

Case Study >>>

Ann Arbor a True Pioneer in Data Exchange

In Ann Arbor, Michigan, a consortium of medical practices forges ahead with their vision for a brave new world of information-sharing in a community setting, all in the name of better patient care.

Despite others' earlier failures in similar ventures, this group, the Ann Arbor Area Health Information Exchange, LLC (A³HIE), has found the right ingredients for success: overlapping patient populations, commonality of payers, commitment to patient-centric care, and strong enterprise data-sharing technology.

The group teamed with NextGen Healthcare Information Systems, Inc. to implement NextGen Community Health Solution (NextGen[®] CHS), a real-time data exchange application built on the enterprise technology developed for NextGen's electronic health record (NextGen[®] EHR) solution.

The consortium worked together, technologically and organizationally, to develop a data repository in which they exchange information for shared patients, all the while seeking participation by other Ann Arbor area health care providers to expand their reach.

The practices securely share important patient data such as demographics, referrals, medication, allergies, diagnoses, procedures, patient history, and, ultimately, plan much more.



Overview

ORGANIZATION

The Ann Arbor Area Health Information Exchange, LLC
Ann Arbor, MI

PRACTICE PROFILE

Comprised of 4 primary care and specialty practices, A³HIE represents over 260 providers and serves over 800,000 patients.

SOLUTION

Implemented NextGen Community Health Solution.

PRODUCT DISTINCTIONS

- Improved, more secure patient data access
- Better clinical documentation/coding
- Extensive clinical device interconnectivity
- Helps improve cash flow and productivity

BENEFITS

- Increased patient safety/care
- Data accessibility
- Staff efficiencies/costs savings
- Eliminated \$344,000 in transcription costs over 2 years
- Full patient records

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A Community Comes Together

As a close-knit healthcare community serving the greater Ann Arbor area, the practices share many of the same patients, the hospital services of St. Joseph Mercy Hospital and relationships with the University of Michigan. As such, representatives of the medical practices meet regularly to discuss topics of concern and needs of the practices, which currently comprise more than 260 providers. The largest practice in the consortium, Integrated Health Associates (IHA, primary care), itself has 230,000 patients at 25 locations; total population is over 800,000 in the communities served throughout portions of five counties.

As the groups began to consider the purchase of an EHR, needs such as easier exchange of patient data were identified, and progressive physicians broached the idea of an enterprise use of the EHR to develop a community data repository. They were well aware of the benefits data-sharing would bring to each practice and to the patients—benefits such as simplified administration, patient safety through allergy and medication histories and hospital ER access, easier access to patient records and diagnoses, and elimination of duplicate labs and other tests. The possibilities were endless.

They were also aware that common obstacles had derailed similar attempts by other collaboratives in the past (e.g., within Community Healthcare Information Networks, or CHINs).

These obstacles, however, such as layers of bureaucracy, or outdated and/or restrictive rules, policies, processes, and IT systems, or conflicts of data ownership, either did not exist or were considered addressable in this case.

After much discussion and research, the group initiated the project. They formulated a vision and a one-page agreement of terms. They then established that each group would purchase the same EHR from whichever vendor was best able to help the group achieve their goals.

The Crucial Decision—Selecting a Vendor

The group began its search and then narrowed the field of products, focusing more closely on NextGen Healthcare's EHR for several reasons. NextGen Healthcare offered scalable, enterprise capabilities, a full set of the features and technology most useful in a data-sharing setting (such as templates, referral workflows, HL7 interfaces, XML portability, etc.), a solid financial background, an open architecture, and extensive flexibility, capable of use by multiple specialties and their unique needs.

The consortium related their plans to NextGen Healthcare leadership, who were excited by the idea. The company agreed to lend their expertise to help plan, sponsor, and develop the necessary processes and tools to help launch the exchange.

The practices contracted for NextGen software and began another phase of planning. The group devised a desired evolution of the data exchange system, which would begin with NextGen EHR software implementation and development of interfaces. With this, a strong working relationship with NextGen Healthcare was forged.

Carlotta Gabard, Executive Director A³HIE, remarks "NextGen Healthcare really stepped up and said they'd support this, and that provided a lot of the impetus to development. We're very excited about the project and what we've accomplished and are really pleased with NextGen Healthcare's efforts."



Putting the Patient First

The primary goal of the exchange, related in their vision statement, is to improve patient care. Thus, their initial strategy was to roll out features in order of importance to care.

