

Jan 23, 2023

THE Download

A monthly webinar diving
into the intersection of
healthcare and technology



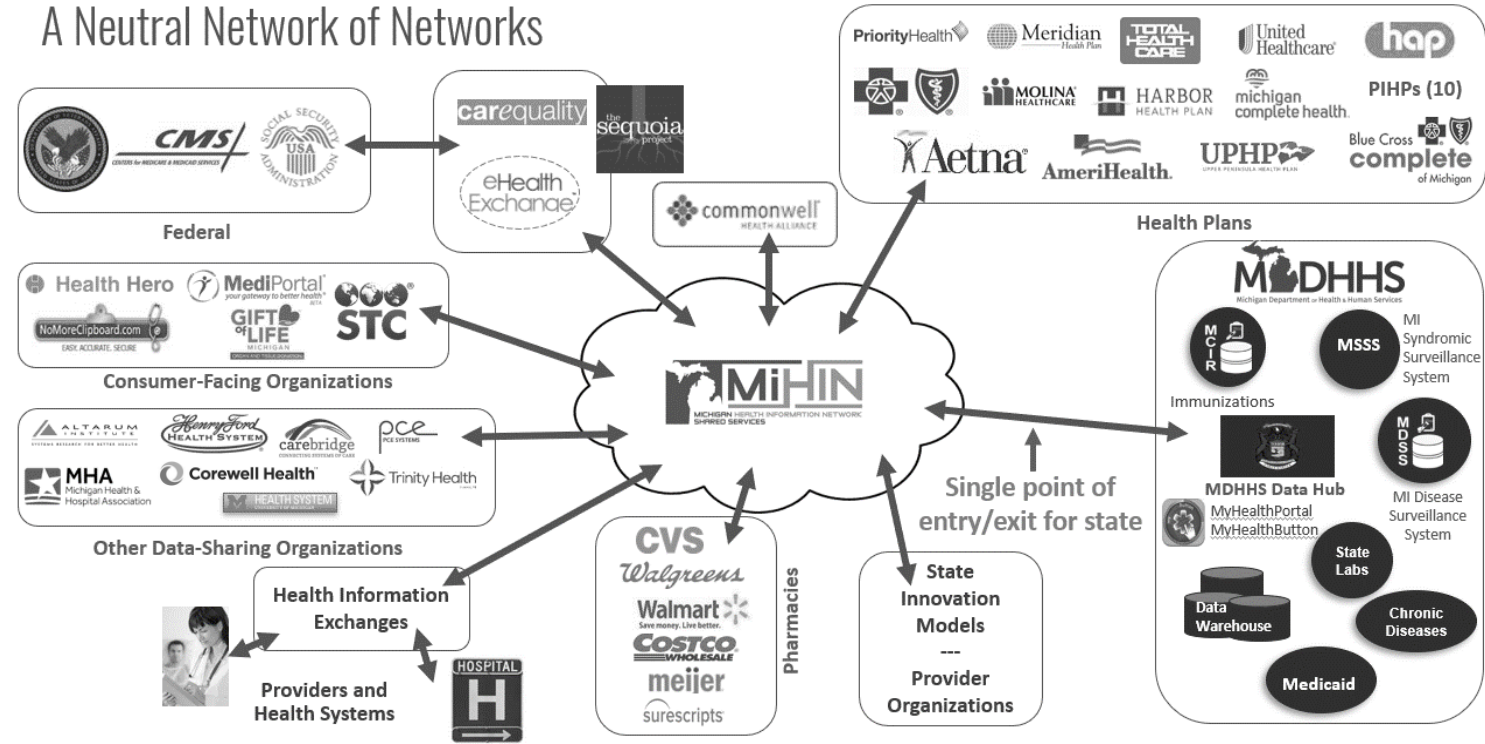


Michigan Health Information Network Shared Services (MiHIN) is a non-profit organization that provides technology and services to connect disparate sectors, *our stakeholders*, to securely, legally and technically share health information.

An unbiased data trustee, MiHIN does not provide health care services, produce health care data or compete in the marketplace.

Instead, we help convene to share vital health information to advance care, better outcomes and lower costs.

A Neutral Network of Networks



Technology is a tool. Humans are the energy! Technology is meant to support the human ability to connect, communicate, and collaborate.

Today's Agenda

01

Welcome
Joanne Jarvi

02

MiHIN 101
Joanne Jarvi

03

Adjourn
Joanne Jarvi



Joanne B. Jarvi

*Senior Director of Outreach and
Market Communications*
MiHIN

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Communication, the *successful* conveying or sharing of ideas, is more critical than ever.

Every communication involves (at least) one sender, a message and a recipient.

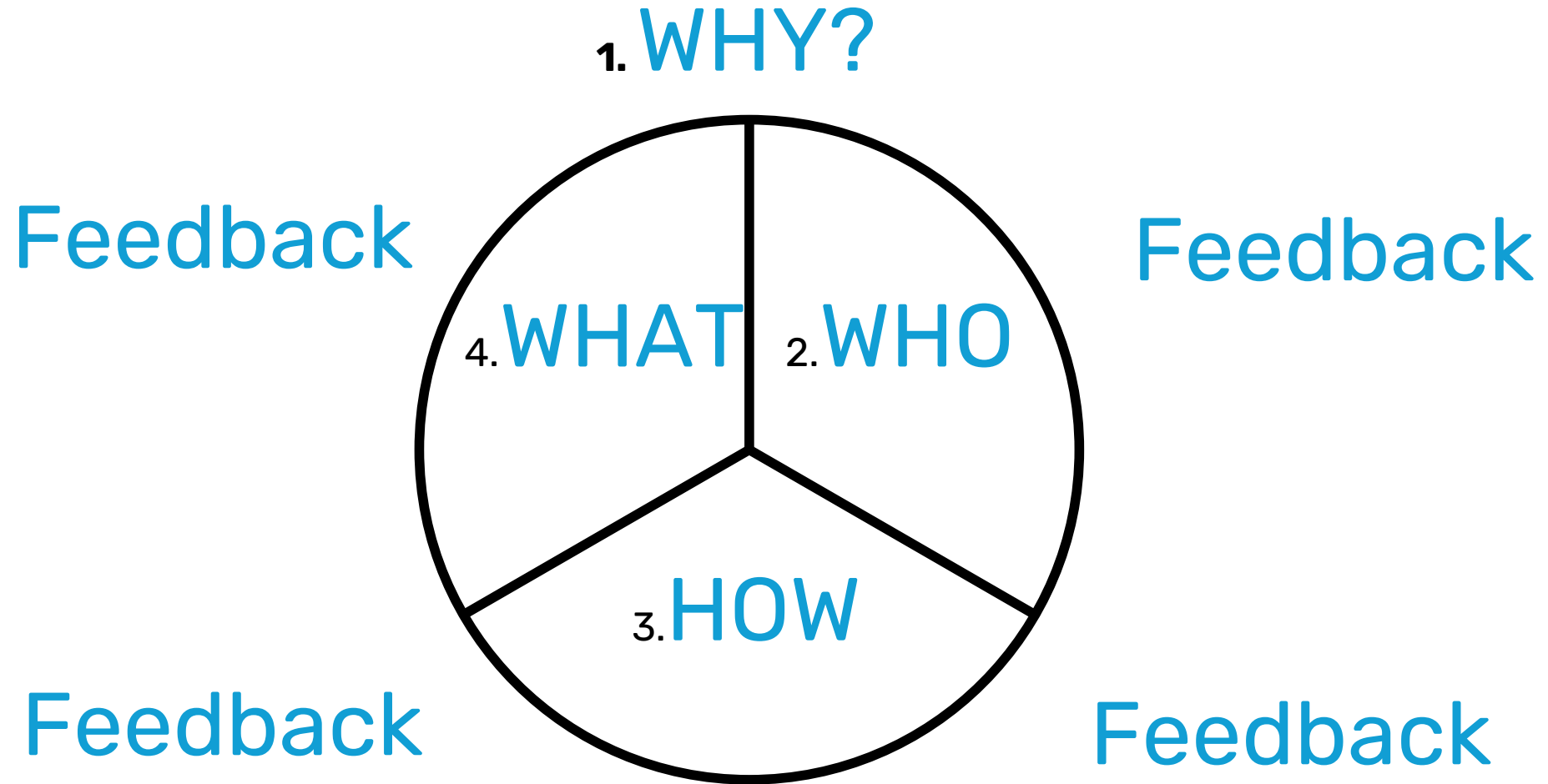
Data is not always communicative.

Technological
Infrastructure + Human
Infrastructure

- **Joanne Jarvi** (Facilitator)
- **Katelyn Lewis** (Webex Chat Moderator)

The Group Development Model

(with special thanks to MHEF and MPHI)



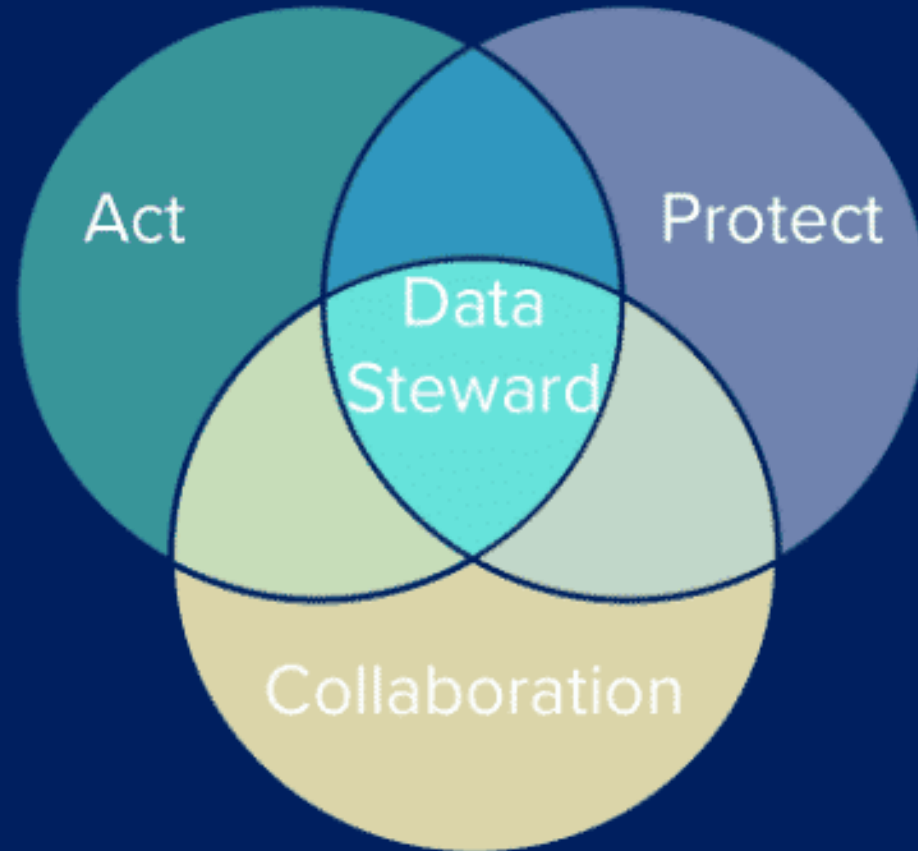
WHY?

