



The Download: ADT 101

Michael Taylor



Meeting Agenda

Joanne Jarvi, Senior Director, Outreach and Market Communications

- Welcome & About MiHIN

Mike Taylor, Senior Product Marketing Manager

- What is an ADT?
- Why do we care about ADTs?
- Who creates ADTs, and When?
- Where do ADTs go?
- What does MiHIN's network look like?
- Conformance
- ADTs on a National Scale

Michigan Health Information Network Shared Services (MiHIN)

MiHIN is a non-profit organization that provides technology and services to connect disparate sectors to securely, legally, technically and privately share health information.

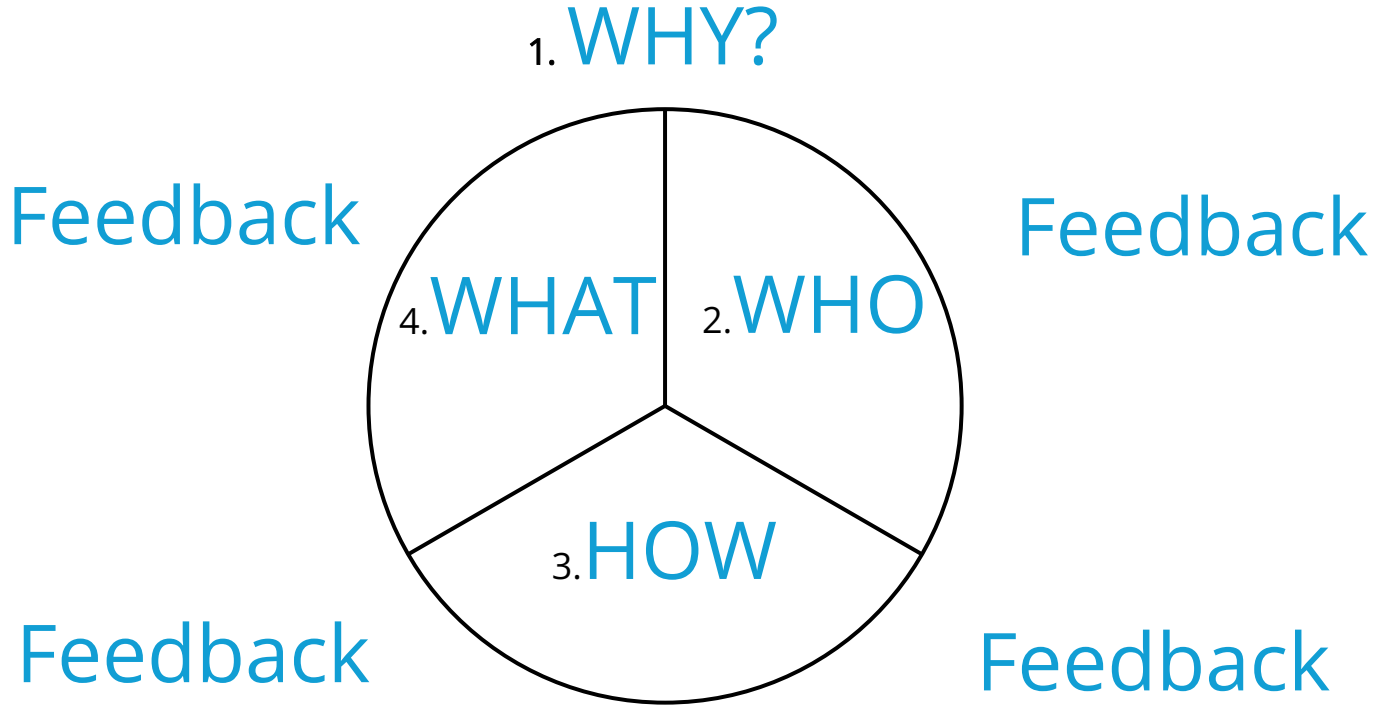
An unbiased data trustee, MiHIN does not provide health care services or produce health care data.

