

Approaches to Provider Directory & Patient Index Solutions

*Achieving large-scale
statewide integration*

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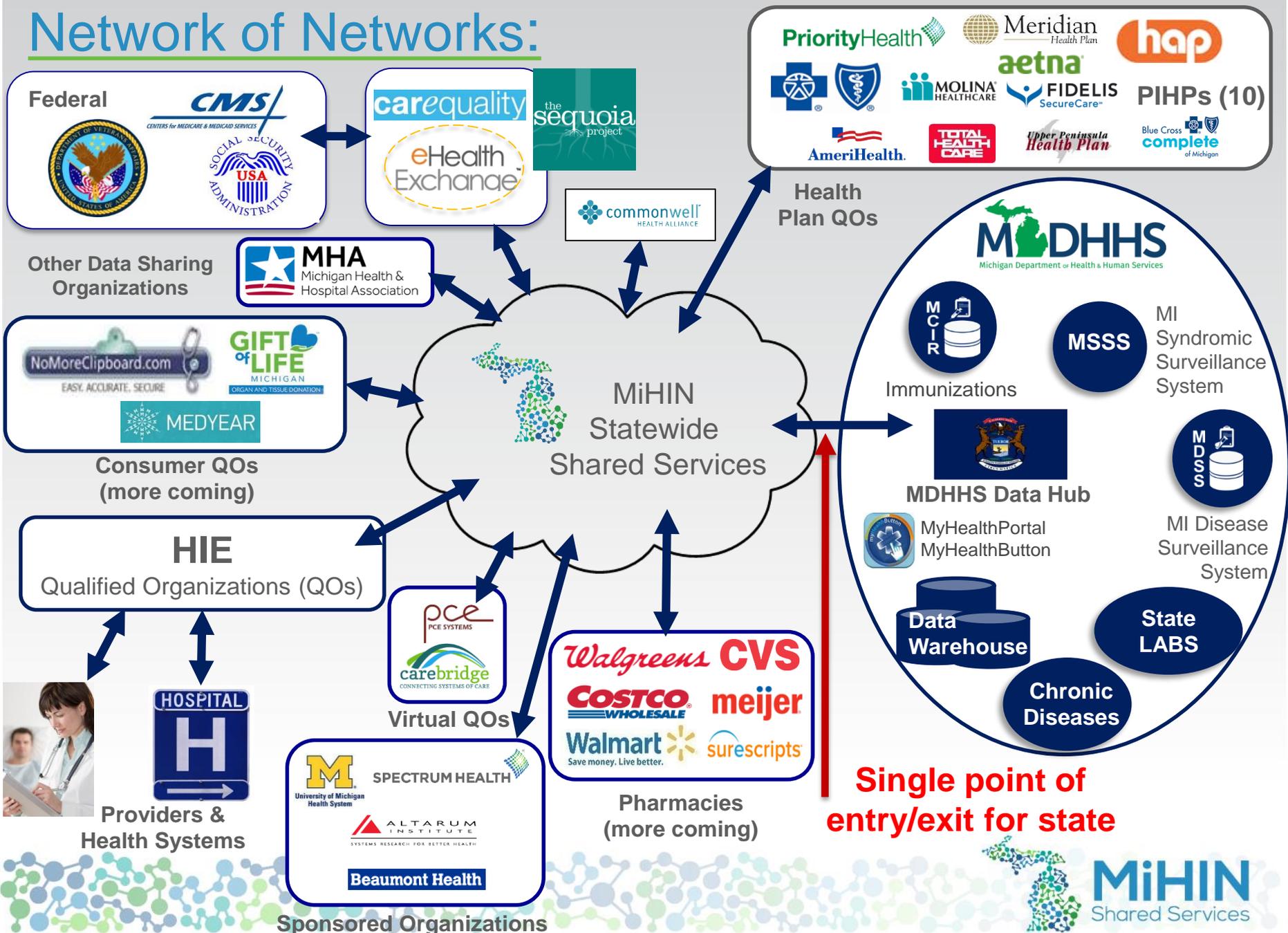


What we are doing at MiHIN

- Improving the healthcare experience for consumers & providers
- Improving quality
- Decreasing cost
- Enabling statewide exchange of health information
- Making valuable data available at the point of care
- For the people of Michigan



Network of Networks:



Sponsored Organizations

What's our Strategy?

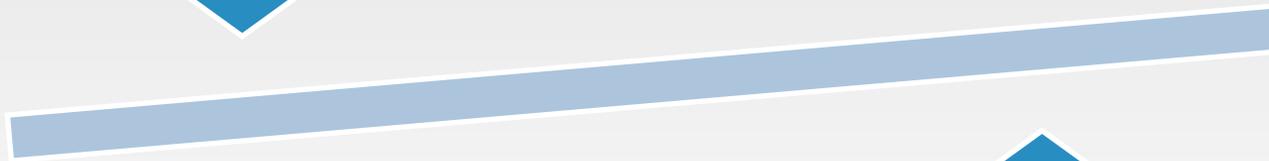
1. Welcome and convene all stakeholders to figure out what to do
2. Get those who pay for or regulate care to incentivize providers to implement priority Use Cases to drive mass adoption
3. Operate the critical shared infrastructure (legal, technical, and master data management) among all stakeholders
4. Help doctors & physician organizations reduce burdens, waste, and barriers to change due to non-standardization and bad technology; start safely with public health then the overlap among care coordination, quality assessment, and finally payment reform
5. Promote the lowest cost & open (DIRECT, FHIR) constrained standards
6. As required, aggressively execute and innovate versus waiting for the industry, then contribute to the standards development with working code
7. Prepare for the consumer engagement/empowerment opportunity