Data for Good



WHY?

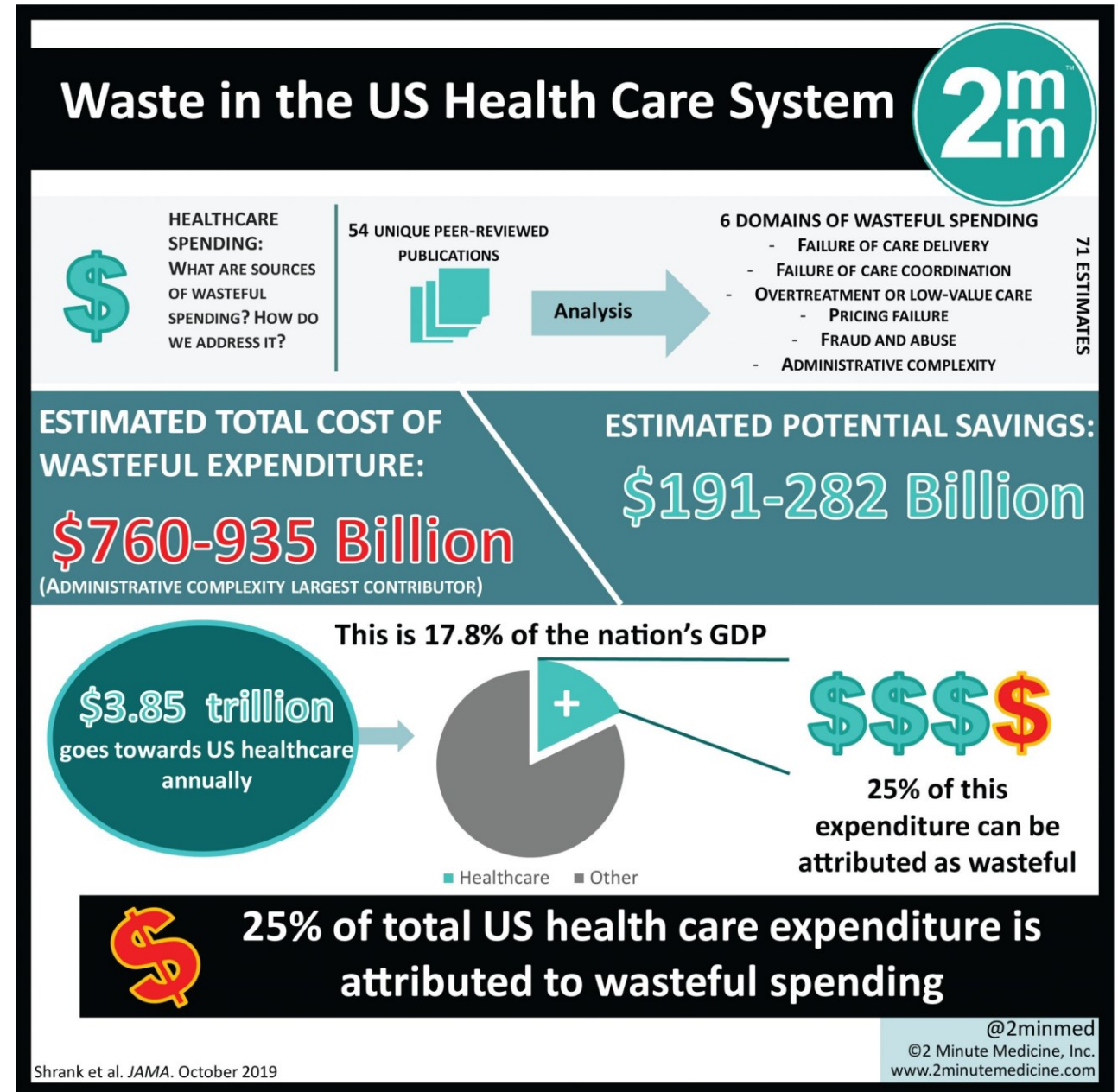
Data for Good



Every year in the US, an estimated \$760 to \$935 billion is wasted through overtreatment, poor coordination and other failures, amounting to about a quarter of total U.S. health care spending.

Nationally, an estimated 251,454 people die annually from medical errors.

Adjusted for MI (3.09% of US population) that is 7,768 people a year or **over 8 times more people than those who die from car crashes annually in Michigan.**



