

# Health Information Exchange (HIE) Overview

Presented to the



March 16, 2022

**Rick Rubin, CEO OneHealthPort**

Created in 2002, by and for the local healthcare community, **OneHealthPort** solves information exchange and workflow problems shared across healthcare organizations

**Collaborative**, open to all, transparent and neutral

Public/Private Partnership built on role as WA State **Lead Organization** for HIE and Admin Simp

Filling the gaps, leveraging **Shared Capabilities**

A utility model, private operation with public oversight

“Run it like a **business** but in the **public** interest”

## **“Health Information Exchange (HIE)”**

**Noun** – An organization created to enable health information exchange

**Verb** – Health information being exchanged by many different parties regardless of organization type

**Interoperability** – ability to exchange information without “special effort” – it is a continuum, not a point in time





Value-based purchasing, population health, consumer convenience, digital health services, provider burnout, regulatory compliance, etc., **add powerful incentives** for improved information exchange and access



# **Standards**

**Application Programming Interface (API)  
Fast Healthcare Interoperability Resources  
(FHIR)**



- HITECH (Health Information Technology for Economics and Child Health)
- HIPAA
- 42 CFR (Substance Abuse Data)
- 21<sup>st</sup> Century Cures Act
- Information Blocking
- TEFCA (Trusted Exchange Framework and Common Agreement)
- State laws



# Cybersecurity Risk

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# Interoperability



So we are now interoperable with the world.

But my bigger point is — we invented interoperability and we got it out to everyone. Somehow there is this [perception that] “we don’t interoperate.”


Judy Faulkner, Epic CEO quoted in MedCity News 03/10/22

“

That’s just not true. These systems were not designed as platforms that easily connect with others whether that is another EHR or new features that startups would have to access. As much as we have had some level of transformation in tools to support providers and patients, we are not in a place of true interoperability.

Senior Exec and user of both Epic and Cerner quoted in MedCity News 03/10/22

# Quantitating and assessing interoperability between electronic health records

Elmer V Bernstam , Jeremy L Warner, John C Krauss, Edward Ambinder, Wendy S Rubinstein, George Komatsoulis, Robert S Miller, James L Chen

*Journal of the American Medical Informatics Association*, ocab289,  
<https://doi.org/10.1093/jamia/ocab289>

**Published:** 07 January 2022    **Article history** ▼

by Vince Kuraitis, JD and [Ian McNicoll, MD](#)

A recent study of EHR interoperability found that **68% of data was “understood” when exchanged across different sites using the same vendor**, but only **22% was “understood” when exchanged across different EHR vendors.**

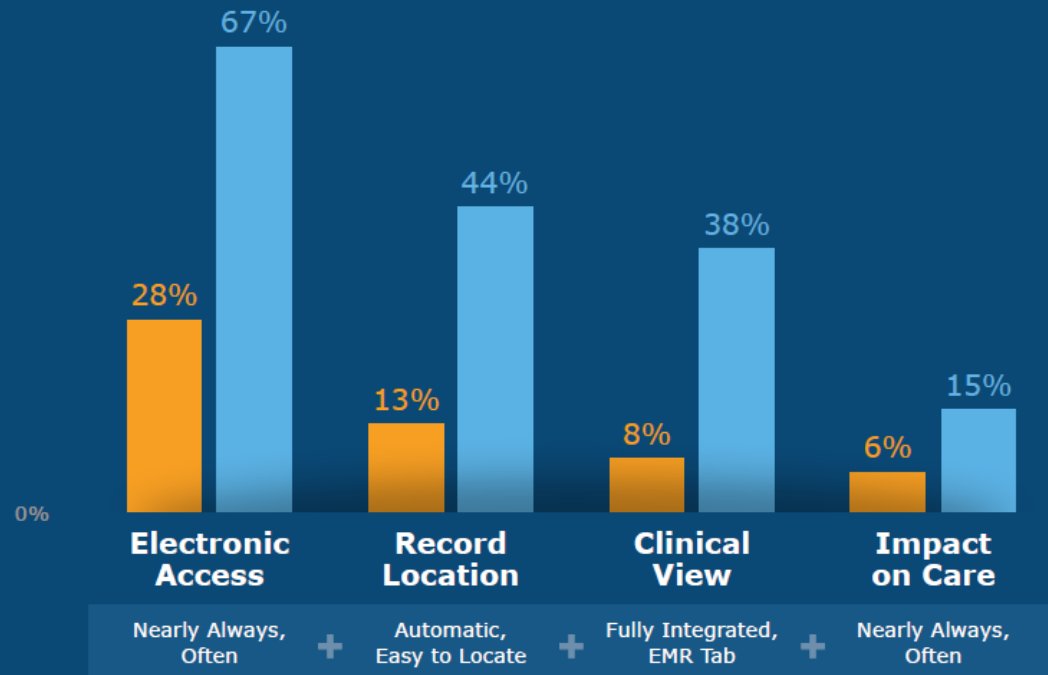
## Industry Progress toward Deep Interoperability, 2017 vs. 2020

