The Office of the National Coordinator for Health Information Technology

Provider Directory & Identity Management Learning Event

Health IT Resource Center
State Innovation Model Initiative (SIM)
CMS Innovation Center (CMMI)

July 28, 2015

Putting the I in HealthIT
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Presenters

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Conflicts of Interest/Disclosure

- Disclosure Statements

Agenda

- Context
- Introduction
- Identity Management - Overview of Learning Opportunities
- Provider Directory - Overview of Learning Opportunities

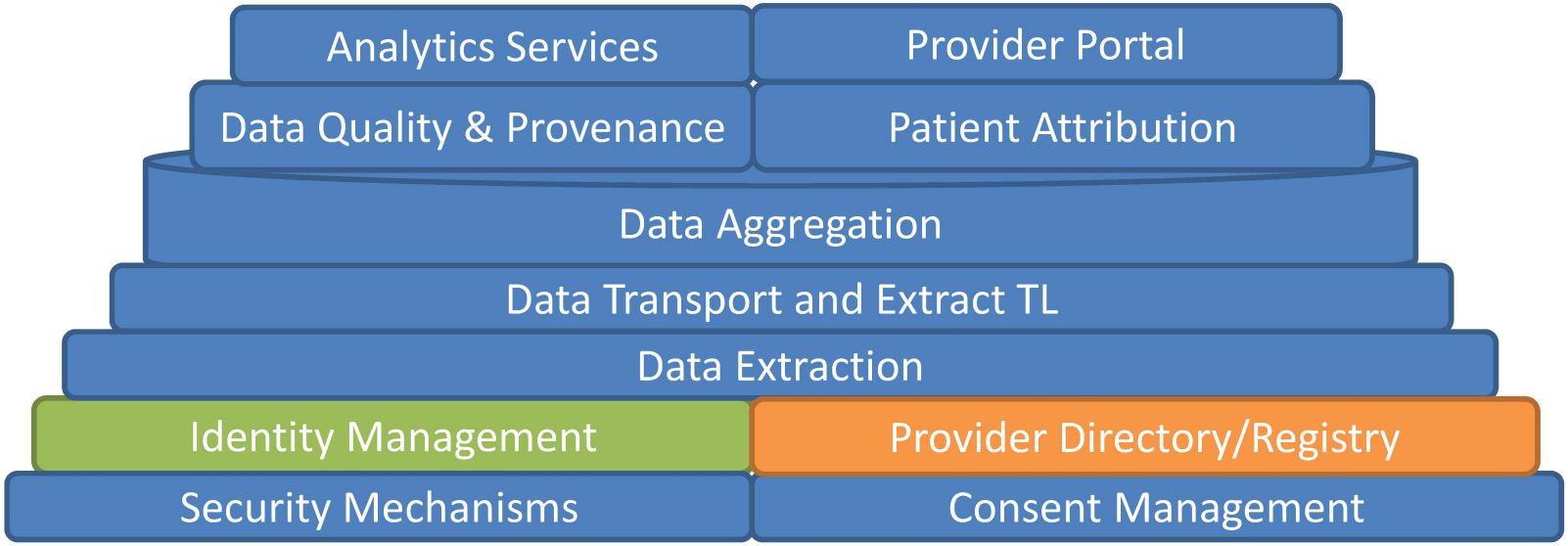
Context

- This learning event is an introduction to ongoing future technical assistance and collaborative peer sharing.
- Areas of focus today:
  - Identity Management (including patient match)
  - Provider Directories
- In the future, additional topics to come.

Introduction: Shared Services

- Software architecture built to leverage “design once, use multiple times” principle
  - Cost savings
  - Better efficiency through standardization
  - Shared governance
- Multiple state healthcare stakeholders will all need similar functionality
  - The primary care doctor needs a provider directory to refer; a payer needs a provider directory to align payment.
- Efficiency and savings achievable through shared services as part of a state-wide Health IT plan

Key Elements of the HIT Stack for Value-based payment models and the Learning Health System

