

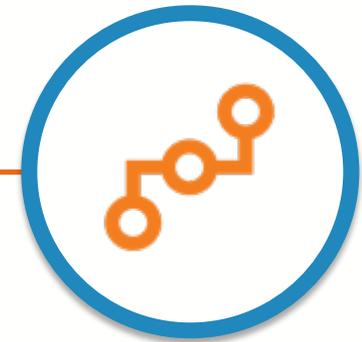


# Healthcare Provider Directories

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# HPD Introduction

- **Business Context**
  - Problem statement
  - Definition
  - Selected Use Cases
  - Scope
  - Value
- **Technical Implementation**
  - Actors
  - Options
  - Attributes
  - Security
  - Standards Used
  - References



# Problem Statement

**HPD Problem Statement:** The industry needs a standards-based method to support queries against, and management of, healthcare provider information that may be publicly shared in a directory structure.

*This slide is the  
Author's opinions only*

## ***HPD Will Likely:***

- Be selected by the Direct Project (secure email) as the means of identifying providers to exchange with
- Be specified in MU3
- Be used by the eHealth Exchange to identify Participants
- Be used by Carequality to list conforming networks and/or organizations
- Be used by states, including the Author's home state of Texas, as a single, authoritative, federated, state-wide directory

## 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.

## HPD Selected Use Cases

- Yellow pages lookup
- Query providers and their associations for Social Services Disability Determination
- Emergency Responders Identification in planning for an emergency event
- Provider Authorization and lookup during an emergency event
- Forwarding of Referral Documents to a Specialist
- Certificate Retrieval
- Language Retrieval
- Federated directories



## HPD Scope

- Designed to maintain a structured list of attributes for both organizations (such as clinics) and people (such as physicians)
- Allows extensibility
- Largely semantically interoperable
- Leverages ISO standard (21091)
- Designed to enable cross organizational directory access



# HPD Value

## Single Authoritative Knowledge Base

- Reduce duplicate and unconnected information databases
- Single place to update
  - Name Changes
  - New Phone Number
  - Additional Addresses



## Enhance Workflow and Communications

- Providing information necessary to make connections
  - Phone Number
  - Email Address
  - Postal Address



# HPD Value

## Enhance User Interactions

- Provide user friendly identities and lists
  - List of members
  - Displayable name of a user
  - Initials query

