Query HIE

Introduction to Query and Retrieve functionality

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Today’s Presenters

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1. Query HIE Introduction

2. Direct Messaging versus Query HIE

3. Query HIE Functionality

4. Query HIE Networks
   - Carequality
   - Commonwell

5. HIway Adoption and Utilization Support (HAUS) Services
There are two HIE methods to electronically share vital patient information between care providers to inform decision making at the point of care.

**Direct Messaging: a.k.a. Directed Exchange**

- Used by referring providers to send patient information directly to another provider to coordinate patient care via Direct Messaging.
- Commonly used to coordinate planned transitions of care.

**Query HIE: a.k.a. Query-based Exchange**

- Used by providers to query (search) and retrieve patient information that was made accessible by other care providers who have seen the patient.
- Rapid expansion of utilization, and is typically used to support unplanned care, but is increasingly be used for planned care as well.
Query HIE helps clinicians to Query, Select, and Retrieve information made accessible by other healthcare providers via a Query HIE Network.

**Query**
Locate a patient's records across different EHR and other clinical systems.

**Select**
View the list of available records and select the relevant records to view.

**Retrieve**
Securely access the selected clinical data from within the provider's own EHR system.
Query HIE Functionality (Preferably integrated into EHR)

Sending

Receiving

Track whether patients agreed to make their health information records accessible

Make patient information accessible on the network

CONSENT

ACCESSIBLE

QUERY

RETRIEVE

Query and select any relevant patient records accessible on the network

Retrieve and reconcile the patient information within the providers’ EHR system
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**Direct Messaging vs Query HIE Use Cases**

*(Left click mouse on a use case to zoom in)*

**Direct Messaging**
- Primary care provider sends an electronic care summary to a specialist when referring a patient.
- Specialist sends an electronic care summary back to the primary care provider upon completion of specialist care.
- Provider sends immunization information to a government health agency to adhere to public health reporting requirements.

**Query HIE**
- An emergency room physician uses Query HIE to find relevant patient information and medical records to determine the treatment plan for a patient.
- An OB GYN uses Query HIE to obtain the relevant medical history of a pregnant patient, to enable decisions when providing care to the patient and unborn baby.
- A neurologist uses Query HIE to retrieve a patient's medical records, to select migraine medication that won't interfere with other medications the patient uses.

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**Planned Care**

**Unplanned and Planned Care**
**Direct Messaging vs Query HIE**

<table>
<thead>
<tr>
<th>Direct Messaging</th>
<th>Query HIE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providers can use Direct Messaging to <strong>send</strong> messages with patient information to another health professional</td>
<td>Providers can use Query HIE to <strong>search and retrieve</strong> the accessible patients’ medical history recorded by other providers</td>
</tr>
<tr>
<td>Relies on providers linking to a <strong>Direct Messaging Network</strong></td>
<td>Relies on providers linking to a <strong>Query HIE Network</strong></td>
</tr>
<tr>
<td><strong>Sending provider can send</strong> referrals, laboratory results, discharge summaries, and patient care orders securely in encrypted messages</td>
<td><strong>Receiving provider can request</strong> patient records made accessible on a Query HIE Network, including laboratory results, medications, etc.</td>
</tr>
<tr>
<td>Receiving provider will <strong>receive data from a single provider</strong>, offline, and at the time the data is sent</td>
<td>Receiving provider will <strong>receive data from zero to multiple providers</strong>, online, and in real time when the query is made</td>
</tr>
<tr>
<td>Commonly used to coordinate <strong>planned transitions of care</strong> between two healthcare providers</td>
<td>Typically used when a patient sees a provider for <strong>unplanned care</strong>, or is a <strong>new patient</strong>, but also be used during <strong>planned care</strong> to find additional info</td>
</tr>
<tr>
<td>Patient must provide <strong>consent before a provider can send their patient’s record to other providers</strong> via HIE</td>
<td>Patient must provide <strong>consent before a provider can make their patient’s record accessible for Query HIE</strong></td>
</tr>
<tr>
<td>Referred to as <strong>push method</strong>. Sending provider drives what information the other provider will receive</td>
<td>Referred to as <strong>pull method</strong>. Receiving provider drives the search, selection, and retrieval of information</td>
</tr>
</tbody>
</table>
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Sending Provider: Enable Query HIE to make patient info available on the network

**Query HIE Settings**

- **Enable Query HIE?**
  - Yes: 10/14/2019
  - No

**Status:** Query HIE Enabled

- Medications
- Medical History
- Lab Results

**EHR system wide settings**

- Query HIE enabled or Disabled?
- What type of info may be shared?
Patient based settings

What info can be made accessible?