Pivot Point



Burdens
Waste
Resistance to
Change



Bad Technology
Lack of
standardization



Path Through the Maze



The Consumer Experience is Here



Critical Infrastructure Components

Patient
Provider
Attribution
Service (ACRS)

Patient Consent
Preferences

Federated
Identity
Management
(Single Sign-On)

Gateway
Services
(e.g. XCA)

Master Person Index
+
Common Key Service

Identity
Management

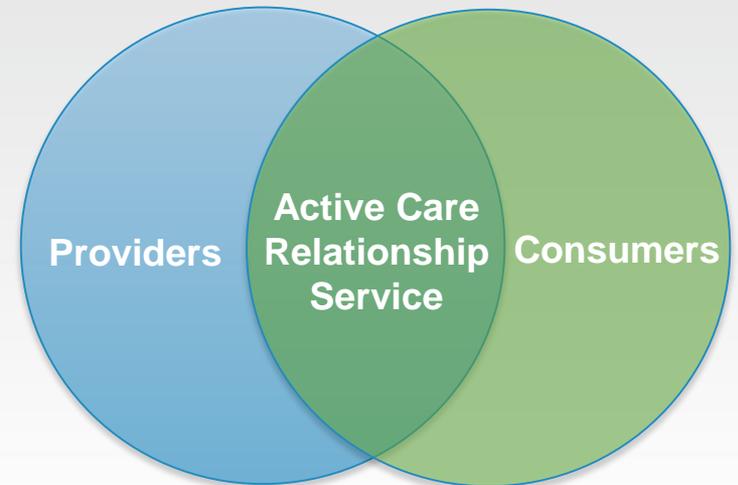
Health
Provider
Directory

Secure Transport Layer Services and
Digital Credentials

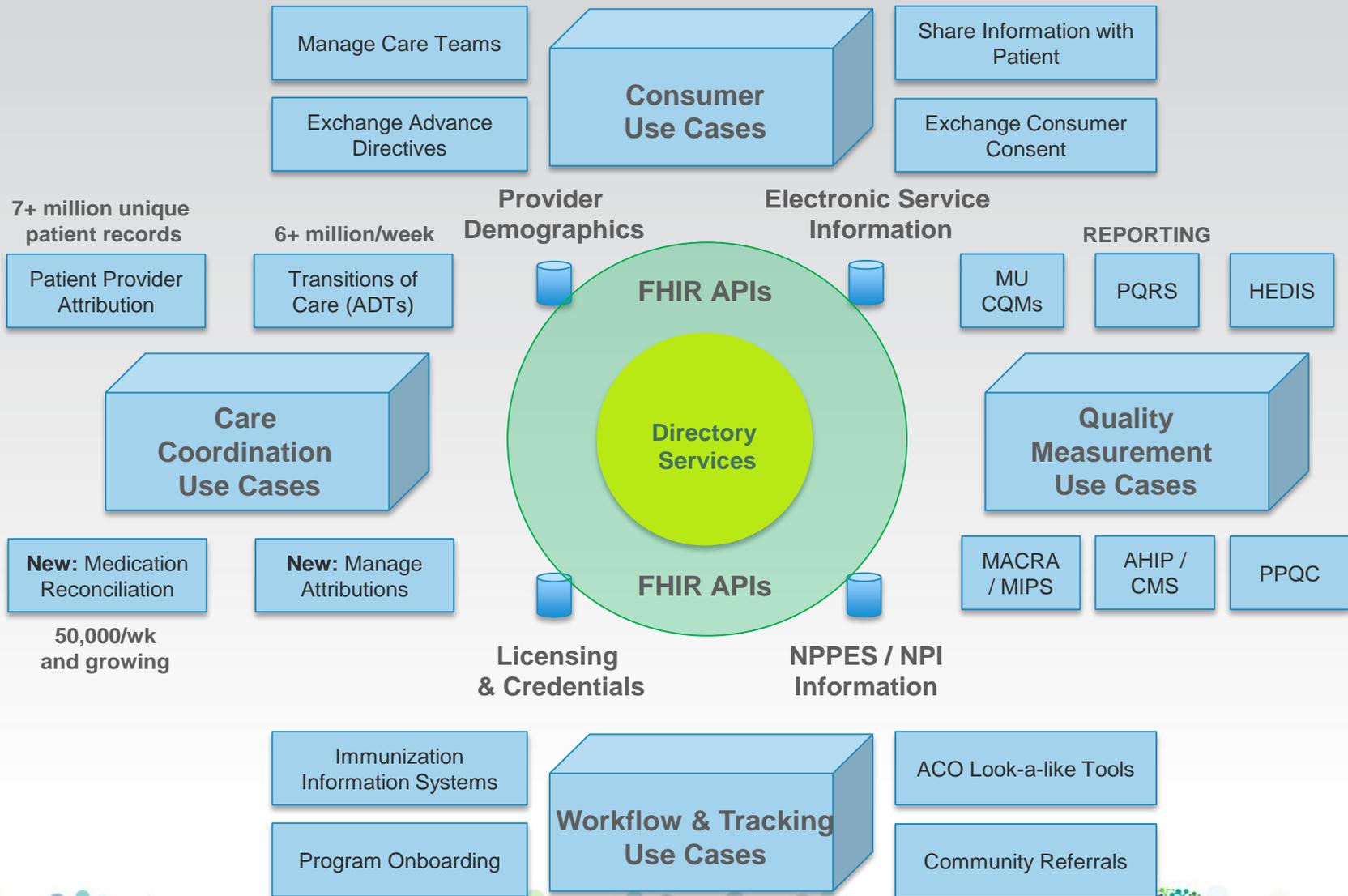


Directory Populations

- Provider directory includes Providers, Organizations, Affiliations and their electronic delivery preferences
- Consumer directory includes Consumers (Patients) and their preferences for storing and sharing their PHI
- Active Care Relationships connect them together into care teams
- All resources in same Salesforce instance
 - Provider objects are mostly public
 - Consumer objects are mostly private
- Salesforce data sharing rules preserve security, separation, and access control