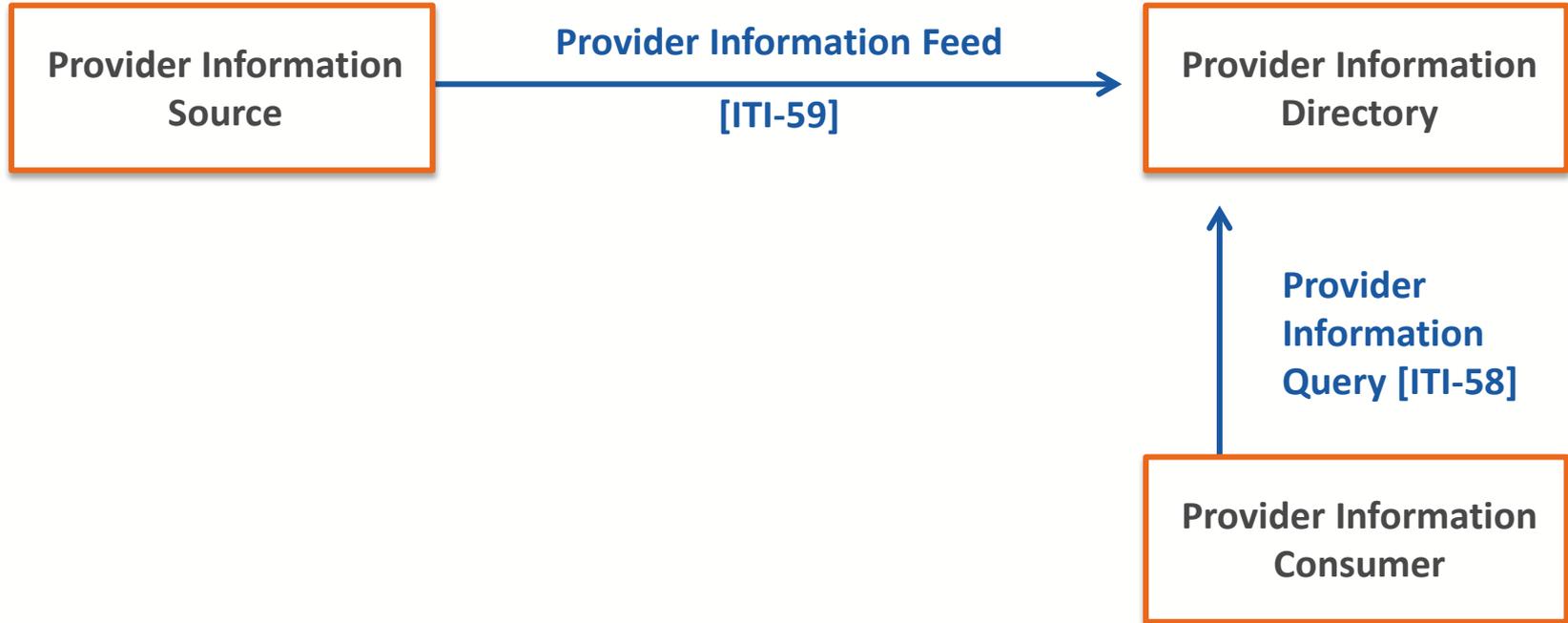


## Contributes to Identity Management

- Additional methods of identity cross verification
  - Name, address, phone number, email
  - Cross reference with Enterprise User Authentication identity
- X.509 Certificates



# HPD Actor Diagram



## HPD Actors

- **Three Actors**
  - Provider Information Directory
  - Provider Information Consumer
  - Provider Information Source
- **Two Transactions**
  - Provider Information Query [ITI-58]
  - Provider Information Feed [ITI-59]
- **Two Options**
  - Provider Information Feed [ITI-59]
  - Federation [ITI-58] data elements



## HPD Options

Actor	Options	Vol. & Section
Provider Information Directory	Provider Information Feed Federation	ITI TF-1: 28.2.1 ITI TF-1: 28.2.2
Provider Information Source	No options defined	--
Provider Information Consumer	Federation	ITI TF-1: 28.2.2

### 28.2.1 Provider Information Feed Option

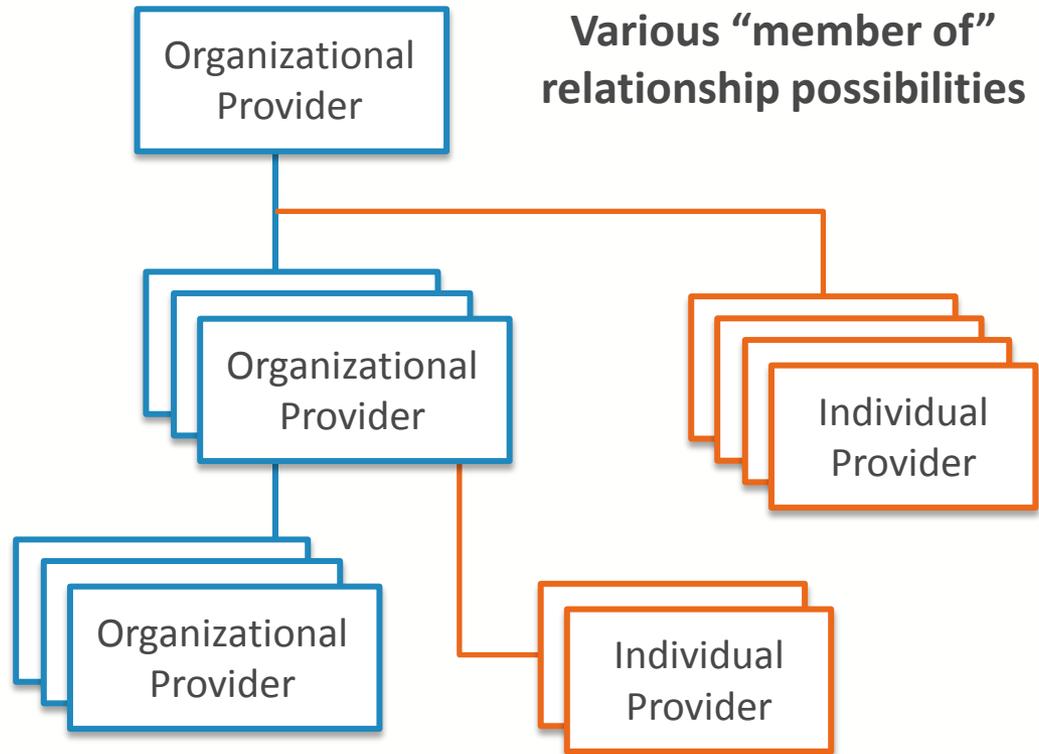
When the Provider Information Feed Option is declared the Provider Information Directory shall support the Provider Information Feed [ITI-59] transaction