What info may be retrieved?

Who can access it?
Receiving Provider: Queries the network and selects matching patient records

Network finds and matches patient records

Provider must confirm each match

Provider can select which records are relevant
Receiving Provider: Retrieves and reconciles the selected patient records

Network retrieves selected records

Provider can review the information

Provider can reconcile the information in their EHR
Record Locator Service (RLS)

RLS is a service that can assist in making more refined queries.

RLS offers functionality to find records based on search criteria, such as geographic location, person’s ID, data type, and other information.

Understand the methods, scope and range of an RLS:

- Users can select a geographic area and/or a range of healthcare communities.
- RLS identifies the locations within this scope that have patient information.
- Users select the applicable locations from which to retrieve information.

RLS services don’t guarantee the accuracy or completeness of results:

- An RLS may not have access to all available records.
- An RLS may or may not have data outside the scope.
- An RLS may report records that aren’t accessible via Query HIE.
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To use Query HIE, a provider must become a member of a Query HIE Network.

Query HIE Networks exchange patient information between EHR and other clinical systems from vendors that are members of the network.

The information is not stored on the network itself.
Available Query HIE Networks

EHR Vendors’ Query HIE Networks

carequality

commonwell®
HEALTH ALLIANCE
Technically not a standalone Query HIE Network
- Carequality members use the framework to implement Query HIE in their clinical system

Set of Standards, Legal Documents and Definitions
- Rules of the road allowing inter-network traffic
  - Members may have custom rules
- Makes it easy to Find, Select and Access a Patient’s Record
- Access to value-added services, such as Surescripts National RLS (NRLS)
- Roles, Rights and Responsibilities of the Participants
  - Security, Privacy, Authorization
  - Messaging Standards
  - Minimum Obligations
    - No unreasonable conditions that limit exchange, Permitted uses, Access

To learn more about Carequality, click here.
Information Flow

Carequality Information Flow

Select Patient in EHR

Search Type?

Organization Directory

Find organization in CQ Directory

Query records in explicit organization connection(s)

Retrieve document meta-data

Retrieve all or specific documents

Import and store documents in patient chart

Patient enabled for future visits

Query records from patient address and provider city/state/zip

Query records within a radius of a specified zip code or address

Geolocation
What is commonwell®
HEALTH ALLIANCE

A nationwide Query HIE Network

- Started based on its own information exchange platform
- Now offers members the option to connect to the CareQuality Framework
- Provides tools to add value
  - Enrollment
  - Commonwell RLS (Record Locator Service)
    - Patient Linking Logic for faster queries
  - Broker Service
    - Advanced Patient Matching
    - Broadcast queries
    - Aggregated responses
- These tools can be integrated into an EHR and other clinical systems
  - Requires vendor project

To learn more about Commonwell, click here
Commonwell Information Flow

Patient Link

Match local EHR person to CW person or create new

Network Link

Match local and remote patients referencing same person

Enroll patient

Select patient in EHR

Search for matching person in Commonwell

Patient enrolled in CW?

Retrieve document meta-data

Retrieve all or specific documents

Import and store documents in patient chart

Patient enabled for future visits
Commonwell – Carequality Interface
To learn more, visit the **Query HIE Toolkit** on the **MassHiway.net** website
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5. HIway Adoption and Utilization Support (HAUS) Services
Mass HIway offers HAUS Services to assist organizations in the deployment of electronic health information exchange to enhance care coordination

HAUS Account Management Team assists organizations with

- Technical Connectivity Assessment
- New or improved utilization of HIE in care coordination, through the development and implementation of HIE-supported use cases
- HIE Technology and Workflow Project Plan

Contact the team to request Query HIE Assistance

- Education and advice for care providers who seek to adopt Query HIE
- Assistance with development of Query HIE Use Cases
- Guidance and training for developing the required workflows for Query HIE
- Workshops pertaining to Query HIE

Review the Query HIE Toolkit on the HIway website, here
Mass HIway - Account Management Team

Front-line Mass HIway support to get you enrolled, connected, and using Direct Messaging

- Enrollment
- Use case identification
- Trading partner identification
- Onboarding support
- Training and workflow implementation
- HIE best practices

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To learn more, visit the MassHIway.net website

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Thank you!

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