Commonwealth of Massachusetts

Executive Office of Health and Human Services



Query HIE

Introduction to Query and Retrieve functionality



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



Query HIE versus Direct Messaging



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.



Principles of Query HIE



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

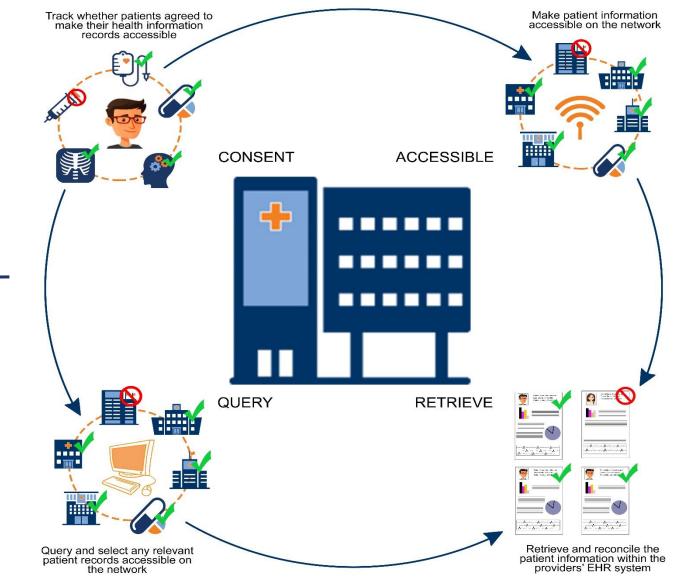


Sending

Receiving

Query HIE Functionality (Preferably integrated into EHR)









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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

Planned Care

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

Unplanned and Planned Care



Direct Messaging vs Query HIE



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



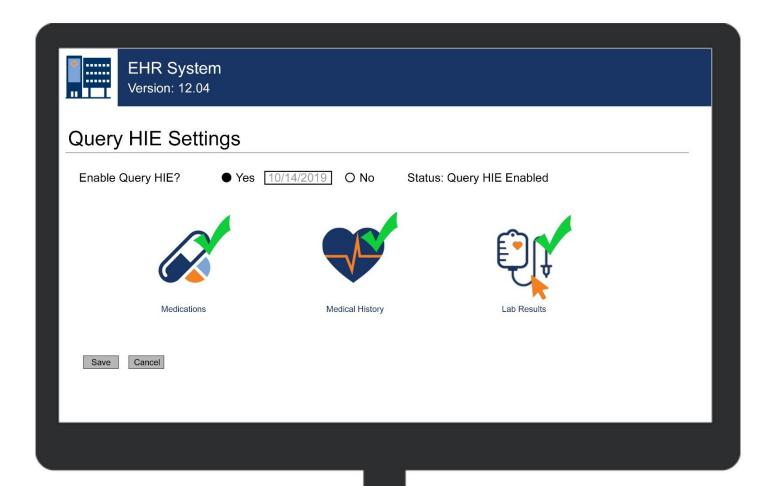


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Sending Provider: Enable Query HIE to make patient info available on the network





EHR system wide settings

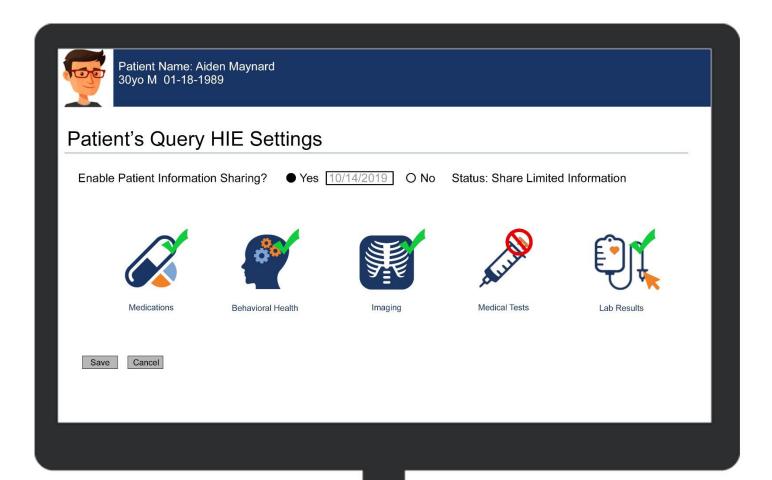
Query HIE enabled or Disabled?

What type of info may be shared?



Sending Provider: Must ask patients for consent





Patient based settings

What info can be made accessible?