# HPD Relationships

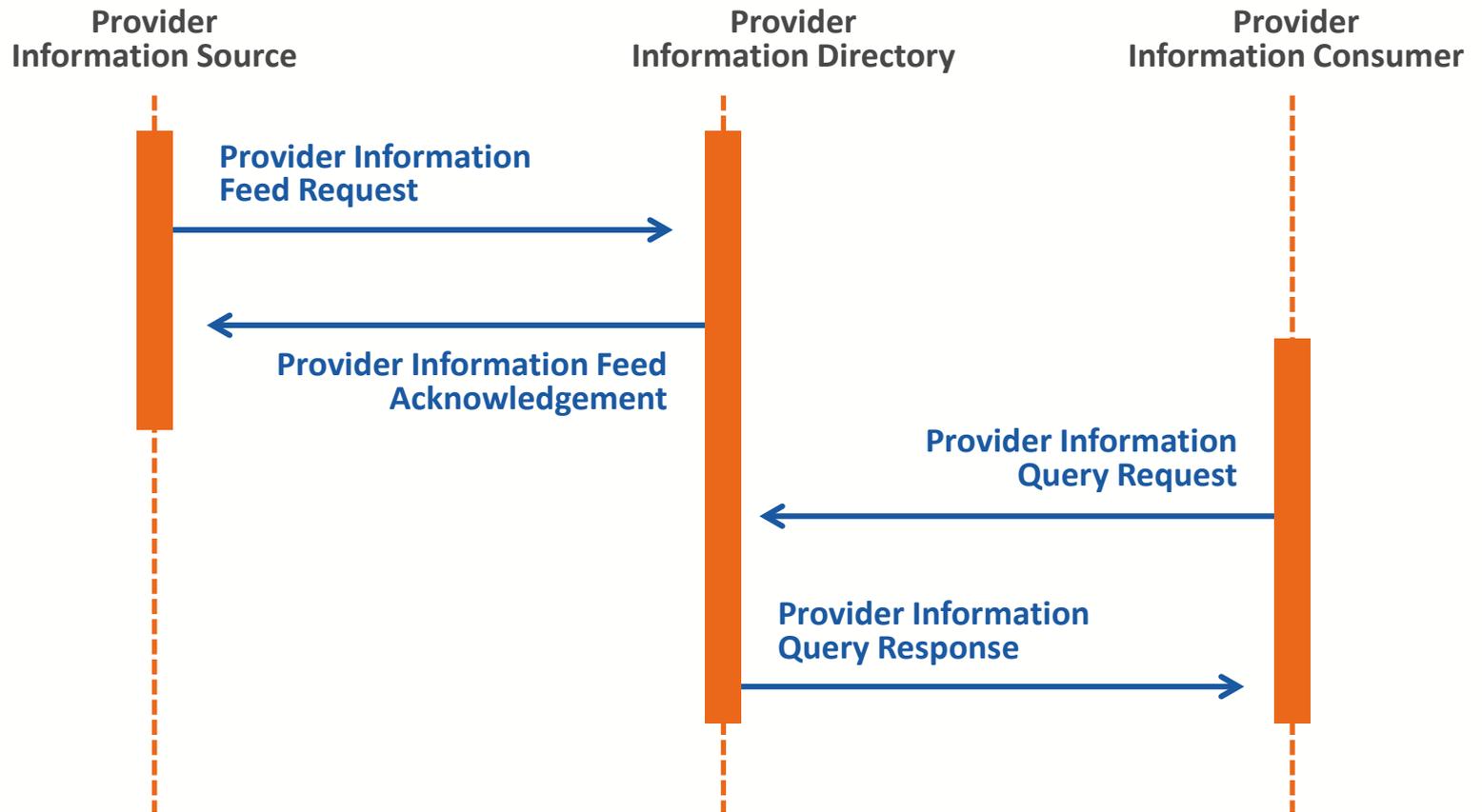
## Providers without relationships