Infrastructure to Support Valuable Use Cases



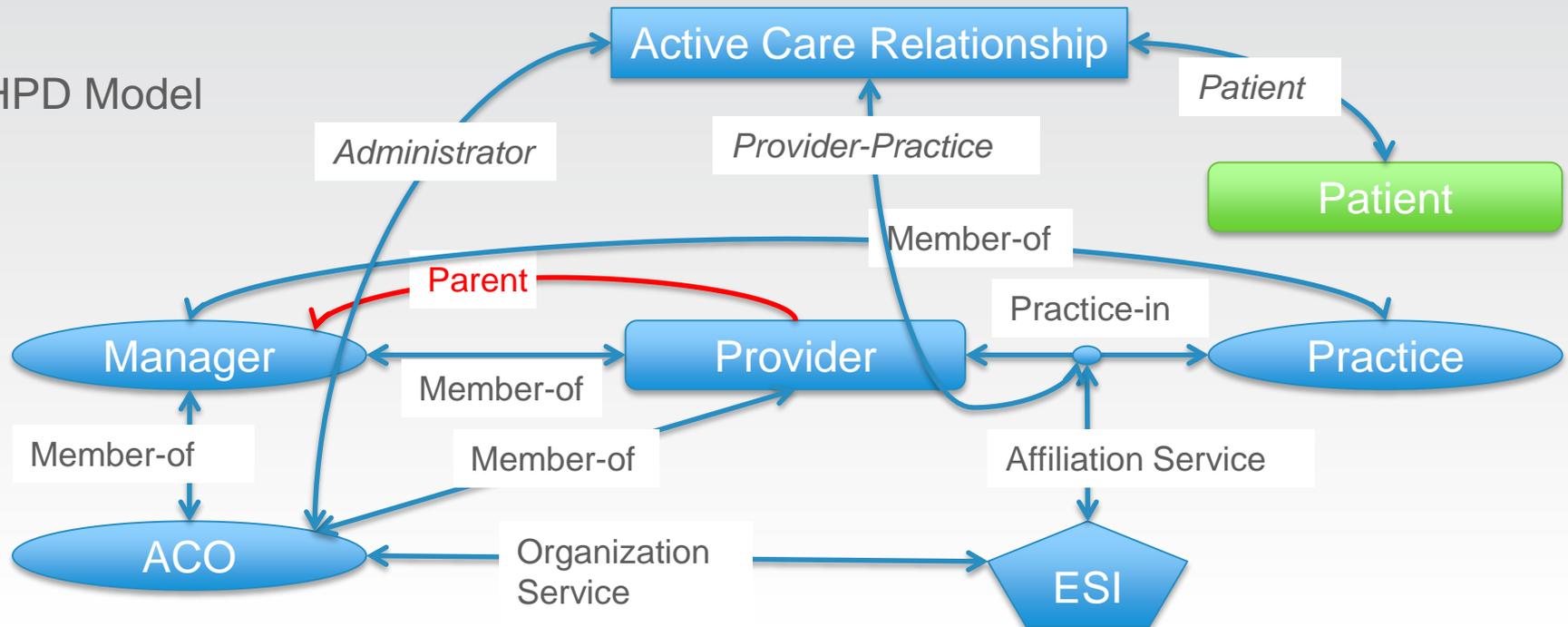
Active Care Relationships on FHIR

Input (ACRS 2.0)

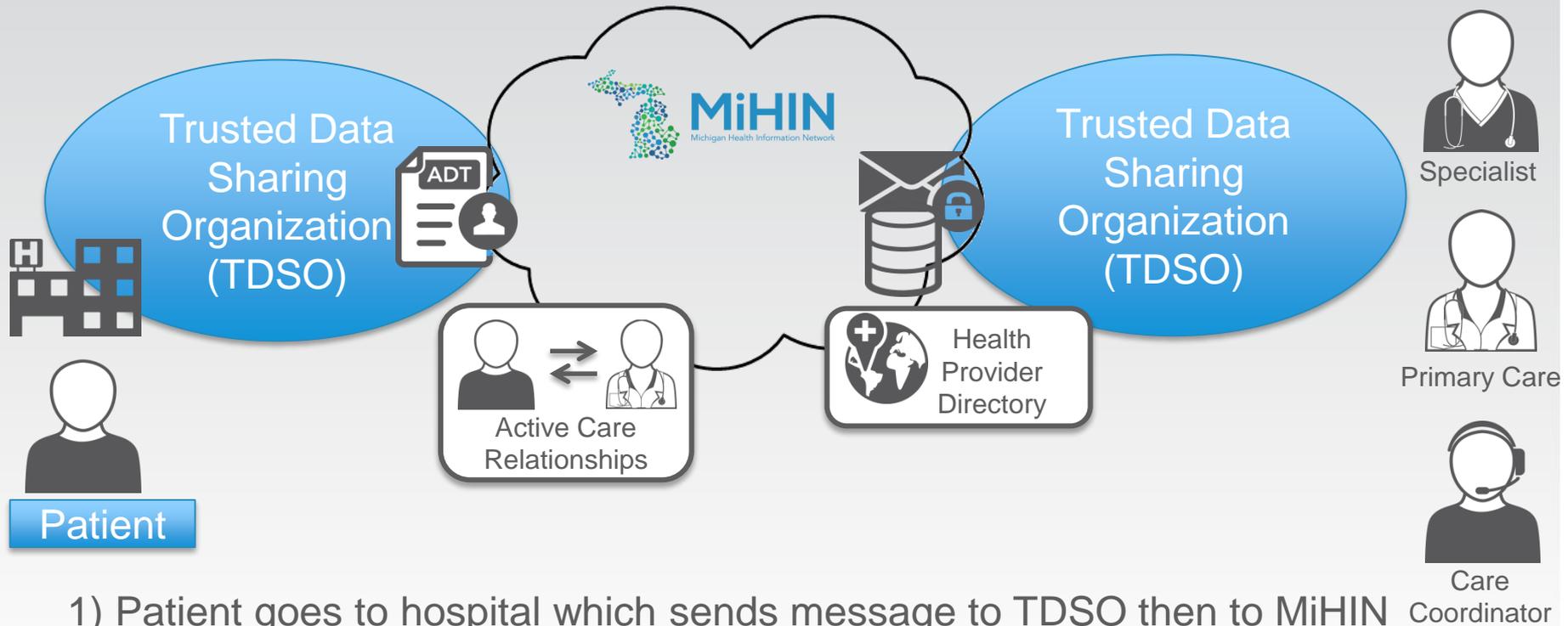
Patient	Provider	Practice	Manager	ESI Preferences