100%

Percent of customers reporting optimal response at each stage who have also achieved previous stages.

2017 2020

Past KLAS interoperability reports have detailed data exchange between organizations on the same EMR and between organizations on different EMRs. This white paper is mainly focused on different-vendor exchange.



*“Deep interoperability is progressing with many organizations poised for significant progress in coming years”*

*Trends in EHR Interoperability – CHIME and KLAS 2021*

# HIE Networks

In WA, OneHealthPort HIE does about 10 million transactions per month

All state/local HIEs together do about 1.5 billion transactions per month



National Networks are a growing force, eHealth Exchange does about 1 billion transactions/month

This



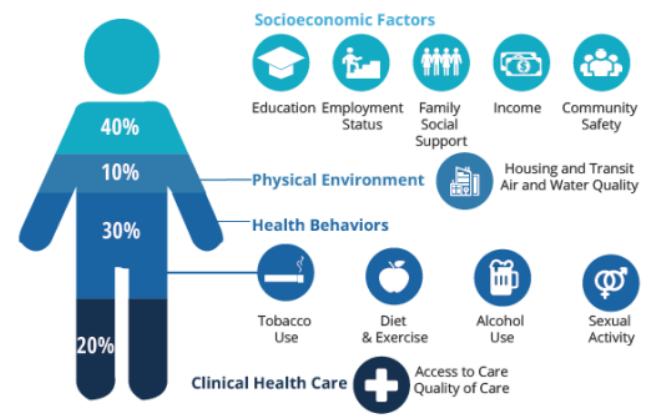
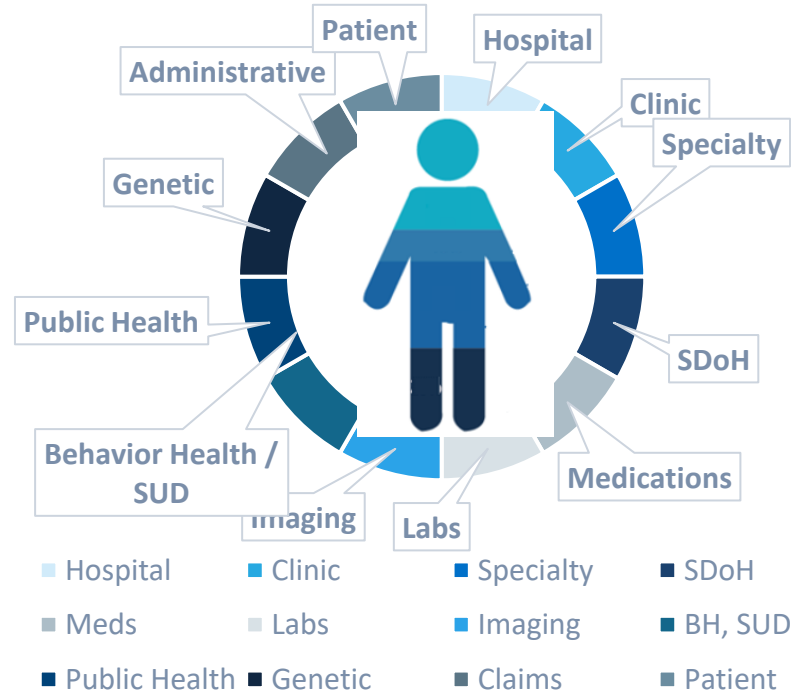
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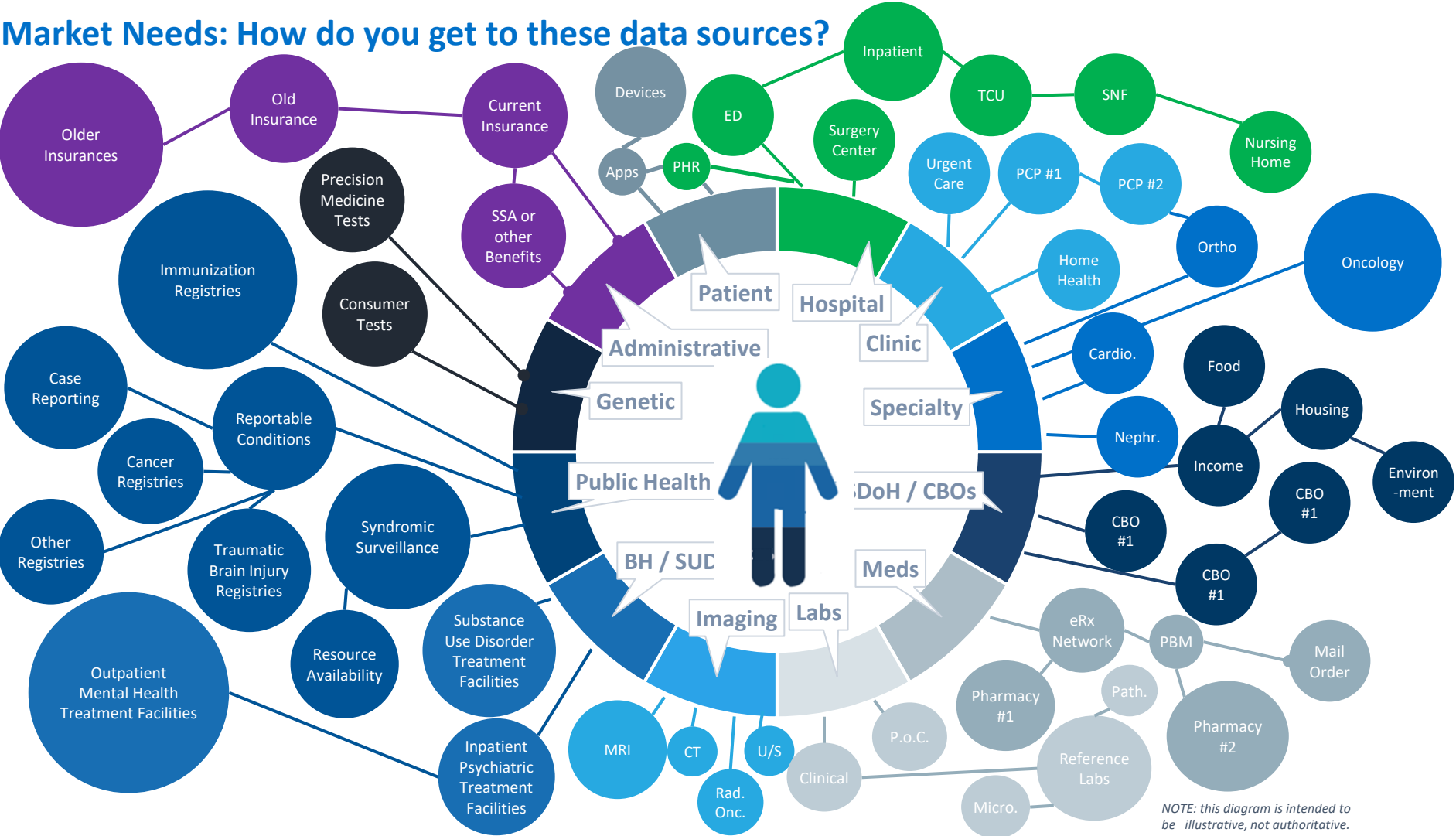
# Market Needs: What are the various sources for the data?

