Agenda

• Track Goals
• Track Leads
• National Directory Overview
• DaVinci Plan-Net Overview
Track Goals

• Test National Directory & Plan Net Implementation Guides

• Verify that the National Directory & Plan Net supports requirements in the CMS rules for Interoperability and Patient Access as well as Reducing Provider and Patient Burden
Track Leads

- Bob Dieterle, EnableCare  rdieterle@enablecare.com
- Abigail Watson, MITRE  awatson@mitre.org
- Sean Mahoney, MITRE  smahoney@mitre.org
What is the National Directory?

- Provides a generally available method to find verified directory information and their associated electronic endpoints, as well as a common process for maintaining the information and verifying its accuracy.
- Contains directory information for individuals and entities involved with the provision and delivery of care with the exception of the patient and their non-licensed caregivers (This is not an MPI).

Objectives

- One national source for verified directory information that is available to any national or local directory workflow environment.
- Individual and entity demographics to determine relationships between individuals and organizations, information related to available services, and support for computable endpoint information such as standards supported, metadata for routing, trust framework, implementation guides and certification status.
- Distributed access by HIEs, state directories, EHRs, etc.
- FHIR standard implementation guides to define exchanges of information into, between, and out of the distributed directory environment.
National Directory
National Directory

- FHIR R4 Base
- US Core
- Endpoint Query (Minimum)
- Enhanced Query
- National Directory

Less Restrictive

More Restrictive
National Directory

- FHIR R4 Base
- US Core
- Endpoint Query (Minimum)
- Enhanced Query
- National Directory

MiHIN

Location.new patients
Location.new patients 0..1
Location.new patients 0..1 MS

Less Restrictive
More Restrictive
National Directory Exchange

• What is the FAST National Directory Exchange?
  – FHIR API to exchange directory information between the Verified National Directory and the distributed Access/Workflow Directories

• Objectives
  – Allows verified directory information to be shared with distributed directories for scalability and integration into local workflow
National Directory Exchange

- Implementation Guide (Pre-ballot)
  - https://build.fhir.org/ig/HL7/fhir-directory-exchange

- Hosted Reference Implementation
  - Server: https://national-directory.meteorapp.com/
  - Client: https://national-directory.meteorapp.com/

- Reference Implementation Code (Apache 2.0 license)
  - https://github.com/HL7-FAST/national-directory

- Confluence
• **What is FAST Endpoint Query?**
  — FHIR API to find electronic endpoints of entities in the Distributed Access/Workflow Directories and their associated demographics and relationships

• **Objectives**
  — Provide a common, standard method for client applications and systems to find directory information, including electronic endpoints, for the entities with which they need to interact

• **Supports Multiple Distributed Access/Workflow Directories**
  — Basic (Endpoint & Expanded)
  — Health or Human Services (Endpoint & Expanded)
  — Human Services (Endpoint & Expanded)
  — Provider (Endpoint & Expanded)
Endpoint Query

- Implementation Guide (Pre-ballot)
  - http://build.fhir.org/ig/HL7/fhir-directory-query

- Hosted Reference Implementation
  - Server: https://national-directory.meteorapp.com/
  - Client: https://national-directory.meteorapp.com/

- Reference Implementation Code (Apache 2.0 license)
  - https://github.com/HL7-FAST/national-directory

- Confluence
  - https://confluence.hl7.org/display/FHIR/National+Directory+Endpoint+Query
• **What is the FAST Attestation and Verification?**
  - FHIR API and workflow process for submitting, updating, attesting and verifying the accuracy of the National Directory information

• **Objectives**
  - Verifies the accuracy and validity of information submitted to, and updated in the National Directory
  - Ensures that information distributed to distributed directories and client applications has been verified to be accurate
Attestation and Validation

• Implementation Guide (Pre-ballot)
  — http://build.fhir.org/ig/HL7/fhir-directory-attestation

• Hosted Reference Implementation
  — Server: https://national-directory.meteorapp.com/
  — Client: https://national-directory.meteorapp.com/

• Reference Implementation Code (Apache 2.0 license)
  — https://github.com/HL7-FAST/national-directory

• Confluence
  — https://confluence.hl7.org/display/FHIR/National+Directory+Endpoint+Query
National Directory Use Cases

St. James is a hospital network that operates in the State of Connecticut in the process of opening up a new hospital facility with an infirmary and hiring staff for it. As part of this process, they will be deploying and operating a federated copy of the National Care Directory for Connecticut.

**Scenario 1 - Federated Query**

As part of setting up their facilities, they first check the directory to see if the St. James Infirmary at 456 Main Street is already registered, and whether Dr. Camron is licensed by Connecticut.