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



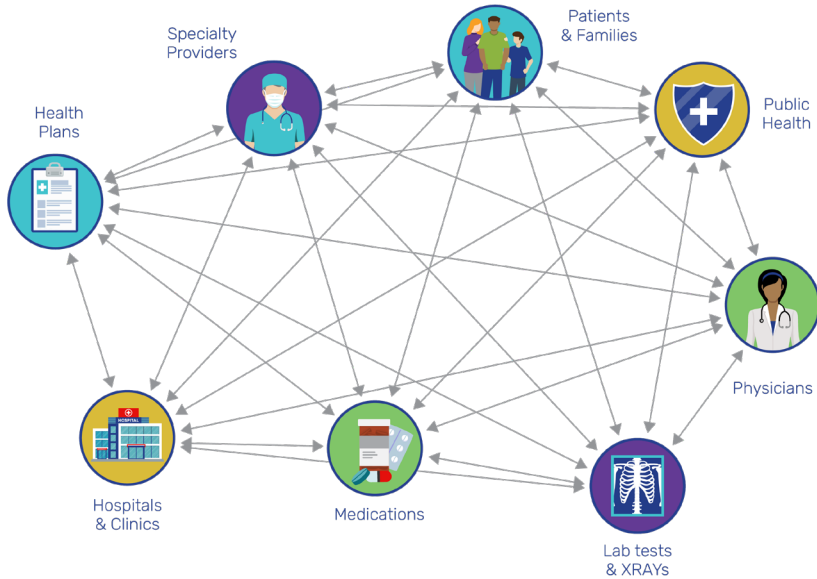
The Group Development Model

(with special thanks to MHEF and MPHI)



Statewide Health Information Exchange Breaks Down Data Silos and Creates Efficiency

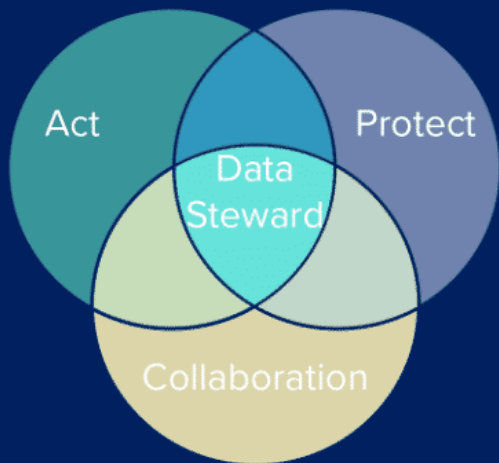
Duplication of effort,
waste and expense



Efficient and cost
effective



Data for Health; Data for Public Good



The Goals of Health Information Exchange

Reduced Inefficiencies



Improved healthcare access



Lower healthcare costs



Better quality of care and health outcomes



Personalized medicine for patients



44,582

Michigan care providers
with Active Care
Relationships®
through MiHIN, working
within

5,637

Michigan care entities

13,136,868

Unique Patient Records

Federal Gov't
State Gov't
Health Department
Health Payers
Health Systems
PIHPs



Hospitals
Clinics
Practices
CMHs
Hospices
FQHCs
Pharmacies
Physician Orgs
Physician Hospital Orgs

