December 12, 2015

HPD Provider Directory
IHE USA Implementation Task Force
Call for Participation

- Introduction
- Problem Statement, Scope and Objectives
- Use Cases
- Open Process
- Provider Directory USA National Extension Technical Approach
- Testing: IHE NA Connectathon 2016
- Benefits of Participation
- Roadmap/Timelines
- Call for Participation
- References – For More Information

Task Force

- – Eric Heflin (The Sequoia Project, Texas Health Services Authority, IHE International)
- – Celina Roth (HIMSS, IHE USA)
- – Sarah Willis-Garcia (HIMSS, IHE USA)
- – Open call for participation!

- ITI HPD has been adopted (18 organizations as per the IHE Product Registry) and we now have implementation experience

- A survey was conducted via various email lists and to implementers (on April 30th 2015 at 9:20am), asking for feedback on readiness of HPD to go to final text

- Approximately 50% stated yes

- Remainder stated a small number of significant problems exist that are preventing interoperability

- Problem:
  - USA implementers need additional specificity that is not appropriate in the international specification
- Impact:
  - Additional specificity is required for many (if not most) real-world implementations of HPD, and the use of these attributes in the USA are not defined clearly, thus they are not interoperable
- Evidence of need:
  - Real world implementations are expressing lack of interoperability and lack of clarity
- Value to IHE community:
  - Resolving the above issues
  - Ensuring interoperability with existing IHE profiles and other applicable standards

- Recommended scope
  - Required queries for USA implementers
  - Clarify required vs. optional query parameter support (such as wildcard)
  - Data field clarifications
  - Final, exact scope, will be determined by the Task Force itself!

- Omitted scope
  - Base HPD change proposals
  - REST/FHIR

- Objective is to develop a workable approach that is broadly supported

- Testable by the industry as soon as possible

- Deployable as soon as possible

Base HPD/Federated

- Yellow pages lookup
- Query providers and their associations
- Emergency responders identification
- Referrals target identification
- Keeping provider lists current
- Certificate retrieval
- Language retrieval
- Federation

USA National Extension

- Same as Base HPD/Federated plus...
- Direct Project/Secure email address acquisition
- Direct Project/Secure email x.509 certificate retrieval
- eHealth Exchange end-point acquisition
- IHE/SOAP end-point acquisition
- Required query types (six)
- Required Boolean logic (AND/OR) support

History…

- IHE International, the Interoperability Work Group, the Office of the National Coordinator, The Sequoia Project, and others collaborated and led various efforts to create a standards-based directory specification.

- This collaborative work was modified and adopted by HIE International, an ISO recognized Standards Development Organization, further developed, balloted and approved as a new international standard on September 3rd, 2014 and is published at: www.ihe.net/Technical_Frameworks/#IT (search for HPD, dated October 13, 2014).
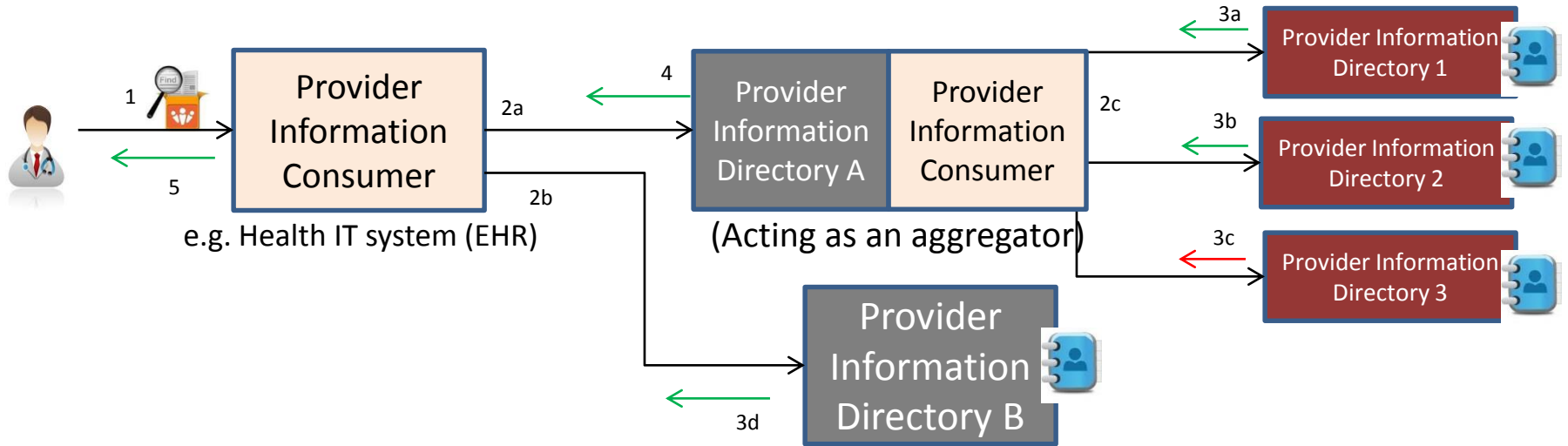
History...

