

June 15, 2022

THE DOWNLOAD

A monthly webinar diving into the intersection of healthcare and technology



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mihin.org



help@mihin.org

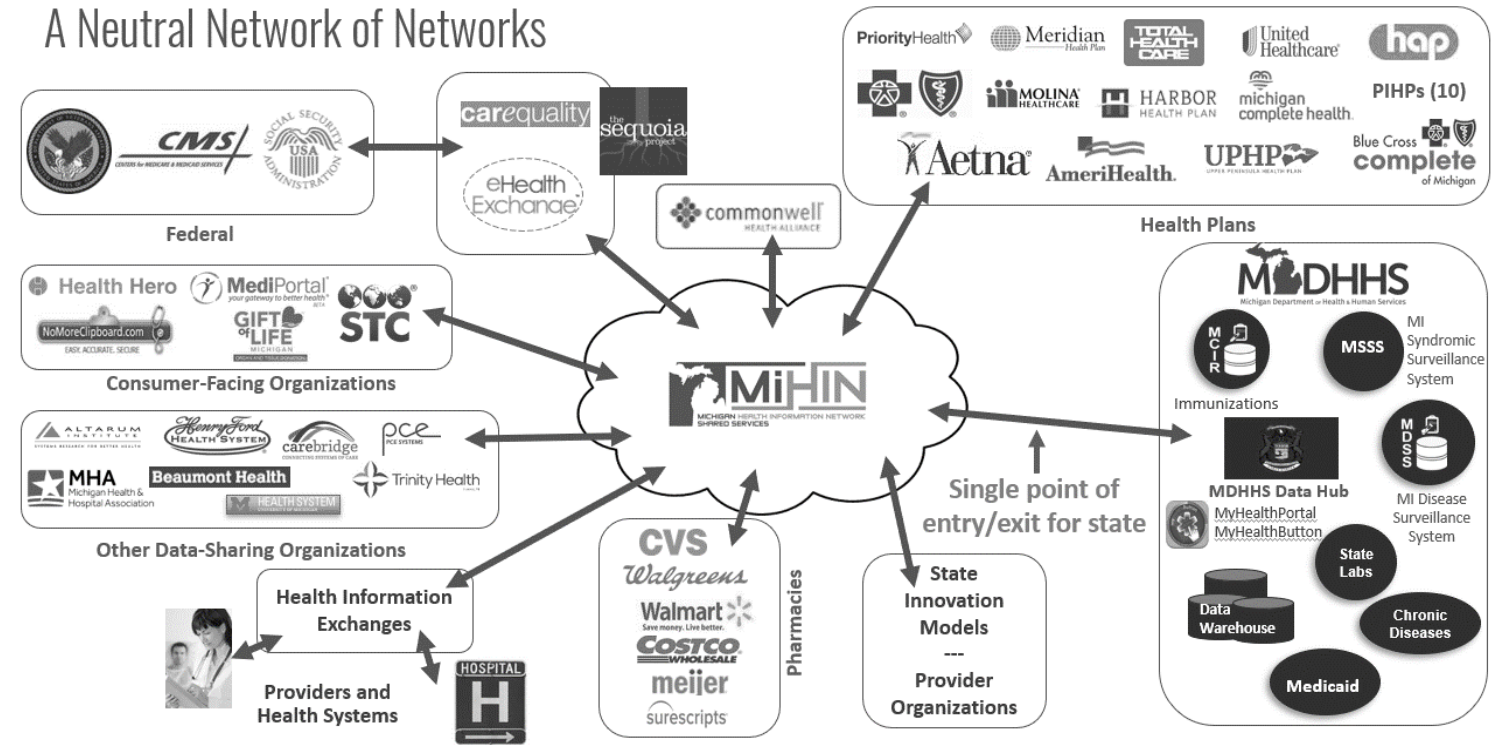


Michigan Health Information Network Shared Services (MiHIN) is a non-profit organization that provides technology and services to connect disparate sectors, *our stakeholders*, to securely, legally and technically share health information.

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

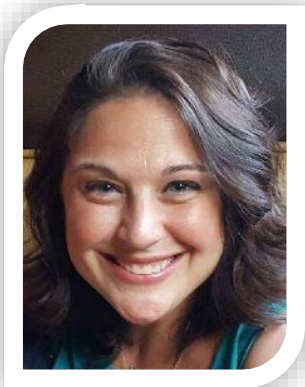
MiHIN 101

Joanne Jarvi

03

Adjourn

Joanne Jarvi



Joanne B. Jarvi

*Senior Director of Outreach and
Market Communications*
MiHIN

Joanne.Jarvi@mihin.org

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.

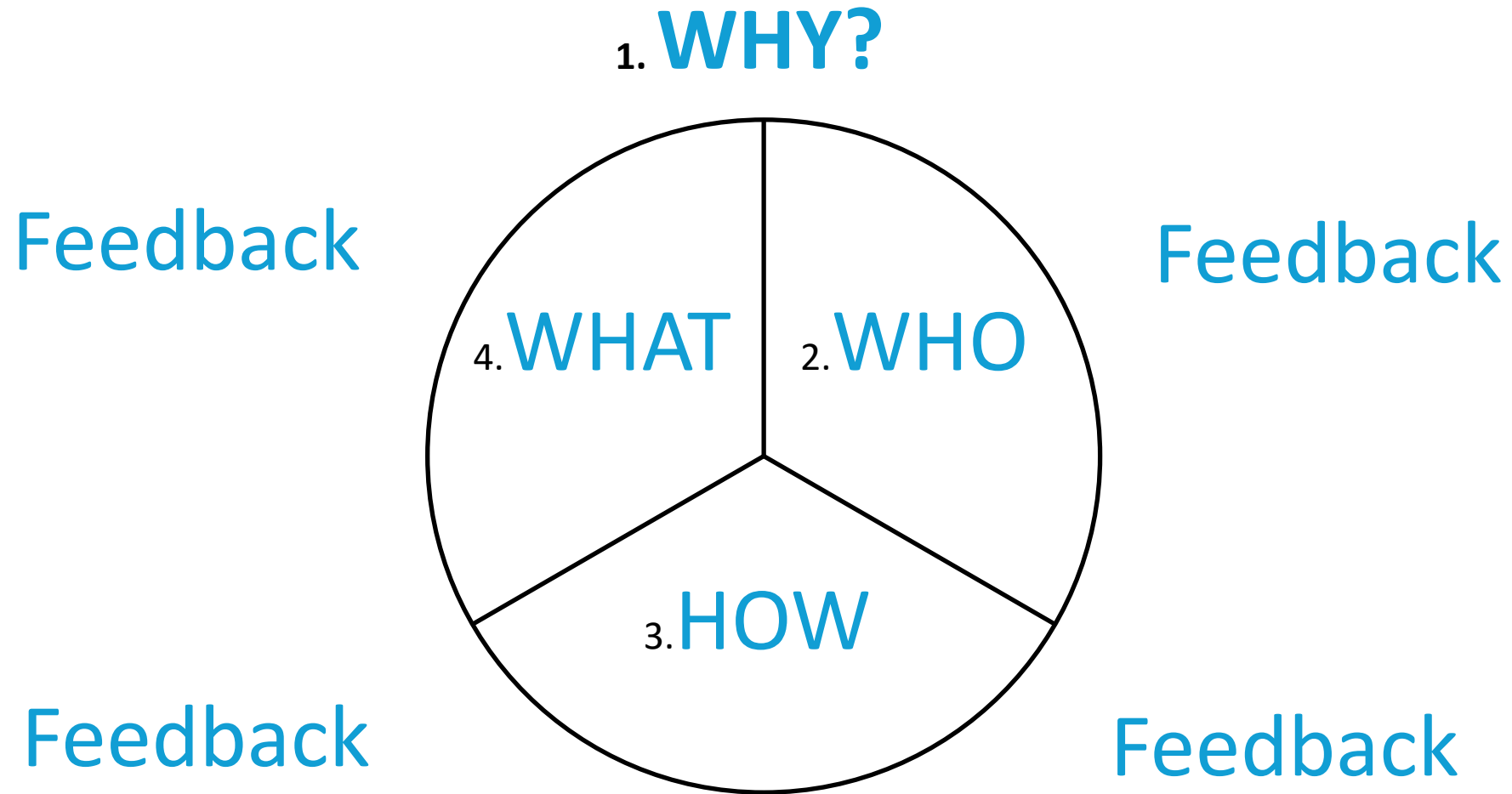
Data is not always
communicative.