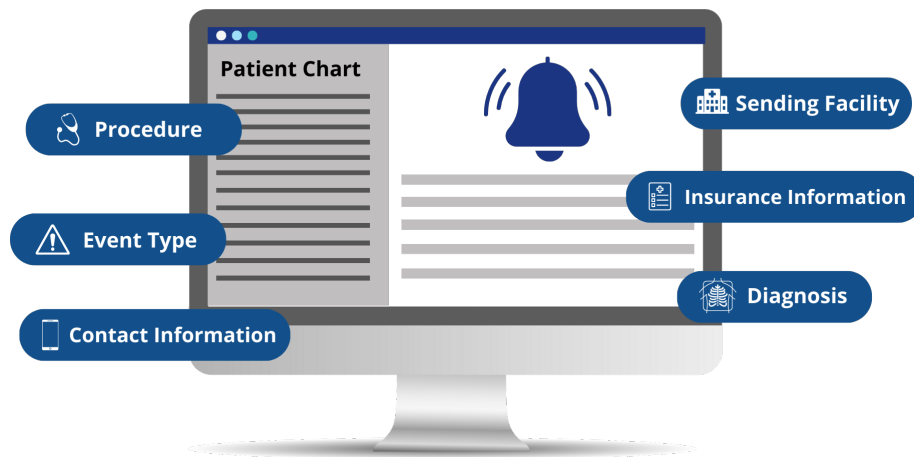
Doctors
Nurses
Clinicians
Care Managers
Social Workers
Dentists
Pharmacists
CARE SEEKERS!



What is an ADT?

ADT stands for Admission-Discharge-Transfer Notification

- A message standard managed by the governing body Health Level Seven (HL7)
- Used to communicate a patient's status at a point in time during an encounter
 - Traditionally associated with hospitals, but not a rule
- When you go anywhere that uses EHR technology to seek care, ADTs are typically created
 - Generated in real-time



An ADT can come from anywhere people seek care



Hospitals



Health
clinics



Psychiatric
facilities



Skilled nursing
facilities



Primary care
providers



Home health
agencies



Hospices



Pretty much
anywhere

- A01- Admit/visit notification
- A02- Transfer a patient
- A03- Discharge Visit
- A04- Register a patient
- A05- Pre-admit a patient

- A22-patient returns from a 'leave of absence.'
- A23- Delete a patient record
- A24- Link Patient data
- A25- Cancel pending discharge

- A41- Merge account- patient account number
- A42- Merge visit- visit number
- A43- Move patient data- patient identifier list
- A44- Move account information- patient account number
- A45- Move visit information-visit number
- A46- Change patient ID
- A47- Change patient identifier list
- A48- Change alternate patient ID
- A49- Change patient account number
- A50- change visit number
- A51- change alternate visit ID
- A52- Cancel leave of absence for a patient
- A53- Cancel patient returns from a leave of absence
- A54- Change attending doctor
- A55- Cancel change attending doctor
- A60-Update allergy data
- A61- Change consulting doctor
- A62- Cancel change consulting doctor

What is an ADT?

- A06- Change an outpatient to an inpatient
- A07- Change inpatient to outpatient
- A08- Update patient information
- A09- Patient departing – tracking
- A10- Patient arriving – tracking
- A11- Cancel admit or visit notification
- A12- Cancel Transfer
- A13- Cancel discharge or end visit
- A14- Pending admit
- A15- Pending transfer
- A16- Pending discharge
- A17- Swap patients
- A18- Merge patient data
- A19- Patient query
- A20- Bed status update
- A21- Patient goes on a 'leave of absence.'
- A26- Cancel pending transfer
- A27-Cancel pending admit
- A28- Add person data
- A29- Delete person data
- A30- Merge person data
- A31- update person data
- A32- Cancel patient arriving-tracking
- A33- Cancel patient departing -tracking
- A34- Merge patient data- patient ID only
- A35- Merge patient data- account # only
- A36- Merge patient data- patient ID and account number
- A37- Unlink patient date
- A38- Cancel pre-admit
- A39- Merge patient -patient ID
- A40- Merge patient- patient identifier list

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What Information Do ADTs Contain?



Where did the message come from?



What time was the message generated?



What was the event type?



Who is the patient?



Who is helping the patient?



Is the patient still alive?



What observations have been made



What diagnosis have been made?



Does the patient have insurance?



What other relevant information?

Why do we care about ADTs?

