Use Case Summary

NAME OF UC:

HEALTH PROVIDER DIRECTORY - BASIC QUERY

Sponsor(s): MiHIN, MDHHS (Tina Scott)

Date: 11/11/14

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 reimburses providers for following up with complex patients within five days of discharge and Meaningful Use requires Eligible Providers and Eligible 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 electronically. Physical address, phone number, fax number, and traditional email are not useful in any way for this electronic exchange. Health professionals now have electronic addresses such as accounts for Direct Secure Messaging (DSM) provided by their EHR or a separate Direct "Health Information Services Provider" (HISP) vendor. The endpoints for electronically sharing information between healthcare providers are collectively called Electronic Service Information (ESI). One health professional needs the ESI of another health professional to share information electronically. In the past it has been difficult to efficiently locate and/or maintain accurate and reliable Electronic Service Information for contacting health care organizations and health professionals electronically. This challenge has hindered the ability to securely exchange health information to improve the quality and efficiency of patient care while decreasing costs.

This Use Case addresses that problem because it enables providers and organizations to obtain the necessary information to communicate electronically and securely with providers by retrieving ESI from the Statewide Health Provider Directory.

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The Statewide Health Provider Directory (HPD) Basic Query Use Case gives providers the ability to easily obtain up-to-date information on where to send information electronically to other health care organizations and health professionals for the purposes of meeting operational, treatment or payment obligations as defined in the HIPAA Privacy and Security Rules. The information available from the HPD includes electronic addresses (electronic service information) such as Direct addresses and can also include name, address, specialty and credentialing information, as well as traditional contact information such as phone and facsimile numbers.

When a basic query is sent to the statewide HPD, the HPD returns a standard report which contains contact information about the health care organization(s) and health professional(s) meeting the search criteria, and most importantly, the Electronic Service Information for providers meeting the search criteria.

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 Health Information Exchange (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 bi-directional, transactional update ability.

The HPD Basic Query Use Case helps Eligible Hospitals/Critical Access Hospitals and Eligible Providers meet Meaningful Use requirements to securely exchange patient information with other providers. The value of Direct Secure Messaging and a Statewide Provider Directory includes care coordination across organizational boundaries, interoperability of information (exchange without interfaces), electronic exchange of structured clinical information, and support for clinical quality measure (CQM) reporting.

The Statewide Health Provider Directory was built for the State of Michigan and is maintained by the Michigan Health Information Network Shared Services (MiHIN).

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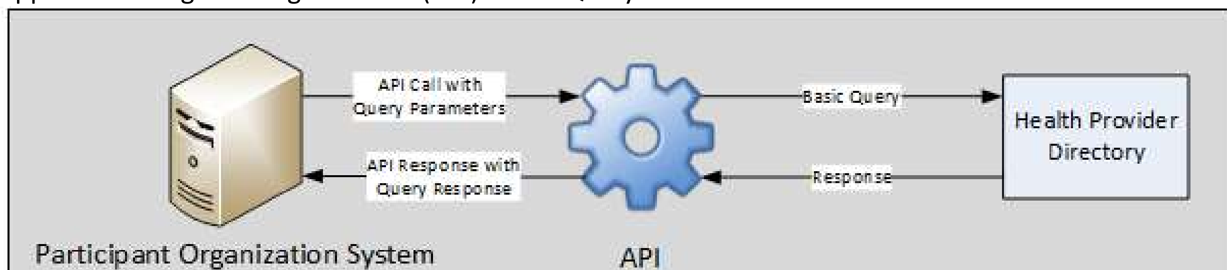
Diagram
In this section, provide a diagram of the information flow for this UC. The diagram should include the major senders and receivers involved and types of information being shared.

MiHIN provides two methods for Participating Organizations to submit a Basic Query to the statewide Health Provider Directory:

Web User Interface based Query

Application Programming Interface (API) based Query



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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 allows 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:

☒ Yes
☐ No
☐ Unknown

Transitions of Care

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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.

Participation in the HPD is by named users who receive portal accounts requiring agreement to an End-User License Agreement or via API accounts for system-system integration.

Fees

MiHIN provides accounts for accessing the HPD to participants in this use case for an annual fee that is slightly above MiHIN's cost for licensing the accounts. The fees established in the Health Provider Directory (HPD) account price list apply to this UC. Monthly fees are based on user accounts for the following user roles/services:

- Population Administrator (portal account) – approximately $300/account/month or lower
- Organization Administrator (portal account) - approximately $75/account/year or lower
- Individual Provider (portal account)- approximately $25/account/year or lower
- API Account (system to system account) - approximately $300/account/month or lower

Hourly fees may apply to time associated with building custom reports.

Fees between MiHIN and the Data Sharing Organization and associated payment terms are defined in one or more Statement of Works between MiHIN and the Data Sharing Organization through the master services section in the Data Sharing Organization Agreement executed by the parties.

Incentives

Participation in the statewide HPD facilitates other use cases required for Meaningful Use. Meaningful Use incentives are available to Eligible/Critical Access Hospitals and Eligible Providers who exchange summary of care documents to support transitions of care (TOC). The TOC incentives are based on an EH/EP's ability to identify members of a care team and distribute a Direct message/care summary to them using Direct Secure Messaging protocols and standards. By submitting provider directory data to MiHIN, the EH/EP makes the Direct addresses of their providers available to other members of the care team to support the exchange of TOC documents via Direct Secure Messaging, thus meeting requirements for the incentives.

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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 using portal/Graphical User Interface (GUI) accounts which are assigned to named, trusted users.

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 utilizes 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 nascent. 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 typical vendor product development cycles.

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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
☒HIT Commission
☒MDHHS or other SOM Department
☒CMS/ONC
☐CDC
☒MiHIN Board
Other: Other states who are interested in participating in the HIN statewide HPD service

Concerns/Oppositions: The main opposition is that organizations have stood up or plan to stand up their own provider directory. The problem with this, in addition to massive redundancy and duplication of effort, is that these “silo” provider directories do not easily communicate with all of the other directories creating an enormous “federation” gap in addition to potentially intractable duplication issues. Instead of hundreds or thousands of small directories which never really synchronize, a few large, centralized directories are manageable and are the preferred approach.

Sponsor(s) of Use Case

Who are the major sponsors of the use case?

MDHHS
MiHIN Shared Services
Data Sharing Organizations

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Metrics of Use Case

In this section, define metrics for the Use Case to be successful.

Number of successful queries
Number and variety of parties submitting queries
Quantity of ESI in HPD and % of HPD entities and persons having ESI
Quantity of Direct Secure Messaging addresses in HPD Michigan Health Information Network Shared Services (MiHIN)
% Change in adoption of HPD capabilities among Data Sharing Organizations
% Change in HPD query volume
Direct Secure Messages sent/received (volume) as related to HPD participation

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.

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