Technological Infrastructure +
Human Infrastructure

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

The Group Development Model

(with special thanks to MHEF and MPHI)



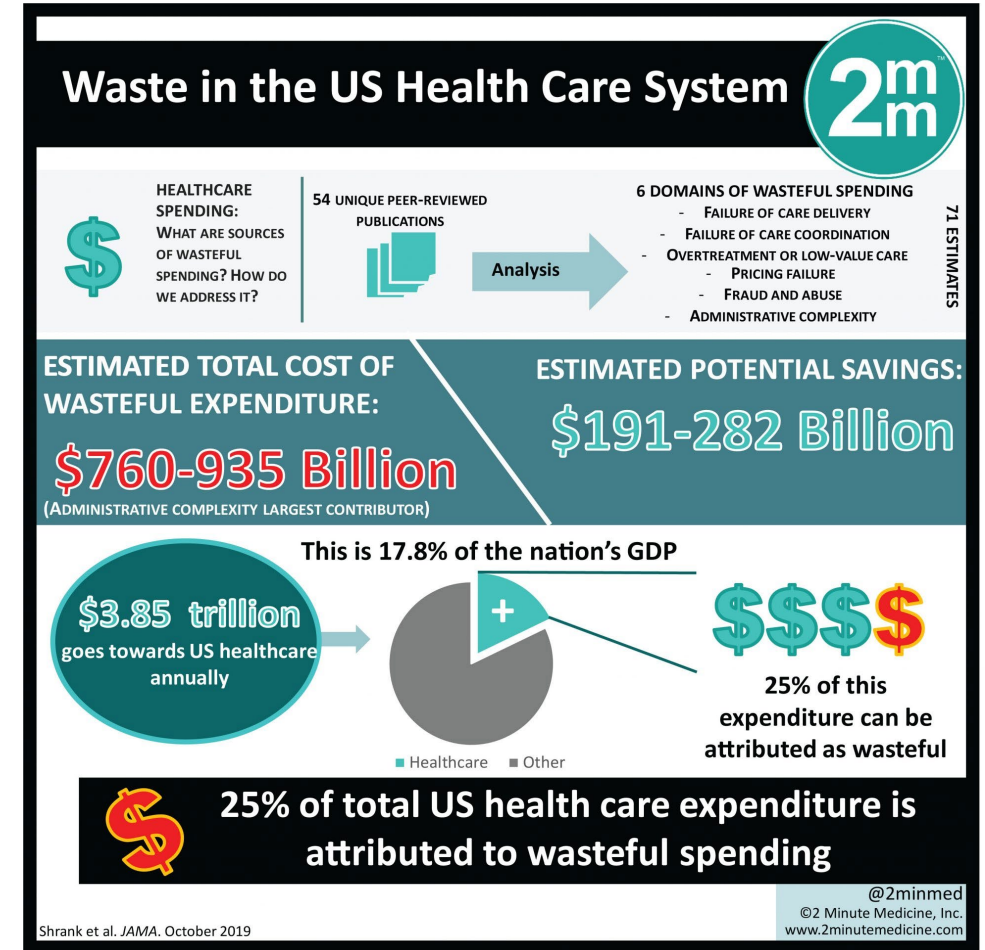
WHY?