The GOALS of Health Information Exchange

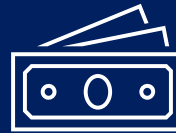
Reduced inefficiencies



Improved healthcare access



Lower healthcare costs



Better quality of care & health outcomes



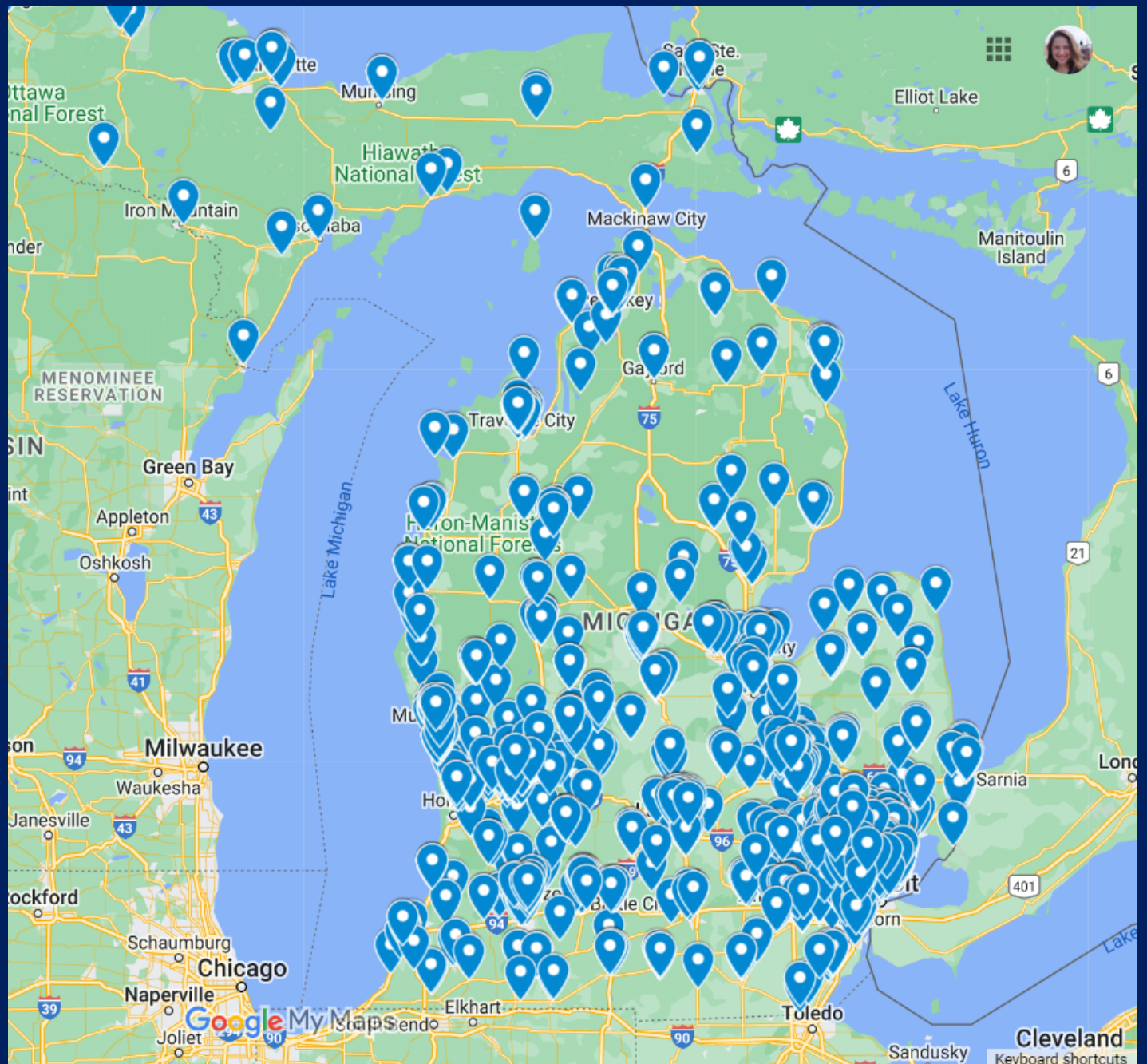
Personalized medicine for patients



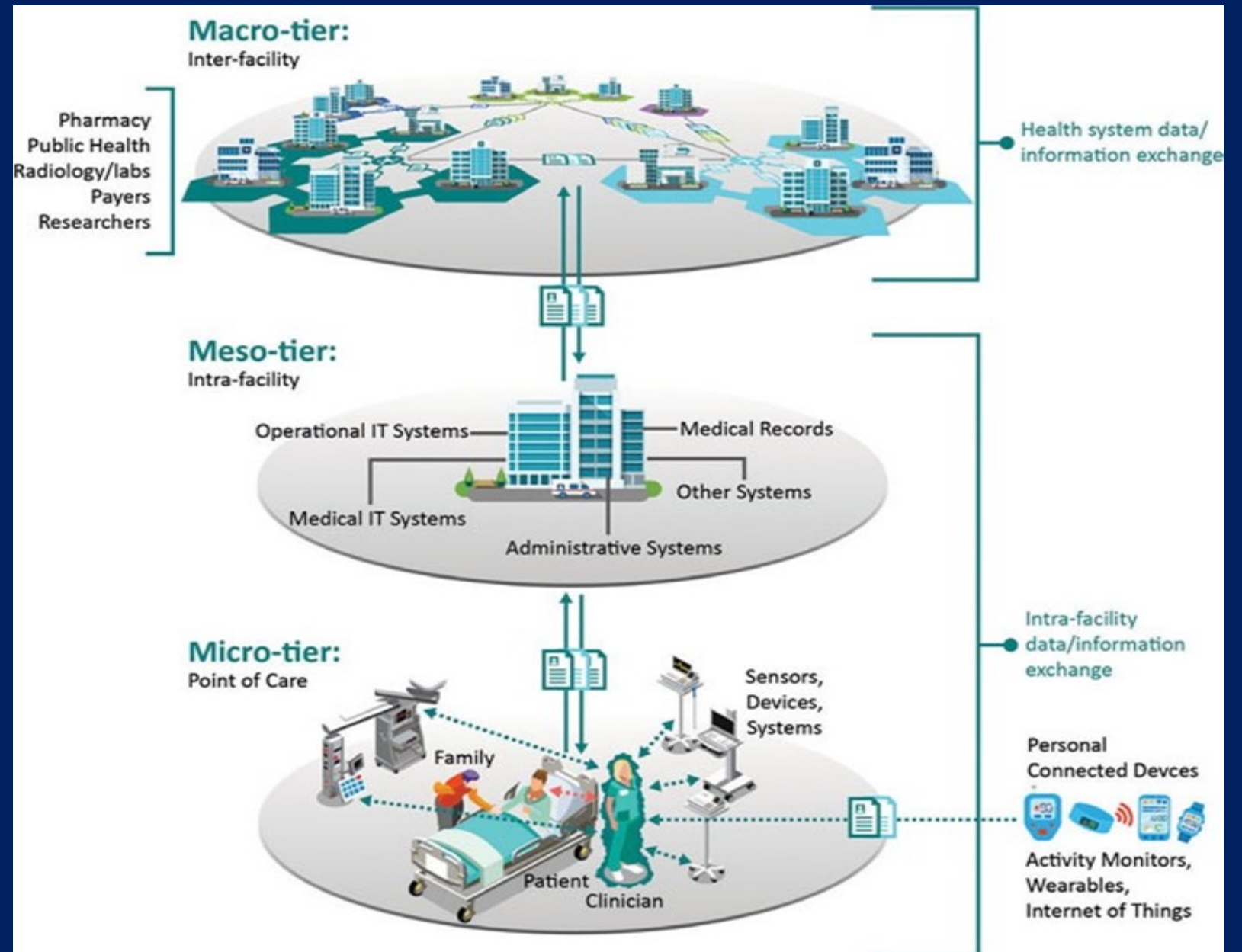
Infrastructure, Standards and Guiderrails



MiHIN Network is a state-wide digital fabric of TRUST



For WHOM With WHOM By WHOM?



**For
WHOM**

**With
WHOM**

**By
WHOM?**

The value of HIE cannot be defined solely in terms of benefits accrued to providers or any other single group.

The value of HIE cannot be parceled out in such a minute fashion but must be considered in terms of benefits to all participants in the healthcare system: patients, providers, payers, and communities.

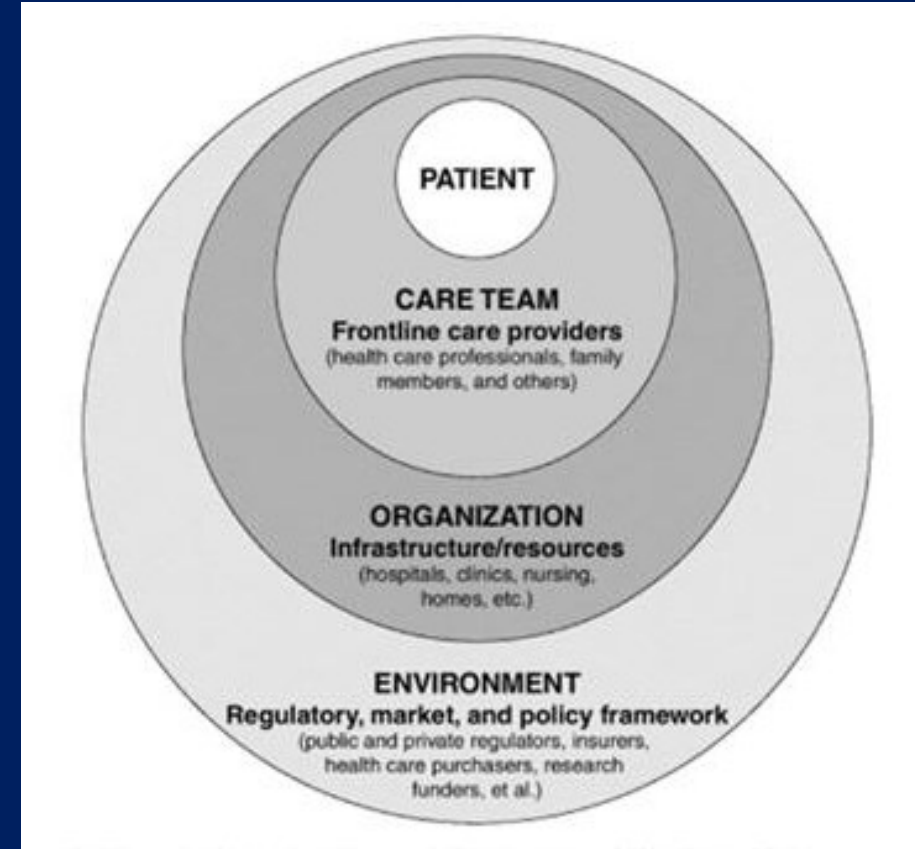
Additionally, HIE requires collaboration among competitors and the healthcare industry has difficulty with this prospect. Other equally competitive industries have managed to survive and thrive with information exchange.

J Am Med Inform Assoc. 2010 May-Jun; 17(3): 288–294.
doi: [10.1136/jamia.2010.003673](https://doi.org/10.1136/jamia.2010.003673)

PMCID: PMC2995716

PMID: [20442146](https://pubmed.ncbi.nlm.nih.gov/20442146/)

Health information exchange: persistent challenges and new strategies



ACRS (Active Care Relationship Service): Its About Making It All Patient Centered



Objects

Real-world objects like patients, providers and organizations and abstract concepts like zip codes, dates, risk scores, social needs and many others.

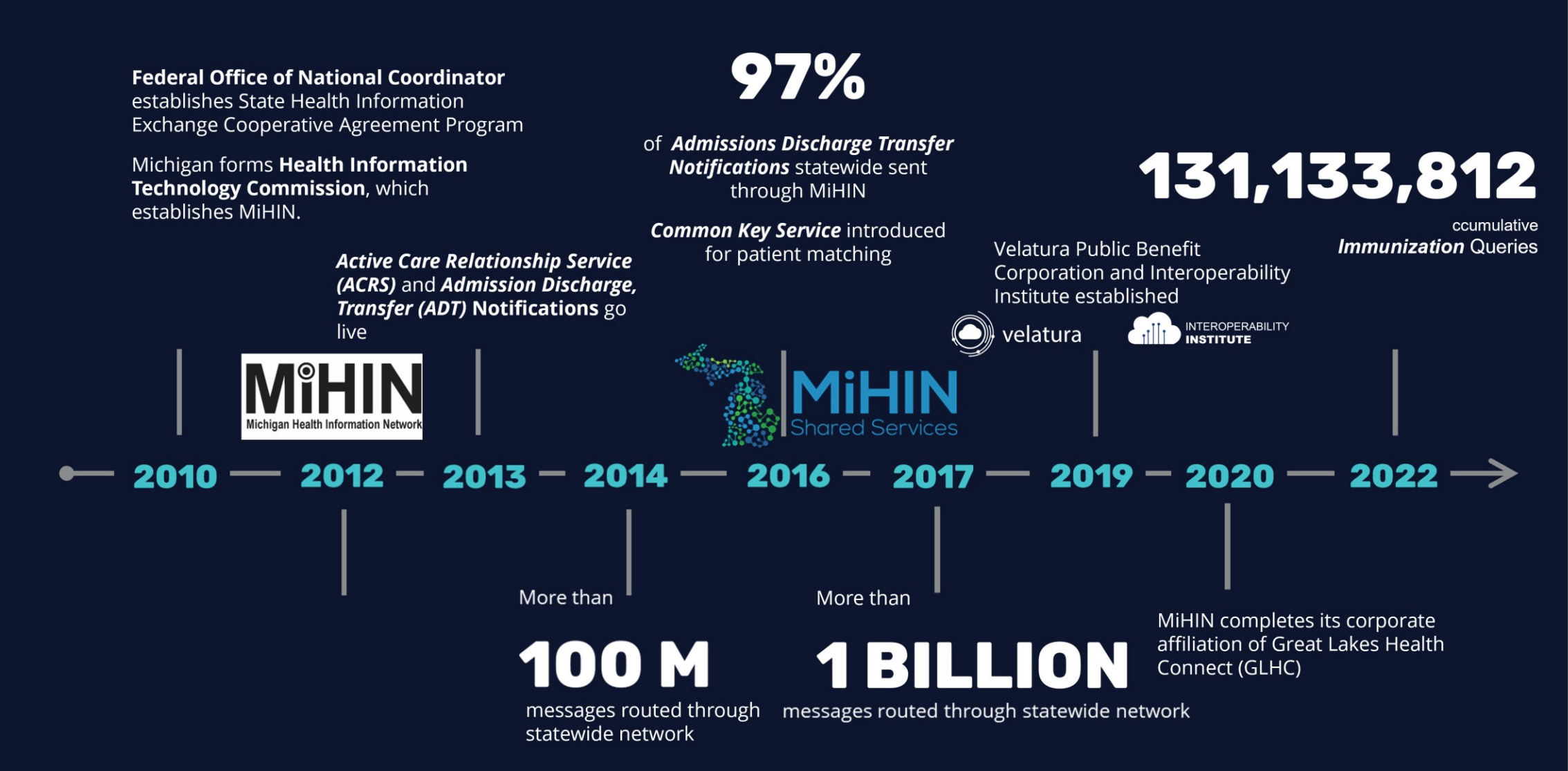
Relationships

A logical association between two objects –
Provider A cares for Patient B; Patient B lives in
Zip Code 49424