+ ACO

HPD Model



Supports Seamless Exchange Alerting Disconnected Entities



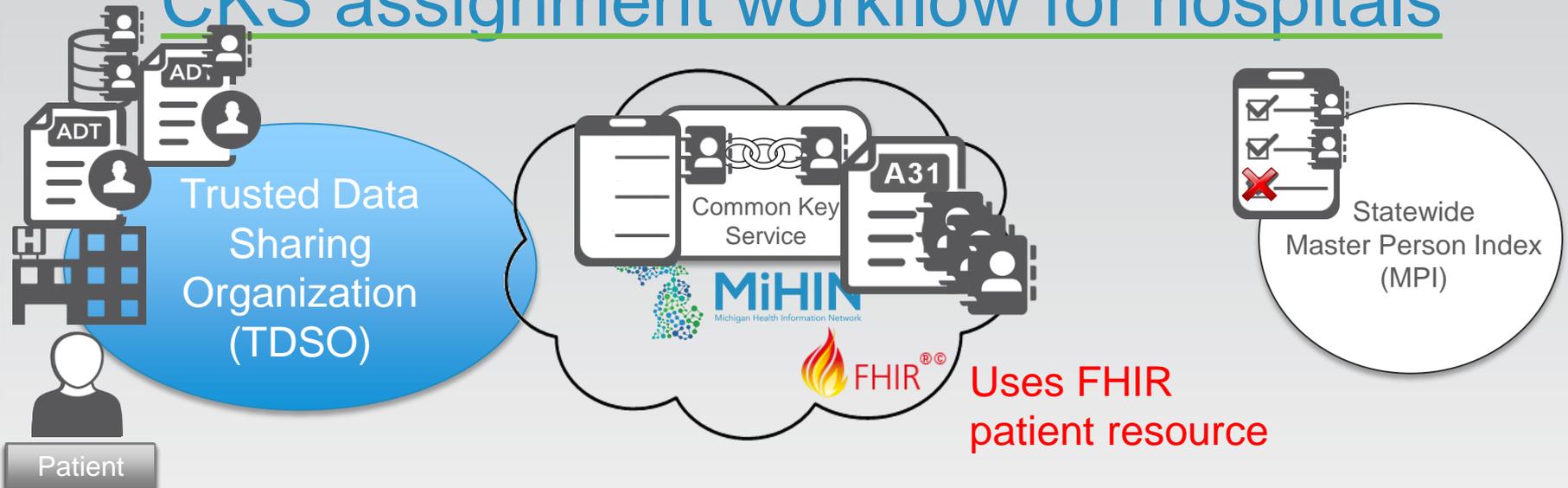
- 1) Patient goes to hospital which sends message to TDSO then to MiHIN
- 2) MiHIN checks Active Care Relationship Service and identifies providers
- 3) MiHIN retrieves contact and delivery preference for each provider from HPD
- 4) Notifications routed to providers based on electronic addresses and preferences

Common Key Service (CKS)

- Provides consistent and reliable patient matching
 - Minimizes mismatches / finds right records
- Links individuals and their health information across multiple organizations, applications and services
- Improves patient safety through higher data integrity
- Reduces workflow significantly in care coordination
- Improves outcomes and reduces cost
- Enables mapping any HIT/HIE endpoint via CKS to State's Master Person Index (MPI)
- Runs as web service with rich FHIR API for easy integration
- Using 1.4.0 FHIR release (CQF on FHIR Ballot + Connectathon 12 (Montreal) using HAPI-FHIR 1.5-DEV Java Library