Preventing Readmissions



Cost
prevention



Outcome
improvement

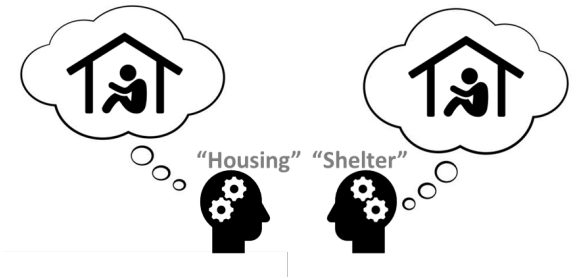


Clinicians can spend
more time with
existing patients
instead of seeing
more patients

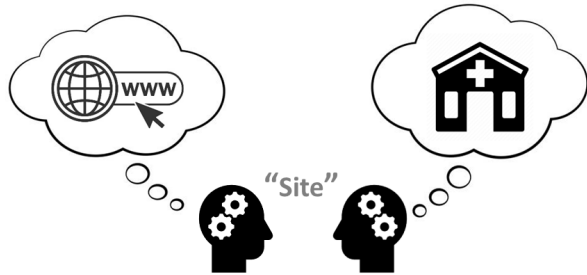


We want to know
where people are
seeking care
(or where they
haven't gone)

Why are ADTs complicated?



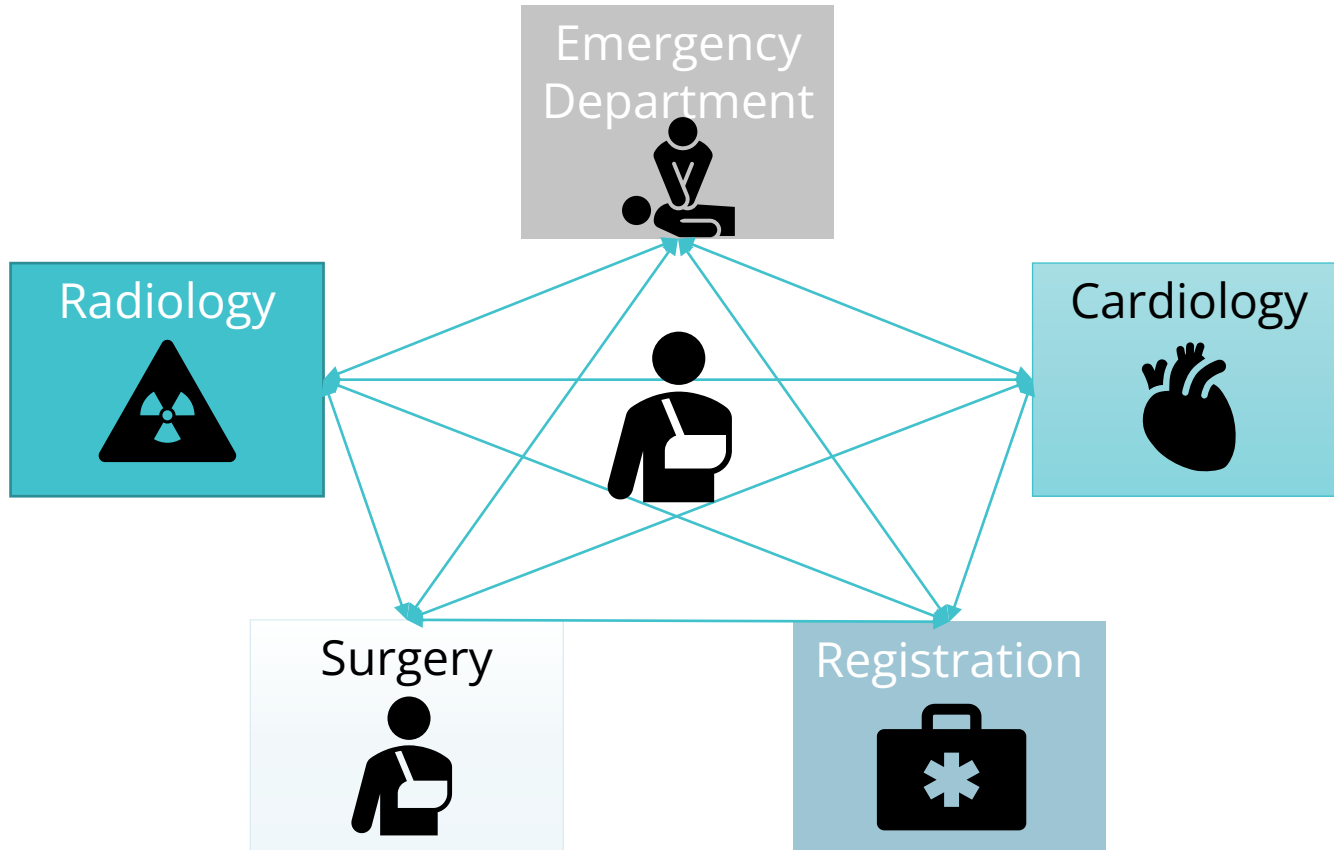
1. Semantic vs syntactic interoperability
 - Standard places to put data, but value sets were not clearly defined
 - Example: 'Male' vs 'M' vs '01'
 - Example: 'NA' can mean Native American or Not Applicable
2. Need context when you get an alert
 - Where are they?
 - Who are they?
 - What's happened?
 - What are you doing for them?
 - Is this connected to other notifications?
3. HL7 defined how to populate each message type but not when to use them
 - Example A01 Admission vs A04 registration followed by A08 update