Data for Good



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

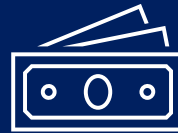
Reduced inefficiencies



Improved healthcare
access



Lower healthcare costs



Better quality of care &
health outcomes



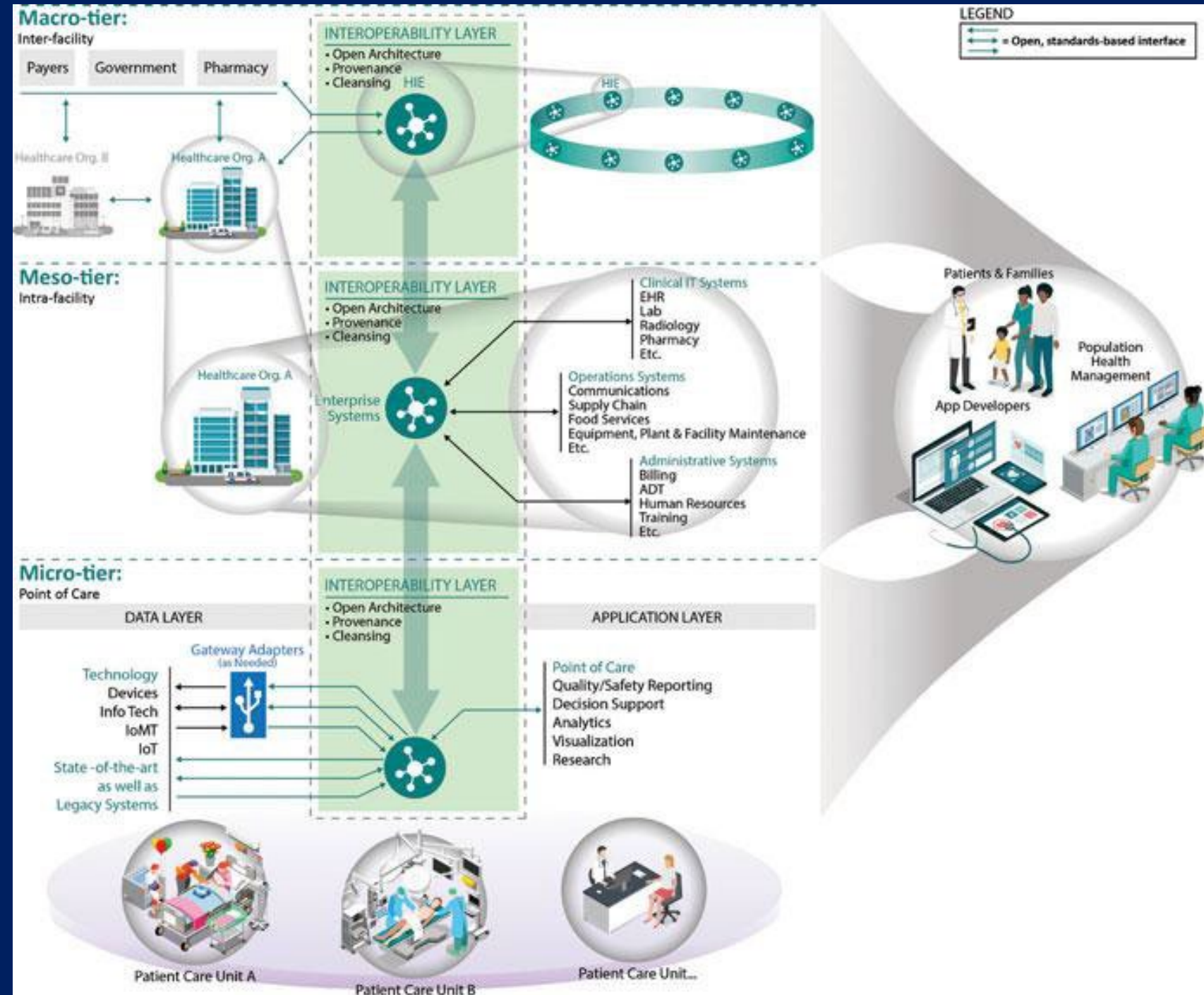
Personalized medicine
for patients



Infrastructure, Standards and Guiderrails

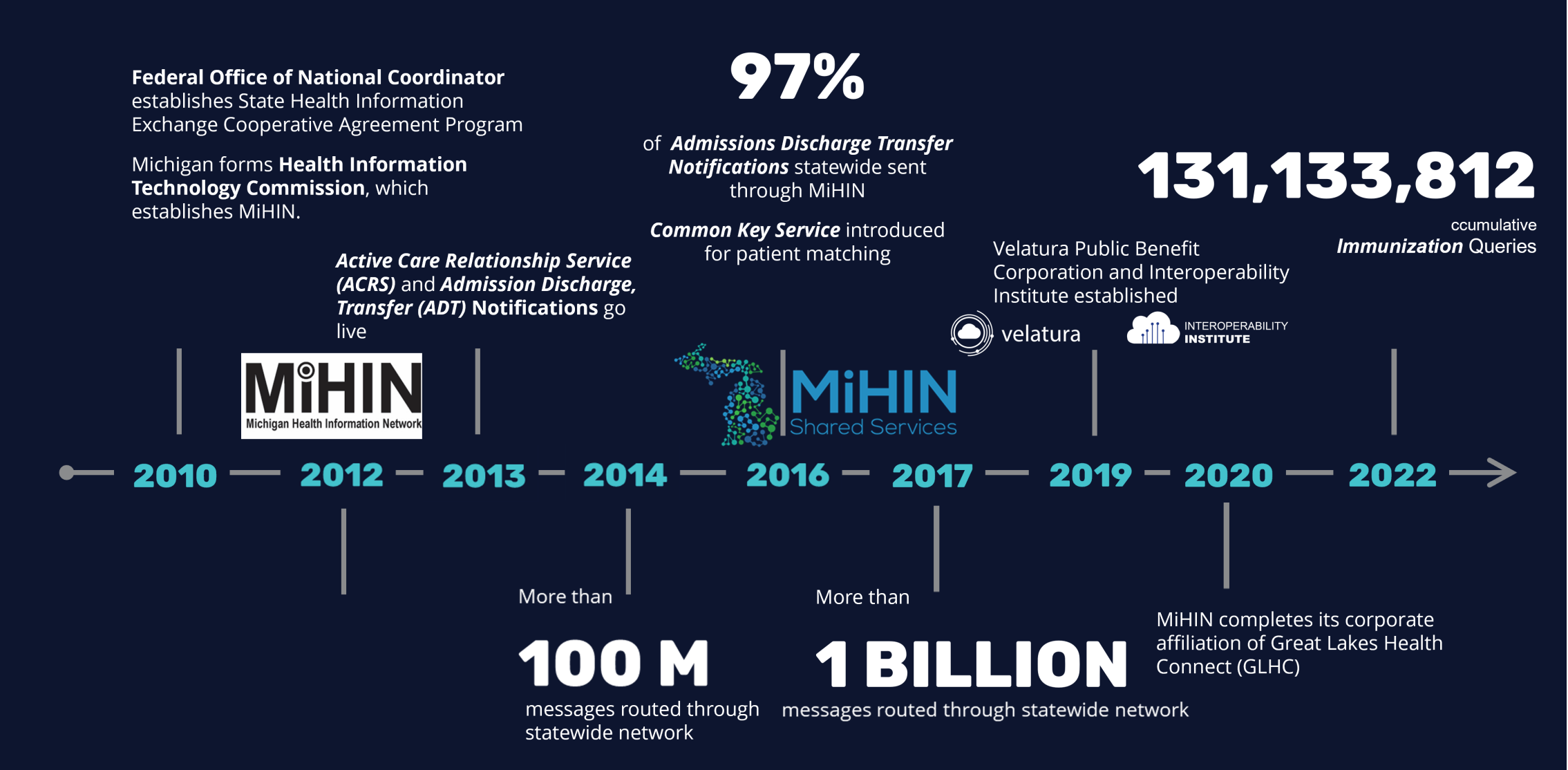


For WHOM With WHOM By WHOM?

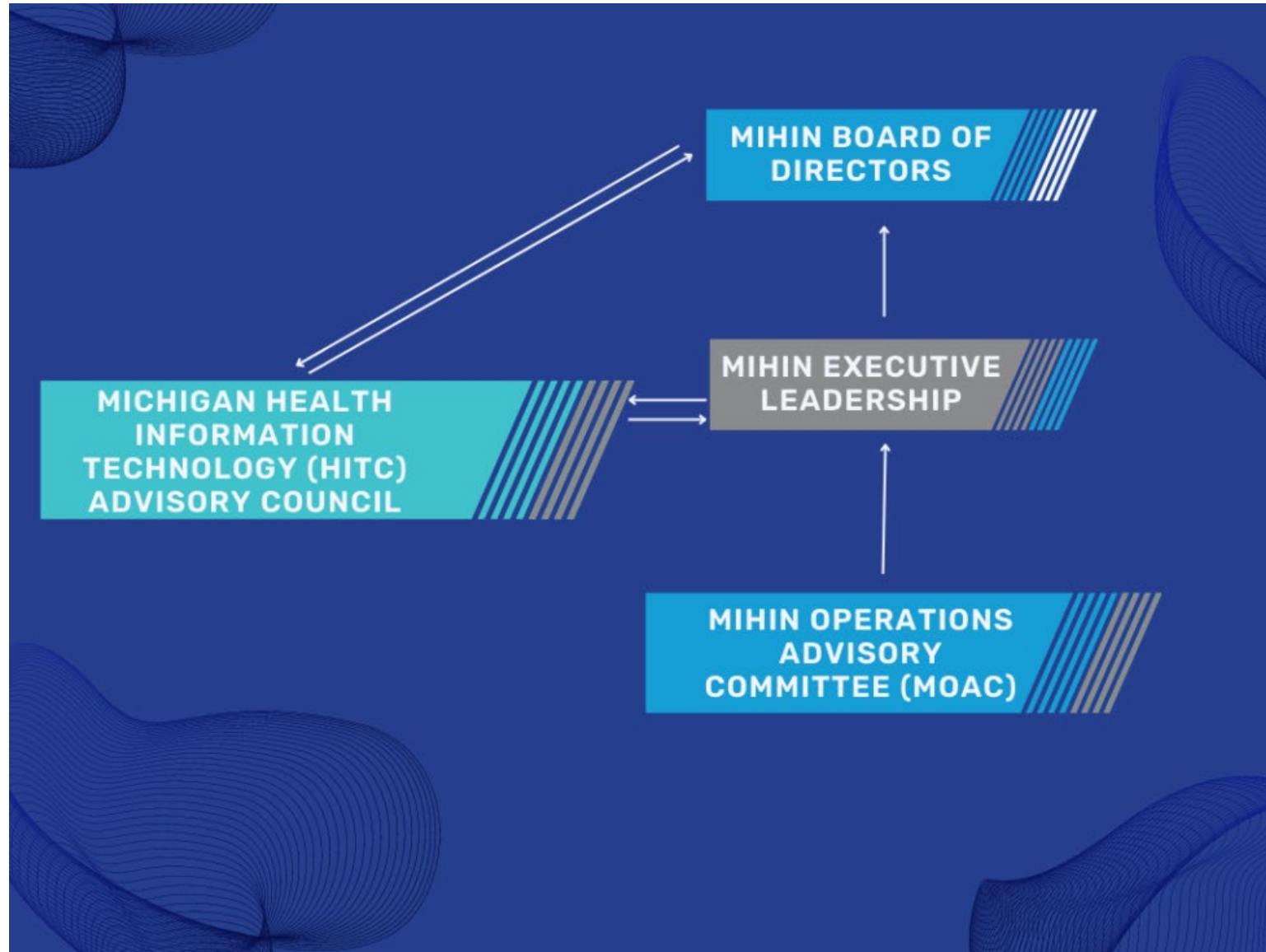


LEVEL	KEY STAKEHOLDER
<i>Micro</i>	Patient
	Patient's family & support structure
	Individual care givers & small practices
	School-based clinics site
	Local health department
	Emergency Medical Support & First Responders
	Emergency department
	Critical Access Hospitals
<i>Meso</i>	Physician Organizations
	Direct Contracting, Risk or Accountable Care Orgs
	Health System
	Health Plans
	HIEs, CBOs, HINs
	Municipal Government (Cities & Counties)
	State Medicaid
	State Human Service
	State Public Health
<i>Macro</i>	Academic Medical Centers
	Technology Incubators
	Strategic Health Information Exchange Col- laborative (SHIEC)
	National Provider Organizations & Health Systems
	National Health Plans
	Centers for Medicare and Medicaid
	Office of the National Coordinator
	Veterans Affairs
	Centers Disease Control
	Standard Development Organizations (HL7, IHE, OMG, X12, etc.)

