Use Case Summary

NAME OF UC:

HEALTH PROVIDER SEARCH SERVICE

Sponsor(s): MiHIN	
Date: 11/11/14	
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The purpose of this Use Case Summary is to allow Sponsors, Participants, and other readers to understand the purpose of the Use Case (UC), the value proposition the UC represents, and what the Use Case does, requires, and how the UC operates at a high level. The summary is intended to assist the HIE and HIT Community understand where this UC fits within the overall roadmap for statewide sharing of health information.

This UC Summary has several sections allowing readers to understand the impact of this UC in the following areas: health outcomes, regulation, cost and revenue, implementation challenges, vendor community, and support.

Executive Summary

In this section provide a brief (3-5 sentence) summary of the UC's function and purpose. Also include a brief description of the importance and highlight the expected positive impact from implementation of this UC.

New models of care require health professionals to send and receive health information electronically and securely. For example, Medicare requires primary care providers to follow up with patients within 30 days of hospital discharge and Meaningful Use requires eligible providers and hospitals to securely exchange patient information with other providers to improve patient outcomes and quality of care.

The electronic exchange of health information requires a provider to know where health information is to be sent. Health professionals now have electronic addresses such as Direct Secure Messaging (DSM). The endpoints for electronically sharing information with healthcare providers are collectively called Electronic Service Information (ESI). One health professional needs the ESI of another health professional to share information electronically. Today it is difficult to efficiently locate and/or maintain accurate and reliable Electronic Service Information for contacting health care organizations and health professionals electronically. This challenge hinders the ability to securely exchange health information to improve the quality and efficiency of patient care while decreasing costs. A solution to storing ESI and making it available to providers and the systems they use when they need it is called a Health Provider Directory (HPD).

The statewide HPD contains data from multiple sources including Active Care Relationship files directly from Physicians Organizations, provider data from commercial payers, State and Federal provider data, provider data from HIE Qualified Organizations and other data sources. Commercial data was purchased and utilized in the past but this practice has been discontinued as the data received directly from

Physicians Organizations is of much greater quality and does not cost anything. The data from various sources is updated monthly and is de-duplicated, mapped to the Provider Object Modal (which supports all standards for HPDs), and the data is then imported into the statewide HPD. Data from these sources is obtained using HPD Plus standards as well as by flat file submissions. The HPD also has "read" and "write" application programming interfaces (API) for real-time transactional updates — using these APIs, the HPD is now integrated with the National Plan and Provider Enumeration System (NPPES) for bidirectional, transactional update ability.

Health Professionals are less inclined to use systems such as an HPD if they are required to spend valuable time logging into disparate systems (which each require unique usernames and passwords) to find the information they seek.

The Michigan Health Information Network Shared Services (HIN) statewide Health Provider Search Service eliminates the need for a user to log into a separate application to search for information about a health care organization or health professional. Using the Health Provider Search Service providers are able to compose a Direct Secure Message (DSM), search the HPD for another provider's Direct address, and include that address for the message through a single log-in to their own Health Information Service Provider (HISP) for DSM. The Health Provider Search Service streamlines the health information exchange process saving health professionals time and creating workflow efficiencies. Furthermore, these efficiencies are likely to encourage more widespread health information exchange and care coordination for transitions of care, which in turn supports an Eligible Hospital (EH)/Critical Access Hospital (CAH) and Eligible Provider (EP) in attaining Meaningful Use transitions of care attestation.

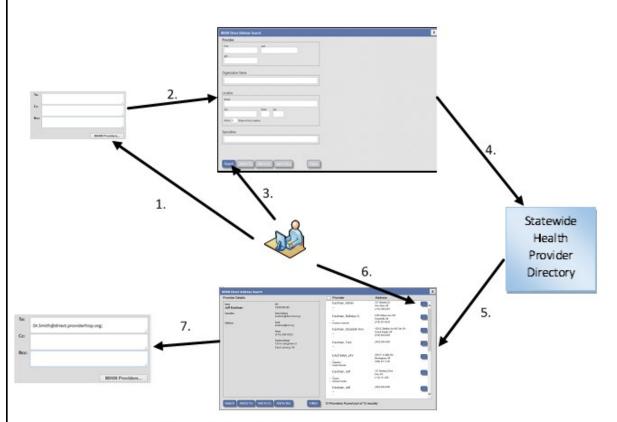
MiHIN statewide Health Provider Search Service window is easily integrated into the typical web client deployed by a Health Information Service Provider (HISP) vendor. A person utilizing the HPD Search Service can log into their HISP web client and search for the Direct Secure Message address of another health care organization or health professional to support health information exchange using a Direct Secure Message (DSM).

The HPD Search Service, hosted by the HIN, displays a Health Provider Search Service window. The HISP used by a health professional can access the HPD data to conduct the search and populate the Health Provider Search Service window with the results obtained from the search, such as the Direct address of another health professional

The HPD contains data from multiple sources, including data directly from Physicians Organizations (the highest quality source), State and Federal provider data (including the National Plan and Provider Enumeration Service or NPPES), accumulated provider data from repositories, (for example, from HIEs, RHIOs and other states' organizations) and commercial data sources. This data is regularly deduplicated, mapped and imported into the HPD, generally on a monthly basis. In the future these updates will be transactional.

Diagram

In this section, provide a diagram of the information flow for this UC. The diagram should include the major senders and receivers involved and types of information being shared.



