



## **The Minnesota Health Information Exchange (MN HIE) Medication History Project**

**Category:** Cross-boundary Collaboration and Partnerships

**Start Date:** Oct 2007

**End Date:** Nov 2008

**Participants:** Minnesota Department of Human Services and its partners:

Blue Cross Blue Shield of Minnesota; Fairview Health Services;  
HealthPartners, Inc.; Medica Health Plans; Regions Hospital; and UCare  
Minnesota

Vendor Partners: Covisint and Perficient

## **B. Executive Summary**

On September 10, 2007, Minnesota Governor Tim Pawlenty announced the creation of a secure electronic network that would “connect doctors, hospitals and clinics across health care systems so they can quickly access medical records needed for patient treatment during a medical emergency or for delivering routine care.”<sup>1</sup>

In 2007, DHS and its partners (Blue Cross Blue Shield of Minnesota, Fairview Health Services, HealthPartners, Inc. Medica Health Plans and UCare Minnesota) embarked on a collaborative effort to build a secure electronic network to exchange health information. This public-private partnership, known as the Minnesota Health Information Exchange (MN HIE), is a limited liability corporation (LLC) owned by the Minnesota Department of Human Services (DHS) and five private, not-for-profit health organizations. Staff from each sponsoring organization collaborated in a wide range of workgroups addressing topics from privacy and security to communications and training. The spirit of teamwork continued when staff from each organization created detailed business requirements which became the foundation for the LLC to build the secure electronic network that is MN HIE.

The MN HIE pilot for medication history went live at Regions Hospital Emergency Department in early November 2008. More than 200 hospital staff members are now trained to use MN HIE, which is expected to be expanded statewide this year. The public Web site at <http://www.mnhie.org/> went live in November 2008 as a result of the collaborative workgroup process.

The MN HIE is a community solution which moves DHS and its partners closer to compliance with the state mandate to have interoperable electronic health records (EHRs) by 2015<sup>2</sup>. Future expansion for MN HIE includes patient payment eligibility, e-labs, personal health records, communicable disease reporting, continuity of care documents (CCD) and immunization registries.

MN HIE aims to improve information availability at the point of care, reduce medication errors, facilitate the coordination and integration of care between the public and private providers that serve DHS clients, improve access to clinical information, facilitate more robust quality monitoring and program improvement, improve efficiency and save costs.

DHS made Medicaid Information Technology Architecture (MITA)<sup>3</sup> a major consideration throughout the MN HIE requirements development, testing and implementation. MN HIE is MITA-aligned by virtue of its use of service-oriented architecture (SOA), reusable services and the Rational Unified Process (RUP).

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<sup>1</sup> Governor Tim Pawlenty's press release dated September 10, 2007

<http://www.governor.state.mn.us/mediacenter/pressreleases/PROD008303.html>

<sup>2</sup>[https://www.revisor.leg.state.mn.us/bin/getpub.php?pubtype=STAT\\_CHAP\\_SEC&year=current&section=62J.495&image.x=12&image.y=9](https://www.revisor.leg.state.mn.us/bin/getpub.php?pubtype=STAT_CHAP_SEC&year=current&section=62J.495&image.x=12&image.y=9)

<sup>3</sup> <http://www.cms.hhs.gov/MedicaidInfoTechArch/>

## **C. Description**

The Minnesota Health Information Exchange (MN HIE) is organized as a Limited Liability Corporation (LLC) with the following owners: Blue Cross Blue Shield of Minnesota, HealthPartners, Inc., UCare Minnesota, Medica Health Plans, Fairview Health Services and the Minnesota Department of Human Services (DHS). DHS is the only government entity; the other sponsoring organizations are not-for profit health care organizations.

The 2008, Minnesota Legislature amended Minnesota Statutes, section 256.01, to add language authorizing DHS “to join and participate as a member in a legal entity developing and operating a statewide health information exchange” that meets certain criteria.”<sup>4</sup>

Currently, MN HIE offers a medication history service. Future expansions include patient payment eligibility, e-labs, e-radiology, continuity of care documents (CCD), personal health records, communicable disease reporting and immunization registries.