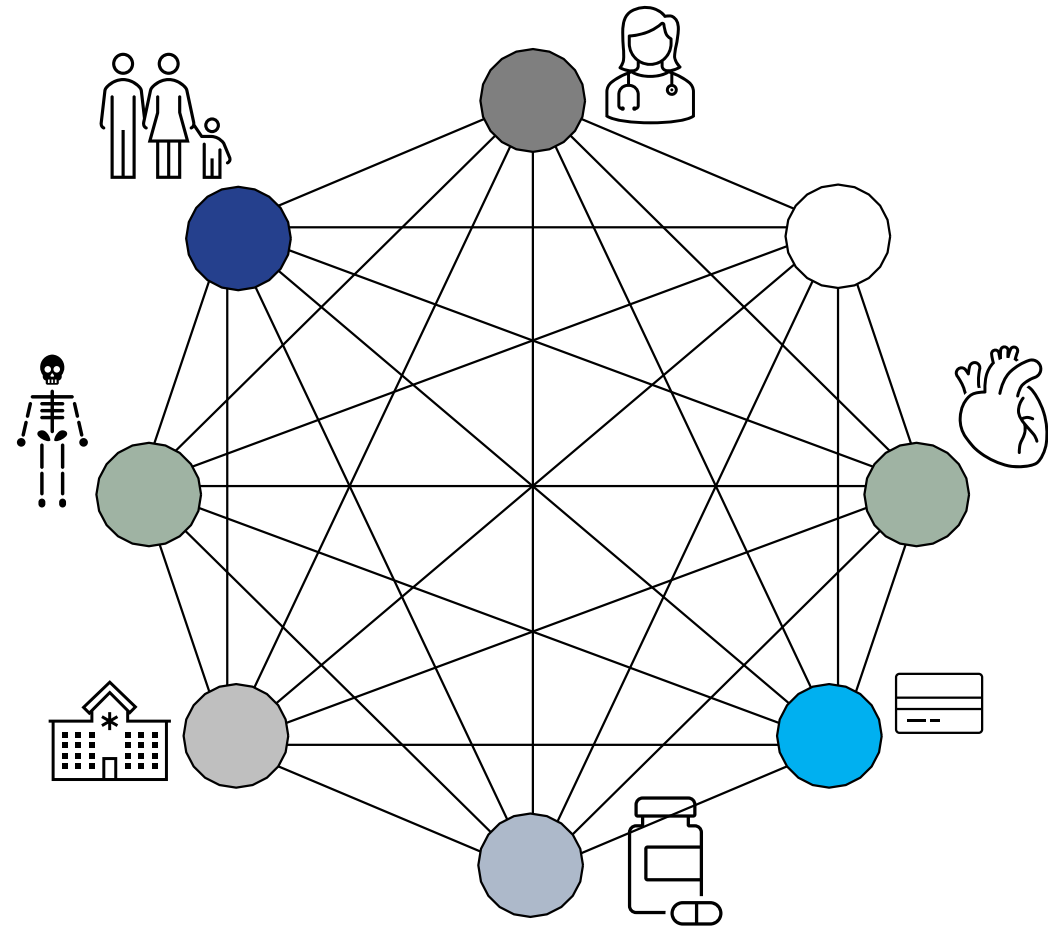
Brief History: Michigan Health Information Network Shared Services



MiHIN Governance Model



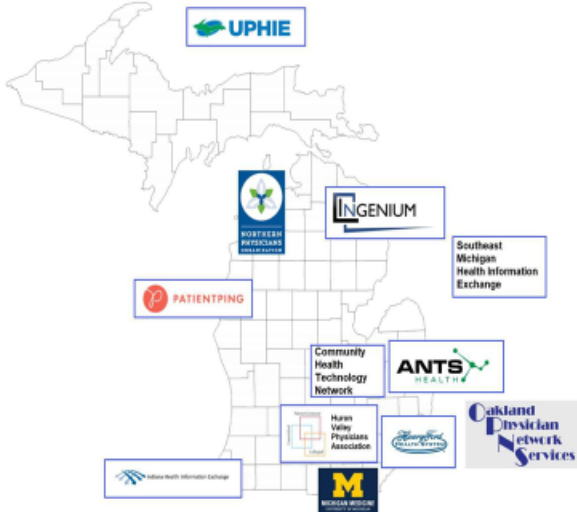
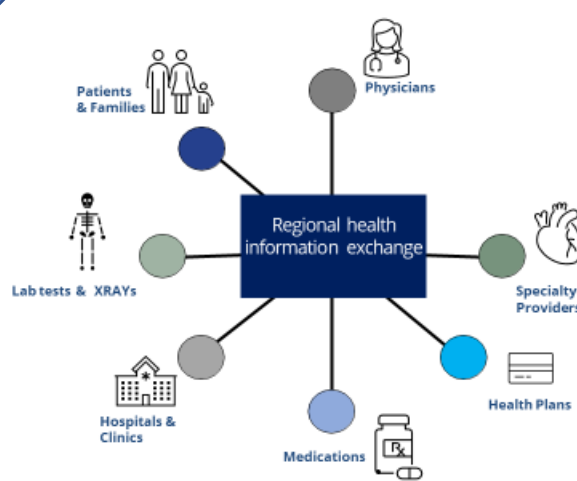
BEFORE:
Duplication
of effort,
waste and
expense



