MEDICOM

FEDERATED SEARCH

Frequently Asked Questions

About Federated Search

Industry Gap

Health Systems across the United States are experiencing gaps in administrative, operational and clinical processes caused by disparate silos of patient data. The inability to exchange medical images, reports and orders within the network of providers that care for a common patient often causes care delays, repeat scans, provider dissatisfaction and patient friction. Healthcare workers spend valuable time locating and retrieving prior health data, frequently relying on antiquated technologies such as CDs, faxes, and VPNs.

Medicom Solution

Automated Federated Search reduces the burden on staff to manually request prior imaging from external organizations. The start of a clinical workflow and the corresponding HL7 message, such as when a patient is scheduled for an appointment (SIU) or an order is placed (ORM), triggers an automated search on the network for relevant priors determined by procedure mapping based on modality types, body parts and keywords of the study description. All organizations that have authorized Automated Federated Search will receive the search. For patient safety, Automated Federated Search will only return data if a unique match for the patient demographics is found and if the matching patient has relevant priors. The process can be further automated with retroactive order generation for outside (foreign) studies and reconciliation into PACS.

Manual Federated Search gives care team members the ability to quickly locate and access prior medical images and reports, even when the previous location of the imaging is unknown. When care teams are able to query the Federated Network on the spot, health systems can provide informed care for patients on short notice.

Health Systems that use Medicom's Automated Federated Search and Manual Federated Search experience:
- Cost savings related to resources spent locating and retrieving prior exams
- Reallocation of financial resources spent on CDs, VPNs and other legacy solutions for sharing and exchanging patient data
- Reduction in the amount of repeat exams
- Increased staff satisfaction
- Improvements in quality and efficiency of care

Medicom developed the first peer-to-peer network for bi-directional image exchange, providing interoperability for health systems utilizing Medicom Connect, formerly Medicom Health Information Network.

Federated Search FAQs

Q: We're a Sponsored organization on the Medicom Network, why should we opt in to Automated Federated Search or Manual Federated Search?

Medicom allows Medicom Connect customers to opt into Automated Federated Search, Manual Federated Search, or both.

- Participating in Automated Federated Search allows health systems to retrieve studies automatically when a mutual patient is scheduled at that organization. Medicom Connect users process significantly less requests for priors, decreasing the risk of information blocking and freeing up staff resources.
- Participating in Manual Federated Search will reduce the number of requests for priors. This will prevent unnecessary disruptions in work and ensure patients receive timely care.
- Medicom's Audit Trail and HIPAA Log will provide insights on when and where data is being transferred.
- Bidirectional sharing and Electronic Requests is available, regardless of participation in Automated Federated Search or Manual Federated Search.

Q: How does Automated Federated Search work?

Automated Federated Search utilizes HL7 messages received from the paying customer's EHR or RIS to locate and retrieve related data for an upcoming appointment or procedure.

1. A patient is scheduled for an appointment: The appointment priority level (STAT, ASAP, Routine, etc.) is used to either immediately issue a network broadcast query or wait until a set period of time before the scheduled appointment date.
2. Schedule message generated: Information is gathered from an HL7 order/scheduling message or through API integrations using HL7 standards.
3. Network query: Medicom service automatically broadcasts a federated query to Medicom Network providers.
4. Processed query: All Trusted Contacts who have authorized Automated Federated Search will receive the query.
5. Matched record: For patient safety, Automated Federated Search will only return data if a single, distinct match is returned from an external system for the patient and the patient has relevant priors.
6. Reconciliation: The process can be further automated with retroactive order generation for outside/foreign studies and reconciliation into PACS.

According to Dr. Cheryl Petersilge, MD, MBA, "[Medicom's] model most closely meets the functionality required for the free flow of information among healthcare providers, reducing information gaps and supporting information flow across the care continuum."

Federated Search FAQs

Q: How does Manual Federated Search work?

Using Medicom's Manual Federated Search, a user can find prior imaging even when the location of priors is unknown. First, using the patient's name, sex and DOB, the user searches authorized organizations on Medicom Connect. Then, studies for that unique patient are displayed and the user selects the studies needed for continuity of care. Last, the selected studies are securely retrieved from the external organization.

Medicom was the first to enable automation when collecting prior images and reports and is the ONLY solution to offer a Manual Federated Search - providing the ability to locate and access medical images and reports.

Q: How does Automated Federated Search and Manual Federated Search meet HIPAA laws? Are we allowed to let external entities query and retrieve our DICOM archives?