The group's inter-relationship, as a large primary care medical group and 10 associated specialties, was firmly grounded in referrals. The specialists saw many patients from IHA referrals and were forced to re-register the patient, again gathering insurance, allergies, medication history, and so forth. If the information was brought into their system automatically, both the practice and patient would save a great deal of time and effort, and the chance of incorrect or important forgotten details would be minimized.

Having the data move electronically in a closed loop would also translate to superior resources for the specialist, reducing potential errors, medication conflicts, or allergic reactions, thereby ensuring greater patient safety. Providers were well aware of statistics highlighting the percentage of medication errors that occurred nationwide; they knew error reduction through EHRs and data-sharing was a viable solution and should be the first step toward improved care. They also saw the potential to reduce the high number of referrals that did not meet the intent of the referring provider or were not completed successfully or in a timely fashion—especially the consult report—putting the patient at risk.

NextGen EHR was a perfect fit. The EHR has extensive medication and allergy modules and full integration with their practice management system (NextGen® EPM), which houses the demographic and insurance information. With a full knowledge base of specialty templates, discrete data exchange in workflow format is easily implemented. Clinical patient data entered at one practice can be identically referenced and used by automatically populating the same tables and templates in a second practice's EHR.

NextGen's NextMD® product also integrates with the HIE for patient-provider interaction.

How it Works

The CHS system utilizes enterprise technology by keeping a central repository of data, known as a centralized model. The repository is hosted on NextGen Healthcare's servers in Horsham, PA, but data can ultimately be served from the exchange's facilities, as chosen.

Upon each saving of data into an EHR or practice management system, data is SSL encrypted and automatically exported to the repository. Further security toward HIPAA compliancy is the use of certificate authorization and RSA SecurID technology for user authentication. A full audit trail and history of records is also established.

At this point, if a patient has consented to release of data and the exporting practice provides the specialty practice, for instance, with pertinent items of demographic data, the importing practice can now find the patient data on the repository. If the practice has an HL-7 compliant EHR, the data can be quickly imported for full use.

Data generated at the second practice can then also be exported and added to the repository, further building a full, longitudinal patient record.

If future members of the group do not have an EHR, they can simply view the data through a web browser. This also applies to any provider needing to view records from a remote location such as their home or hospital location.

Even more conveniently, the practices within the A³HIE now utilize the closed loop referral process NextGen CHS facilitates. This process allows for the seamless exchange of data through comprehensive referral templates, combining the administrative and clinical aspects of referrals.

During this process, clinicians, upon completion of encounters, send electronic tasks to their administrative staff, who then process the referral authorizations and "attach" them to the electronic referral that is then sent to participating practices.

The receiving practices accessing the referrals then have clinical data and authorization information readily available, making for a more pleasant patient experience, with fewer forms to complete. It also gives clinicians a good starting point with regard to clinical data when seeing the patient.

Receiving practices can then send data back to the primary care provider, which provides for a more complete chart on the referrer's side.

Non-EHR providers can sign in to the CHS website and view referrals through a browser.

From Ideas to Reality

Expansion of the solution continues and additional features are continually added. For instance, one of the more recent features of NextGen CHS is its "break the glass" search capability, where searches can be performed across data from all participating practices in the exchange. This feature is intended for use in ER situations, whereby clinicians in the ER can view critical information for a patient at a time when the patient may be incapacitated.

Additional phases call for links to small practices without EHRs, other EHRs that use national standards, patient portals, payers, further standardization of code sets, and data streaming from the local hospital.

As features are implemented, the practices see not only the array of patient benefits already described, but also a reduction in healthcare costs through staff efficiencies,

fewer duplicate orders, elimination of prescription errors or clarifications, reduction of supply and mailing costs, and much more. It is also believed that community and patient awareness, as well as results seen and experienced by the patients, will drive patient loyalty and recommendation.

Future Growth and Potential

Current members of the A³HIE hope that expansion of the parties involved will lead to developments such as more reliable chart prepping through the Exchange, recovery of in-patient work product, and further development of mini-charts. The local hospital, St. Joseph Mercy, is also willing to deliver data to the repository for distribution to the practices in the consortium and is in informal talks to become much more involved.

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Dr. Neal Weinberg, pediatrician at IHA and one of the early proponents of the health information exchange, best summed up the group's feelings at this stage. "We're tying a lot of people together here, and we're making the best use of our EHRs. The level of care was already high," he says, "but now we are taking it to the next level, out of individuals and into the community. It's a quantum leap in care and service for our patients, and it's what we think our patients deserve."

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For full information about the features and functions of NextGen Healthcare's products and services, please contact us at www.nextgen.com/contact.

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