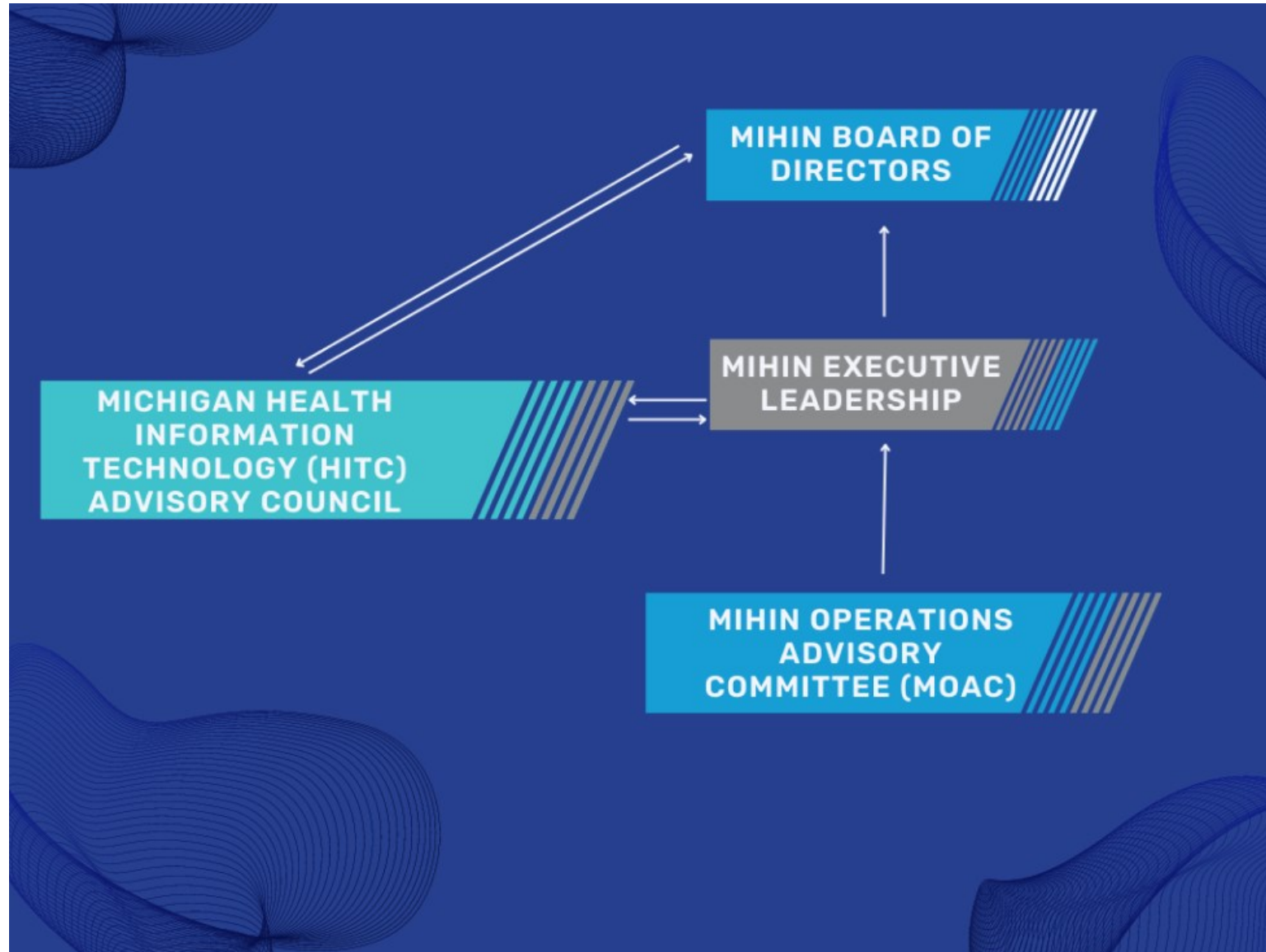
Semantics

Indicates the meaning of objects and relationships –
Provider A has a treatment relationship with
Patient B; Provider A is a Primary Care Physician

Brief History: Michigan Health Information Network Shared Services

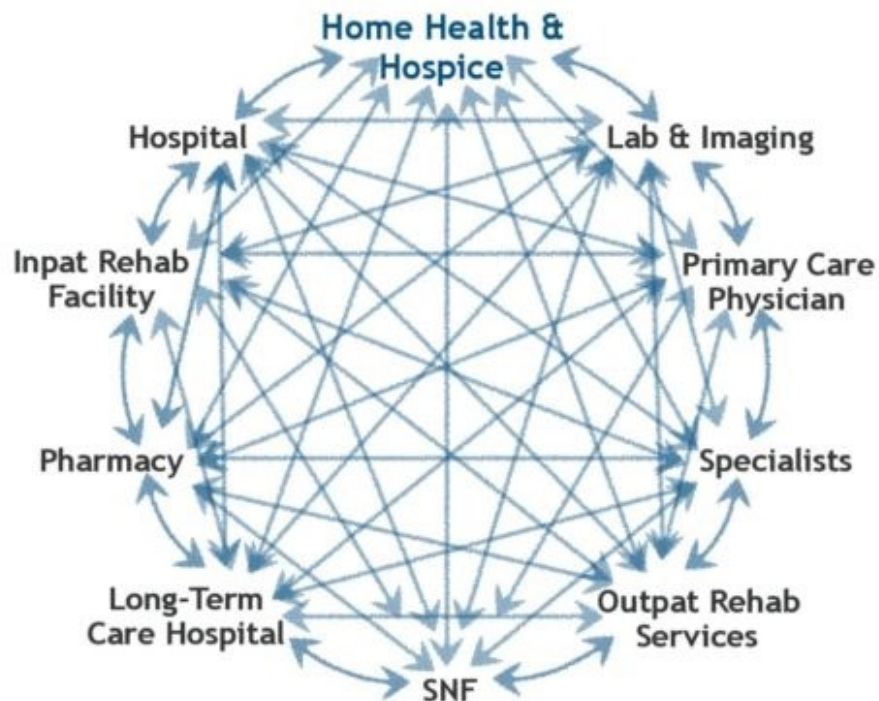


MiHIN Governance Model



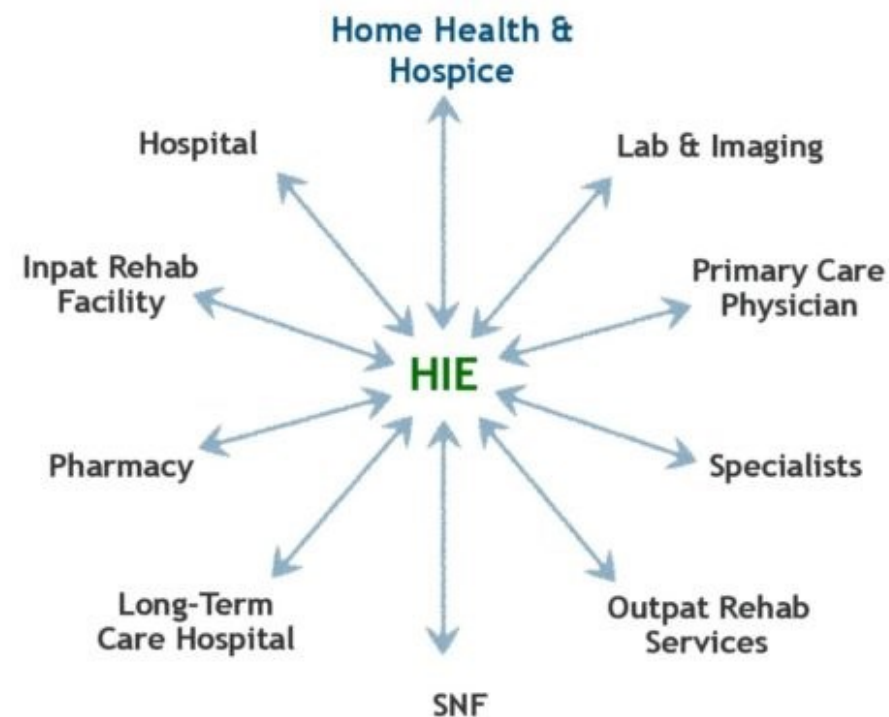
Michigan's "network of networks"