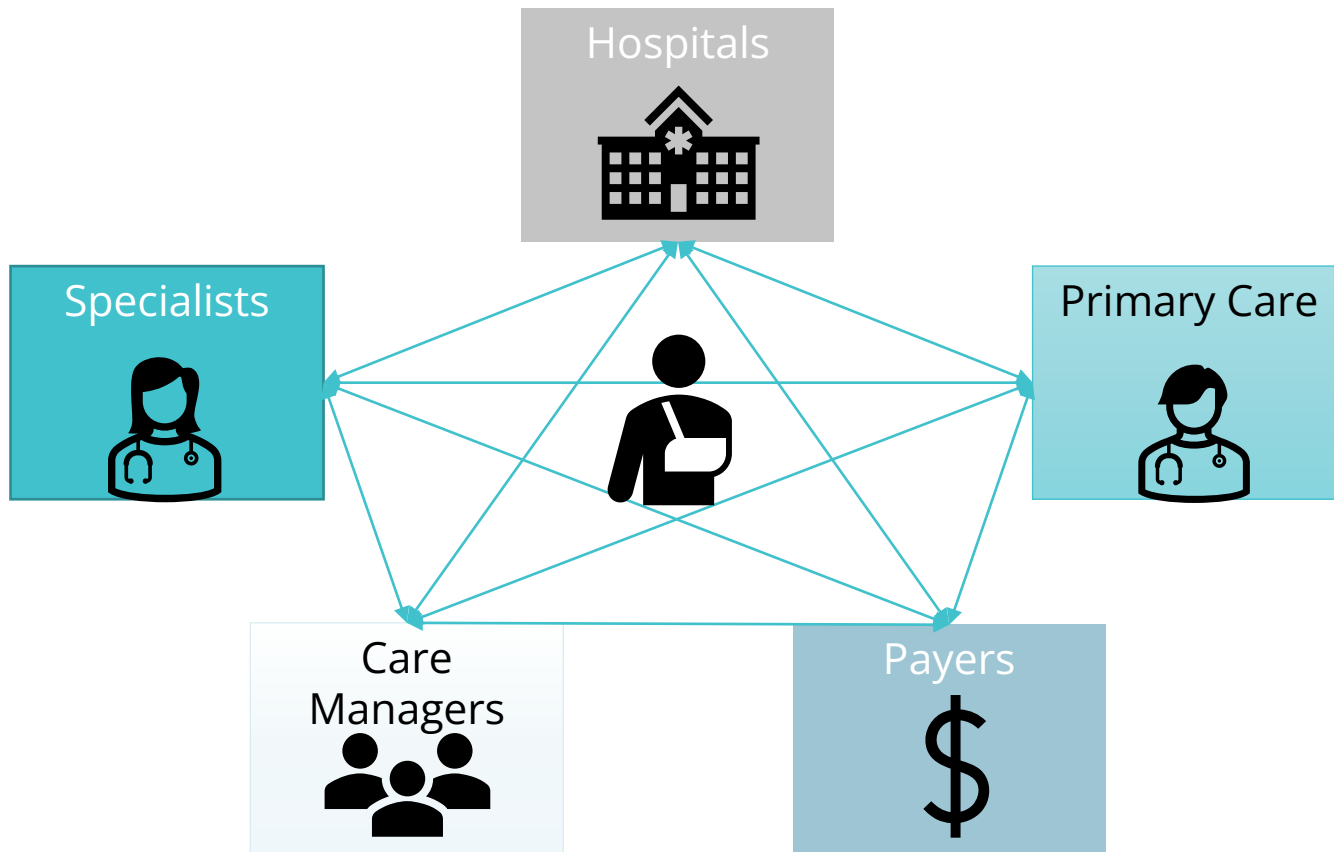
A map of Michigan and surrounding regions, including parts of Wisconsin, Indiana, and Ohio. The map shows major cities like Marquette, Sault Ste. Marie, Escanaba, Cheboygan, Saginaw, Grand Rapids, Flint, Lansing, and Detroit. The Great Lakes are also visible. The text "Why do we need a statewide solution?" is overlaid in white on a blue background.