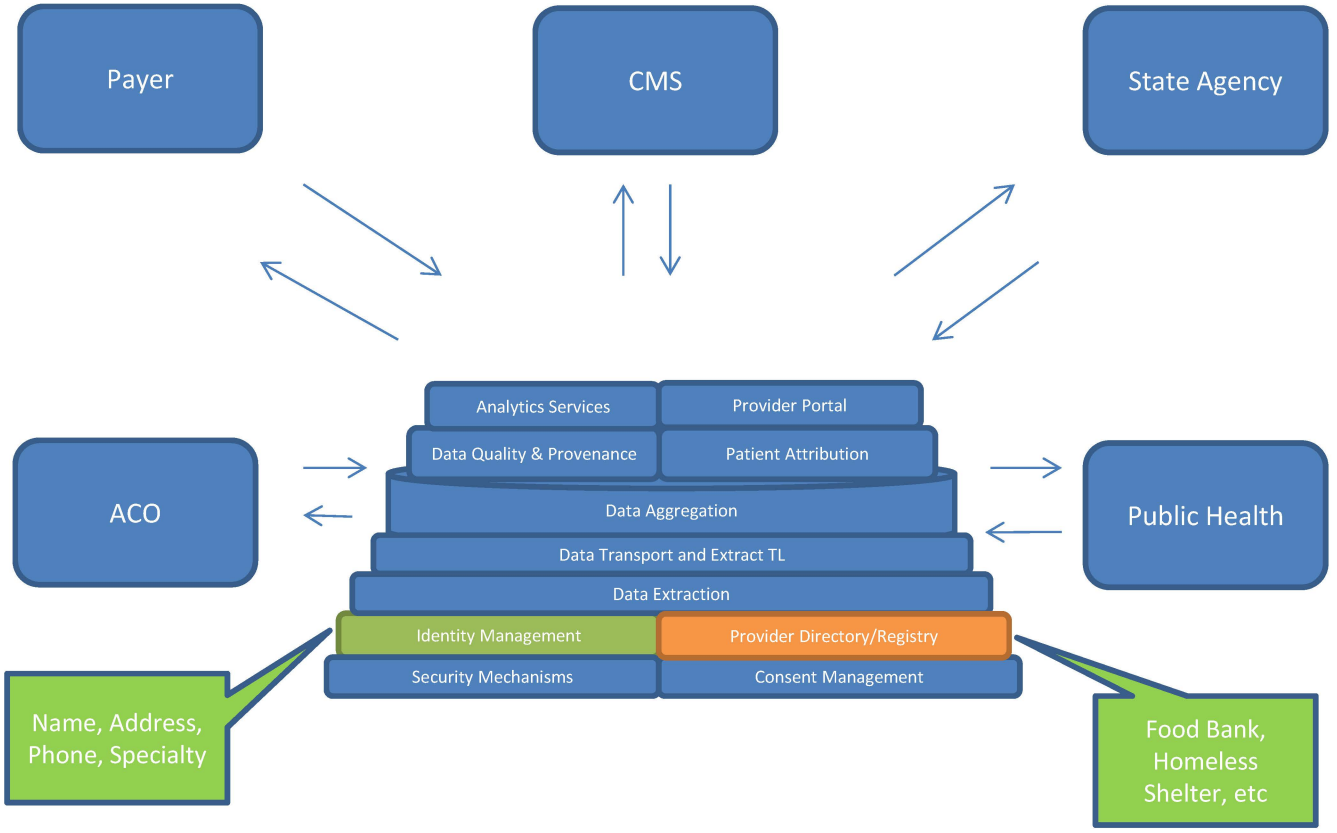


Introduction: Shared Services

Shared Services Model

Introduction: Shared Services

Shared Services from a stakeholder perspective

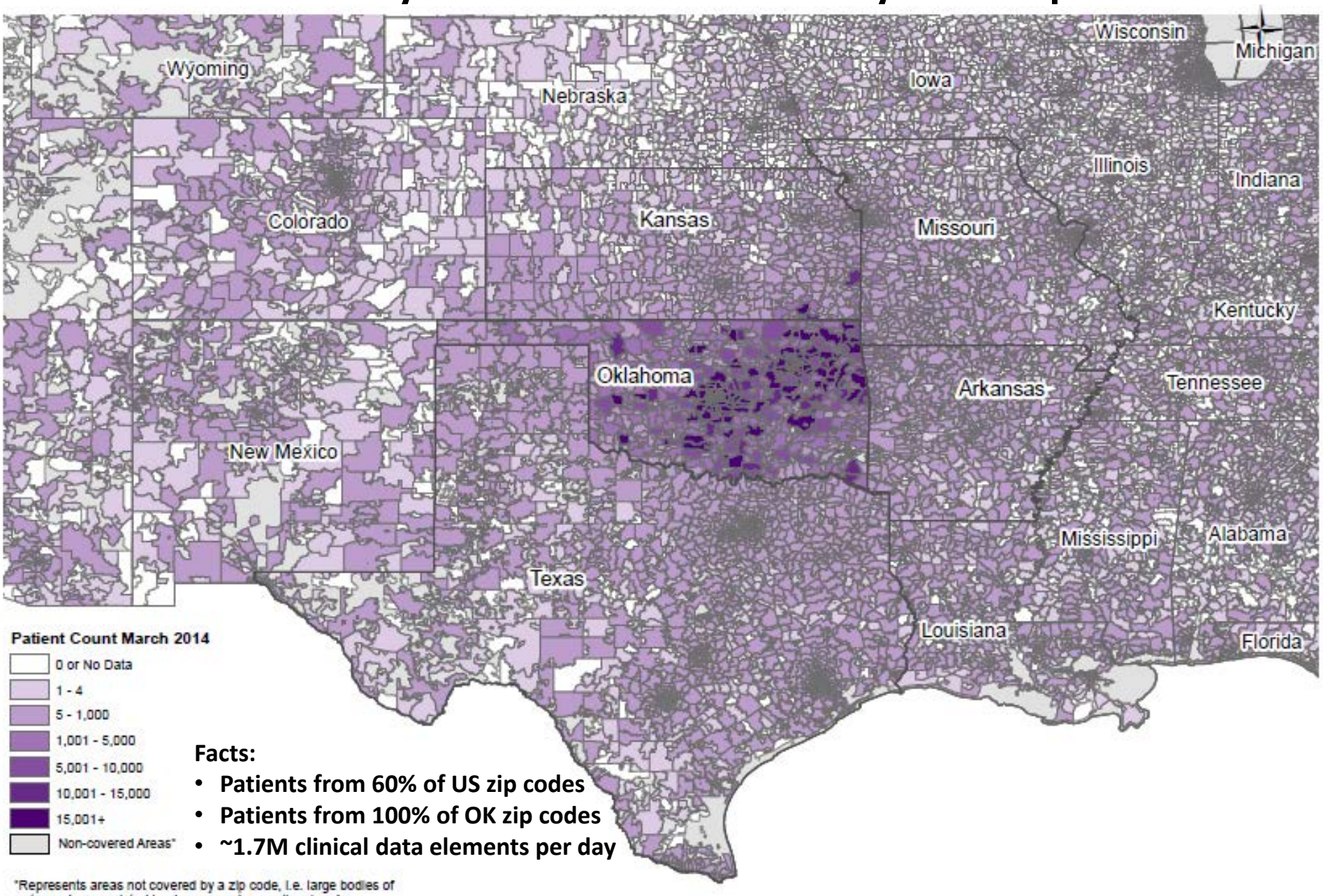


Identity Management

Identity Management: Value

- Why is a state-wide Identity Management strategy important?
  - Aggregation of data from an ever increasing number of disparate Health IT systems is necessary for delivery system reform
  - Alternative payment models rely on this data for analytics, care management and quality measurement
  - Additionally, it is a health IT safety issue
  - Consistency across stakeholders is achievable

Patients in MyHealth Access network by home zip code



Facts:

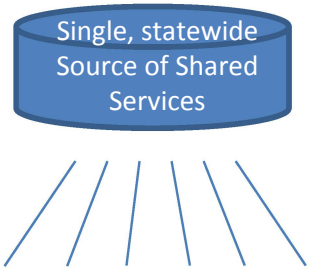
- **Patients from 60% of US zip codes**