- Was tested at IHE North American Connectathon 2015, Jan 26th through 30th, 2015.

- USA-Specific gaps have been identified thus leading to this effort.

- The original project proposal (from two years ago) removed the USA-specific requirements with the intent of adding them back to the scope in the future. So this is consistent with the original intent of the profile and is part of the overall HPD plan.

History…

- On Nov 13th, IHE International ITI Technical Committee and Planning Committee agreed that this work item would be an appropriate USA National Extension.

- Dec 3rd, the HPD USA National Extension was approved by the IHE USA Board of Directors.

- Dec 14th, the HPD USA working team met and jointly created the work plan discussed herein.

- Dec 17th, the IHE USA newsletter publicizes this call for participation.

- Current/Future Efforts…
  - Will continue as an open process following IHE International and ISO governance including vendor neutrality, open participation, published meeting notes, etc.
  - Participation is welcome from
    - Vendors
    - Customers/implementers
    - SDOs
    - Federal and State government
    - General public
    - All are welcome!

- The majority of this work is relatively small, such as identifying which of two options should be used to store a Direct Project email. Most items in this category are largely single-sentence statements in the HPD USA National Extension.

- The query definitions are expected to be documented already since they were part of the previous ONC Mod Spec/IHE effort (but ultimately omitted from the HPD profile due to them being USA-specific).

- The majority of the USA National Extension work effort is to convene, agree on the above, write a small specification, and then test the specification.

- The expected size of the profile is small, such as 5-7 pages of core content.

- The proposer expects the work will take approximately 5 meetings between now and the IHE NA Connectathon 2016 to complete.

HPD Architecture

Workflow

1b. Healthcare provider uses their HealthIT system to locate a provider

2a. The **Provider Information Consumer** (the HealthIT system) sends the request to a **Provider Information Directory A** which federates multiple directory sources as shown in the diagram
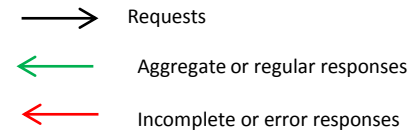
2b. The **Provider Information Consumer** (the HealthIT system) can also send a request to a **Provider Information Directory B** that does not federate the request to any other directory sources.