BEFORE:
Duplication
of effort,
waste and
expense

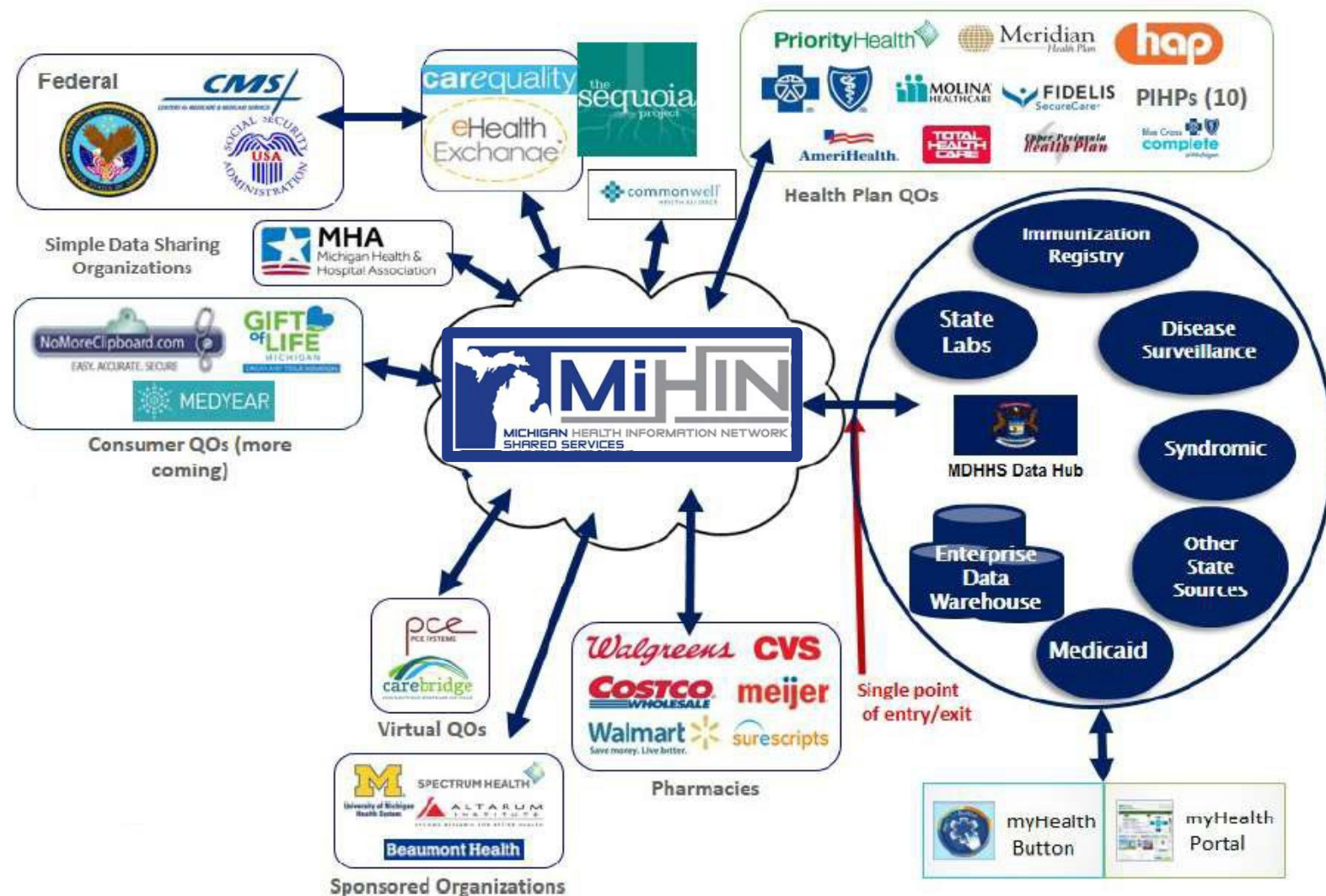
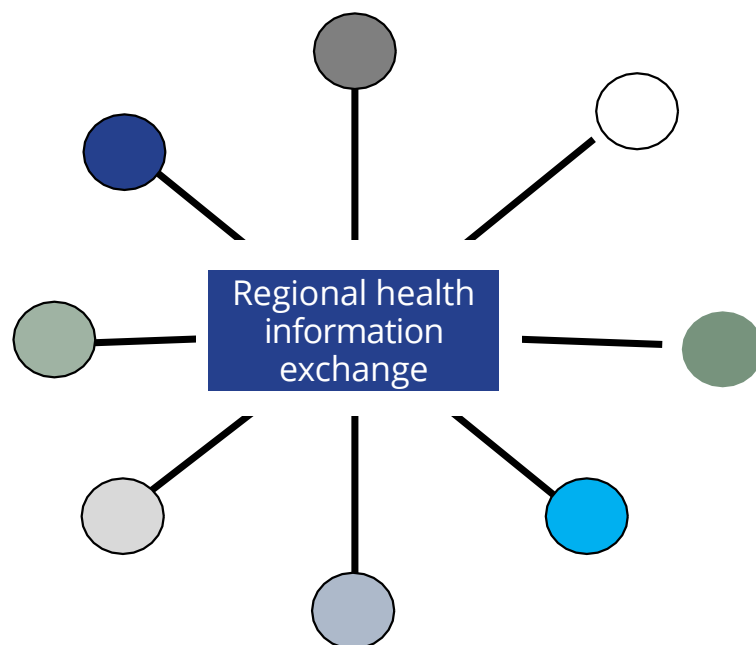


Many networks connecting regional health providers



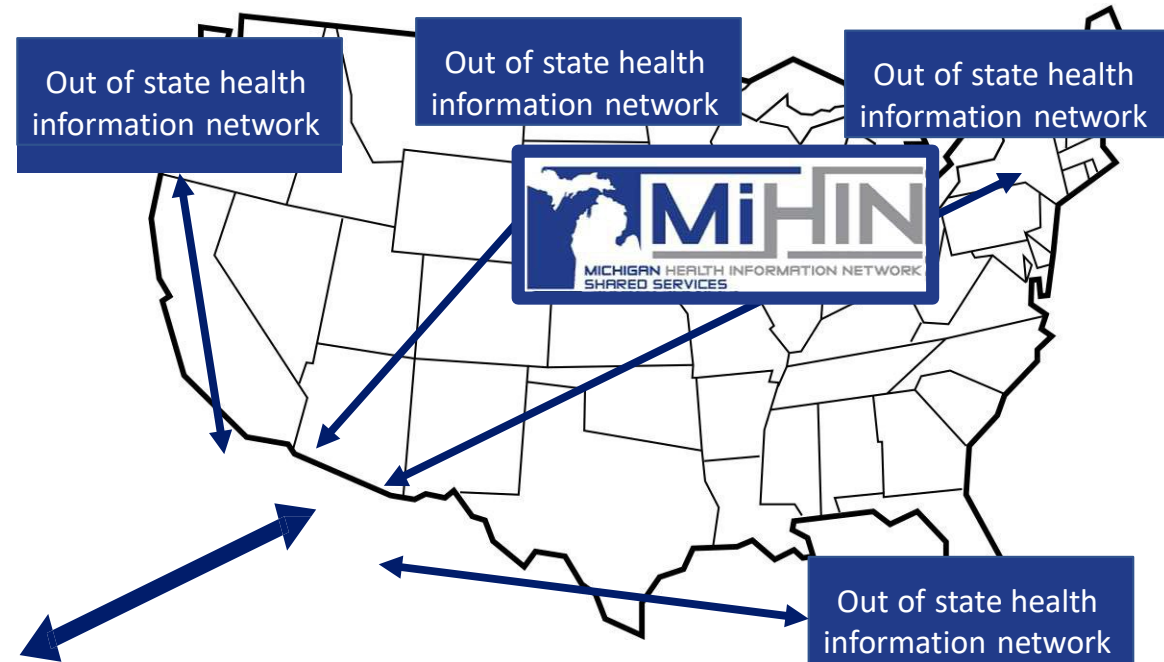
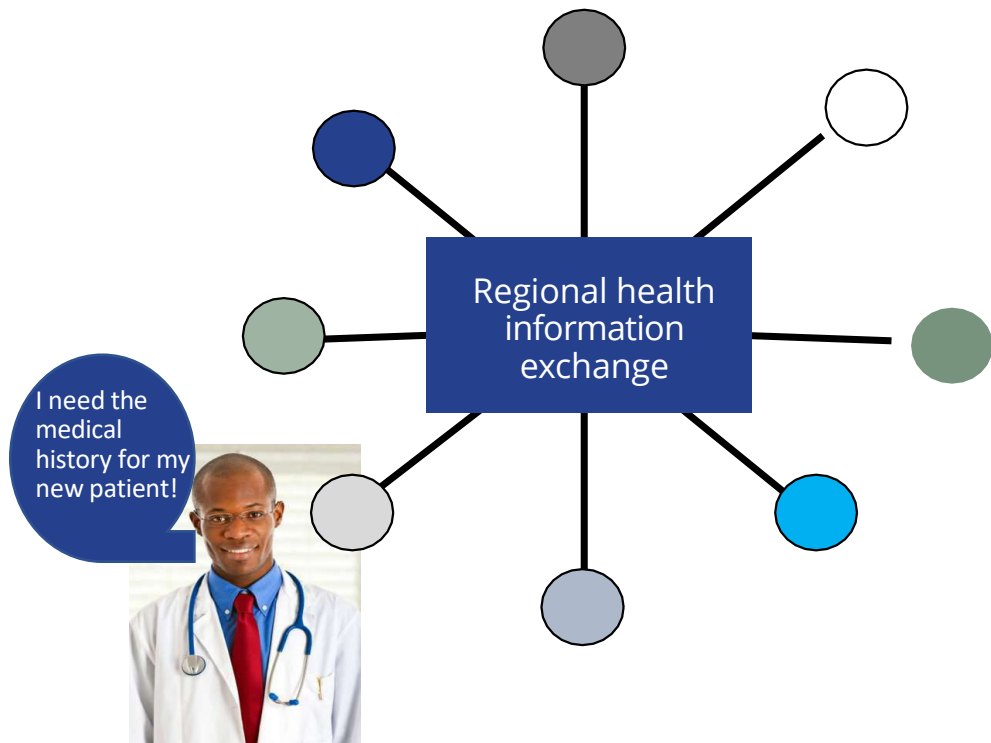
Michigan's network of networks