**Scenario 2 - Dynamic Client Registration**

Administrators at St. James register an account with the National Directory as they wish to be able to submit new data and subscribe to updates.

**Scenario 3 - Subscriptions**

St. James send a subscription request to the National Directory, requesting updates be sent to their local directory. When new data is registered nationally, it is relayed to their state directory.

**Scenario 4 - Attestation**

St. James administrators register the hospital as a new Organization with the federated directory, along with associated Location, HealthcareServices, and Endpoint.

**Scenario 5 - Validation**

After receiving an attestation from an external source, clerks operating the National Directory reach out to the Connecticut State Licensing Board to verify that Allison Camron is licensed to practice medicine in that state.

**Scenario 6 - Restricted Access Data**

Due to the sensitive nature of Women’s Shelters, access to the locations of said facilities are restricted to Social Workers and the devices/apps they use.
National Directory Questions

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- Abigail Watson, MITRE  awatson@mitre.org
- Sean Mahoney, MITRE  smahoney@mitre.org

Track Page:
https://confluence.hl7.org/pages/viewpage.action?pageId=134938786
Da Vinci Plan-Net
(AKA Provider Directory)

Implementation Guide Overview

CMS Interoperability and Patient Access Final Rule

• A Provider Directory API is required by the CMS Interoperability and Patient Access Final Rule
  — Includes:
    Medicare Advantage organizations, state Medicaid and Children’s Health Insurance Program (CHIP) fee-for-service (FFS), Medicaid managed care plans, and CHIP managed care entities
  — Must include, at a minimum:
    • Provider names, addresses, phone #’s and specialties
    • Pharmacy names, addresses, phone numbers, and type
  — Must be updated within 30 calendar days of payer receiving updates

• CMS is strongly encouraging the use of the Da Vinci Plan-Net Implementation Guide as one way to meet Provider Directory API requirement.
What is a Plan-Net?

• Plan-Net defines a FHIR interface to a health insurer’s insurance plans, their associated networks, and the organizations and providers that participate in these networks. In other words, it is a Payer Provider Directory.

• Enables 3rd parties to develop applications through which consumers and providers can query the participants in a payer’s network that may provide services that address their health care needs.
Plan-Net Key Concepts

• This is a query only API (GET) and does not support PUT or POST.
• This implementation guide was written for a US audience and profiles resources from US Core STU 3.1, where available (Practitioner, Organization and Location), and otherwise from R4 (OrganizationAffiliation, PractitionerRole, HealthCareService, Endpoint)
• The Provider Directory API is publicly available and excludes the security protocols related to user authentication and authorization
Targeted Users

• Members
  – Looking for information about providers in their current network

• Potential Members
  – Looking for information about current providers in insurers’ networks

• 3rd Party App Developers
  – Aggregating information from multiple plans
  – Add value by augmenting directory content with additional data or functionality
# Plan-Net Search Types

<table>
<thead>
<tr>
<th>Search</th>
<th>Example</th>
<th>Focal Resource and Field</th>
<th>Qualifications of Search</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 General Search</td>
<td>Pharmacy</td>
<td>HealthcareService.category, HealthcareService.specialty</td>
<td>Location, network, name</td>
</tr>
<tr>
<td>#2 Provider by Name</td>
<td>“Joe Smith”</td>
<td>Practitioner.name</td>
<td>Location, network, specialty/role</td>
</tr>
<tr>
<td>#3 Organization by Name</td>
<td>“Montgomery Cardiology” or CVS</td>
<td>Organization.name</td>
<td>Location, network, specialty</td>
</tr>
<tr>
<td>#3 Provider by Specialty</td>
<td>Cardiologist</td>
<td>Practitioner.qualification, PractitionerRole.specialty</td>
<td>Location, network, name</td>
</tr>
<tr>
<td>#3 Organization by Specialty</td>
<td>Compounding Pharmacy</td>
<td>Organization.qualification, OrganizationAffiliation.specialty</td>
<td>Location, network, name</td>
</tr>
</tbody>
</table>
Plan-Net Profiles
Represented:
Hartford Orthopedics (is a group) providing Orthopedists for Network Acme of CT at Hartford General Hospital and is in-network for Acme of CT’s standard network.
Plan Net Links

• STU1 Update Implementation Guide:

• Zulip Stream:
  — https://chat.fhir.org/#narrow/stream/229922-Da.2BVinci.2BPDex.2BPlan-Net
    (Davinci+Pdex+Plan+Net)

• Hosted Reference Implementations
  — Server: https://davinci-plan-net-ri.logicahealth.org/fhir
  — Client: https://plan-net-client.herokuapp.com/