- **Patients from 100% of OK zip codes**
- **~1.7M clinical data elements per day**

*Represents areas not covered by a zip code, i.e. large bodies of water and unpopulated land areas such as national parks.

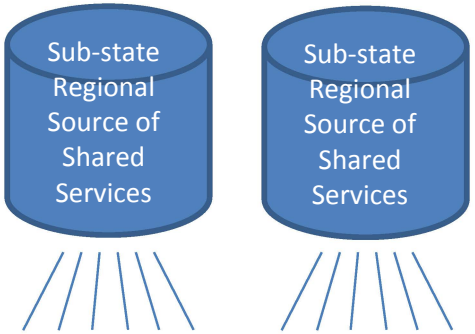
Identity Management: Learning Opportunities

- Shared Services Model to identity management
- Organizational vs. State-Wide Master Patient Index and necessary elements
- Identity data quality and data dictionaries including an identity management maturity model
- Best practices for data governance and sustainability
- Health IT solution RFP discussion and examples

States like mine . . . Which are you?



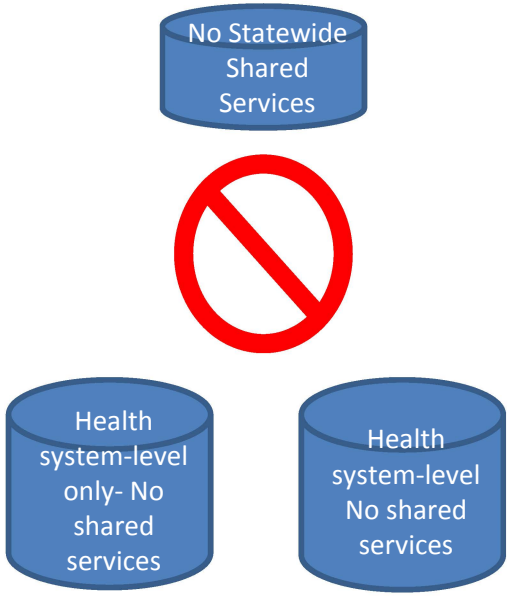
1.Single state-wide Shared Service Hub
- Single eMPI for identity management
- One multi-organizational data-use policy