Why do we need a statewide solution?

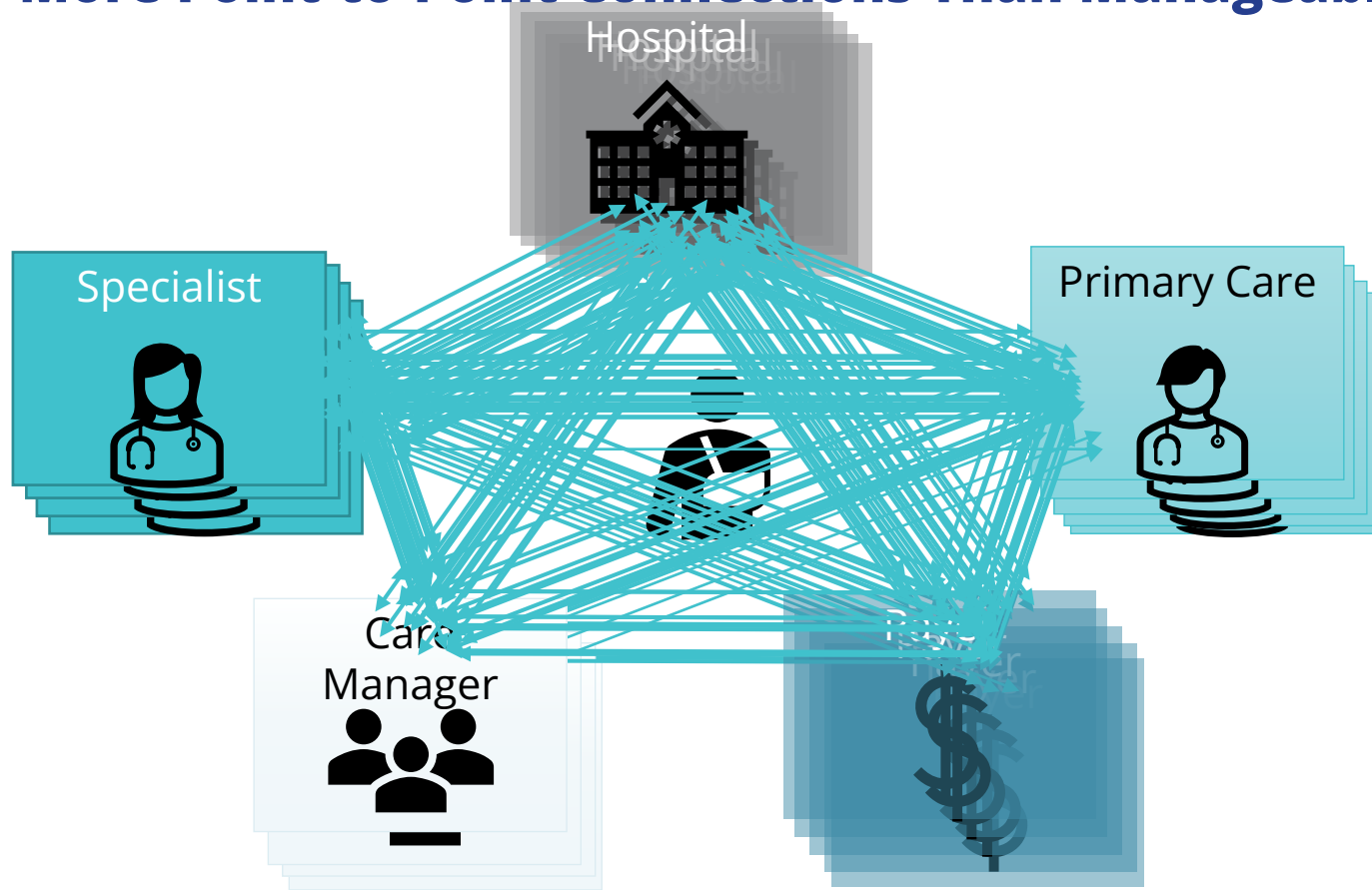
Historically Messaging Within IT Systems in a Hospital



