



# CONNECTING OUR HEALTHCARE COMMUNITY

*Hixny offers healthcare providers secure, electronic health information exchange to help achieve Stage 2 Meaningful Use and deliver patient-centric care benefitting our entire community.*

## EXECUTIVE SUMMARY

Healthcare providers and clinicians universally agree that exchanging health information across care settings and among all providers is essential for improving healthcare delivery and patient care. The question is how to conduct health information exchange in a secure, electronic manner that:

- Gives providers access to the most comprehensive patient records
- Helps providers meet federal Meaningful Use mandates for using Electronic Health Record (EHR) systems
- Delivers benefits for the entire community

Many practices already use EHR systems and thousands of healthcare providers participate in Hixny, the Regional Health Information Organization (RHIO) in our community that operates a health information exchange (HIE) and offers a portfolio of HIE services. Yet some providers are still unsure how to best participate in health information exchange, especially now that they are facing federal Meaningful Use requirements and as new patient-centered models of care emerge, such as accountable care and medical homes.

This is a time of transition and transformation in healthcare, with multiple vendors offering different philosophies and technology options, and with federal regulations and guidelines still evolving. It's natural to have questions about the best approach to HIE.

This brief explains Hixny's approach to HIE, which takes advantage of two industry protocols:

1. **eHealth Exchange**, which is query-based and also known as pull technology. eHealth Exchange allows providers to access comprehensive patient records that are aggregated from various sources.
2. **Direct Exchange**, which is delivery-based and also known as push technology. Direct Exchange is a secure, standards-based way to send encrypted health information directly to known, trusted recipients over the Internet, similar to a secure email service.

eHealth Exchange and Direct Exchange are terms originated by the Office of National Coordinator (ONC) for Health Information Technology and are becoming standard terms in the healthcare industry.

**Hixny's ability to offer both eHealth Exchange and Direct Exchange allows provider organizations to engage in "one-stop shopping" to fulfill Meaningful Use requirements regarding transitions of care and patient engagement.** On a broader level, Hixny's services connect the healthcare community around the patient's needs and enable healthcare organizations, providers and health IT executives to meet the full extent of their HIE needs.

## HIXNY OVERVIEW

Hixny connects providers, patients and organizations across our community to improve care coordination and promote patient-centric care—a long-held mission since the formation of our RHIO.

Hixny began as a query-based health information exchange, allowing providers in our region to access a patient's records that were contributed to the HIE by other healthcare organizations, as long as the patient signed a consent form. One advantage of Hixny is that a broad array of healthcare organizations contribute data to our HIE—hundreds of provider practices, hospitals, labs, imaging centers, payers, pharmacy networks and other organizations. Hixny aggregates this information from multiple sources into a single, comprehensive view of a patient that vastly streamlines and improves what otherwise can be a complex, labor-intensive process with many points of risk for potential error: care transitions.

During care transitions, clinicians can use eHealth Exchange to query Hixny for all relevant data on a patient in order to discover, for example, what tests have already been performed, what medications a patient is on and what other providers a patient has already seen. Clinicians that use one of the many Hospital Information Systems or EHR systems that are interoperable with Hixny can receive this information directly in the workflow of their system, and contribute data back to Hixny through their native system. Hixny also offers a provider portal for accessing patient records.

Recently, Hixny has added Direct Exchange capabilities to complement its eHealth Exchange capabilities, and has established connectivity to three upstate New York RHIOs in Buffalo, Rochester and Syracuse, as well as with Vermont's RHIO. Hixny is also an early member of DirectTrust, a non-profit healthcare industry alliance that has created and maintains a national Security and Trust Framework in support of Direct Exchange of health information among treating providers.

Through the DirectTrust Bundle, Hixny has achieved connectivity across the U.S. This connectivity enables healthcare professionals who treat the same patients to send and receive electronic health records through secure and encrypted messaging, via Direct Exchange and using Hixny's Health Information Service Provider (HISP) capability. Direct Exchange can be seen as a replacement for fax, phone calls, postal mail or standard email as a way to send patient records.