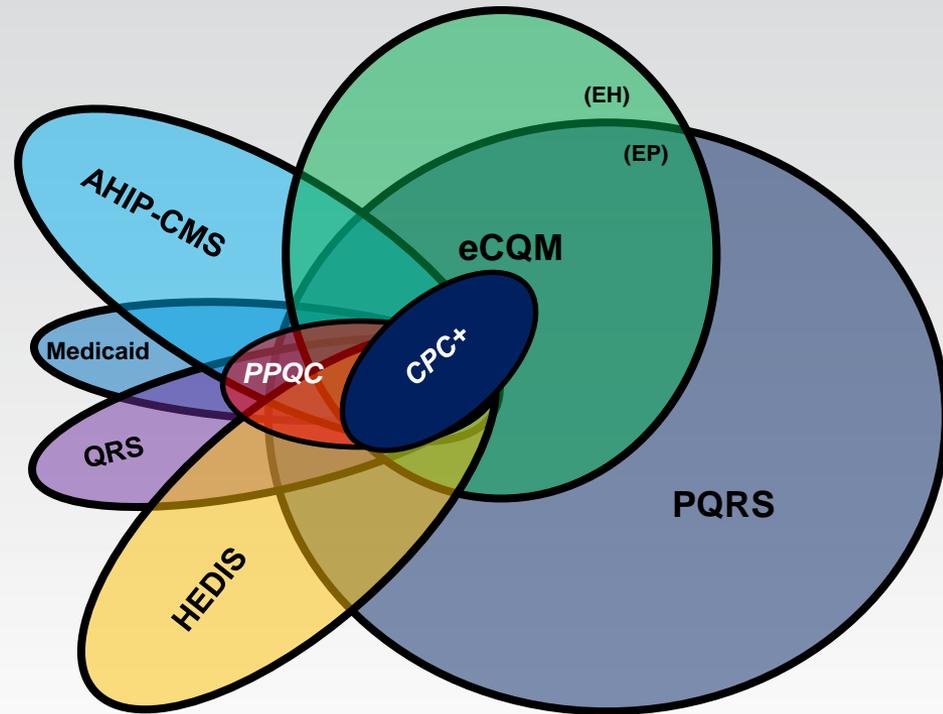
CKS assignment workflow for hospitals



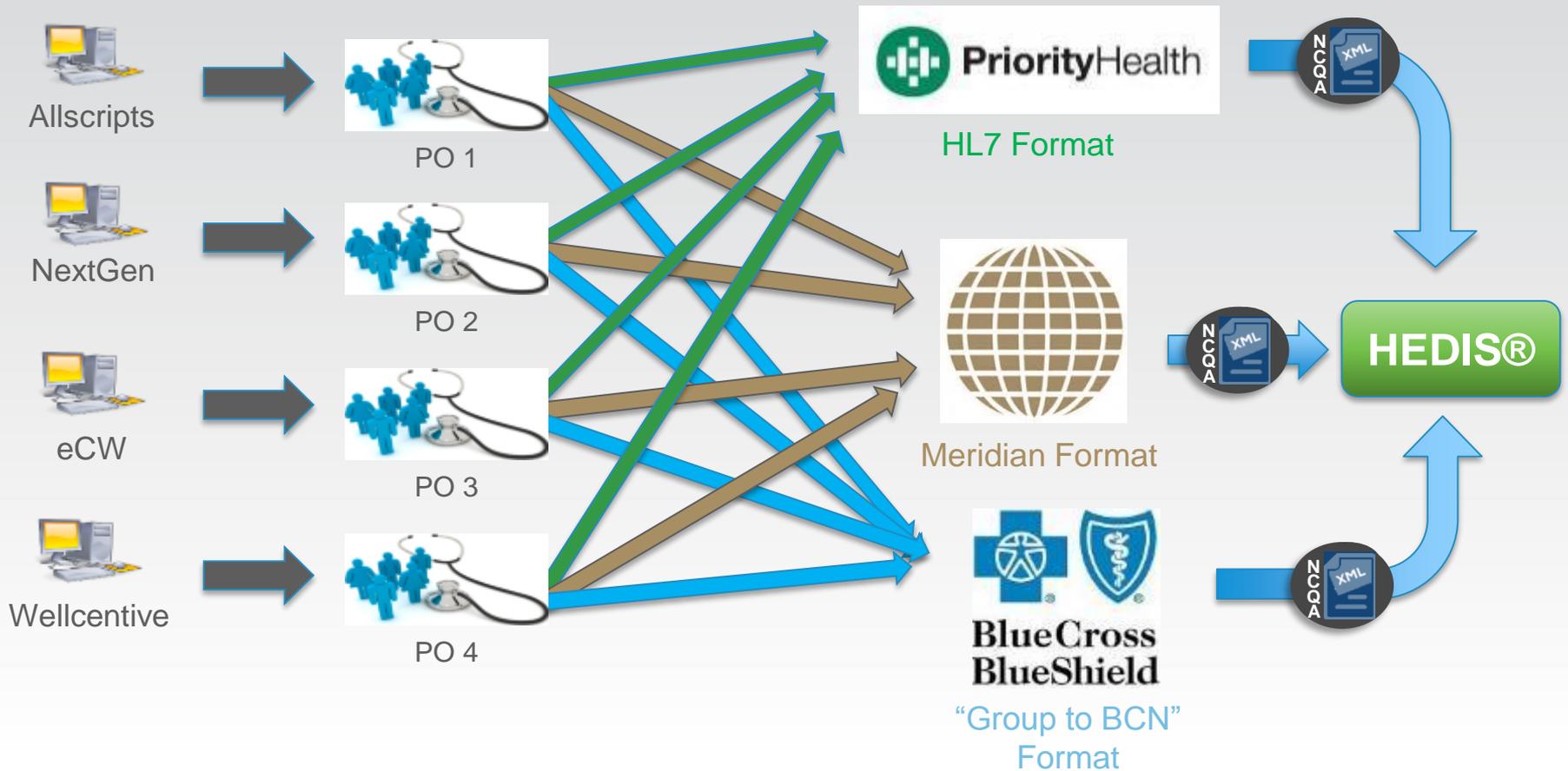
- 1) Patient goes to hospital which assigns MRN and generates ADT message
- 2) ADT message sent to MiHIN via TDSO for normal routing to ADT receivers
- 3) MiHIN accumulates A03 inpatient ADT messages which do not have the common keys for a period of time (*will be 100% of the time at first*)
- 4) MiHIN assembles patient list file and processes it through the CKS
- 5) MiHIN sends a flat file of A31 messages with the common keys to the hospital to store within their system during testing, moving to real-time over time
- 6) Hospital can now add common key to future messages for that patient