2. Multiple sub-state Shared Services Hub

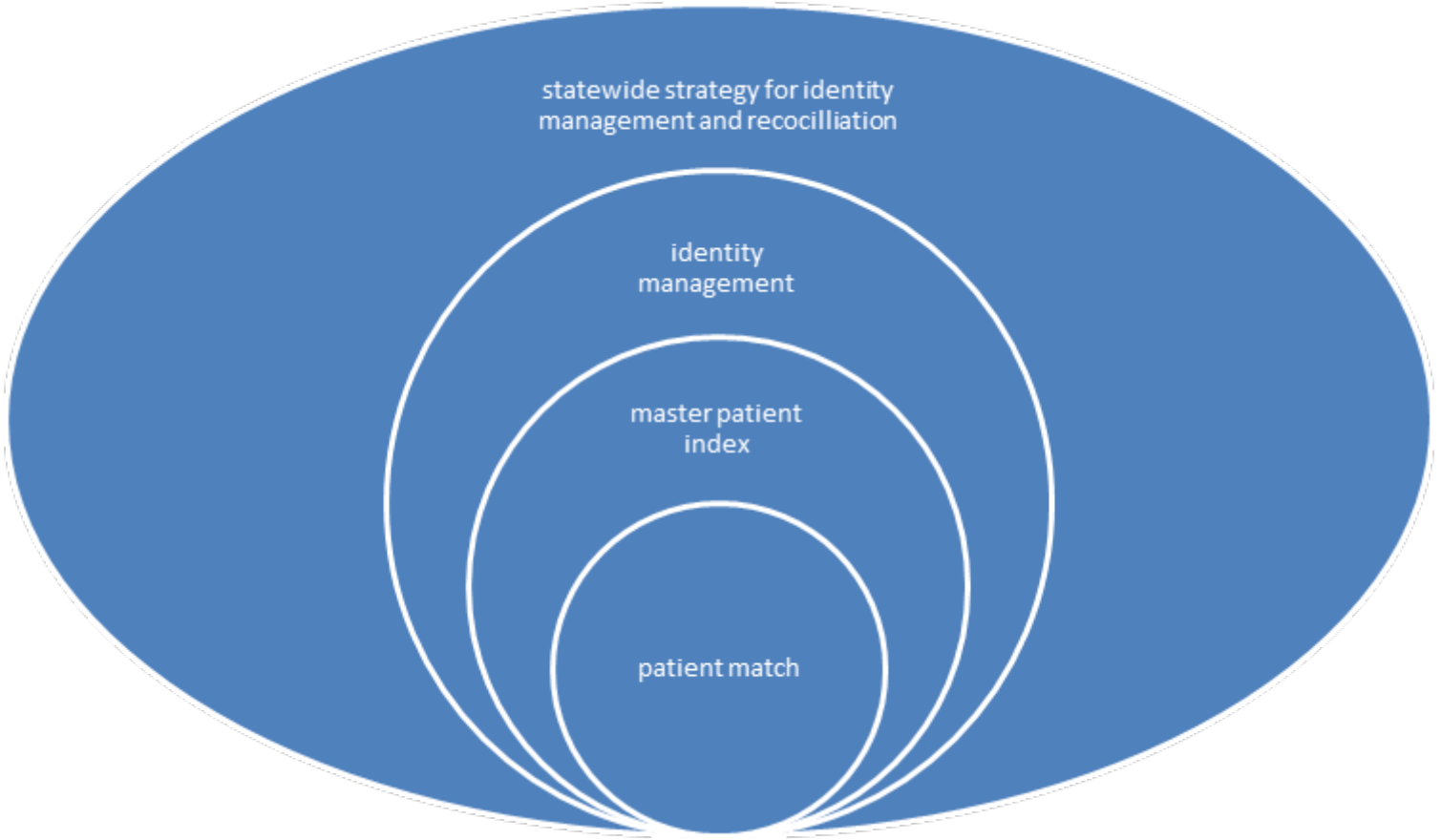
2a. Geographically distinct

2b. Substantially overlapping markets



3. No Shared Services
- One or more Health System HIE's
- No multi-organizational trust agreements

Identity Management: Architecture Concept



Identity Management:
Future possible topics for a comprehensive roadmap

- Identity Management Fundamentals
  - Maturity Model
  - Overview of one-page assessment template
- Business Architecture
  - Public/private? Within the state? Health care or broader?
  - Integration with other systems?
- Governance / Policy
  - Funding Source? Where will information live? Future of state HIE? Key Partners?
- Technical Build
  - Shared Services? Alignment with Provider Directory?
- Procurement/ Contracting best practices
  - Features and functions, RFP examples, Cost models for EMPI, Agile Development
  - Pitfalls / Risks - Reusing an MRN number, Not using already purchased software
- Sustainability
- Case study presentation and discussion

Identity Management: SIM State Assistance Needs

Interest in **webinar, state-specific TA or state exchange**

- Identity Management Fundamentals
- Business Architecture
- Integration with other systems
- Governance / Policy
- Technical build
- Procurement/contracting best practices
- Sustainability
- Case study/best practices
- Other (please specify)