## FIVE HIXNY HEALTH INFORMATION EXCHANGE SERVICES

Using both eHealth Exchange and Direct Exchange protocols, Hixny offers five ways to use health information exchange to better coordinate care and help meet federal Meaningful Use guidelines:

1. **Query Patient Records**—Access to aggregated patient records from Hixny, including reports, results and all other information available on a patient.
2. **Results & Reports Delivery**—One-to-one delivery of lab results, radiology reports and transcribed documents such as discharge summaries.
3. **Event Notification**—Subscription service to event notifications such as hospital admissions, hospital discharges, the availability of test results and other relevant patient events.

4. **Secure Direct Messaging**—One-to-one communication between providers, with the ability to include patient records in the secure communication.
5. **Patient Engagement**—The Hixny Secure Patient Portal will allow patients and providers to communicate with each other. Patients can view and download their records, as well transmit their information to providers.

## CHARACTERISTICS OF HIXNY

- Hixny participants gather patient consent so that a patient’s medical information can be accessible to providers using the system. Hixny also handles all security and data encryption as well as normalizing and organizing disparate data elements and formats.
- Hixny offers both query-based eHealth Exchange and delivery-based Direct Exchange.
- Hixny offers subscription and notification services that allow providers to have access to patient information as soon as it is available.
- Providers can use Hixny integrated in their HIS or EHR system and within their familiar workflow, or can access Hixny through a provider portal on the web.
- Hixny’s version of its HIE platform—InterSystems HealthShare and its upcoming Secure Patient Portal—is certified for Meaningful Use.

## SUPPORTED USE CASES THROUGH HIE

- A provider queries the HIE to access all available information on a patient and present it in a single view.
- Clinicians look up patient information when the patient presents at the emergency room. There are many situations in the emergency room when the patient may be unable to provide information on their own. Even when able to provide information, patients often inadvertently leave out critical details that could negatively impact the care they receive.
- Providers stay up-to-date on patients’ status by subscribing to a service that automatically delivers patient discharge summaries, results, reports, other medical documents and event notifications (admission to or discharge from hospital, for example) directly into their EHR system.
- Hospitalists use health information exchange during transitions of care, making it easier and safer to pick up where a previous physician left off.
- Providers perform medication reconciliation at the point of care, helping to reduce medication errors and improve patient care.



- Physicians send each other secure messages when collaborating on patient care or during care transitions, and attach patient information such as lab results, reports and other documents. Example: A primary care provider referring a patient to a specialist will be able to send a summary of the care record to the specialist.
- Patients view and download their health records from a secure patient portal. Patients also transmit their records to their healthcare providers, helping providers satisfy one of the patient engagement requirements of Meaningful Use.
- Public health agencies access medical information collected by an HIE for public health reporting and surveillance.

## RECOMMENDATION

Our goal is to assist you in making the right decisions about HIE that will help you meet your near-term objectives as well as position you to achieve longer-term goals. In the near term, in order to meet the Meaningful Use mandates for care transitions and patient engagement, you can participate in Hixny to take advantage of eHealth Exchange and Direct Exchange.

In addition, as reimbursements begin to shift toward quality of patient outcomes, and as new care models such as accountable care and medical homes emerge, providers and care teams can benefit from sophisticated and easy-to-use tools at their disposal as well as comprehensive patient information to improve care coordination, increase efficiency among all staff, fulfill reporting obligations, and communicate with patients and other providers. These functions are exactly what Hixny is built to do.

To stay current on what's new from a federal standpoint, we recommend you or your technology staff makes proper use of government information resources on the [CMS Meaningful Use website](#)<sup>1</sup>, familiarize yourself further with the [Direct Project](#)<sup>2</sup>, and learn more about the [DirectTrust](#)<sup>3</sup> network.

## ABOUT HIXNY

Hixny ("hix-knee") connects providers, patients and organizations to better coordinate care and reduce healthcare costs across our community. Hixny's programs and services give patients and clinicians real-time electronic access to patients' comprehensive medical history for making timely, informed care decisions. As a not-for-profit, Hixny collaborates with health plans, hospitals, physician practices, employers, government agencies, patients and others in the Capital Region and Northern New York that share the common vision and goal of substantially transforming healthcare and improving population health. Hixny operates a health information exchange for in a 17-county region which includes 1.55 million residents. To learn more about Hixny, visit [www.hixny.org](http://www.hixny.org).

<sup>1</sup> [http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Stage\\_2.html](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Stage_2.html)

<sup>2</sup> <http://wiki.directproject.org/>

<sup>3</sup> <http://www.directtrust.org/>