## A Person's Electronic Record: Data Types & Sources



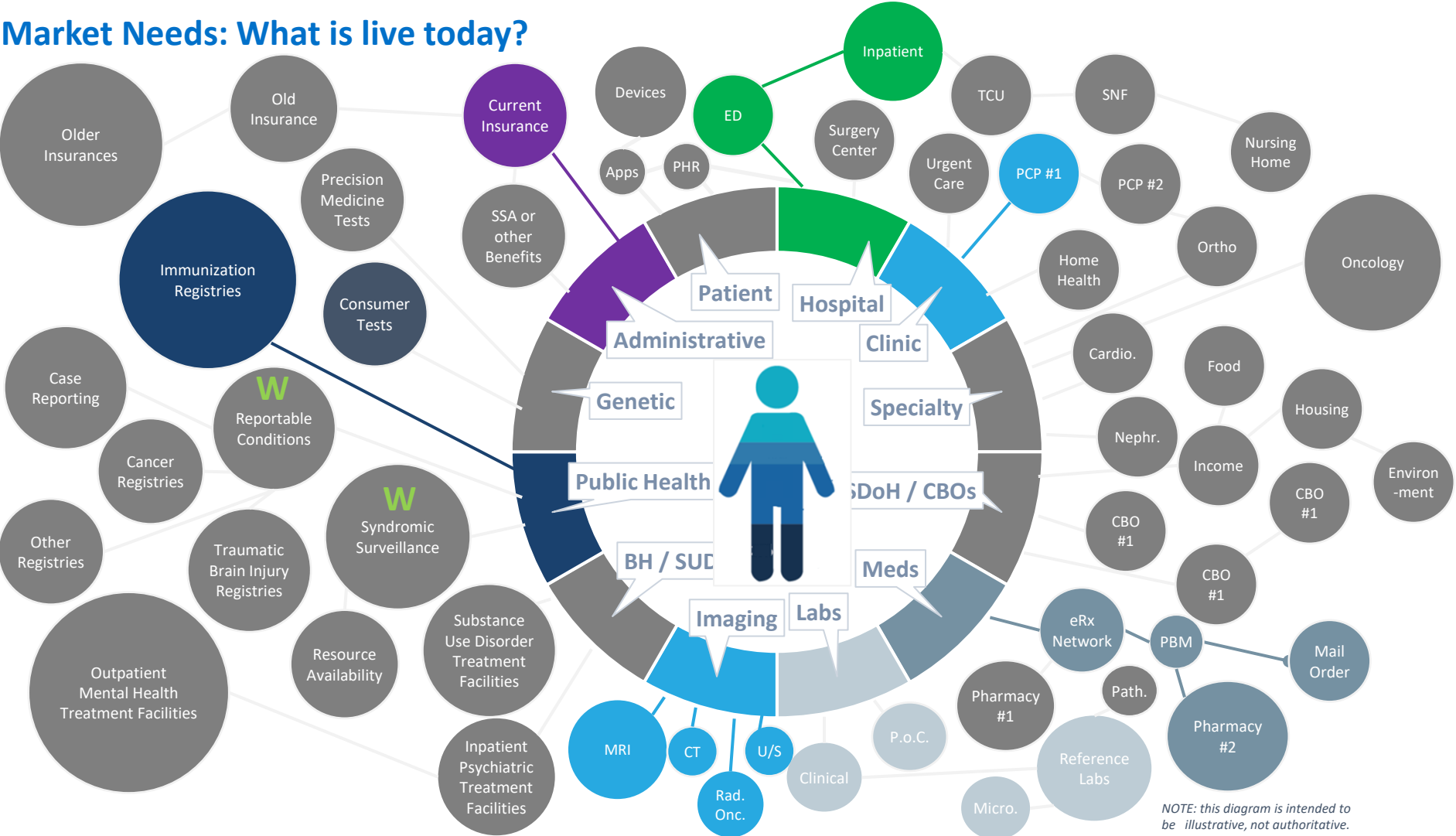
Hood, CM, Gennuso, KP, Swain, GR, & Catlin, BB. (2015). County health rankings: Relationships between determinant factors and health outcomes. *American Journal of Preventive Medicine*.

# Market Needs: How do you get to these data sources?



NOTE: this diagram is intended to be illustrative, not authoritative.

Market Needs: What is live today?



# So What?

1. Made **great** progress on HIE and great challenges still lie ahead
2. In WA, HIE is real for certain narrow, but important use cases
3. Going forward:
  - Promulgate standards, don't buy proprietary tools
  - Try to have fewer, rather than more connection points
  - Seek commonality around policy, identity management, consent
  - Expand beyond medical treatment use cases
  - Balance market incentives and regulation

Question, Comments, Discussion

Thanks very much