Provider Directory

Provider Directory: Learning Opportunities

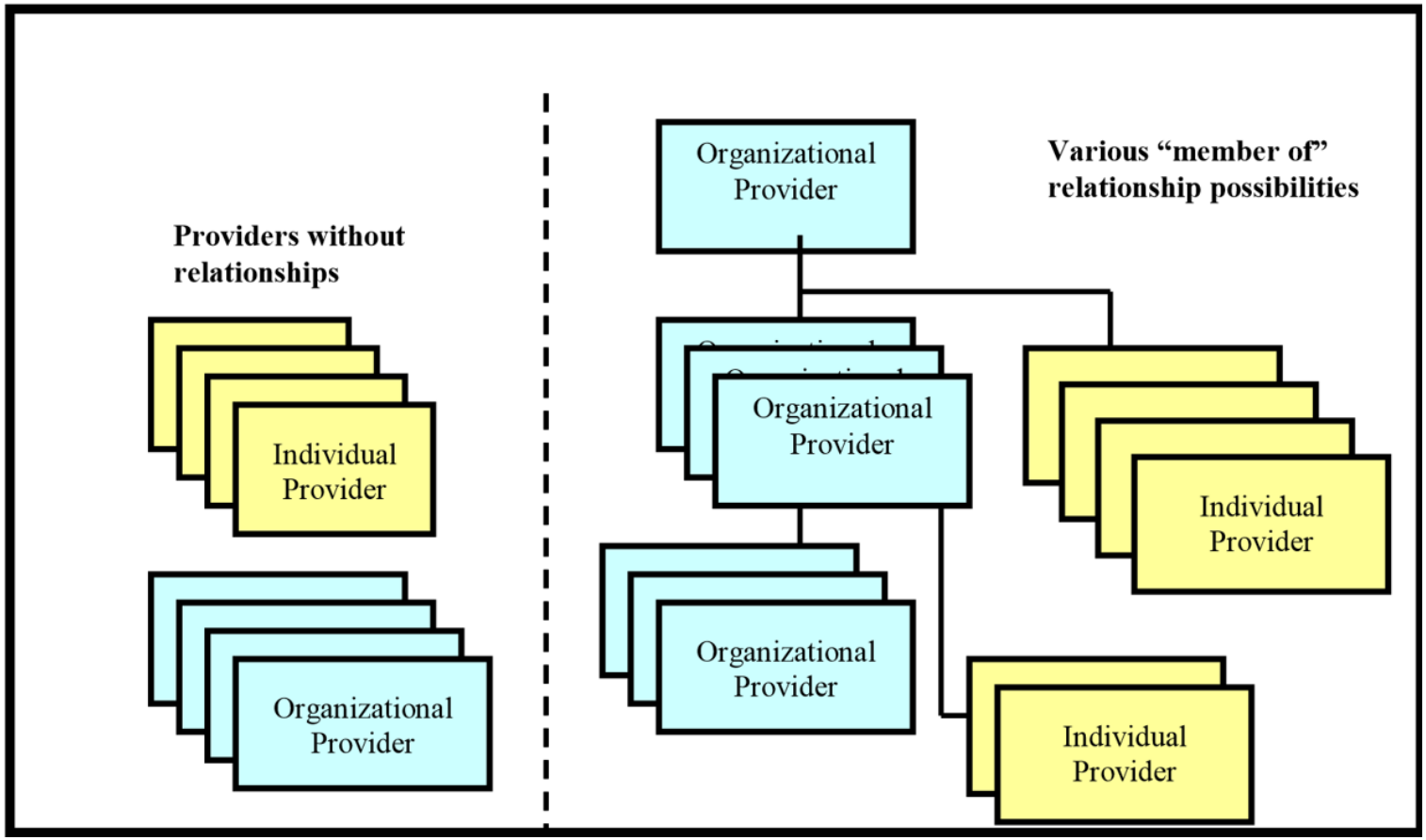
- Shared Services Model
- Fundamentals
  - Centralized vs federated architecture
- Use Cases and Value Proposition
- Standards
- Governance and Policy Considerations
- Funding and Procurement Considerations