Interoperability Connects Healthcare Providers ...It Can Get Complicated



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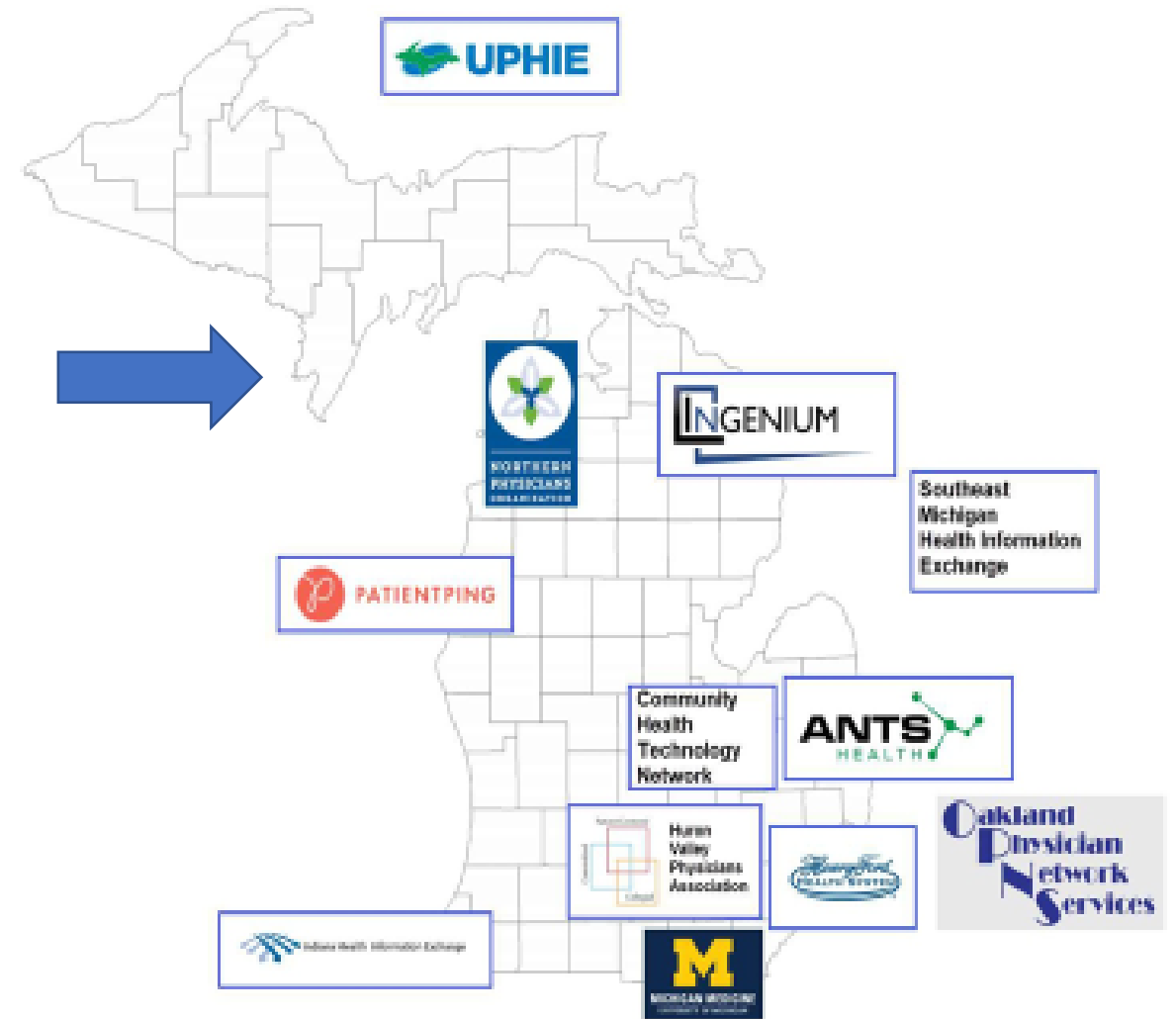
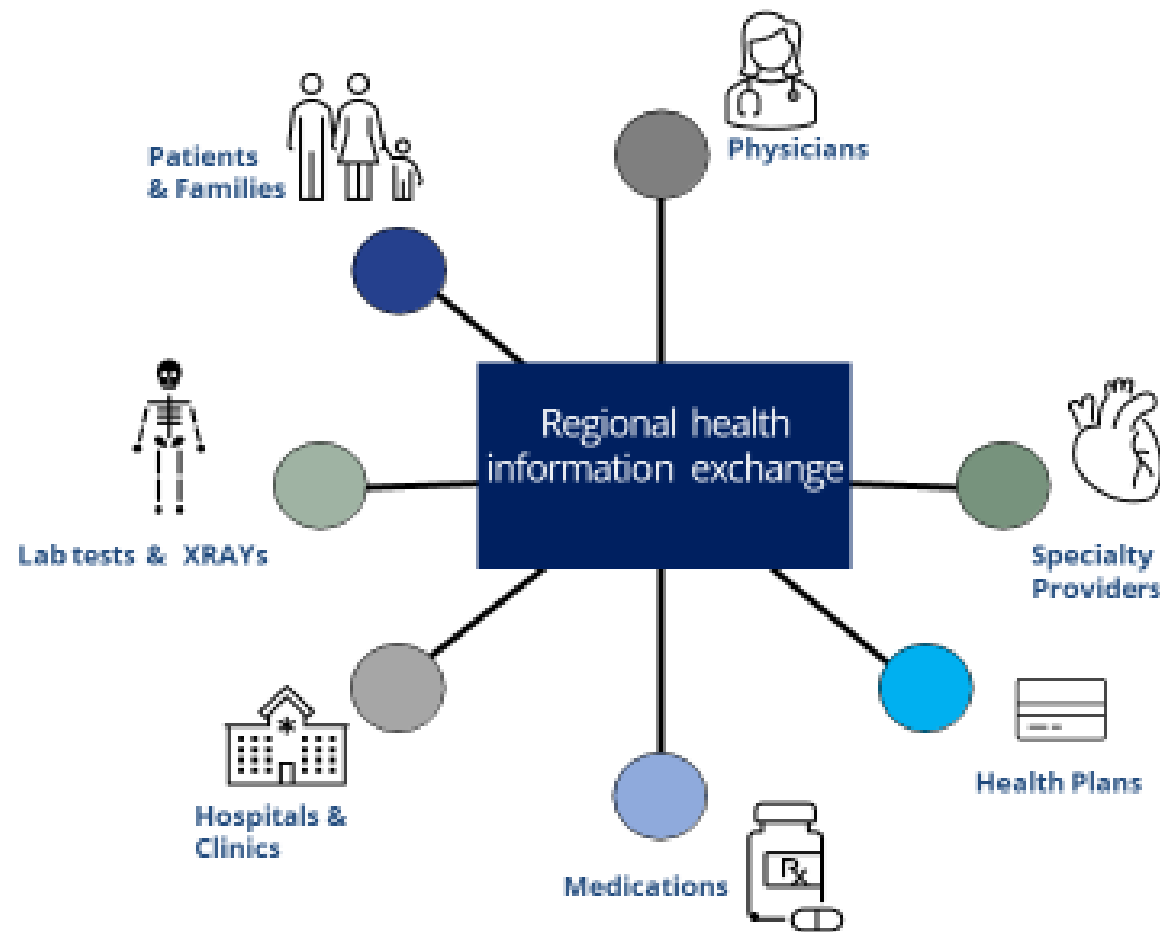
Health Information Exchange (HIE) ...Simplifying the Interoperability Equation



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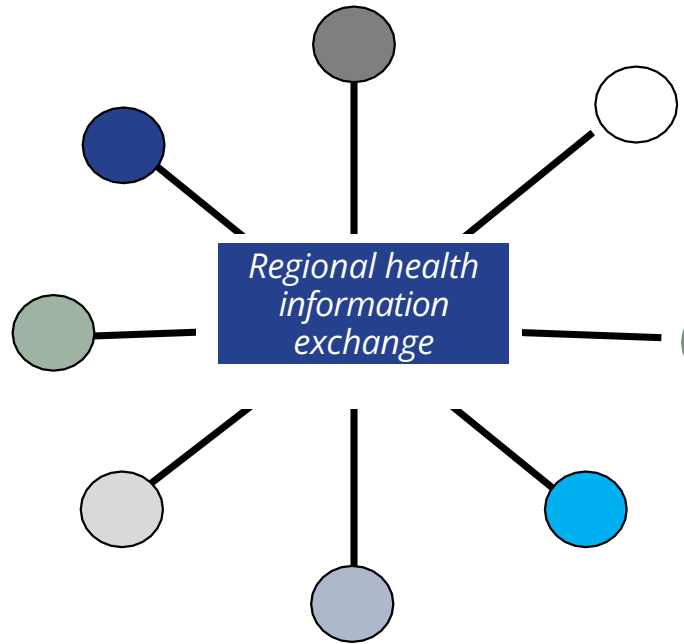
BEFORE:
Duplication
of effort,
waste and
expense

Many networks connecting regional health providers

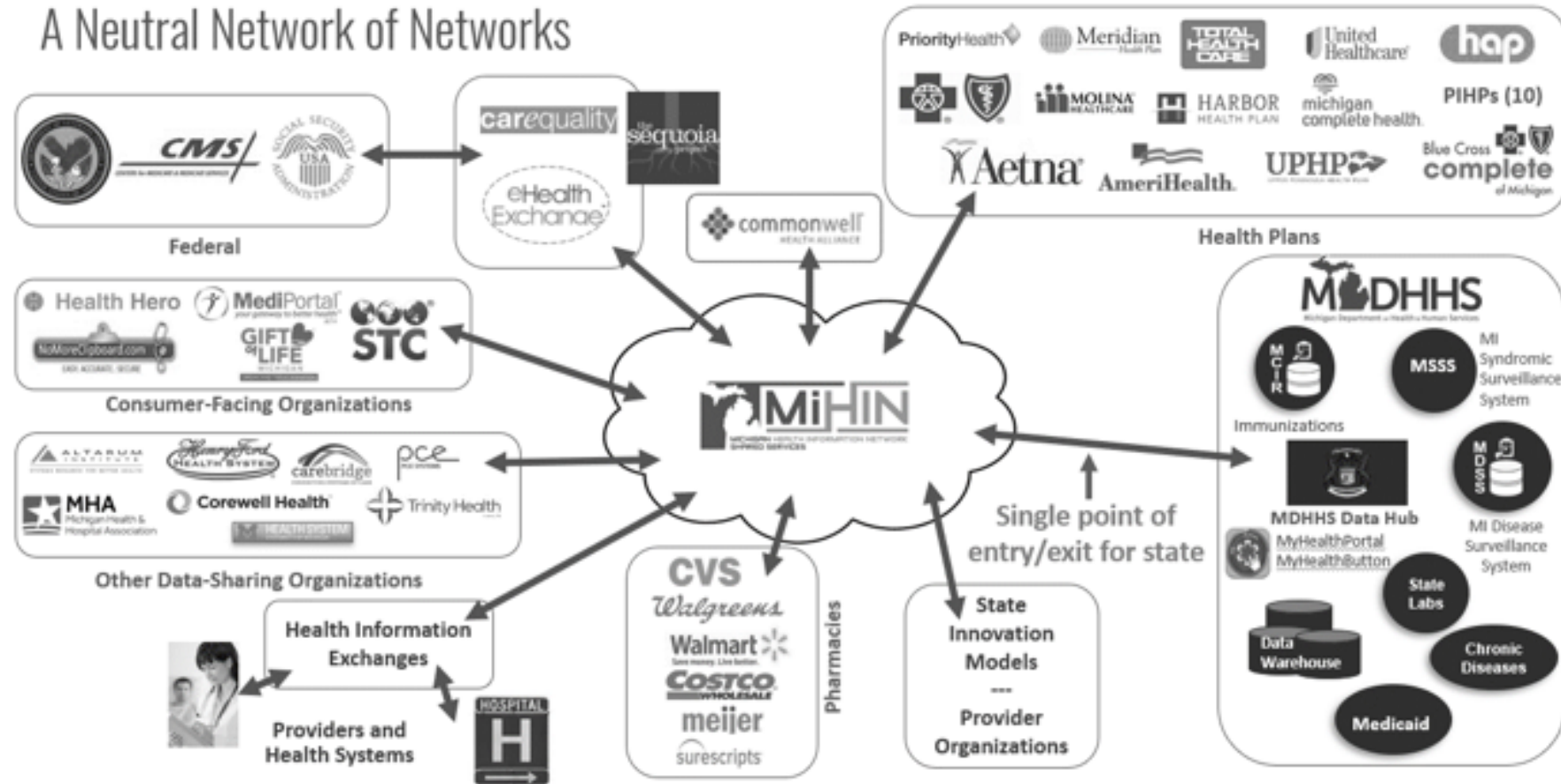


Michigan's "network of networks"

