

# SSHA Connects Hospitals to Improve Patient Care in Ontario

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In February 2006, the James Bay General Hospital became Ontario's final public hospital to connect to ONE™ Network – Smart Systems for Health Agency's (SSHA) managed private network. This is good news for the people of the western James Bay coast, both now and through the expected future expansion to remote communities with clinics. For SSHA, it is also the achievement of a milestone towards SSHA's goal of connecting all Ontario health care providers.

The importance of ONE Network, like all SSHA ONE products and services, is that they are designed for the unique needs of health care because of its security, availability and reliability. While the Network currently serves as a connectivity solution among many for hospitals, it is the foundation for the development of e-Health in Ontario – using the power of IT to improve patient care.

Building on ONE Network, hospitals will eventually have the security, reliability and availability needed to use other SSHA products, such as ONE Mail Partnered that builds on existing hospital systems as well as access to online portals and applications to come in future. Other products include a searchable listing of ONE Mail users – ONE Pages. ONE ID is the registration and identity management program to ensure that only appropriate people access information. Finally, applications and portals hosted in SSHA's data centres will provide access to specific information health care providers in hospitals need.

## Benefits

Some of the benefits of ONE Network, and other SSHA products, include:

### ***Saving money***

One clear cost-saving benefit of ONE Network, which is offered free of charge to Ontario hospitals, is demonstrated by Health Card validation. MOHLTC validates over 28 million Health Cards annually online and processes an additional 22 million eligibility checks overnight in a batch process. For years, hospitals

have used dedicated network connections with the Ministry of Health and Long-Term Care to validate Health Cards. These connections typically cost hospitals \$800 per month.

In fall 2005, 50 hospitals changed to using ONE Network for their Health Card validation.

"This move represents a substantial savings for our hospital," says Don McGrath, Manager of Information Management/Information Technology at Brockville General Hospital. "Using ONE Network to validate Health Cards frees our hospital's technical resources so that we can focus on other core activities."

### ***Connecting to provincial initiatives***

ONE Network offers provincial programs the opportunity to connect directly to hospitals in ways that they could not afford on their own. This allows them to do their work more quickly and effectively than through their own networks or other means such as telephone or fax.

For example, Rizwana Ramzanali from London, Ontario, is one patient who benefited from the Trillium Gift of Life Network (TGLN), which now uses SSHA's connectivity. TGLN matched Rizwana with a kidney-pancreas donor in August 2004. Potential organ donors and recipients can now be matched more quickly and accurately online than using a manual process which would take hours.

Cancer Care Ontario (CCO) also uses ONE Network to send and receive information about treatment times and wait lists from hospitals across the province. This information is now posted on its website, giving patients access to this information.

Cardiac Care Network (CCN) uses SSHA's network to share its renowned wait list management system with hospitals. Since connecting with SSHA, CCN has been able to reduce costs and simplify communications with hospitals. Patients have benefited from better scheduling based on their needs.



### ***Better integration for multi-site hospitals***

Another initiative is multi-site hospitals using ONE Network to meet their need to overcome distances to work as a single organization. For example, Niagara Health System (NHS) has eight sites with 985 beds and handles 176,000 emergency visits annually. ONE Network serves as a backup for the microwave network this hospital uses to exchange patient information between sites. ONE Network helped NHS stay connected during a major windstorm in April 2004 when a microwave link failed at one of its sites.

Similarly, at Lakeridge Health in Durham Region, more than 1,000 people per day use the hospital's services at any one of its four sites. ONE Network helps Lakeridge reduce its operating costs. In addition, connectivity extends to additional community-based health care sites including physician clinics, addiction centres, ambulance services and outpatient clinics.

Patients at these hospitals benefit from a single patient record. Referrals from site to site are streamlined, and sharing of patient information has improved.

### ***Better collaboration between hospitals***

ONE Network is helping hospitals work together better to improve patient care by improving the flow of information.

Sudbury Regional Hospital is one of eight hospitals that form part of the Northeastern Ontario Network (NEON). All hospitals save money and have improved the flow of patient information by using a common electronic medical record that can be shared over SSHA's network. As a result, duplication of tests and case histories is reduced. Health care providers can spend more time providing care.

### ***Allowing patients to access specialists hundreds of kilometres away***

Ontario's three telemedicine providers – CareConnect, North Network, and VideoCare – use SSHA to connect patients in remote parts of Ontario with specialists in urban centres. Since starting in 2000, the services have had and continue to have exponential growth, hitting 20,000 patient videoconferences in 2005.