Provider Directory: Fundamentals

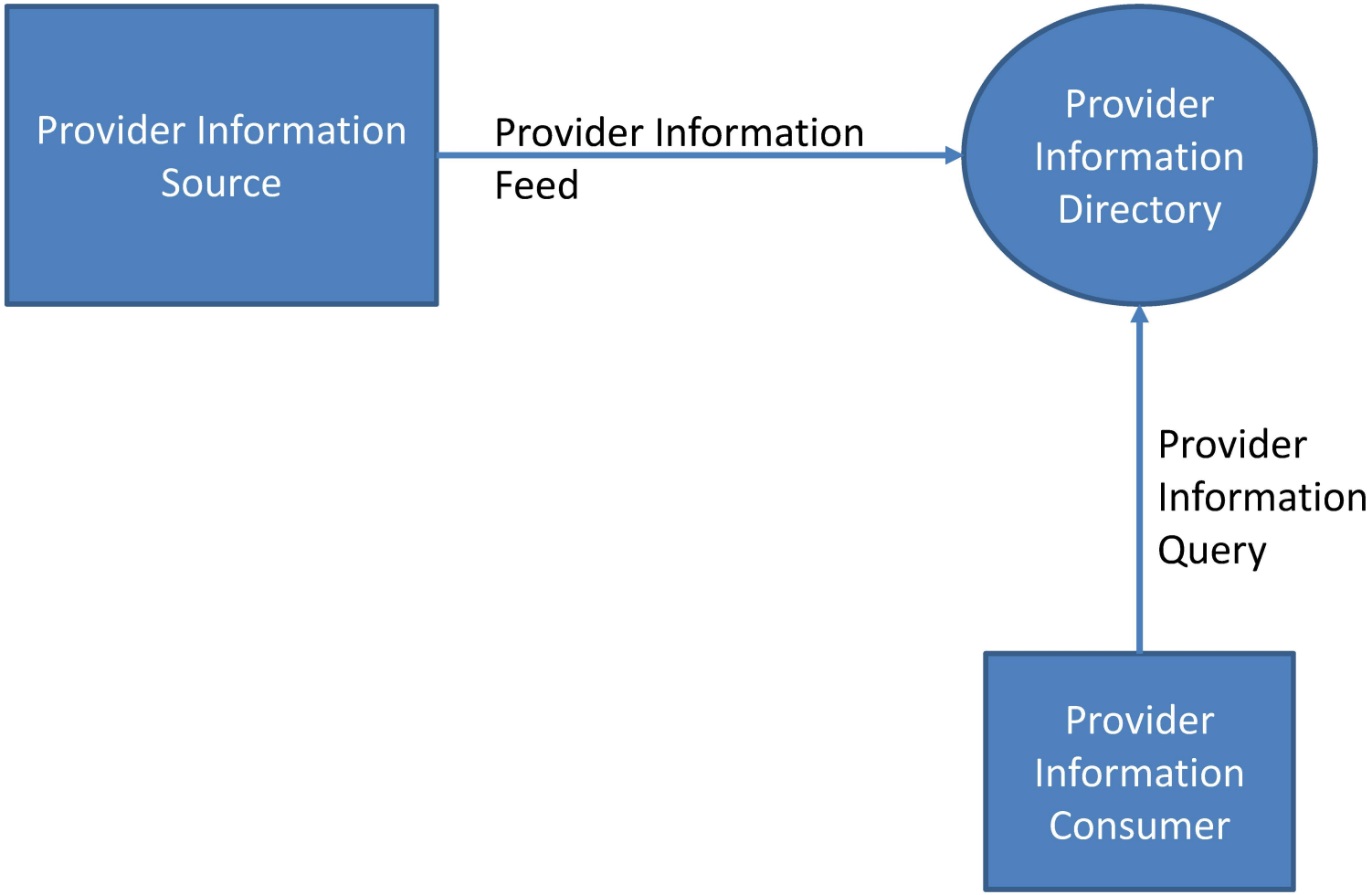
- **A Health Provider Directory supports management of healthcare provider information, both individual and organizational, in a directory structure.**
- **Typical provider information:**
  - Demographics, address, credential and specialty information, as well as electronic endpoint to facilitate trusted communications with a provider
  - Relationships:
    - Health Information Exchange (HIE) and members
    - Integrated Delivery Networks and care delivery members
    - Hospitals and their practitioners
    - Hospital sub organizations including departments, physician Practice Groups and their practitioners, practitioners and the hospitals they are associated with

Provider Directory: Relationships

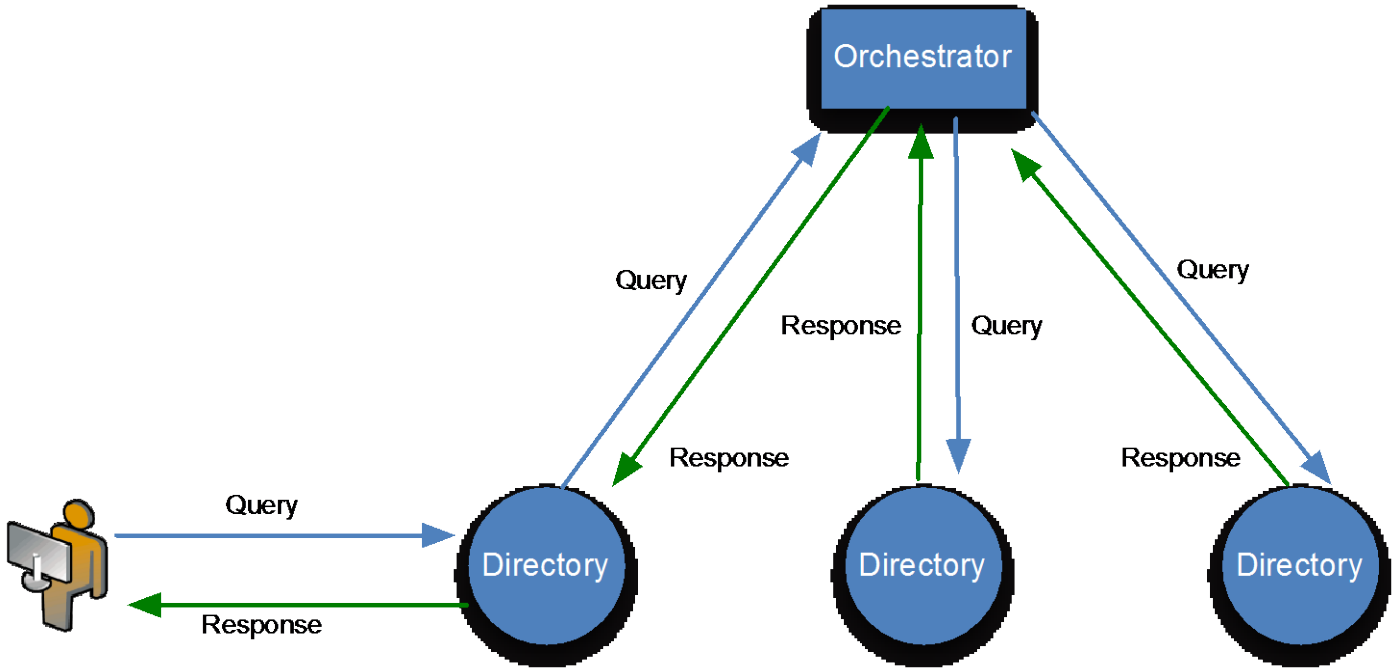
Examples of supporting provider entries with or without relationships in a Provider Information Directory (source: IHE IT Infrastructure Technical Framework Supplement: Healthcare Provider Directory (HPD))