SINCE 2010:
*Connect once to
access shared
services*



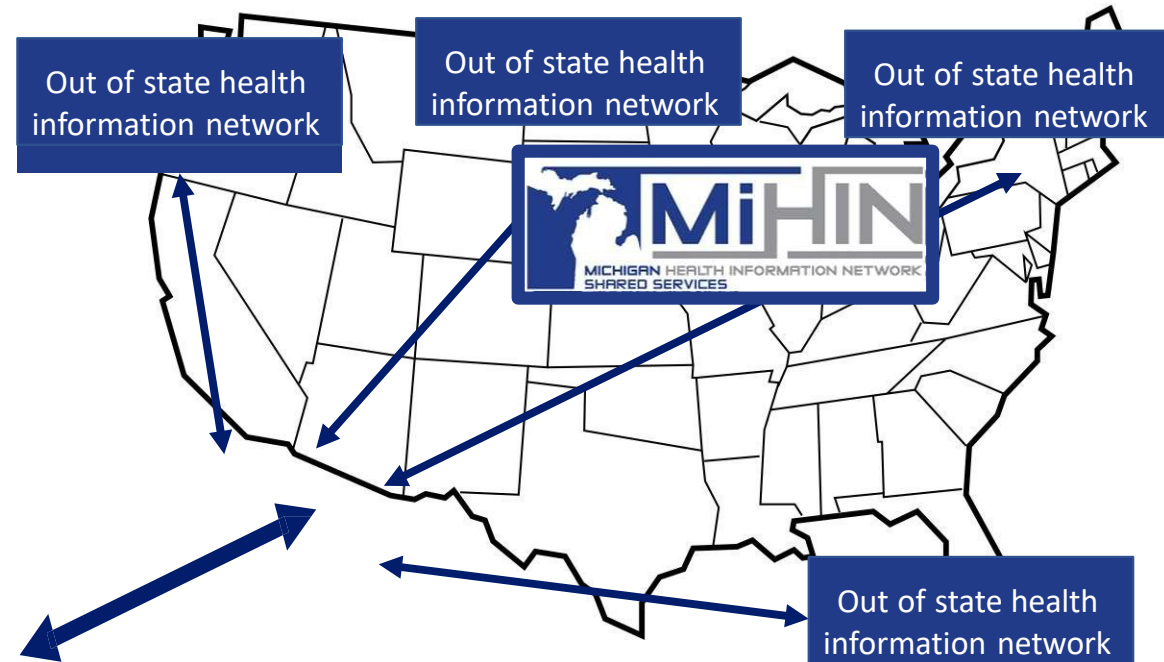
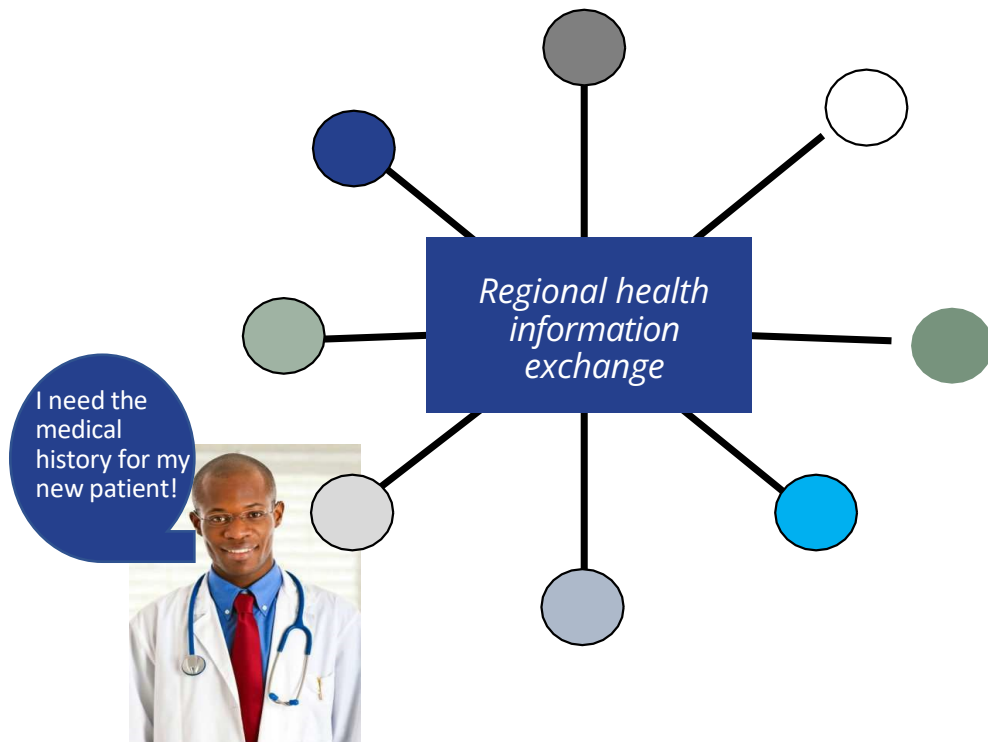
A Neutral Network of Networks



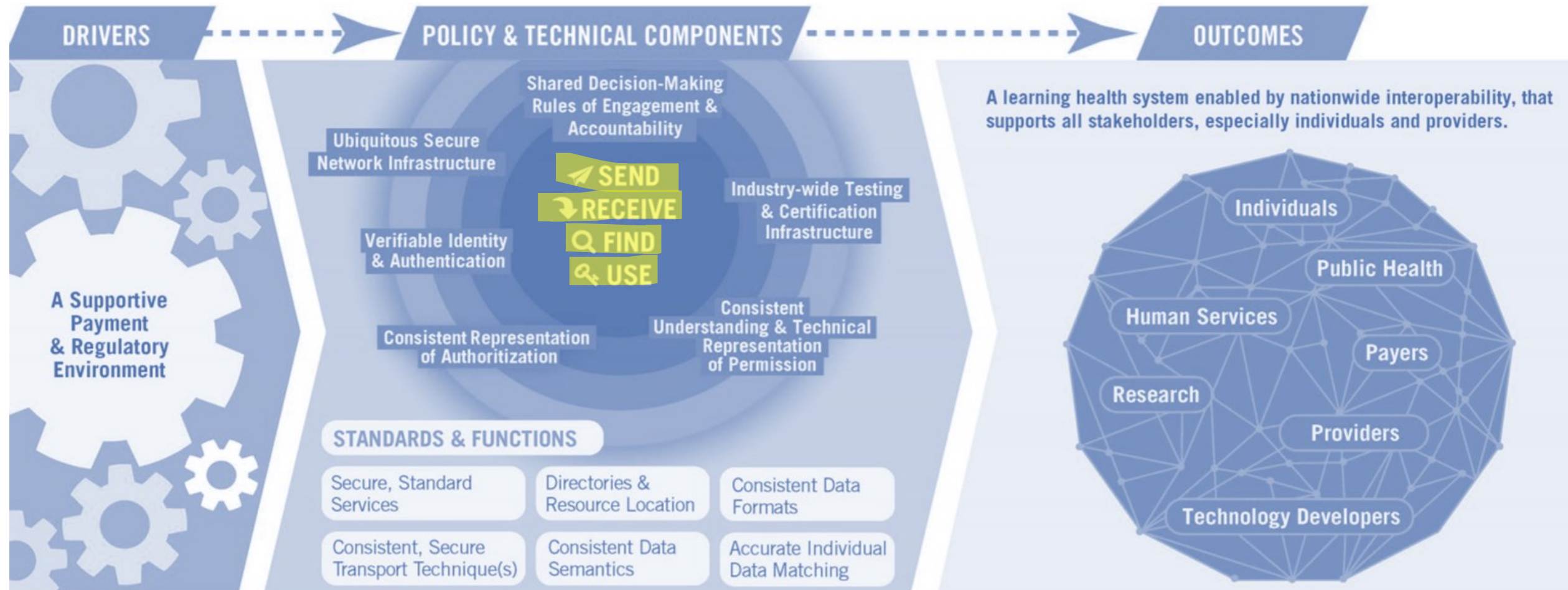
Michigan's "network of networks"

TOMORROW:

*Connect once to access
interstate data exchange,
leveraged under the ONC
Trusted Exchange Framework
and Common Agreement*



HOW does it all work?

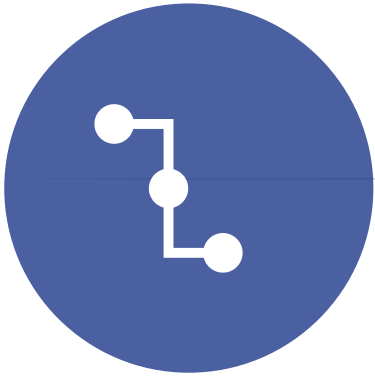


“Connecting Health and Care for the Nation: A Shared Nationwide Interoperability Roadmap.” The Office of the National Coordinator for Health Information Technology.” Final Version 1.0.

HOW does it all work?

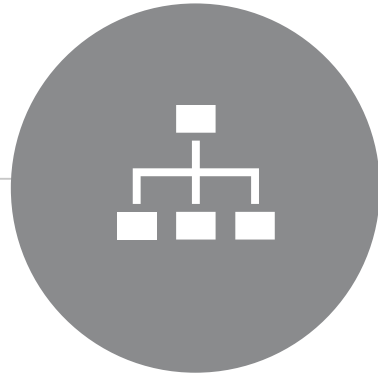


HOW does it all work?



