - Standards based architecture
  - Easily expandable use cases
- Provides Data Aggregation across multiple domains
  - Medical, Behavioral, Social Services
  - Supporting opioid crisis assessment and intervention
  - Supports Qualified Clinical Data Registry services for VBPM's
- Meets HIE's "where they are" and elevates from there
- Governance Model for nimble national interoperability

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Find more information:

- www.StrategicHIE.com
- http://strategichie.com/patient-centered-data-home-pcdh