2c. The **Provider Information Directory A** federates the request to a set of known additional **Provider Information Directories (1, 2, and 3)**.
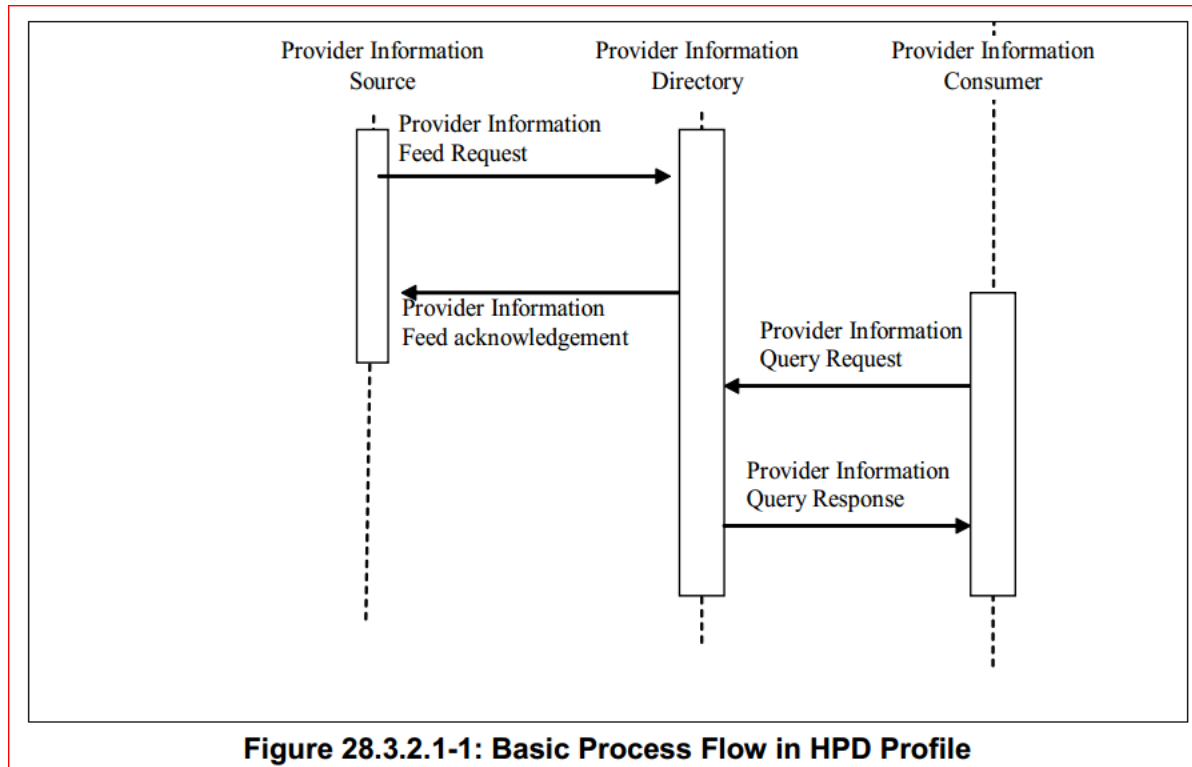
3# **Provider Information Directories** provide a complete response, an error, or an incomplete response.
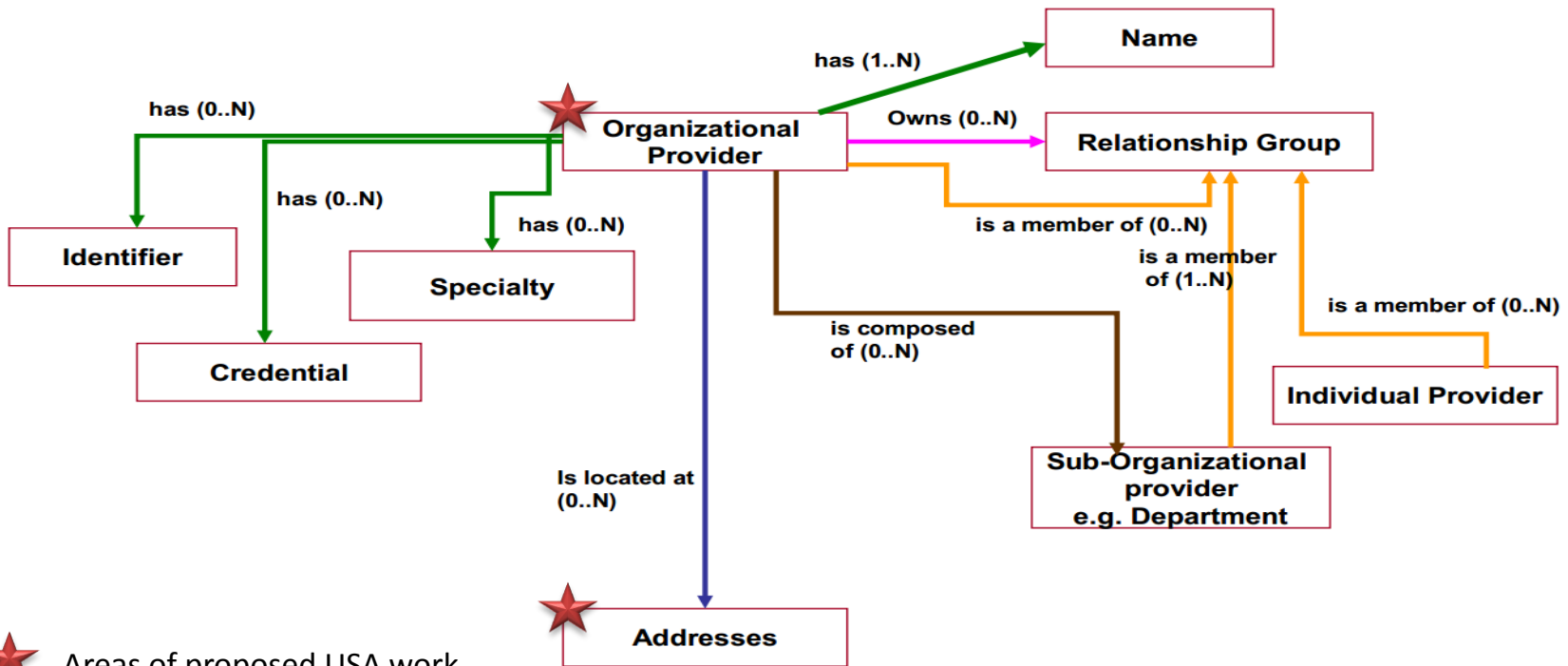
4. **Provider Information Provider A** aggregates responses (including complete responses, errors, and incomplete responses) back to the **Provider Information Consumer**.