Same Information Can Support Coordination Across Care Settings



More Point-to-Point Connections Than Manageable



With a Central Connection Point, That Looks Like MiHIN



A hand in a blue sleeve holds a tablet computer. The background is a dark blue gradient with a network of white circles containing user icons, connected by thin white lines. The text is centered in white, bold font.

What does MiHIN do with ADTs and where do they go?

Admission, Discharge, Transfer Notifications

Keeping care team members informed on a patient's major health events

1

When Tricia goes to the hospital an ADT Notification is sent to a TDSO and then to MiHIN

2

MiHIN checks ACRS and identifies Tricia's care team

3

MiHIN retrieves contact and delivery preferences for Tricia's care team from the Health Directory

4

ADT Notifications are sent to the care team based on electronic addresses and preferences



ACRS® = Active Care Relationship Service®

What does our network look like?

ADT Metrics

1,400

sending sites
including 172
sending hospitals

8,209

ADT receiving organizations
Practices, Hospitals, Payers,
POs, PIHPs, ACOs, CINs,
FQHCs, HHAs, and CMHs

44

ADTs per
licensed bed
per day

7M

Number of
ADTs MiHIN
receives per
week

12M

The number of ADTs
MiHIN delivers after
flowing through
ACRS

Conformance



Better Data: Leveraging Incentives for ADT Adoption

One Hospital System Incentivized by a Payer

Conformance reports based on ADT notifications can serve as critical tools to encourage adoption and use of ADT notifications, particularly when tied with incentive dollars from payers, resulting in dramatically improved data quality and compliance.