Provider Directory: Basic Diagram



Provider Directory Model: Federated Directory Networks



Directory networks forming today are often *federated,* arranged hierarchically with queries distributed to data holders.

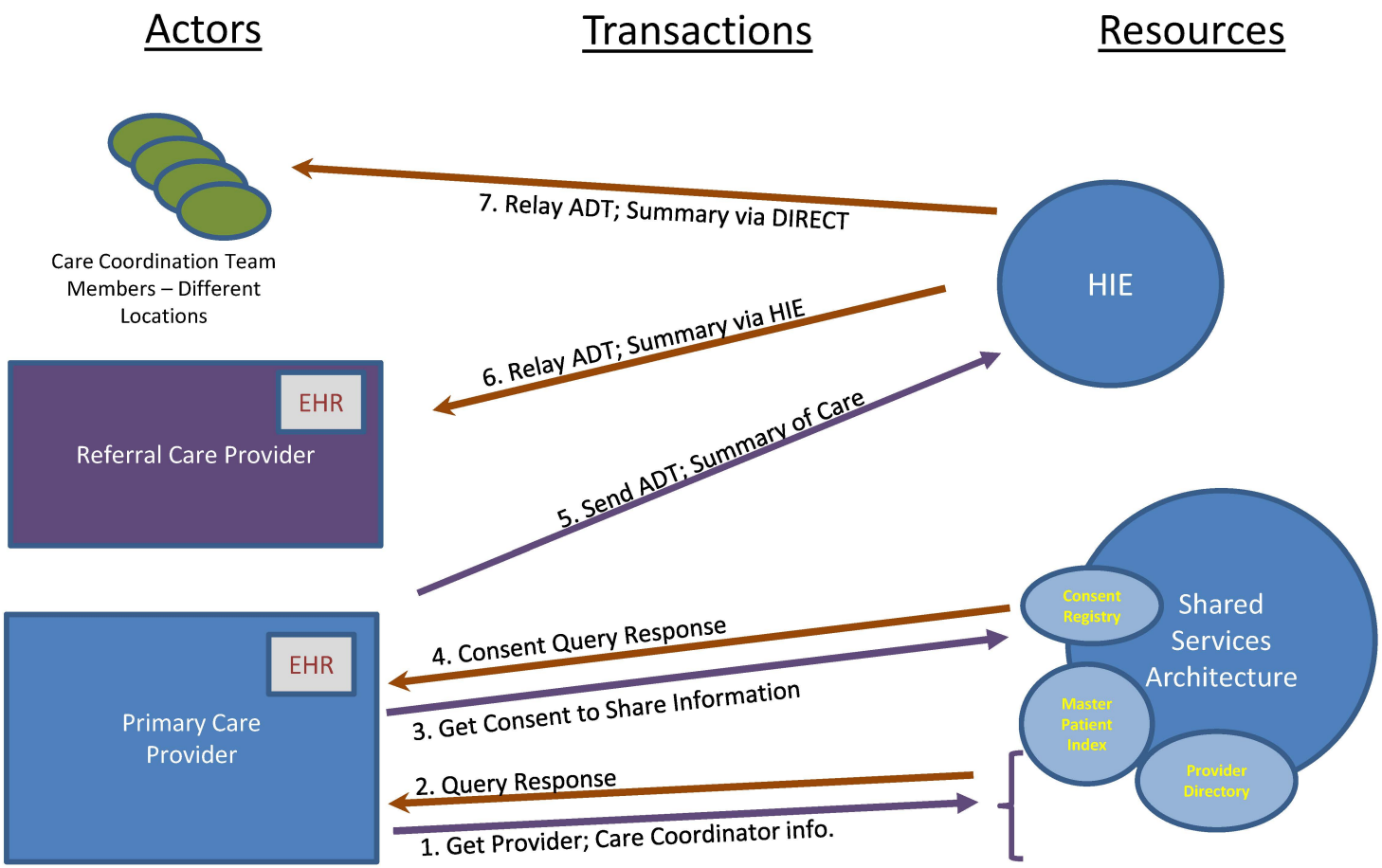
Provider Directory: Use Cases

- Enable secure email (Direct) communications
  - Also support Query end point look up
- Support consumer queries (i.e., providers in plans, hours of operation, special areas of expertise, etc.)
- Support credentialing and verification
- Support Patient attribution to Providers and Organizations
- Support referrals to Specialists and Other Providers
- Provide information on relationships among providers (i.e., PCP's to care coordinators)

Provider Directory: Patient Attribution to Providers and Orgs

- Facilitate determination of accountability for payment.
  - PD might not determine who is accountable, but might support that effort.
  - Track organizational affiliations – this is often a complex many-to-many relationship
- Determine which provider/organization receives reporting and population-level analytics/decision support.
  - Track actual provider vocation: PCP vs. ER vs. UC vs. hospitals vs. inactive/retired
  - Facilitate "Provider Registry" services – used to establish historical attribution
- Facilitate attribution of quality performance.

Examples of Attribution / Health IT Interactions: Health IT-enabled Referral with Care Coordination



Provider Directory: Statewide Directory Value Proposition

- The value of most use cases is increased as more providers and organizations are added to the directory
- Operations and Maintenance – economies of scale
  - Fewer instances of directories to support
  - Efficiencies in data management and data verification
- Supports the transformation of healthcare delivery to coordinated value-based outcomes
  - Supports patient-provider attribution for quality reporting
  - Includes new provider types (behavioral health, mental health, substance abuse, human services providers, other care providers)
- Consumers/patients benefit from a statewide Provider Directory
  - Patients are better served, leading to better individual health outcomes
  - Consumers are better served, leading to better informed decisions about plans and providers

Provider Directory: Standards

- **HPD (Health Provider Directory) is the current standard**
- **HPD Definition**
  - HPD supports queries against, and management of, healthcare provider information that may be publicly shared in a directory structure. HPD directory structure is a listing of the following two categories of healthcare providers that are classified by provider type, specialties, credentials, demographics and service locations:
    - **Individual Provider:** A person who provides healthcare services, such as a physician, nurse, or pharmacist.