Quality measures overlap

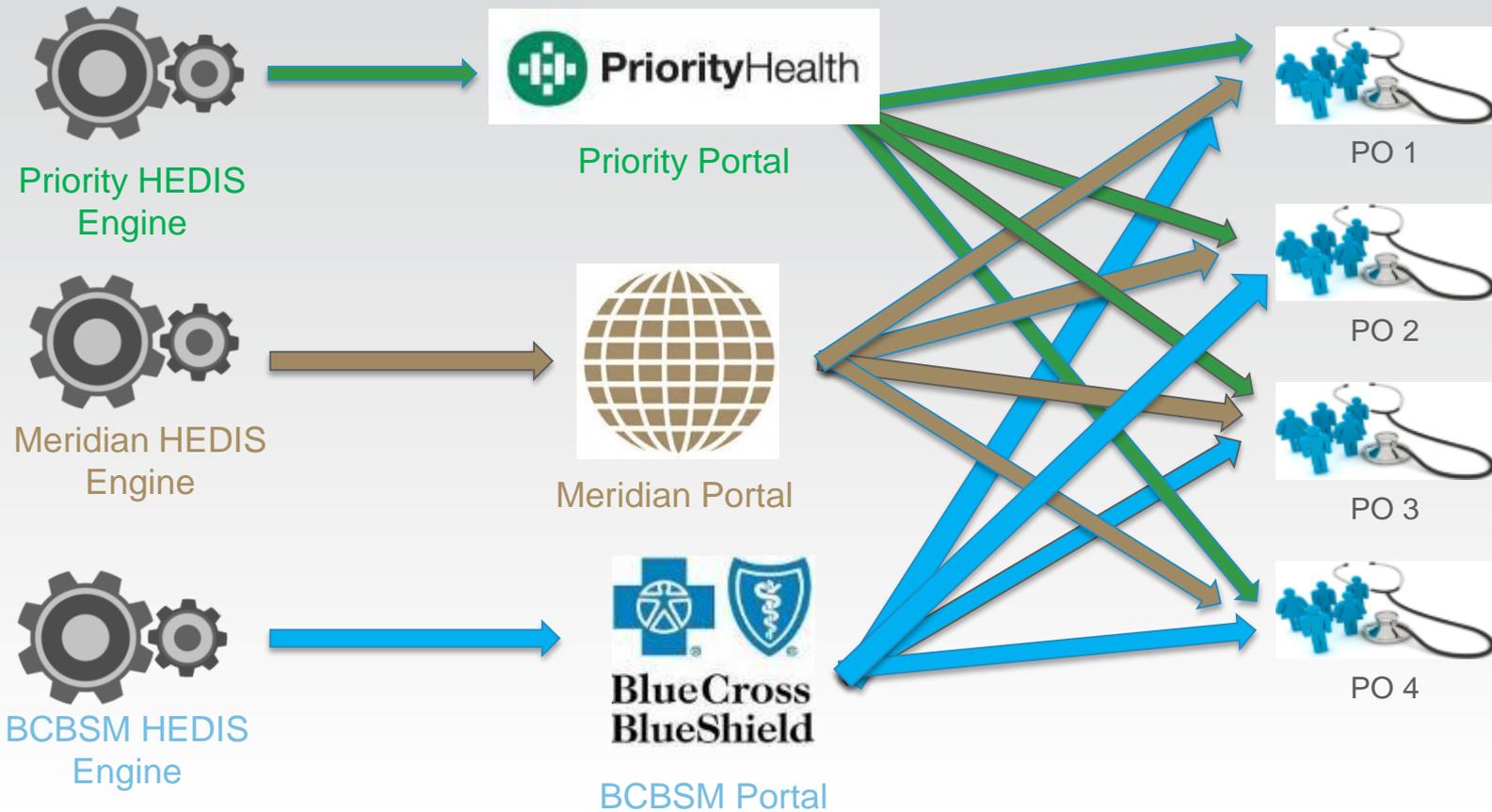
Measure Set	# of Unique Measures
PQRS	281
eCQM	93
HEDIS	89
AHIP - CMS	88
Medicaid	51
QRS	45
CPC+	22
PPQC	27
Overlap	3