SINCE 2010:
Connect once to
access shared
services

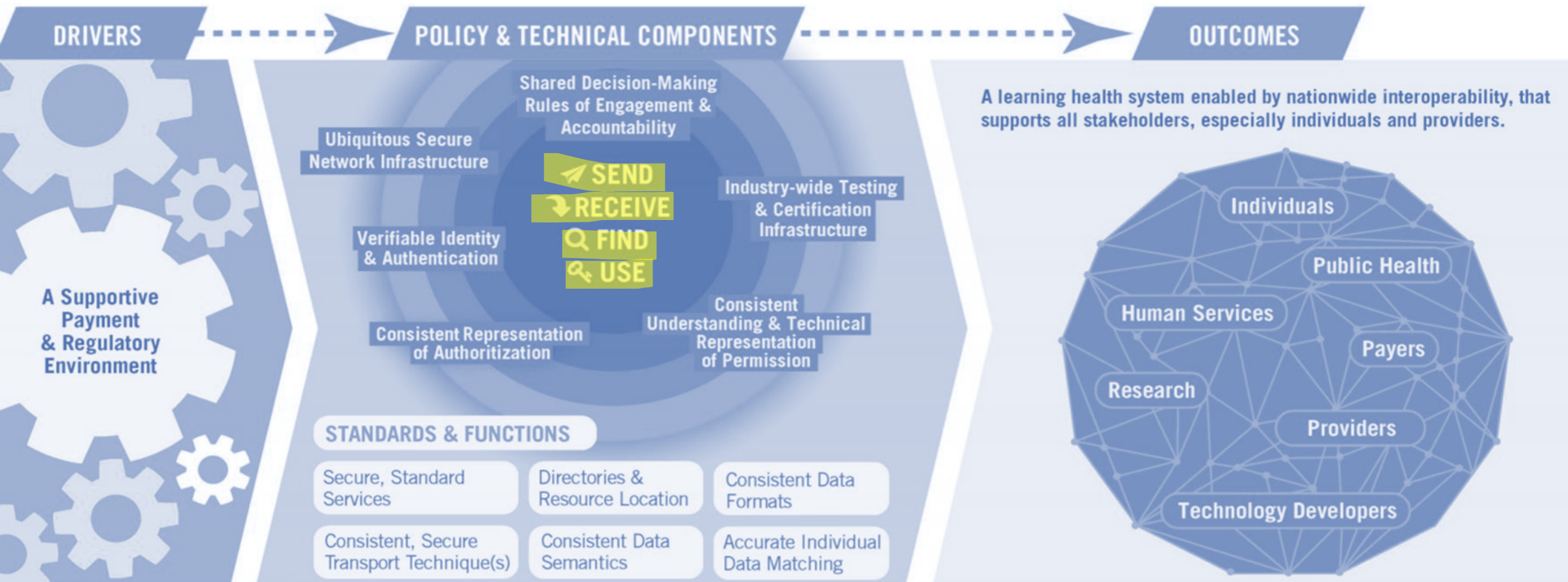


Michigan's network of networks

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

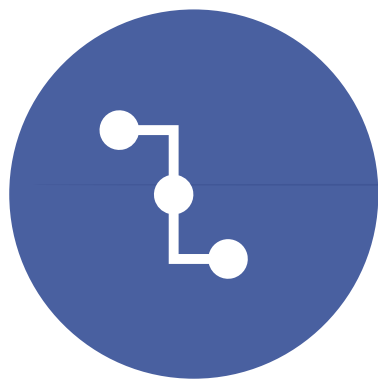


HOW does it all work?



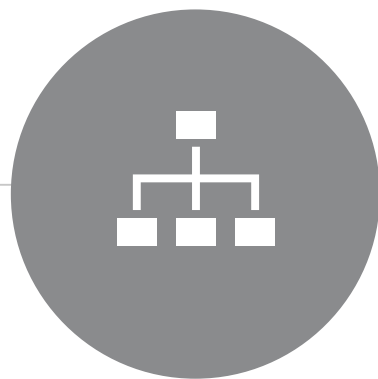
“Connecting Health and Care for the Nation: A Shared Nationwide Interoperability Roadmap.” The Office of the National Coordinator for Health Information Technology.” Final Version 1.0.

HOW does it all work?



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

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

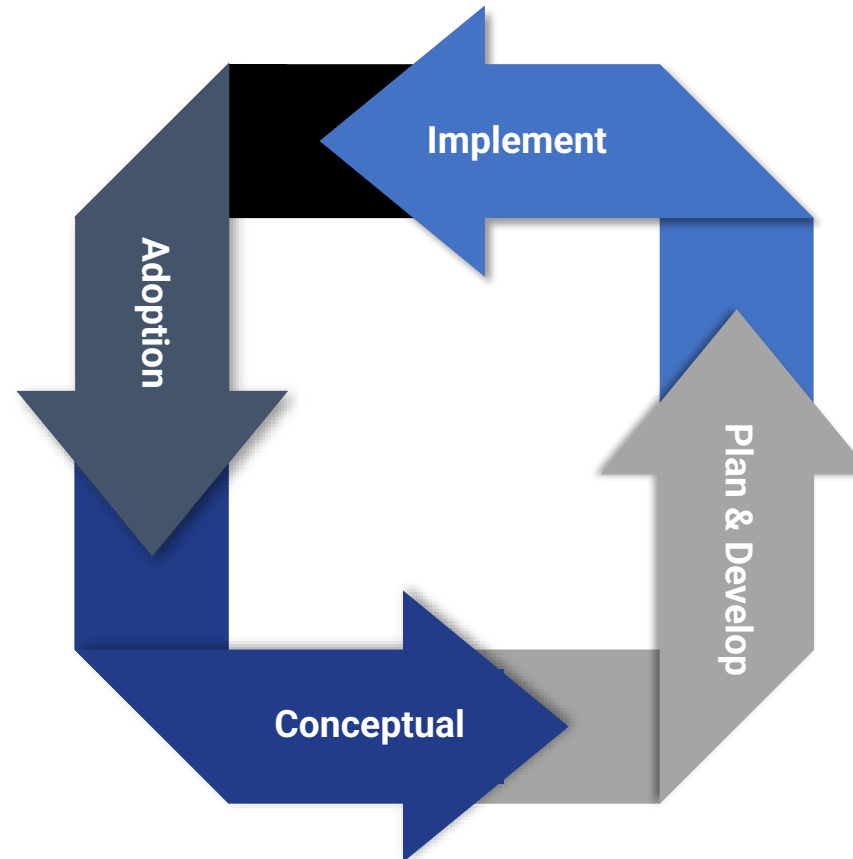
- Critical Mass

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

Conceptual

- Define purpose
- Evaluation

Idea with Sponsor



Implement

- Production Status
- Metrics

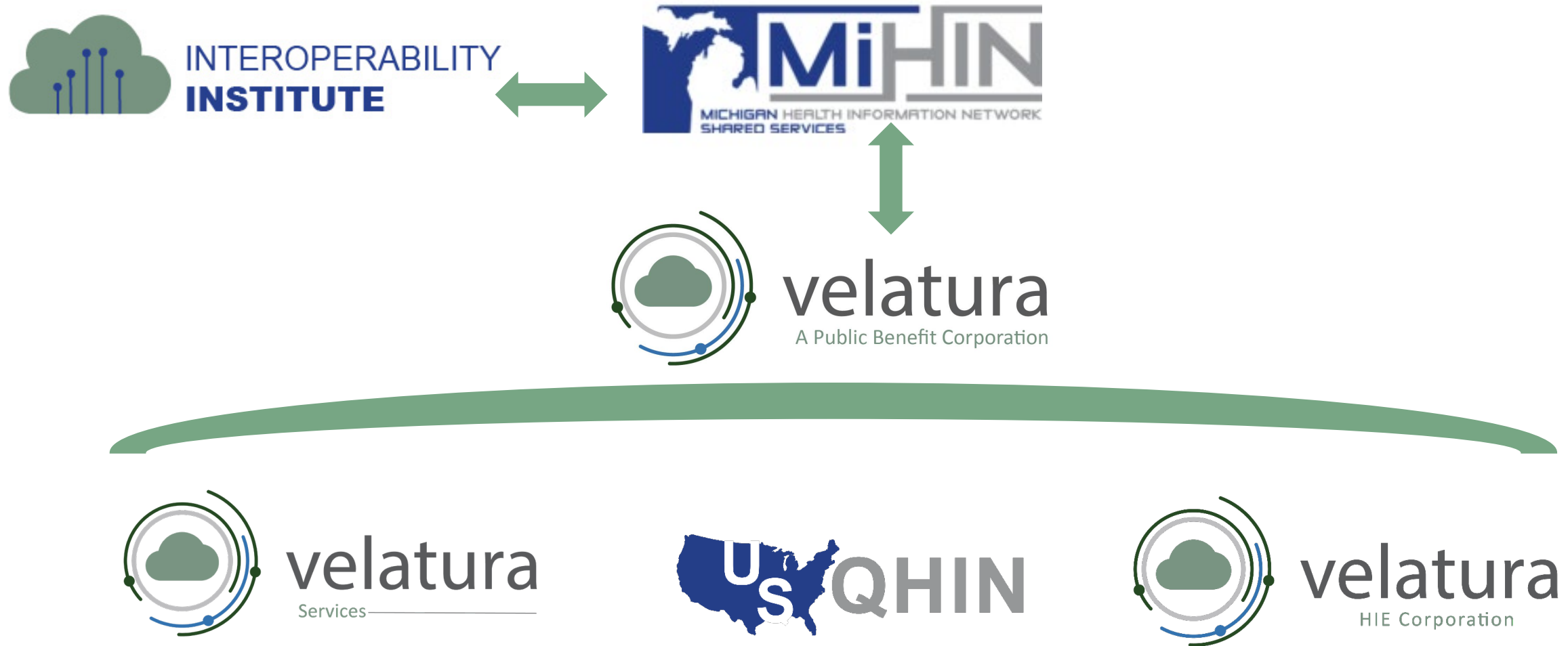
***Mass Marketing &
Outreach
Successful Adoption***