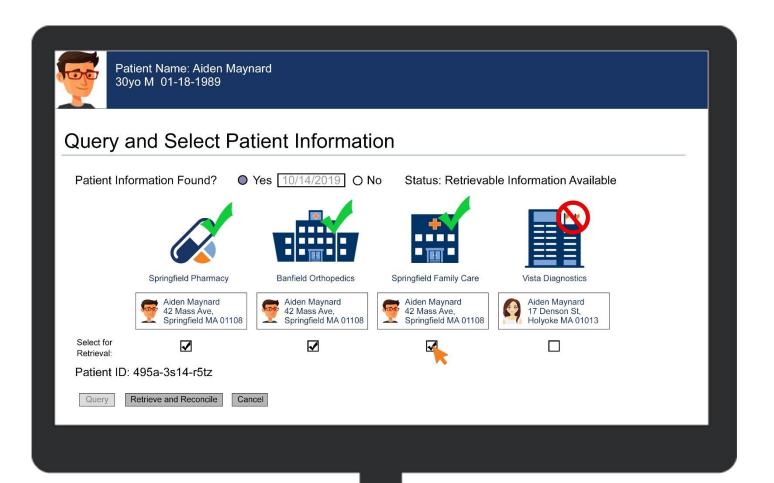
What info may be retrieved?

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





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.

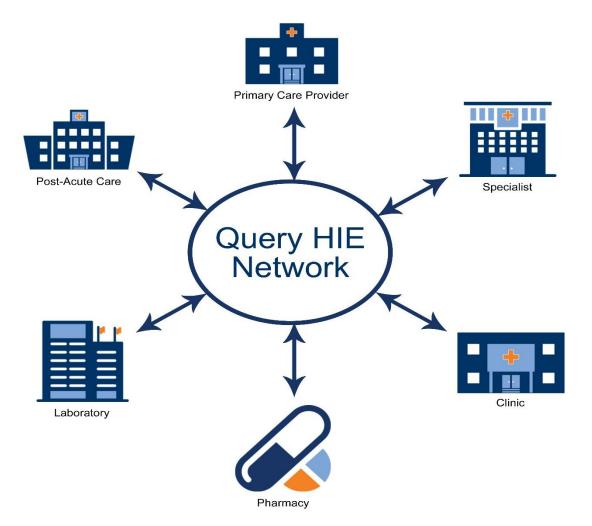




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To use Query HIE, a provider must become a member of a Query HIE Network



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





carequality



EHR Vendors' Query HIE Networks



Framework to support Query-based Exchange of documents

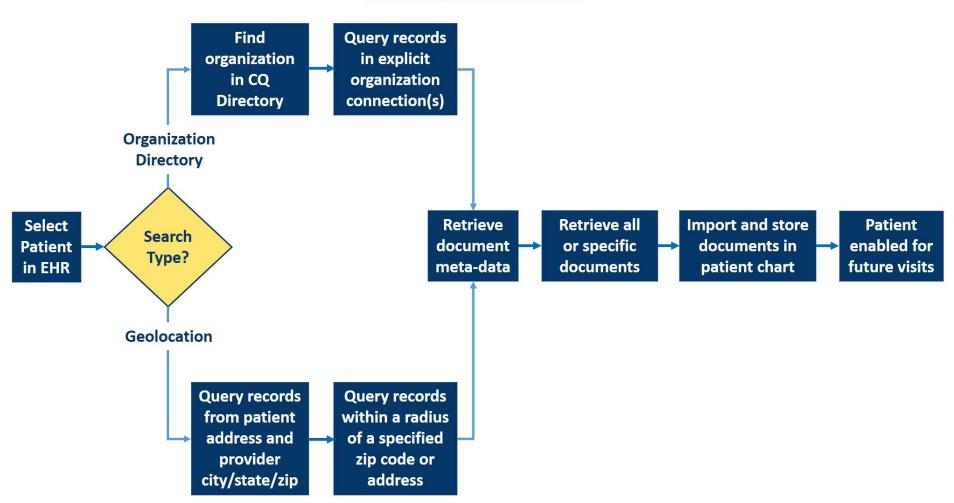
- Technically not a standalone Query HIE Network
 - Carequality members use the framework to implement Query HIE in their clinical system
- Set of Standards, Legal Documents and Definitions
 - Rules of the road allowing inter-network traffic
 - Members may have custom rules
 - Makes it easy to Find, 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 <u>here</u>.





Carequality Information Flow





A nationwide Query HIE Network

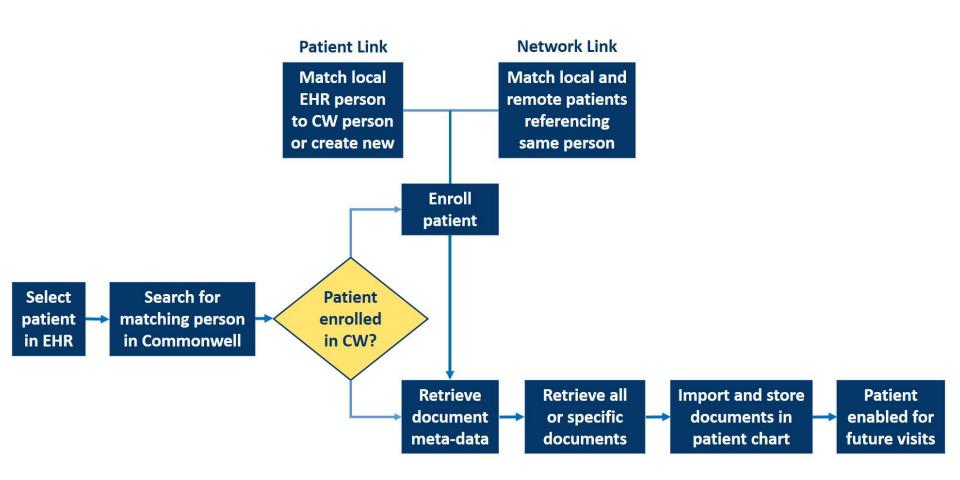
- Started based on its own information exchange platform
- Now offers members the option to connect to the CareQuality Framework
- Provides tools to add value
 - Enrollment
 - Commonwell RLS (Record Locator Service)
 - Patient Linking Logic for faster queries
 - Broker Service
 - Advanced Patient Matching
 - 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