The services are growing from regular scheduled appointments to specialized services to treat burns and even emergency care. For instance, Tim Saucier was able to be prescribed a life-saving drug while experiencing a stroke in North Bay. There are no neurologists in North Bay, but he was able to visit one in Toronto through live two-way videoconferencing. The neurologist confirmed Saucier's condition and immediately prescribed a clot-busting drug – a drug unavailable to family physicians, as it can prove fatal to patients who are not actually experiencing a stroke. Tim was able to make a full recovery.

### ***Access to a patient's prescription history in emergency rooms***

The prescription history of patients who have prescription drugs paid for by the Ontario Drug Benefit Program or Trillium Benefit Program became available to the first hospitals in Ontario in late 2005 and will be available at most hospitals in 2006. This will help Emergency personnel quickly identify and prevent harmful drug reactions in patients who are unconscious or cannot remember what prescriptions they are taking. It will also allow for faster diagnosis and treatment. ONE Network is making it possible for hospitals to access drug histories stored in these drug databases.

SSHA is also hosting the application that allows doctors and nurses to see the prescription histories. A rigorous registration process is managed by SSHA – ONE ID – to ensure that only approved users can access the sensitive patient information.

### ***Connecting doctors to hospital systems***

Trillium Health Centre, a Toronto-area hospital, has connected physician offices to the hospital network for several years – an enabler and precursor to the vision of integrated patient centered care called Community Care Services Model. ONE Network connections are part of the larger solution, with 128 physicians already connected.

Dr. June Kingston, family physician and Chief of Family Practice at Trillium has replaced her previous connection with ONE Network, which is faster, more secure and more reliable. She now has access to the hospital information system. She can view lab results, x-rays, and the hospital Intranet, all from her off-site office. The connection to the hospital's system lets Dr. Kingston know what happened to her patients when they visit Trillium's emergency department – she no longer has to wait to receive discharge papers or rely on a patient's memory to explain what tests were done.

Work is underway to connect physicians to The Scarborough Hospital in the same way Trillium Health Centre's physicians are connected.

### ***Hospital discharge information***

University Health Network, Toronto Community Care Access Centre and Saint Elizabeth Health Care were the first Ontario health care organizations to connect electronically with ONE Mail – SSHA's e-mail for health care. Thousands of staff across these organizations can now securely send messages to each other. They also have access to a searchable directory – ONE Pages – to easily find and contact their colleagues at each organization.

Matt Anderson, Vice President and Chief Information Officer, University Health Network explains: "Because of our cumbersome paper environment, patients can

be stuck in hospital for an extra day or two. This delay has a huge impact on wait times. If patients could get out faster, we would free up beds faster and this would have a trickle down effect of reducing wait times. This is what we are looking forward to with ONE Mail and a centralized on-line directory – to start making the process better for our patients.”

### ***Sharing data and more***

An innovative use of ONE Network is the implementation of Voice over IP (VoIP) at Quinte Health Care. Not only is Quinte using SSHA for sharing data, they have successfully implemented VoIP in their four hospital sites so calls can be placed without incurring long distance charges. They are saving \$110,000 in communication charges as a result of ONE Network.

In the Ottawa area, the Champlain Regional electronic Master Patient Index (EMPI) launched a four-hospital pilot in December 2005 that links hospitals’ medical record numbers to improve patient information sharing.

The value of the EMPI is to create a unique identifier for patients among all the hospitals. Currently, patients receive a number when they register as in-patients; they receive another number for any lab tests. If they

are sent to another hospital, that hospital will have its own numbering system. An EMPI enables hospitals to reduce duplication, achieve greater efficiencies, and improve patient safety.

The remaining ten participating hospitals will join in 2006.

### **The Future**

To date, ONE Network has created the foundation for connecting hospitals in Ontario – as well as Public Health Units, Community Care Access Centres and a growing number of physicians and continuing care agencies.

Building on this foundation, the creativity of hospitals and the value of SSHA services will lead to more sharing of patient information. That may take the form of ONE Mail, ONE Pages, portals with important Public Health information that is vital for hospitals or specific applications.

At the end of the day, improving access to health information will help health care providers in hospitals through SSHA’s ONE products and services meet their goal of offering the best patient care possible. ●

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