

# Meeting the challenge of... The Paper Divide between EMR and Hospital

## An xwaveEMR case study

### The challenge

While a growing number of healthcare providers are adopting IT to improve efficiency and delivery of care, there remains a paper divide that continues to separate what are often two digital environments. An example is family health teams that exchange large volumes of paper with local hospitals: the FHT uses an electronic medical record (EMR) and the hospital information systems (HIS) are fully automated, but there is no interface connecting the two. Consequently, electronic data must be converted to paper for transmission, significantly slowing down delivery of patient information and, to a large extent, undoing the efficiency of EMR and HIS.

Such was the case with the Prince Edward Family Health Team in Picton, Ontario, and the Maple Family Health Team in Kingston. The Prince Edward FHT provides primary healthcare services to just under 20,000 patients and is affiliated with four hospitals—in Picton, Belleville, Trenton and Bancroft—that are operated by Quinte Health Care Corporation. The Maple Family Health Team serves approximately 39,000 patients, and its physicians are associated with Kingston General Hospital and Hotel Dieu Hospital—large, teaching facilities affiliated with Queen's University.

Both are large, multidisciplinary practices with dozens of physicians, nurse practitioners and various other allied health professionals. And both received a steady stream of hospital-generated paper—discharge summaries, consultation notes, pathology reports, x-ray reports—that has since been reduced to a relative trickle following the integration of their xwaveEMR systems with their respective hospitals.

### The xwaveEMR solution

As a web-based solution hosted and delivered to physicians via eHealth Ontario's secure ONE™ Network, xwaveEMR integrates with external healthcare providers such as hospitals and labs. Through xwave-built interfaces that support Health Level 7 (HL7) messaging, patient information is received from the hospital and intelligently sorted and 'pushed' to the corresponding physician's EMR desktop. There's no application to open or messages to check; the information is available automatically without any prompting by the physician.

The solution is also designed to ensure physicians don't receive too much information, or multiple versions of a document. The interface provides users with the information they need, when they need it.

The integration was seamless—there was no additional training required for either FHT or hospital staff—and the EMR and HIS systems can 'speak' to one another regardless of HIS vendor; in the case of Quinte, it's Meditech, and in Kingston, it's QuadraMed. (In another similar integration completed by xwave involving

Mississauga's Summerville Family Health Team and Trillium Health Centre, Trillium's HIS is the Eclipsys Sunrise Clinical Manager™.)

“It's so nice to have a consultation report the same day as the consultation,” says Dr. Richard Milner, President of the Maple FHT. “And I've had many similar positive comments from colleagues.” He cites the example of discharge summaries, whereby patients who've been admitted to hospital are discharged and told to see their family doctor within a week. Previously, the follow-up visit would have involved a certain degree of diagnostic guesswork from the patient because it took weeks for the discharge summary to arrive. Now, all that information is available within minutes.

Dr. Greg Higgins of the Prince Edward Family Health Team reports similar benefits. “When the hospital reports were on paper, staff would receive them, then have me review and approve them, then scan them—all of which took several days. Now, the information is right there, accessible to everyone in the FHT who needs to see it.”

## The outcome: Dramatically reduced paper-pushing, with information delivered in seconds rather than days

Today, about 57 percent of the reports generated by Kingston General and Hotel Dieu are transmitted electronically. At Quinte, the figure is 51 percent. Kingston General estimates it is sending out roughly 5,600 fewer pieces of paper per month. (In Mississauga, Summerville FHT estimates scanning has been reduced by 50 percent.)

And information that once took three to five days to deliver now is received in about three to five seconds.

Additional benefits include lower costs (such as postage and labour), and improved accuracy, as there is no longer the risk of error associated with transcribing paper reports into an electronic system.

Paul McAuley, Regional CIO and eHealth Lead at the South East LHIN, also points to the more strategic advantages of integration. “The fact that FHT physicians receive hospital information almost instantly enables them to plan patient treatment in advance, which in turn helps shorten patients' hospital stays and lets them recuperate at home.

“We talk about having an EHR in Ontario by 2015,” says McAuley, “What we will have is not one system but a series of interfaces linking the various systems, with physicians' EMRs serving as the data hubs for this province-wide infrastructure.”

McAuley also reports positive feedback from physicians who, having received diagnostic results sooner, are able to provide more responsive care. “One doctor emailed me to let me know that when his patient underwent some cancer-related diagnostic tests—and they came back clear—he was able to follow up with the patient before anyone else.”

Says Prince Edward's Dr. Greg Higgins: “The real benefit of EMRs is having them connect to all these other systems hospitals, labs, pharmacies. While the EMR itself offers obvious value, there's the value-add of having the automated lab reports, the e-prescribing, and so on.” He adds, “What we don't want is a series of digital islands.”

### HOW IT WORKS

#### xwaveEMR integration with external healthcare providers

- The integration is seamless, with no additional training for users
- Information is pushed automatically to the physician's desktop; there's no special program or application to open or check
- The integration supports any hospital information system/vendor
- The interfaces are secured through eHealth Ontario's ONE™ Network
- They're Health Level 7 (HL7)-standard and support both observation result (ORU) and medical document management (MDM) messages
- xwave** works directly with providers including family health teams (FHTs), family health organizations (FHOs), family service organizations (FSOs), superFHT groups, private clinics, hospitals, community care access centres (CCACs), and local health integration networks (LHINs)
- xwave** can also help providers apply for grants, and was successful in helping the South East LHIN and Mississauga Halton LHIN win eHealth interface grants
- xwave** can provide full requirement-specifications for your review as well as all necessary site-assessment And project-planning support
- xwaveEMR** includes all necessary training, software updates, change management and technical support such as a 24/7 helpdesk
- It is one of the first web-based EMRs to be launched in Ontario and has been used by physicians across the province since 2005
- It is based on GE Healthcare's award-winning Centricity® Practice EMR; Centricity has over two decades Of development and refinement behind it and is used by 30,000 clinicians worldwide

*“The fact that FHT physicians receive hospital information almost instantly enables them to plan patient treatment in advance, which in turn helps shorten patients' hospital stays and lets them recuperate at home.”*

Paul McAuley, Regional CIO and eHealth Lead, South East LHIN

### Contact Us

Call us toll free: 1-866-241-7849

Email us at: [xwaveEMRsales@xwave.com](mailto:xwaveEMRsales@xwave.com)

Or visit our website at [www.xwaveemr.com](http://www.xwaveemr.com)