Plan and Develop

- Technical Planning
- Pilot and Refine

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

Family of Companies



Velatura Public Benefit Corporation & Interoperability Institute



creatively connects and aligns people, organizations, technology, ideas, and information to improve the way healthcare information is exchanged today through professional services and best in class technology solutions



an alternative nationwide health information network, focused on rationalizing interstate data exchange at national scale



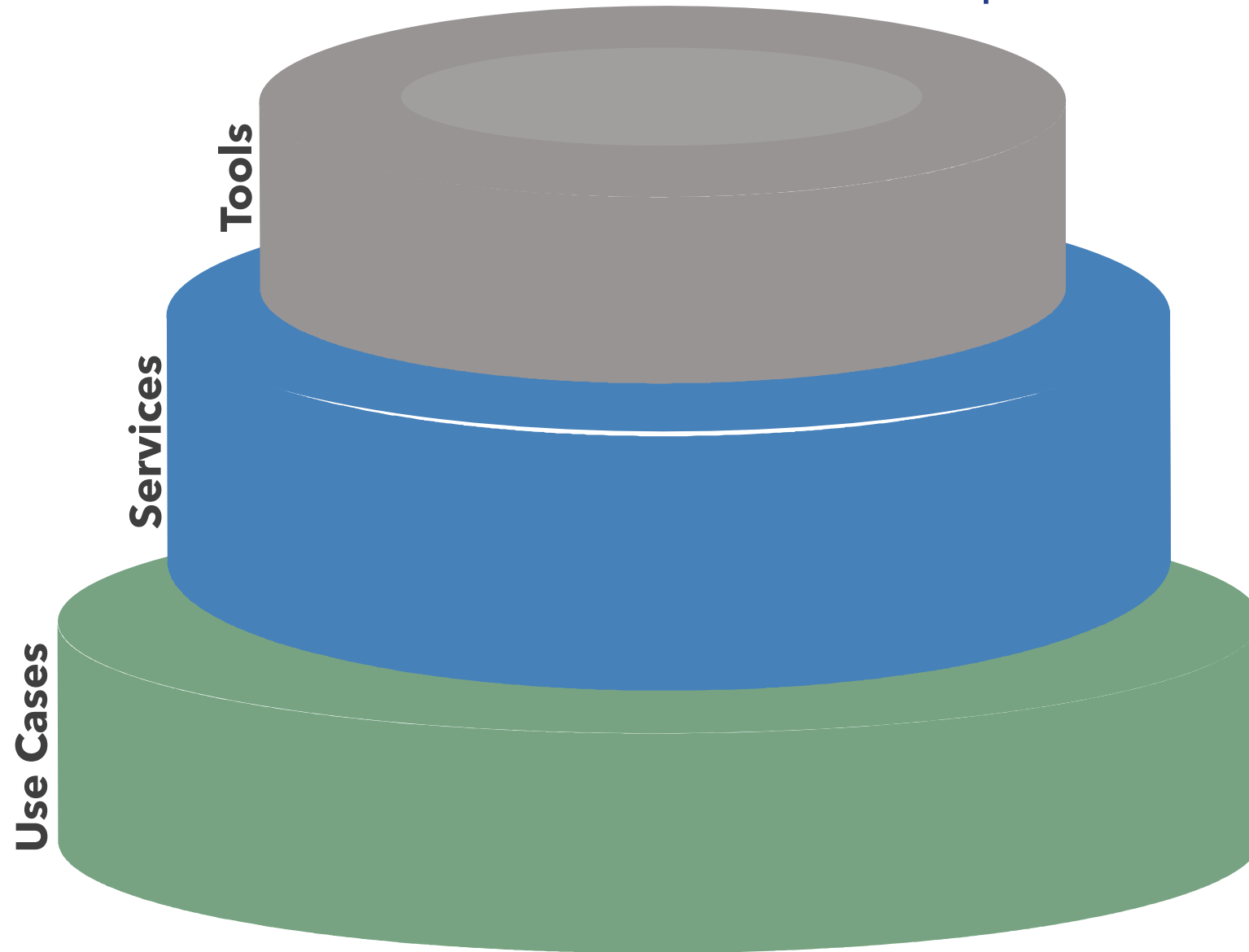
a consolidation of health information exchanges, community-based organizations, and health information networks that have formally affiliated to achieve national economies of scale yet maintain localized stakeholder alignment



a non-profit software technology research and development institute. Uniquely positioned as a health information technology innovation incubator, IOI's capabilities include applied research, software development, informatics, data science, artificial intelligence, machine learning, natural language processing, and solution enablement.

The WHAT:

The Use Case determinations the Service which is operationalized by the Tool



MiHIN Use Cases

1. Advance Care Documents
2. Active Care Relationship Service
3. Admission, Discharge, Transfer Notifications
4. Behavioral Health Specially Protected Information
5. Common Key Service
6. Death Notifications
7. Drug Poisoning Surveillance System
8. Electronic Case Reporting
9. Electronic Consent Management Service
10. Exchange Consolidated Clinical Document Architecture (C-CDA)
11. Exchange Continuity of Care (CCD)
12. Health Information for State, *including Immunizations, Syndromic Surveillance, Newborn Screening – Hearing Test Results*
13. Health Provider Directory
14. Imaging
15. Immunization History-Forecast
16. Lab Orders - Results, *including Cancer Notifications, Cancer Pathology, Disease Surveillance, State Bureau Lab Order-Results, Newborn Critical Congenital Heart Disease*
17. Longitudinal Record
18. Medication Reconciliation, *including Discharge Medication Reconciliation*
19. Medicaid Patient Query, Michigan, *including Find Patient Records*
20. Orders and Results Delivery
21. Quality Measure Information
22. Radiology Studies
23. Referrals, *including: Tobacco Free*
24. Social Determinants of Health (SDOH)
25. Statewide Telehealth
26. Streamline Medical Examiner Reporting of Death Certificates
27. Transcribed Document Delivery
28. University of Michigan Proprietary System for Opioid Overdose Surveillance

MiHIN Services

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

MiHIN Tools



MIGateway

Single platform to: Upload ACRS files; Manage Active Care Relationships; View Care Team & other patient information; View Super C-CDA; View/Download ADTs/CCDs; Access report to support MU attestations; Access Diretto

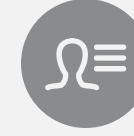
Customer Types: Health Plans, Providers, Practices, POs, ACOs, Health, Departments, Health Systems, MDHHS