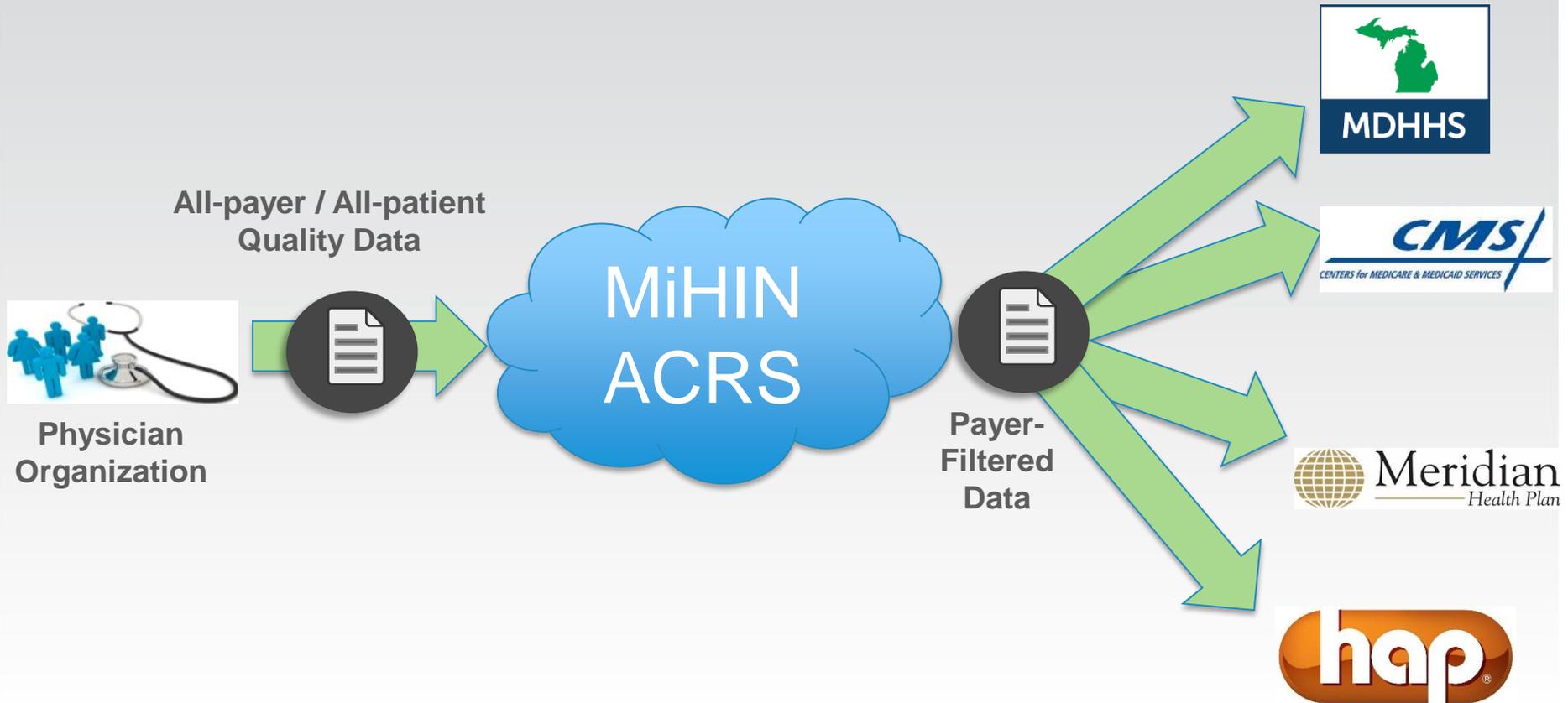
Supplemental Data – Status Quo



Gaps in Care Reports – Status Quo



Payer Filtering & Routing



Quality Measure Data Flow



NPO



WSUPG



UP



OSP

Physician
Organizations

MiHIN
Combined
Quality Measure
Reporting and
Recovery



PriorityHealth



MOLINA
HEALTHCARE



Meridian
Health Plan Inc.



BlueCross
BlueShield

Health
Plans

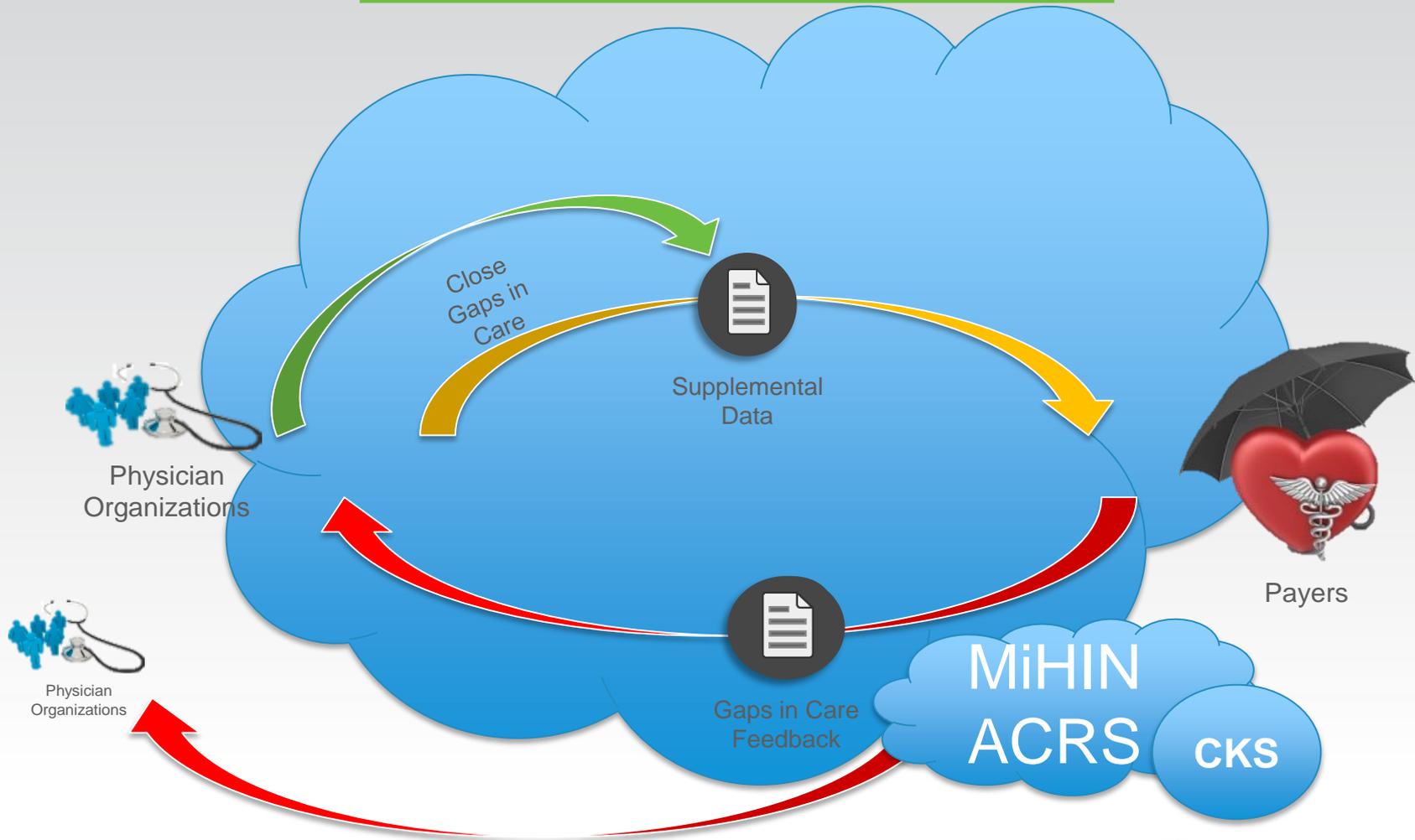
One format and one location for:

- POs to submit quality measures
- Payers to submit Gaps in Care
- POs to close Gaps in Care
- Discussing FHIR resources for Gaps in Care with HL7, FHIR leadership



MiHIN
Shared Services

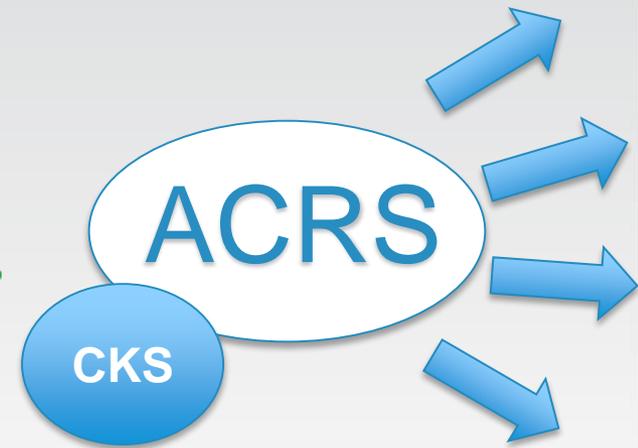
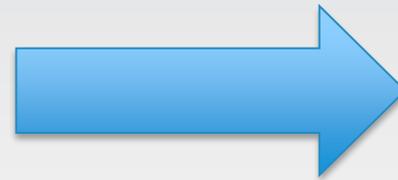
PPQC Data Flow



A Simplified Model for Send



- Public Health
- ADT
- Care Summary
- Cat1 Quality Measure
- Labs



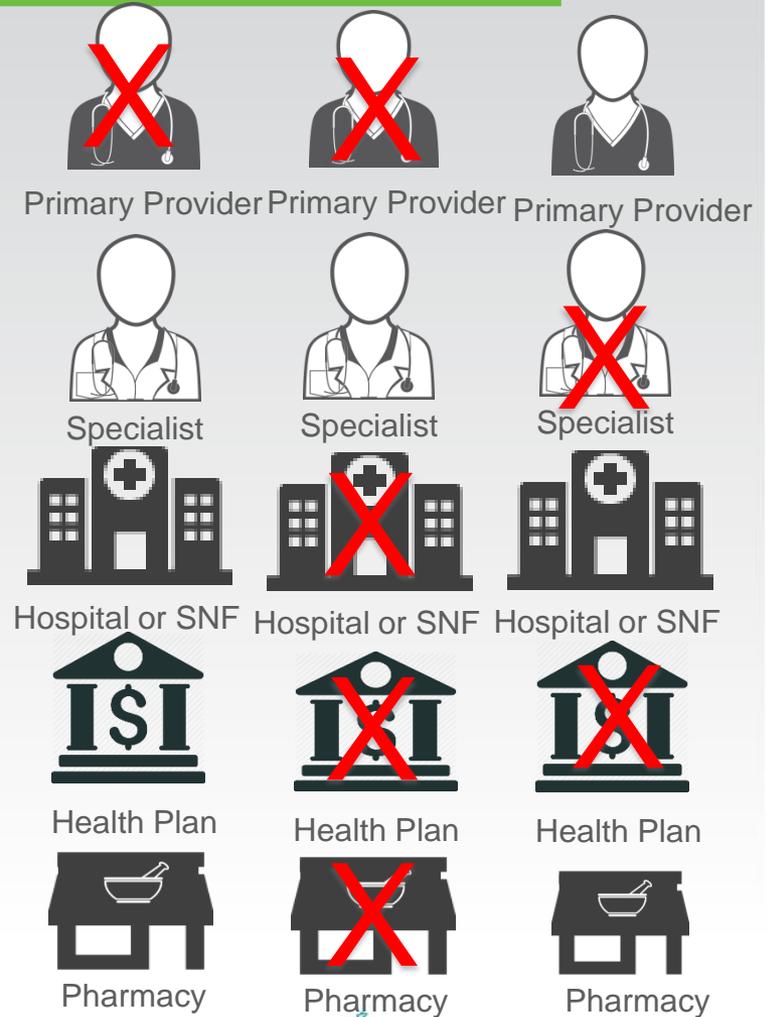
A Simplified Model for FIND



Electronic Health Record(s)



- FHIR
- IHE SOAP
- HL7 2.x QBP



Questions?

THANK YOU

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