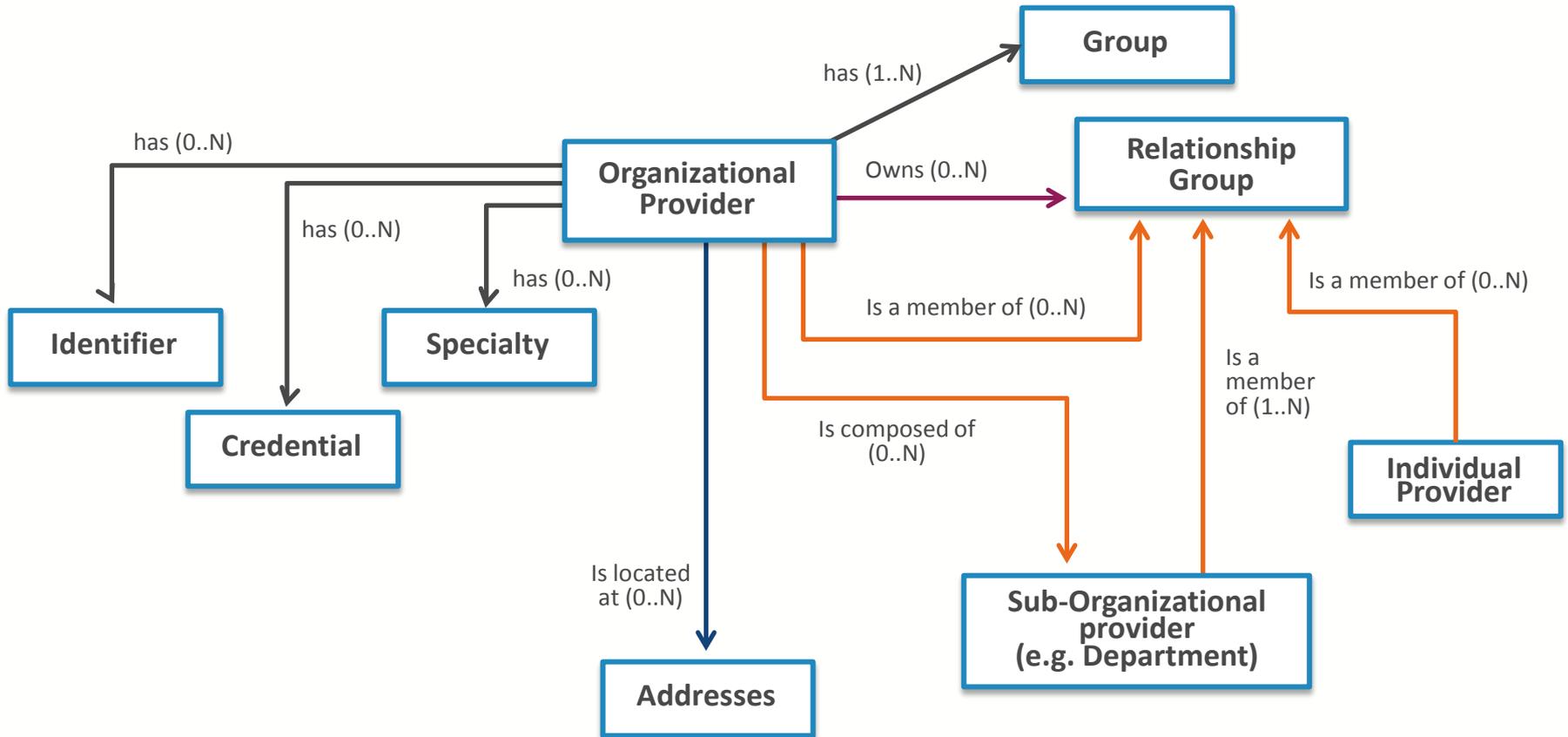
## Various “member of” relationship possibilities