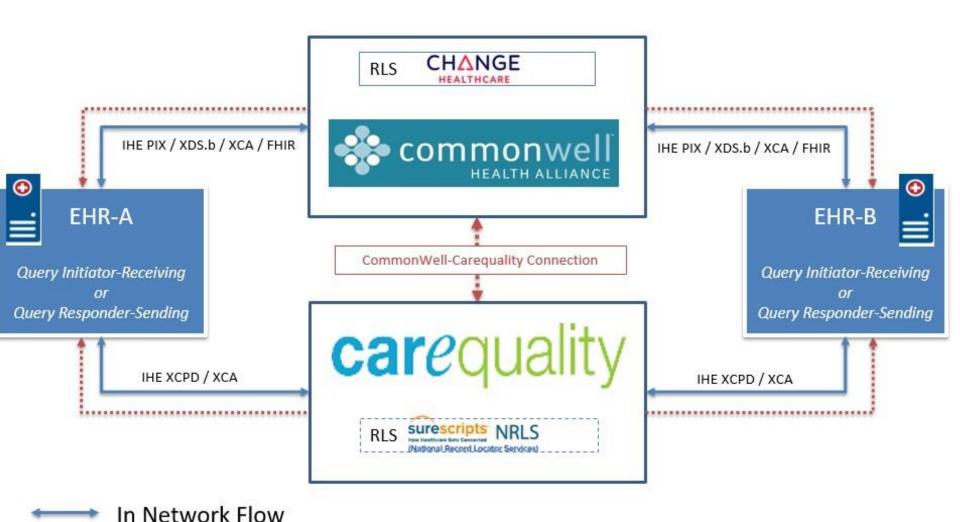
Commonwell Information Flow





Commonwell – Carequality Interface





CommonWell-Carequality Connection Flow



To learn more, visit the **Query HIE Toolkit** on the **MassHlway.net** website



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QUERY HIE TOOLKIT

View Edit Delete Revisions

This toolkit provides an overview of Query HIE to assist providers in adopting this Health Information Exchange (HIE) method, which leverages the Query-based Exchange method to improve health care. The content was developed with input from the 2019 Query HIE Learning Collaborative.

Introduction Use Cases Functionality Query HIE Networks Vendor Status Directory

Directory Workflows FAQ

INTRODUCTION

Health Information Exchange (HIE) allows the sharing of vital patient information to inform decision making at the point of care. There are two methods of HIE that can be used to electronically share information between care providers.

Directed Exchange: can be used by a referring provider to send patient information directly to another provider to coordinate patient care via Direct Messaging. This commonly used HIE method is mostly used to coordinate planned transitions of care.

Query-based Exchange: can be used by a provider to search for (query) and retrieve patient information that was made accessible by other care providers, public agencies, and other sources. This method can be used to obtain data for planned and unplanned care.

Query HIE uses the Query-based Exchange method to exchange information between care providers. As participation in Query HIE is rapidly expanding, this toolkit focuses on explaining the principles of Query HIE to exhange information from provider-to-provider.

To learn more about Directed Exchange, review the Direct Messaging page. The last section on this page provides an overview of the differences between the two methods.

OUERY HIE

The principle of Query HIE is simple. This HIE method helps clinicians to Query, Select, and Retrieve information made accessible by other healthcare providers via a Query HIE Network.











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HIway Adoption & 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 <u>Query HIE Use Cases</u>
- 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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Mass HIway - Website and Newsletter



To learn more, visit the **MassHlway.net** website

- Select Resources for additional info, or News for on demand presentations
- Sign up to receive the HIway newsletters and notices





WELCOME TO THE MASS HIWAY

The Mass Hlway, the Massachusetts Health Information Exchange (HIE), is a secure Health Information Services Provider (HISP). The Hlway is available to all healthcare systems in the Commonwealth, and can be used to cost-effectively improve care coordination, care quality, patient satisfaction, and public health reporting via Direct Messaging. To learn more, click here.











TO MASS HIWAY NEWSLETT



Mass HIway - Contact Information



Thank you!

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