ADT data quality: April

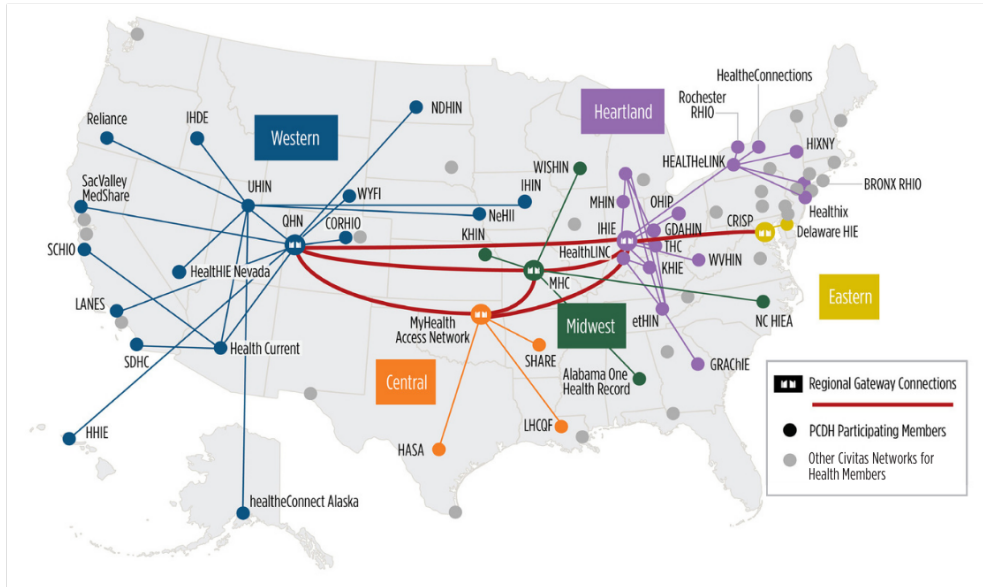
| Fields populate | Fields mapped | Enhanced fields |
|-----------------|---------------|-----------------|
| 100.0% | 100.0% | 0.0% |
| 63.6% | 53.8% | 0.0% |
| 81.8% | 53.8% | 33.3% |
| 90.9% | 61.5% | 0.0% |
| 100.0% | 38.5% | 0.0% |
| 90.9% | 92.3% | 0.0% |
| 54.5% | 15.4% | 0.0% |
| 54.5% | 15.4% | 0.0% |
| 100.0% | 0.0% | 33.3% |
| 90.9% | 61.5% | 0.0% |
| 90.9% | 76.9% | 33.3% |
| 90.9% | 23.1% | 0.0% |
| 63.6% | 69.2% | 0.0% |
| 63.6% | 92.3% | 0.0% |
| 63.6% | 0.0% | 0.0% |
| 63.6% | 38.5% | 33.3% |
| 90.9% | 92.3% | 33.3% |
| 63.6% | 53.8% | 0.0% |
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| 81.8% | 23.1% | 0.0% |
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ADT data quality: December

| Fields populate | Fields mapped | Enhanced fields |
|-----------------|---------------|-----------------|
| 100.0% | 100.0% | 100.0% |
| 100.0% | 100.0% | 66.7% |
| 100.0% | 0.0% | 33.3% |
| 72.7% | 100.0% | 66.7% |
| 100.0% | 100.0% | 66.7% |
| 100.0% | 100.0% | 100.0% |
| 90.9% | 100.0% | 100.0% |
| 100.0% | 92.3% | 66.7% |
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| 100.0% | 100.0% | 100.0% |
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| 100.0% | 100.0% | 100.0% |
| 100.0% | 100.0% | 66.7% |
| 100.0% | 100.0% | 100.0% |
| 100.0% | 76.9% | 66.7% |
| 72.7% | 100.0% | 66.7% |
| 63.6% | 84.6% | 66.7% |
| 100.0% | 92.3% | 100.0% |
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| 90.9% | 100.0% | 33.3% |
| 100.0% | 100.0% | 66.7% |



ADTs at a national scale



PATIENT CENTERED DATA HOME®



PATIENT CENTERED DATA HOME® IS A REGISTERED TRADEMARK OF CIVITAS NETWORKS FOR HEALTH ASSOCIATION.



Upcoming Engagements

Bits & Bytes ADTs Technical Deep Dive

Wednesday, May 31
12:00-1:00 PM EST

THANK YOU

LET'S CONNECT



mihin.org



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