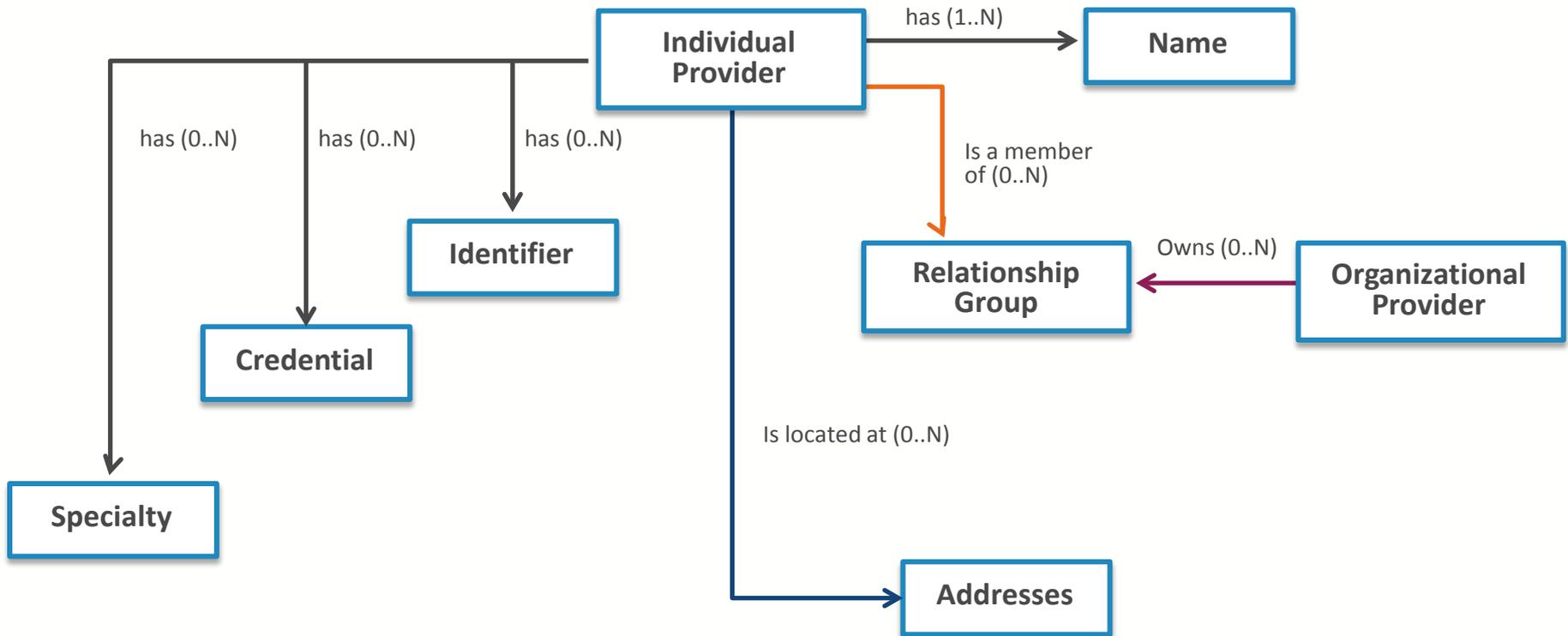
# HPD Process Flow



# HPD Organizational Provider



# HPD Individual Provider

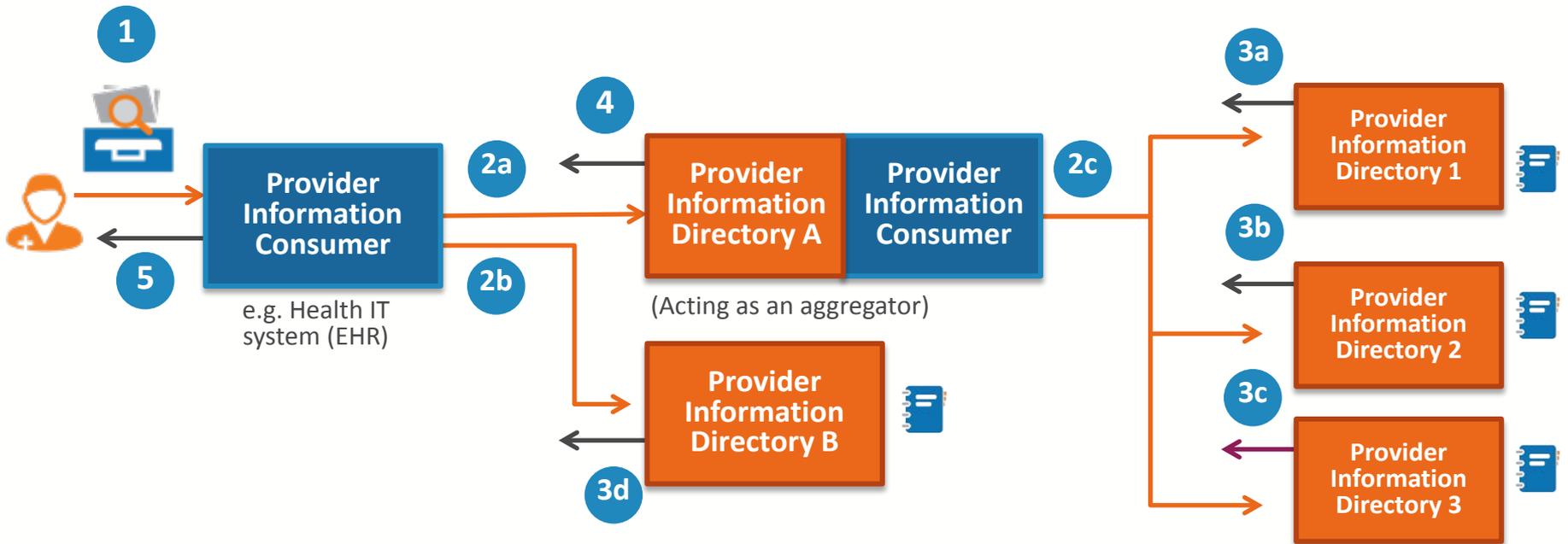


## HPD Security and Privacy

- Security and privacy for HPD is established via other mechanisms
  - ATNA for node authentication and secure logging
  - EUA to authenticate users
  - XUA for access control
  - PWP for system users identification
  - IT best practices
  - LDAP authentication for attribute protection
- Regional-specific legal, regulatory, policy, privacy, and security analysis is suggested
- See the HPD profile for an analysis
- X.509 keys can be stored in HPD or PWP directories



# NEW! Federation Option



## HPD Standards Used

- LDAP
- DSML
- ISO/TS 21091



## For More Information

For more information on HPD, please see:

### **IHE Technical Framework**

- [http://www.ihe.net/Technical\\_Framework/](http://www.ihe.net/Technical_Framework/)

### **ISO TS 21091:2005 – Requires purchase**

- [http://www.iso.org/iso/catalogue\\_detail.htm?csnumber=35647](http://www.iso.org/iso/catalogue_detail.htm?csnumber=35647)

Thank you!

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