5. The **Provider Information Consumer** (the HealthIT system) receives the responses, including incomplete and error responses, and presents the data to the user.
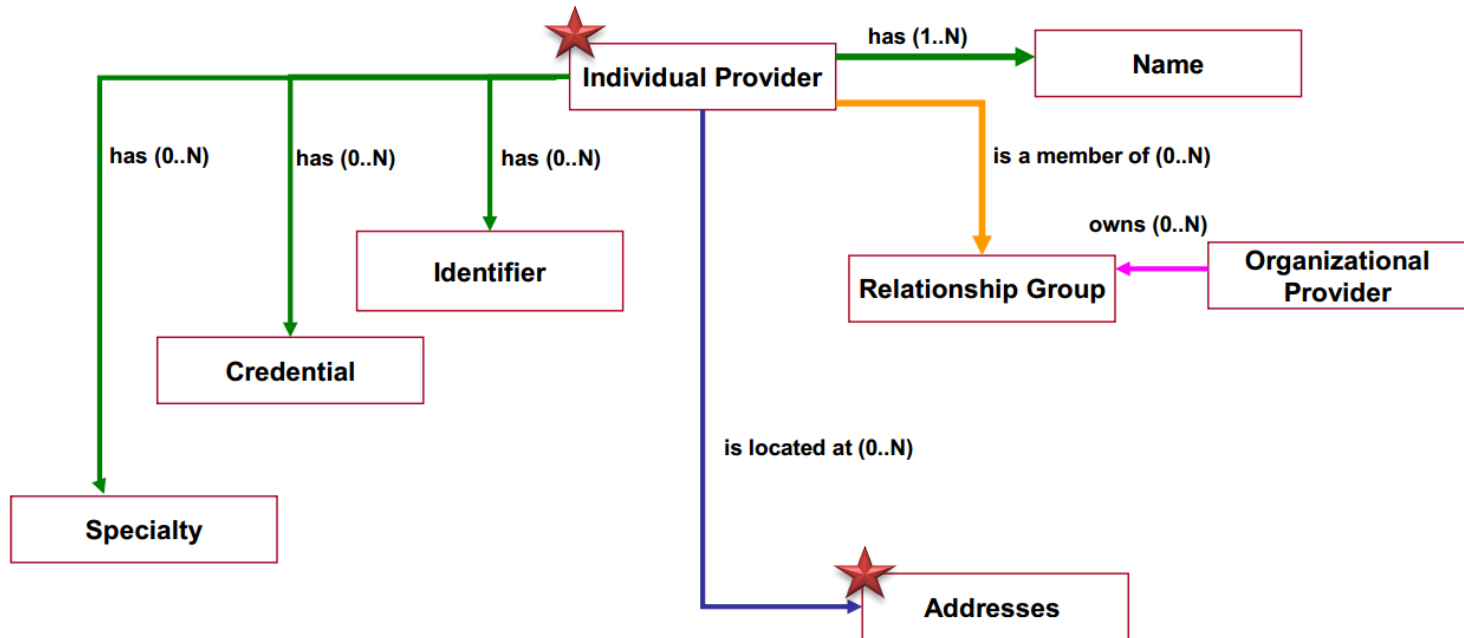
Requests