Connect Department of Health and Human Services and healthcare organizations in Michigan including:

- Health systems, physician organizations, health plans, pharmacies, etc.



Maintain statewide master data sharing infrastructure



Convene stakeholder groups to identify data sharing barriers, reduce provider burdens, engage consumers, and enable population health



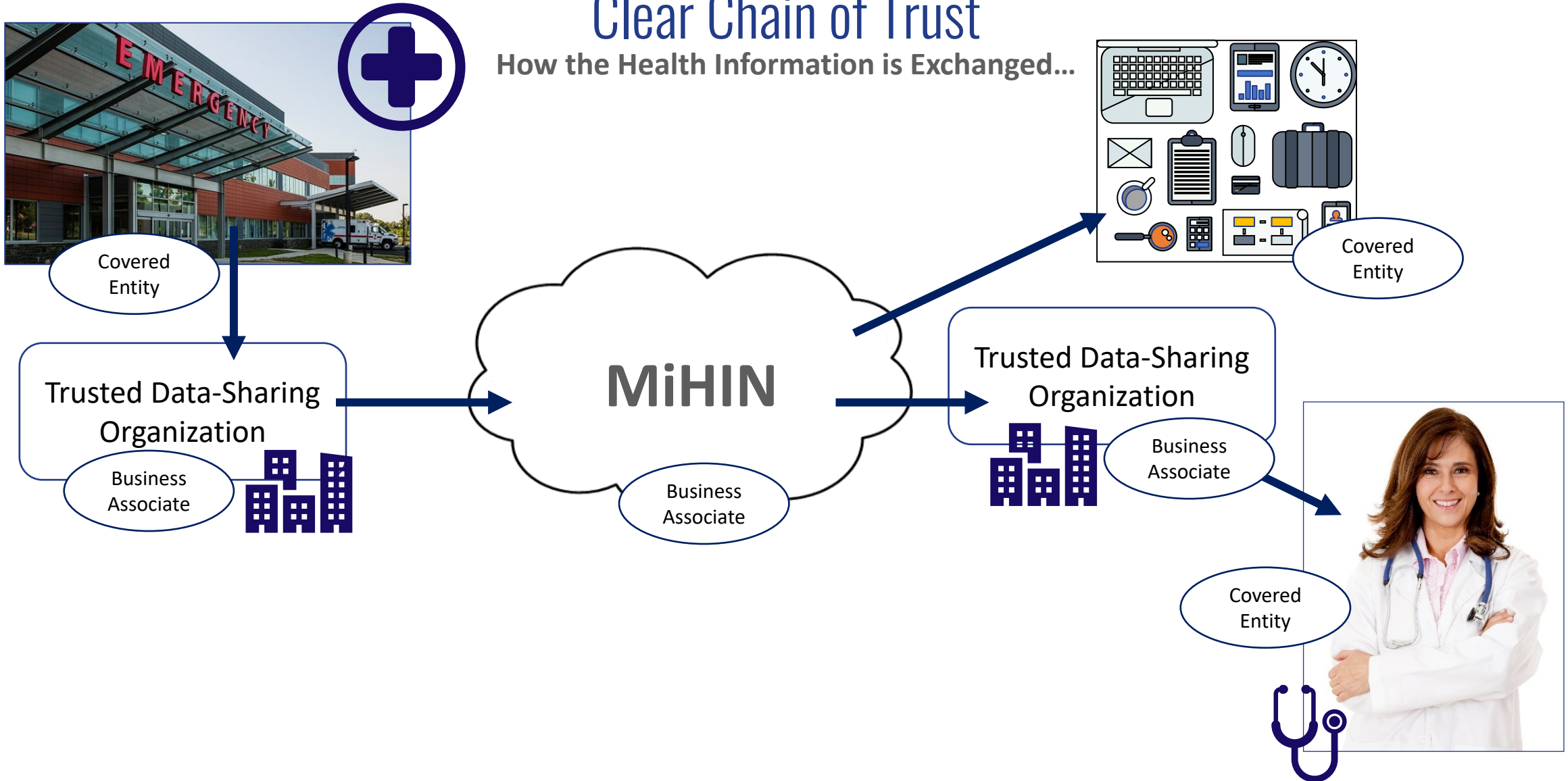
Manage statewide legal trust framework



Align incentives and/or regulations to fairly share data and promote data standardization via use cases

Clear Chain of Trust

How the Health Information is Exchanged...



Use Case

One or more scenarios to share specific information



Each use case has its own:

- Purpose
- Type of information exchanged
- Description of interactions between people/systems



Examples of use cases:

- Immunizations
- Admission Discharge Transfer (ADT) Notifications



Each use case may have different:

- Participants/interested parties
- Scenarios for information-sharing
- Rules for using the information
- Technical requirements
- Access restrictions
- Cost recovery fees or charges

Anyone can suggest a use case at <https://mihin.org/submit-use-case-idea/>

Use Case Factory

How does it work?

Adoption

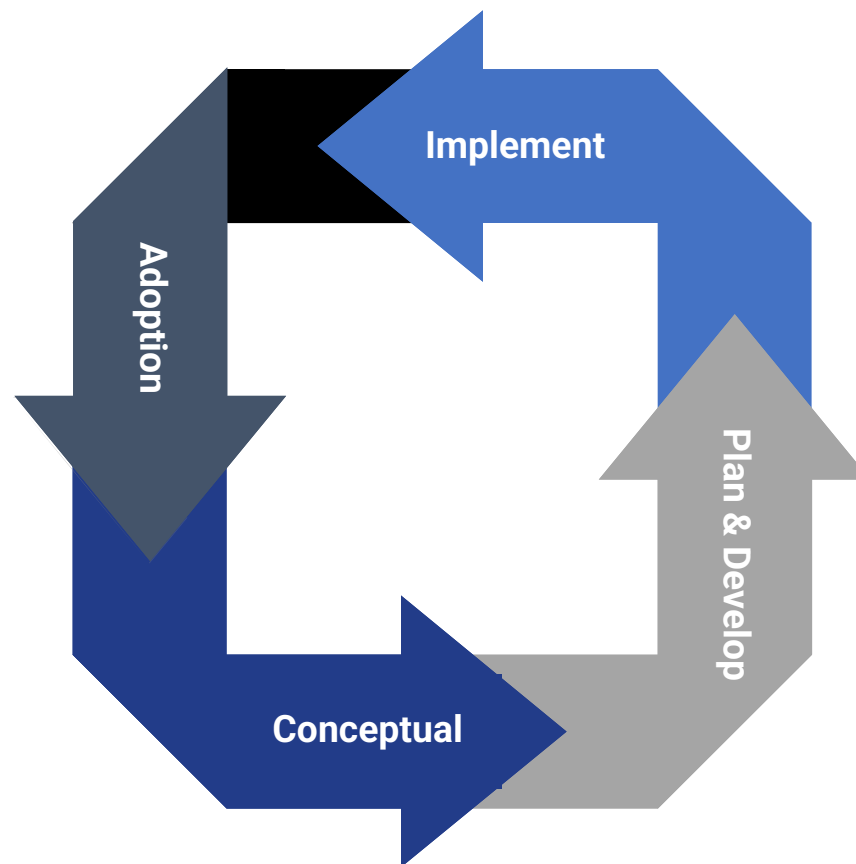
- *Critical Mass*

*Continuous Improvement.
...Bringing us back to...*

Conceptual

- *Define purpose*
- *Evaluation*

Idea with Sponsor



Implement

- *Production Status*
- *Metrics*

*Mass Marketing &
Outreach
Successful Adoption*

Plan and Develop

- *Technical Planning*
- *Pilot and Refine*

*Functional Data-Sharing
Widget
...onto MOAC and the MiHIN
Board*



Phase 1

CONCEPTUAL

An Idea with a Sponsor

Current Developing Use Cases

- [Alert & Query](#)
- [Personalized Medicine](#)
- [Intelligent Query Broker](#)

•Use Case Scenarios or Activities

- Exchanging Lab Orders (technology not there yet)
- Piloting with State Bureau of Labs on orders and results Consumer Choices
- ACRS AWARE
- ADT Privacy Tagging



Phase 2

PLANNING & DEVELOPMENT

Developing the Project

Current Use Cases Supporting Care Coordination

- [Imaging](#)
- [Advanced Care Documents](#)
- [Statewide Telehealth](#)
- [Interoperable Referrals](#)

Current Use Cases Supporting Public Health

- [Death Notifications \(for hospitals\)](#)
- [Electronic Consent Management Solution \(ECMS or Econsent\)](#)

Current Use Cases Supporting Quality Information and Administration

- [Health Claims](#)

•Use Case Scenarios or Activities

- Out of State ADT's
- Cross Sector Data Sharing: First Responders



Phase 3

IMPLEMENTATION

Ensuring Successful Adoption

Current Use Cases Supporting Care Coordination

- [Referrals](#)
- [Social Determinants of Health](#)

Current Use Cases Supporting Public Health

- [Electronic Case Reporting \(eCR\)](#)



Phase 4

ADOPTION

Utilization, Demand, and Sustainability

Current Use Cases Supporting Care Coordination

- [Admission, Discharge, Transfer Notifications](#)
- [Exchange Consolidated Clinical Document Architecture](#)
- [Longitudinal Record](#)

Current Use Cases Supporting Public Health

- [Health Information for State](#)
- [Immunization History Forecast](#)
- [Syndromic Surveillance](#)

Current Use Cases Supporting Results Delivery

- [Lab Orders-Results](#) (Cancer Notifications, Cancer Pathology, Newborn Screenings, Reportable Labs, Blood Lead, Disease Surveillance)
- [Radiology Studies](#)
- [Transcribed Document Delivery](#)