Diretto

web interface supporting sending & receiving Direct Secure Messaging through a web browser

Customer Types: Everyone exchanging data in healthcare: payers, providers, HIEs, POs, PHOs, home health, state governments, even consumers eventually



ReferralsPlus™

A secure closed loop application that enables healthcare & community organizations to send and receive referrals

Customer Types: Medical Practices & Clinics, Hospitals, Home Health Agencies, Behavioral Health, Educational & Human Services, Pharmacists, Community Mental Health & Health Departments, Community Resources, (e.g. Shelters, Food Banks), Physical, Speech & Occupational Therapy, Dental, Health Plans)



AD Vault

Allows submission of Advance Care Documents, Care Plans, Action Plans & other clinical PDF documents into Longitudinal Record

Customer Types: Any organization that has Advance Care Documents, Care Plans, Action Plans & other clinical PDF documents (e.g. Attorneys, Cancer Centers, Community & Faith Based Orgs, HIEs, Home Health, Hospice, Hospitals, Online Healthcare, Outpatient Clinics, PHOs, POs, Senior Living Centers, LTC, SNF, Health Plans)



Interoperability Institute and MELD

Meld is an open-source, cloud-based healthcare IT sandbox preloaded with fully synthetic HL7® FHIR® data available in FHIR DSTU2, STU3, and R4. An immersive, vendor-neutral environment that's collaborative across different organizations who can work together to achieve a unified goal of healthcare interoperability.



CareConvene

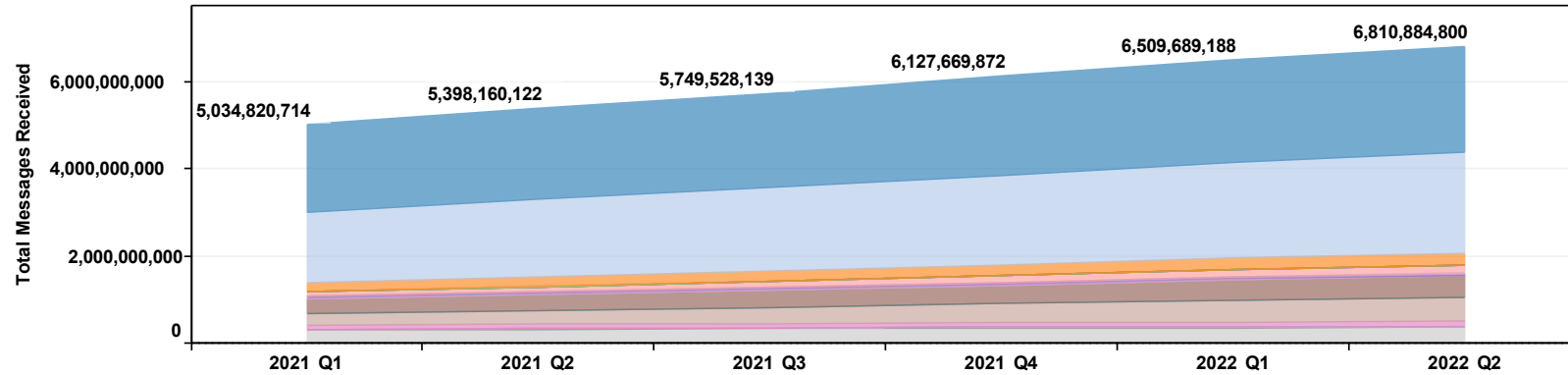
Virtual health platform allowing for greater patient access to quality care via a secure platform; HIE enabled, easily integrated into a providers practice flow, and can provide longitudinal and episodic care information; supports bi-directional communication between patient and provider via text or chat functionality

Customer Types: Providers, Payers, HIEs as a reseller, POs



Cumulative Quarterly Message Totals by Use Case

Running total - Growth Over Time



	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2
ADT ACRS Inbound	2,017,244,468	2,108,551,696	2,189,499,194	2,270,317,001	2,363,938,678	2,438,577,629
ADT ACRS Outbound	1,635,073,284	1,775,770,066	1,916,684,266	2,063,225,139	2,201,071,868	2,305,776,156
ADT Payer Outbound	199,554,703	215,108,082	230,733,224	246,215,997	261,646,176	274,096,342
Ambulatory C-CDA Inbound					5,667,726	11,930,040
Blood Lead	4,788	4,788	4,788	4,788	4,788	4,788
Cancer Notifications	14,202	14,635	14,704	14,704	14,704	14,704
Cancer Pathology	166,843	167,018	167,128	167,253	167,311	167,433
Consumer-Mediated Exchange	6,936	7,429	10,758	11,667	12,461	12,940
Death Notifications SCU Inbound	1,524	3,168	5,391	7,923	10,620	12,514
Death Notifications SCU Outbound	1,496	3,116	5,339	7,861	10,558	12,439
Electronic Case Reporting	78,452	102,308	118,648	127,090	211,426	259,594
ICBR	121,618	124,260	126,916	130,627	134,244	136,256
Immunization History-Forecast	115,856,982	126,489,323	137,725,335	151,366,154	163,079,369	175,095,464
MDPSS	1,253,832	1,507,508	1,770,102	2,021,791	2,287,941	2,505,975
MedRec Inbound	31,683,679	32,674,923	33,575,553	34,622,432	35,635,221	36,467,330
MedRec Outbound	23,640,639	24,938,601	26,062,452	27,456,283	28,805,134	29,934,045
Query Patient Record History	273,387	329,748	387,731	454,859	516,735	559,280
SOS	635	786	952	1,106	1,236	1,280
Statewide Labs	351,599,934	379,005,655	405,984,344	435,500,297	463,919,471	485,469,507
Statewide Labs Enhanced ORU-Outbound	5,616	5,616	5,616	5,616	5,616	5,616
Statewide Labs-Outbound	244,236,679	302,311,197	357,373,472	425,626,338	494,816,041	549,799,526
Submit Immunizations	95,933,784	101,503,136	107,552,874	115,245,088	119,773,128	121,664,076
Submit MBCIS			87	813	1,603	2,426
Submit Newborn Screening	57,714	60,044	62,564	64,853	67,044	68,779
Submit Reportable Labs	9,692,722	11,552,433	12,850,754	14,890,111	18,080,793	19,076,421
Submit Syndromic Surveillance	308,316,797	317,924,586	328,805,947	340,184,081	349,809,296	359,234,240
Grand Total	5,033,480,683	5,396,540,788	5,747,627,395	6,125,505,595	6,501,503,082	6,796,167,430

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

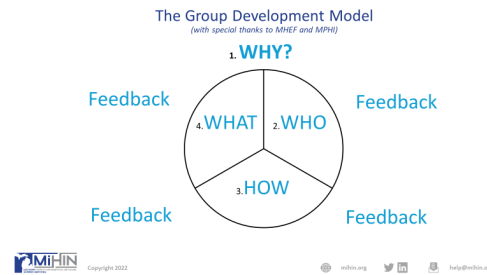
GOAL 1	Promote Health and Wellness Objective 1a: Improve individual access to usable health information Objective 1b: Advance healthy and safe practices through health IT Objective 1c: Integrate health and human services information	GOAL 4 4 Connect Healthcare with Health Data
GOAL 2	Enhance the Delivery and Experience of Care Objective 2a: Leverage health IT to improve clinical practice and promote safe, high-quality care Objective 2b: Use health IT to expand access and connect patients to care Objective 2c: Foster competition, transparency, and affordability in healthcare Objective 2d: Reduce regulatory and administrative burden on providers Objective 2e: Enable efficient management of health IT resources and a nationwide workforce confidently using health IT	Objective 4a: Advance the development and use of health IT capabilities Objective 4b: Establish expectations for data sharing Objective 4c: Enhance technology and communications infrastructure Objective 4d: Promote secure health information practices that protect individual privacy
GOAL 3	Build a Secure, Data-Driven Ecosystem to Accelerate Research and Innovation Objective 3a: Advance individual- and population-level transfer of health data Objective 3b: Support research and analysis using health IT and data at the individual and population levels	



<https://www.healthit.gov/topic/2020-2025-federal-health-it-strategic-plan>



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.

THANK YOU!