The Use Case includes the following steps as illustrated above:

- 1. User composing a Direct Secure Message clicks on the "Providers..." button
- 2. The HISP Web Client opens the Health Provider Search Service user interface (UI).
- 3. The user fills in the search criteria on the Health Provider Search Service UI and clicks on the Search button.
- 4. The Health Provider Search Service Module makes an API query call into the HPD.
- 5. The data returned from the HPD API query is used to populate the Health Provider Search Service UI.
- The user reviews the results, scrolls through the list of providers, makes a selection and clicks on the "Add to..." button on the Health Provider Search Service UI.
- The data returned from the Health Provider Search Service is used to populate "To", "Cc" or "Bcc" fields in the HISP Web Client DSM

Footnote: Ordinarily this would be implemented in the HISP Client but in some cases it should be implemented using a secure web site.

Regulation
In this section, describe whether this UC is being developed in response to a federal regulation, state
legislation or state level administrative rule or directive. Please reference the precise regulation,
legislation, or administrative act such as Public Law 111-152 (Affordable Care Act, Public Law 111-5;
Section 4104 (Meaningful Use), 42 CFR 2 (substance information), MCL § 333.5431 (Newborn
Screening), PA 129 (standard consent form), etc.
Additionally, provide information if this UC will allow Eligible Professionals/Providers (EP) or Eligible
Hospitals (EH) to meet an attestation requirement for Meaningful Use.
Legislation/Administrative Rule/Directive
⊠ Yes
□ No
☐ Unknown
Name or number of legislation, rule, directive, or public act
Public Law 111-152 (Affordable Care Act)
Public Law 111-5; Section 4104 (Meaningful Use)
Meaningful Use:
□ No
□ Unknown

Cost and Revenue

In this section provide an estimate of the investment of time and money needed or currently secured for this UC. Be sure to address items such as payer incentives, provider incentives, revenues generated (e.g. SSA transaction payments) or cost savings that could be realized (i.e. reduction of administrative burden).

As information is known or available, provide information on the resources and infrastructure needed to move this UC into production.

Fees

There are no fees to utilize the Health Provider Search Service for EHNAC-DTAAP (DirectTrust) accredited HISPs that integrate the ability to call the service from within their HISP.

Incentives

In the past MiHIN has made \$5K-\$10K of incentive funding available to HISP vendors to cover their costs for integrating the ability to call the service from within their HISP. This funding from MiHIN is not available to every HISP nor are these incentives always available. Data sharing organizations whose HISP vendor is interested in using the Health Provider Search Service should reach out to help@mihin.org and state their interest in the Health Provider Search Service.

Implementation Challenges

In this section, as information is known or available, describe challenges that may be faced to implement this UC. Be sure to address whether the UC leverages existing infrastructure, policies and procedures, ease of technical implementation, or impacts current workflows (short term and long term).

Several so-called "HPD" standards are available and each has a different data model. For the statewide HPD, a "superset" data model was developed which harmonizes all of these standards into one model to support the population of a statewide HPD. The standards used and improved upon include HPD Plus, ModSpec and Federated HPD standards — these standards are not fully finalized and have limited adoption rates in the industry; however the statewide HPD "superset" model closes gaps in these standards.

ModSpec-based federation is technically challenging, time consuming, expensive and inefficient. Furthermore, ModSpec-based federation does not easily scale to large numbers of directories. To mitigate this problem, MiHIN has developed and offers this low cost federation capability called the HPD Search Service described in this Search HPD Use Case Summary.

The goal for most organizations is to have a federated provider directory that supports submission, update and query of information on health care organizations and health professionals with other directories. The statewide HPD has the ability to federate. Systems and services with API capabilities can connect to the statewide HPD via published APIs; systems and services without API capabilities can

interact with the HPD via flat-file exchange. People can interact with the HPD which are assigned to named, trusted users.	using portal/GUI accounts

Vendor Community Preparedness

In this section, address the vendor community preparedness to readily participate in the implementation of this UC. Speak to whether this UC will utilize current or future technical capabilities of the vendor products. If this UC requires new functionality at the vendor level provide information as known to the timeliness of when product updates may be available and any potential costs to the HIE community.

Multiple competing Healthcare Provider Directory (HPD) standards are under development and have criteria for how such data is stored and shared in EHRs.

Utilization of federated provider directories is in its early stages. Products used to update and access directories via Federation may not have the necessary capabilities to enable users to query for data outside the standard data model. Vendor display capabilities may also be limited.

Products supporting Federated provider directories are likely to be more broadly supported in 2015 to early 2016 based on vendor product development cycles.

Support Information

In this section, provide known information on the support for this UC.

Support can come from multiple levels (Governor, Federal or State Legislative, MI HIT

Commission, Michigan State Departments, CMS/ONC/CDC, MiHIN Board, Qualified Organizations, Payer Community, Interest Group [ex: MSMS, MHA], or Citizen support).
Please note any concerns or oppositions with the Use Case.
Political Support:
□Governor
□Michigan Legislature
☑MDHHS or other SOM Department
⊠cms/onc
□CDC
⊠MiHIN Board
Other: Other states who are interested in participating in the MiHIN statewide HPD service

Concerns/Oppositions: None noted.
Sponsor(s) of Use Case Who are the major sponsors of the use case?
MDHHS MiHIN Shared Services Data Sharing Organizations Payers/Health Plans HISP vendors who have already integrated the HPD Search Service into their HISP client
Metrics of Use Case In this section, define metrics for the Use Case to be successful.
Number of HISP applications having integrated the HPD Search Service Number of searches made to the HPD Search Service % change in number of Direct Secure Messages sent after each HISP implementation with HPD Search Service
Other Information This section is to afford the sponsor(s) an opportunity to address any additional information with regard to this UC that may be pertinent to assessing its potential impact.