Current Use Cases Supporting Quality Information and Administration

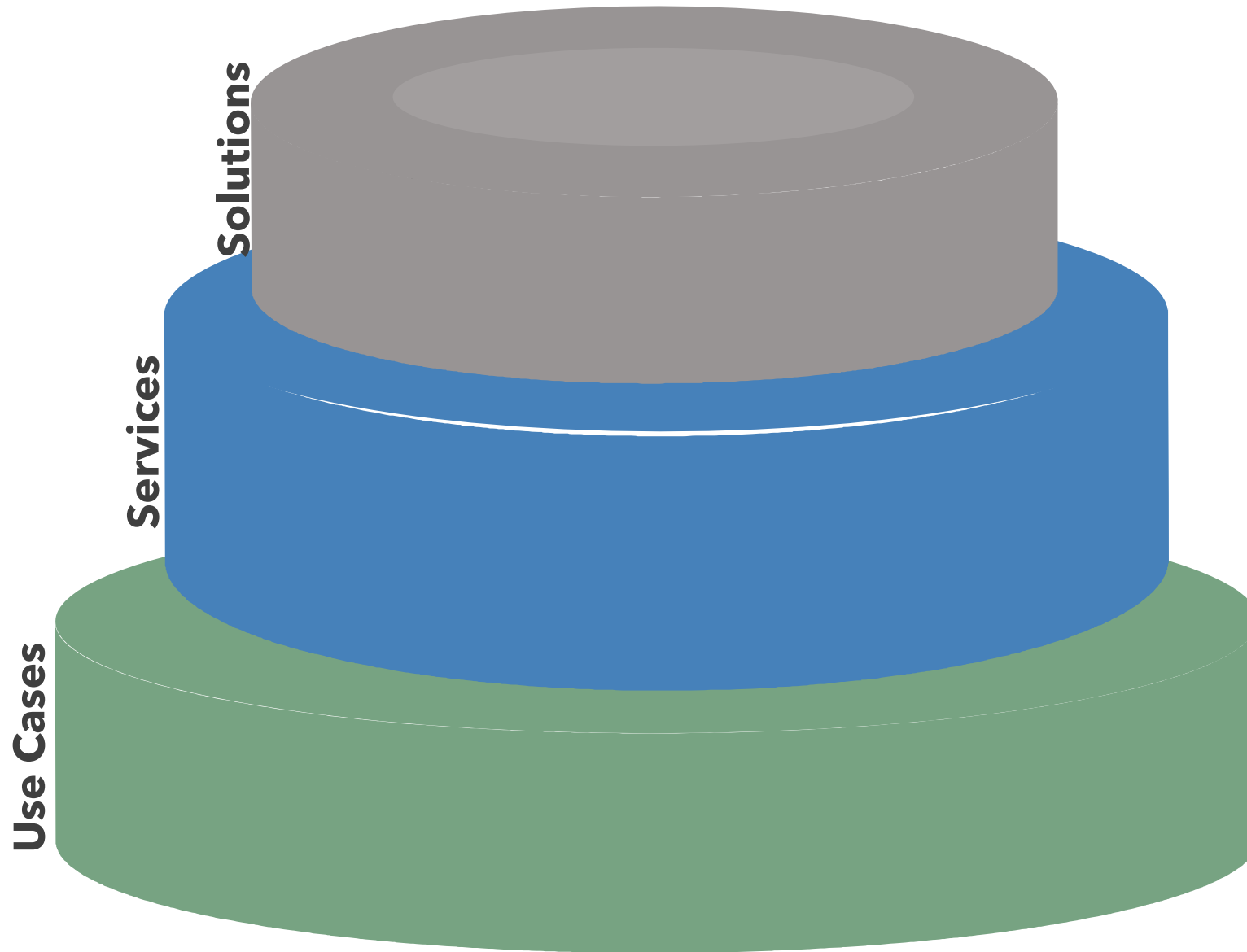
- [Physician Payer Quality Collaborative \(QMI\)](#)

Current Use Cases Supporting Network Infrastructure

- [Common Key Service](#)
- [Active Care Relationship Service](#)
- [Health Directory](#)

The WHAT:

The Use Case determines the Service which can be operationalized by the Solution



MiHIN Services

1. ADT Normalization & Conformance
2. Active Care Relationship Service
3. C-CDA Normalization & Conformance
4. Common Key Service
5. Connect to Cancer Registry
6. Coordinating the Care Coordinators
7. Covid-19 ACRS Batch Reporting
8. Death Notifications outbound
9. Direct Secure Messaging
10. eConsent
11. Electronic Case Reporting
12. Health Directory
13. Immunization for Schools (also known as Consumer Access)
14. Immunization Query
15. Immunization Submission
16. Lab Conformance and Normalization
17. Longitudinal Patient Record
18. Making Choices Michigan: Advanced Directives
19. Newborn Screening Login Portal
20. Population Health (MDSS, MSSS, ADT/syndromic, CCHD, ORU)
21. PPQC (APS Files)
22. Public Health Reporting (MCIR: QBP, VXU)
23. Radiology Conformance and Normalization
24. Receive ADTs from External Facility
25. Receive C-CDA from external facility
26. Receive Death Notification
27. Receive External Lab Results
28. Receive External Radiology Results
29. Receive Transcribed Documents
30. Reportable Labs to State of Michigan
31. Send Claims Data for Disease Registries
32. Send Ambulatory C-CDA
33. Sharing Integrated Care Bridge Record (ICBR)
34. Submission of SDOH Screening Forms to Route
35. Super C-CDA
36. Syndromic Surveillance

MiHIN Solutions

- MIGateway
 - TOC Viewer
 - Conformance Module
 - SDOH Screening Data
- Referrals Plus
- Care Convene
- Diretto (Direct Secure Messaging)
- Interoperability Station
- Interoperability Land (MELD)
- EDO with Point Click Care



AT SCALE: THE REQUIRED SIZE TO SOLVE THE PROBLEM

**OVER 2 MILLION LABS FLOWING INBOUND TO MIHIN
(MORE THAN 1 OUTBOUND PER 1 INBOUND APPLIES)**

**AN AVERAGE OF ABOUT 7.5M ADTS IN AND 11.5 OUT MEANS
THAT ANY WAY THAT YOU COUNT IT – WHEN WE FIND AN
ACTIVE CARE RELATIONSHIP THEN WE TYPICALLY FIND
MORE THAN ONE. THE SAME IS TRUE OF MEDREC.**

**FORECAST THAT CALENDAR YEAR
2023 WE WILL LIKELY HIT A
CUMULATIVE TOTAL OF 10 BILLION
MESSAGES (WE ARE AT 7.5 BILLION
NOW AND WE WENT UP 1.6 BILLION
FROM Q3 2021 TO Q3 2022**



Areas of opportunity



Reduce health disparities and underlying drivers of inequities, with solutions to bridge the digital divide, and give residents more control over their own health



Maximize the impact of public-private partnerships by creating a statewide plan that can drive joint investments in interoperable HIT



Support systems that address social determinants of health with screening and referral systems, and integrated health and human services data



Expand real-time notifications and data exchange to improve coordinated care delivery, follow up, and public health response



Enhance the use of data to measure performance and drive decision-making in the public and private sectors, including improving standardization and completeness



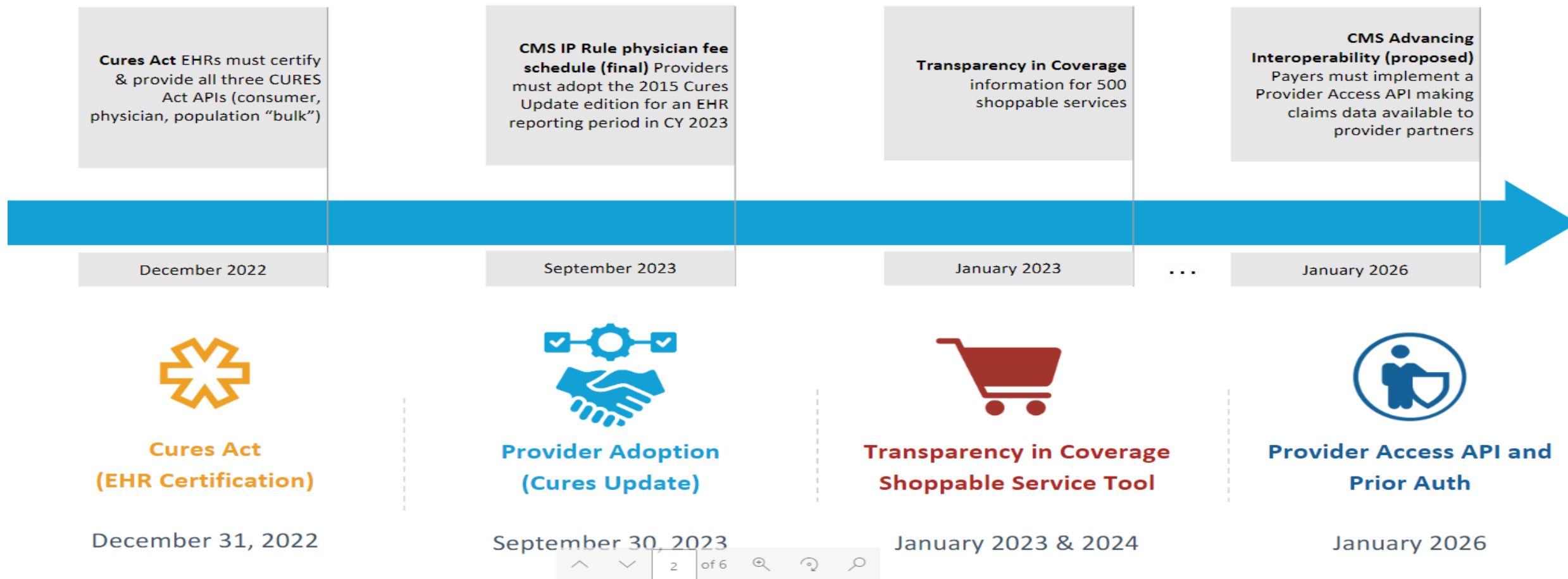
Streamline activities across the system, creating tools that reducing duplication of effort for providers and patients, and adopting a "build once" mindset



High Level Priorities



Key Timelines for Open Data Access



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FEEDBACK?!? DYNAMIC DISCUSSION?!?

Interested in working with MiHIN?

The first step is to **identify a use case** with a manageable scope that can grow incrementally.

Does my organization have health data that other members of the care team would find valuable or vice versa?

Why do I want to share the data?

What is the data going to be used for?

From there, let's work together to identify policy or governance challenges and figure out how to create a technology solution to enable that data sharing.



Upcoming Engagements

The Download

The Use Case Factory: From Conception to Adoption
Wednesday, February 15 from 10:00am-11:00am

Bits & Bytes

Admission, Discharge, Transfer Notifications (ADT) Use Case
Wednesday, February 22 from 2:00pm-3:00pm

THANK YOU!