Health systems utilizing Federated Search to retrieve and access patient data from other health systems are exercising continuation of care and remain in compliance with HIPAA regulations. Medicom executes a BAA with each of the user-entities and all sign a common terms of service agreement. Automated Federated Search is driven by a scheduled appointment or ordered procedure and therefore validated by the target system's patient schedule. In addition, there are detailed user query disclosures and modification logs.

Medicom is designated as a non-covered entity under HIPAA and HITECH rules (45 CFR 160.103). Medicom's data transfer protocol exceeds HIPAA and HITECH requirements for ePHI, allowing users to be compliant with applicable rules (45 CFR 160.302-.318). Unlike most cloud offerings, we do not store diagnostic data.

Q: What about Patient Consent? Am I allowed to share a patient's data with another facility without a release of information signed?

Yes - HIPAA specifically allows for the sharing of PHI for continuity of care. From the Department of Health and Human Services, "if the disclosure of PHI is for the health care operations of the recipient covered entity, the Privacy Rule requires that:
- Each entity either has or had a relationship with the individual who is the subject of the PHI being requested
- The PHI pertains to that relationship
- The disclosure is for a health care operation listed in paragraphs (1) or (2) of the definition of health care operations or for health care fraud and abuse detection or compliance. 45 CFR 164.502(a)(1)(ii); 45 CFR 164.506(c)(4)."

Federated Search FAQs

Q: How does Medicom Patient Matching work?

An exact match is required and is based upon three points of identification - name, date of birth and sex. If there are duplicate matches or no match at all, users are prompted to add related study data or additional patient identifiers when doing a Manual Federated Search. Automated Federated Search will retrieve data ONLY if there is a unique patient match.

Q: Are other organizations allowing Automated Federated search and Manual Federated Search?

Many Medicom Connect users opt in for both Automated Federated Search and Manual Federated Search routinely. Automated Federated Search and Manual Federated Search drastically improve and enable interoperability by allowing organizations to share health data like images, studies and related documents more efficiently.

Q: How will Federated Search impact my patients?

Patients benefit from interoperability between health systems, allowing them to receive more specialized care at a greater range of care choices in their communities and across the nation. As a result of this evolving dynamic of care, healthcare organizations are striving to increase interoperability and find ways to keep costs down in the new value-based model for health services. Organizations that adopt interoperability, especially through Federated Search, lead their network in quality and efficiency of care and have a higher rate of patient satisfaction. Many value-based reimbursement models award payments, or reimbursements, for reaching a threshold of quality care, including rates of patient satisfaction.

Q: How do I make sure we are only allowing access to those that need this data for continued treatment of the patient?

Automated Federated Search is triggered by an order placed or an appointment scheduled in the EHR or RIS, and therefore validated by the covered entity's scheduling or ordering system. An end user is not involved in searching for patient data in the Automated Federated Search workflow. When performing a Manual Federated Search, the minimum search criteria is three unique patient identifiers - name, DOB and sex. Entering an internal patient ID will automatically meet the minimum search criteria. Permission levels are set by each organization and only users with the highest level of data privilege are allowed to perform a Manual Federated Search.

All queries are captured in HIPAA logs that meet HIPAA compliance standards, typically including:
- Who accessed the network
- What time they accessed the network
- What actions they performed
- What documentation or data they viewed regarding the patient

Federated Search FAQs

Q: What if we have patient populations with sensitive data that need to be excluded from searches?

We know there are unique circumstances where certain patients need to be excluded from automated and manual searches to limit unwanted attention and enhance their privacy and security. Using External Retrieve Search Limiters, you can exclude specific patients from searches triggered by external organizations. **Common examples of patients that may require exclusion are:**

- Public figures
- High level business executives
- Politicians
- Professional athletes
- Celebrities

Q: How do we opt in to be included in Manual and/or Automated Federated Search with our contacts on the Medicom Network?

As a paying customer or a sponsored partner on Medicom Connect, you are in control of the level of access you grant other organizations.

1. **To allow a Contact (external organization) on Medicom Network to include you in an Automated Federated Search:**
   a. Query and retrieve (Q/R) must be enabled for the DICOM node
   b. Automated Federated Search permission will be provisioned for the Contact
2. **To allow a Contact (external organization) to include you in a Manual Federated Search:**
   a. Query and retrieve (Q/R) must be enabled for the DICOM node
   b. The Search and Retrieve privilege will be provisioned for the Contact

Note: Only users with appropriate permissions will have the ability to perform a Manual Federated Search. Medicom can provide guidance to ensure the privileges are set to the correct site preferences. If you are interested in assistance, please contact Medicom support.

For more information on Medicom's Federated Search, visit www.medicom.us or email help@medicom.us