Aggregate or regular responses

Incomplete or error responses

IHE HPD Federated Basic Process Flow

Figure 28.3.2.1-1: Basic Process Flow in HPD Profile

HPD Organization Constraints

Areas of proposed USA work

★ Areas of proposed USA work

- HPD Federated was tested at the IHE North American Connectathon 2014 under the "New Directions" program.
- Since HPD is an accepted IHE profile, it was tested at the IHE North American Connectathon 2015.
- We are hosting an Internet based virtual Connectathon starting now, meeting each Friday, for a technical working session.
- Establishing connectivity, ports, firewalls.
- Establishing basic interoperability SOAP, Web Services.
- Establishing true interoperability (proper functions and data).
- Will be an opportunity to for manual testing at IHE NA Connectathon on Thurs. January 28, 2016.

- IHE North American Connectathon 2016
  - Registration has closed but…
  - Organizations already registered for IHE NA Connectathon testing can add the USA National Extension option still (contact Eric Heflin)
  - HPD USA National Extension will be tested on Thursday, January 28 using Gazelle plus manual review
- HIMSS16 Interoperability Showcase
  - Several Showcase options under consideration
  - Your feedback is requested
- Please let us know ASAP if you have an interest in participating in the HIMSS16 Interoperability Showcase!

- Ability to pilot and influence a significant new USA standard

- Jump start providing this functionality to clients and prospects

- Higher degree of assurance of interoperability

- Better prepared for the IHE NA Connectathon

- Potential ability to demonstrate your solution at the HIMSS Interoperability Showcase (requires Connectathon successful testing)...

Roadmap / Timeline

Milestone	Date
Publication as IHE HPD Trial Implementation Supplement	Published Oct 13, 2014
Vendor Product Development	In process now
Registration for NA Connectathon 2016 USA National Extension Testing	In process now
Register for HIMSS 16 Interop Showcase	In process now (deadline extended!)
Call for participation	Now through Jan 4, 2016
Virtual Connectathon	Now through end of Jan 26th, 2016 (meeting schedule 1-3 times a week depending on participant interest)
IHE NA Connectathon 2016	Jan 28th (one day)
HIMSS16 Interoperability Showcase™ Setup / Prep	End of Jan 2016 through HIMSS16
HIMSS16 Interoperability Showcase™	Feb 30th through Mar 4th, 2016
IHE USA National supplement publication process	Post HIMSS16, targeting April 2016
Available for Deployment to Customers	Targeting May 2016

- Virtual Connectathon meetings starting Jan 4th, 2016.
- Shared collaboration space, resources, data, tools, etc. (Using IHE International Wiki for transparency.)
- Working together to prove-out HPD USA National Extension.
- Indicate interest in participating in the HIMSS16 Interoperability Showcase™ ASAP.
- For questions about participating, please contact:
  – Eric Heflin (eric.heflin <at> thsa.org)
  – Sarah Willis (swillis <at> himss.org) for IHE NA Connectathon 2016 questions

- For any questions regarding this effort, please email: Eric.Heflin <at> thsa.org

- ONC Solution (source, tools, data, actors) are available to jump start activities
- HPD Federated as published by IHE for Trial Implementation
  - http://www.ihe.net/uploadedFiles/Documents/ITI/IHE_ITI_Suppl_HPD.pdf
- ONC Documentation:
  - http://modularspecs.siframework.org/Provider+Directories+Artifacts
- Test Tools/Data/Schemas/etc.:
  - IHE Gazelle
  - http://sitenv.org/   (Check out the Provider Directory Sandbox)
  - https://github.com/siteadmin/pdti/tree/master/pdti-server/
- Initial project:
  - http://modularspecs.siframework.org/Provider+Directories+Artifacts
- Google Groups HPD:
  - https://groups.google.com/d/msg/ihe-hpd-implementors/
- More info:
  - Eric.Heflin <at> thsa.org