MN HIE features a centralized master patient index, the Secure Patient Directory (SPD), which aggregates data from multiple payer sources and uses person-matching algorithms to find the probabilistic match using patient name, address, phone number, gender, date of birth and insurance ID. SPD data is transmitted securely to MN HIE from the payer sources. The MN HIE record locator service retrieves 12 months of medication history and aggregates the information for the treating health care provider. The record locator service does *not* store health information.

Patients control access to their personal medical information. Authorized health care providers who participate in MN HIE can view medical information only with patient permission or in a medical emergency. Patients may choose to “opt out” of MN HIE entirely; doing so will result in participating health care providers not being able to view patient medical information—even in a medical emergency.

## **D. Significance**

By leveraging a single technology platform to safely and securely exchange medical information, health care providers across Minnesota have immediate access to vital medical information to quickly diagnose and treat patients. This allows for effective management and coordination of health care services between multiple health care providers.

Future services will include real-time access to lab results, immunization records, insurance eligibility, personal health records, communicable disease reporting, continuity of care documents (CCD) and other vital medical information.

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<sup>4</sup> <https://www.revisor.leg.state.mn.us/bin/bldbill.php?bill=H3222.4.html&session=ls85>

MN HIE is a not-for-profit, limited liability corporation (LLC) that is a unique collaboration among health plans, health care providers and state organizations. MN HIE is governed by a Board of Managers comprised of representatives from each sponsoring organization.

MN HIE will help facilitate providers moving closer to alignment with the 2015 Interoperable Health Record Mandate by providing a secure electronic network for health information exchange.

## **E. Benefit of the Project**

MN HIE aims to improve information availability at the point of care, reduce medication errors, facilitate the coordination and integration of care between the public and private providers that serve our clients, improve access to clinical information, facilitate more robust quality monitoring and program improvement, improve efficiency and save costs.

The exchange of health information electronically among physicians, hospitals, health plans and patients is decreasing the cost of care and improving outcomes, according to a survey released by the non-profit eHealth Initiative. The 2008 Fifth Annual Survey of Health Information Exchange at the State and Local Levels, which included responses from 130 community-based initiatives in 48 states, shows the significant impact fully operational initiatives are having on improving health care delivery and efficiency.<sup>5</sup>

MN HIE has been built in accordance with Minnesota statute 144.293 regarding patient consent and privacy with respect to record locator services. A legal team comprised of members from each sponsoring MN HIE organization spent considerable time and effort carefully laying the foundation for MN HIE's robust security and privacy provisions which informed the technical architecture. The MN HIE Security Workgroup also developed a comprehensive set of information security policies.

The National Business Coalition on Health (NBCH) named the Minnesota Health Information Exchange (MN HIE) as a finalist for the 2008 NBCH Innovation Awards. All Innovation Award nominees are recognized for developing and implementing new and effective solutions to critical health care challenges.

Approximately 70 health plans applied for the awards as part of information submitted on "Best Practices and Innovations" in NBCH's 2008 eValue8 submission tool, an annual evaluation of health plans used by employers and business coalitions. A selection committee of eValue8 reviewers evaluated all applications on the basis of creativity, effectiveness and replicability before narrowing down the field to 11 finalists.<sup>6</sup>

MN HIE takes the burden off the patient and the patient's family while allowing the health care practitioner to treat the patient in the most efficient and prudent manner. In *Minnesota Physician*, Dr. Brad Gordon notes, "Founding partners HealthPartners, Blue

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<sup>5</sup> <http://www.ehealthinitiative.org/HIESurvey/>

<sup>6</sup> <http://www.mnhie.org/media.html>

Cross and Blue Shield of Minnesota, Fairview, Medica, UCare and the Minnesota Department of Human Services foresee a day when every patient in the state is part of MN HIE - but that will require proactive participation from hospitals and medical groups....

“Impenetrable silos of information can be fatal in the medical profession, so from a doctor’s point of view, MN HIE is long overdue and makes perfect use of today’s technology. With the patient’s consent, doctors can have access to key information needed for medical care, without waiting at the fax machine for that slow and imprecise ‘chart biopsy’ from another hospital or clinic. Patients are able to control access to their health information while simultaneously decreasing the burden of remembering every aspect of their medical data necessary for safe and timely treatment.”<sup>7</sup>

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<sup>7</sup> “Building an e-health Superhighway: the Minnesota Health Information Exchange,” Minnesota Physician, November 2008, Brad Gordon, MD