    - **Organizational Provider:** Organization that provides or supports healthcare services, such as a hospital, Healthcare Information Exchange (HIE), Managed Care, Integrated Delivery Network (IDN), and Association
- **Federated HPD is listed by the ONC in the 2015 Interoperability Standards Advisory**

Provider Directory: Standards - HPD Data Model

Credentials	• Information about where a provider is credentialed (includes credentialed data and expiration) • Can also represent professional qualifications (degrees; certificates)
Memberships	• Indicates affiliations between individuals and organizations • Includes contact and Services information for the individual specific to the affiliation
Organizations	• Represents organizational entities • Includes identifying information such as name, legal address, and contact, plus items such as languages supported and pointers to Services
Providers	• Represents individual healthcare professionals • Includes identifying information such as name, profession, specialization, addresses (legal, billing, postal), and contact information, plus items such as status (e.g., inactive)
Services	• Contains health information exchange information for an individual or organization, including Direct address and query endpoint

Provider Directory: Policy Framework

- Technology is only part of the picture. Behind it lies a policy framework:
  - Governance
    - Establish trust; set policies; establish procedures; monitor compliance
  - Data Quality
    - Critical to Provider Directory as a source of information
    - Must be applied to all federated directories
  - Data Access and Permitted Use
    - Access: How data can be accessed, and who can access the data
    - Use: For what purposes the data can be accessed – TPO; Quality Reporting; Public Health
  - Security Provisions
    - Shared responsibility which should require traceability of transactions and authentication of all parties (users; federated directories; intermediaries)

Provider Directory: Funding and Procurement Considerations

- Develop a Business Case
  - Visualize the end state, including implementation and operations
  - Analyze savings associated with use cases
  - Apply savings from economies of scale
  - Consider savings from improved outcomes (subset of use cases)
  - Consider the dependency of new payment models on Provider Directory Services
- Develop a shared investment / shared savings model for stakeholders
- Medicaid funding should be available to support Medicaid's participation (Medicaid providers; Managed Care Organizations)
- RFI; Requirements; RFP; Implementation and Operations

Provider Directory: SIM State Assistance Needs

Interest in **webinar, state-specific TA or state exchange**

- Policy and governance topics
- Standards, current and emerging
- Architecture with considerations for FHA and MITA
- Funding and sustainability
- The road to procurement
- Data sources
- Implementation & operations
- Use cases

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