



Electronic Signatures - Big Success for Capital Health

Jo Kucher

Jo Kucher is the Senior Director of Regional Patient Information Services and Regional Library Services for Capital Health.

Capital Health is one of Canada's largest integrated health regions, comprising 12 hospitals, 2 primary care facilities, 22 public health centers and 199 specialty clinics, with 29,000 staff and 2,500 physicians. The region provides care for one million residents, including acute care, long term care, home care outreach programs, mental health, and rehabilitation and prevention programs in the Edmonton area.

Since mid-2006, five hospitals in the Capital Health Region in Edmonton have been using an electronic signature (e-signature) system provided by Meta Health Technology.

As part of Capital Health's plan to move to a true regional electronic medical record system, we investigated implementing an electronic signature solution. We anticipated that this would provide a number of benefits, including:

- Enhanced clinician and health information management productivity
- Reduced volume of incomplete charts
- Improved patient care and service
- Streamlined chart handling processes
- Improved access to information by care providers
- Reduced operating costs

We began by establishing a user task force that performed a thorough review to define what we would need to meet all our requirements. One key objective was to ensure that patient documents would be routed to the right people at the right time so that the latest patient information would always be available to those who needed it. The product had to provide physicians with easy access to the patient documents they needed to sign. The product needed to provide the Patient Information Services department with an effective tool for managing the flow of information across the region.

Capital Health was already using applications for chart abstracting, tracking and deficiency management from Meta Health Technology. We were impressed by Meta's e-signature solution because the product offered capabilities that would enable us to achieve our objectives. For the project, Meta would implement PowerSign, its e-signature product, as well as PowerMonitor Plus, which would automate Capital Health's chart completion process.

Because PowerSign enables physicians to change and then sign a patient record, we determined that the application would be the best "source of truth" for the transcribed document, and that Meta should develop a document routing module to achieve this objective. The routing software determines which document is to be sent where, based on Capital Health's site-specific business rules. It can send documents via fax, email or by interfacing electronically with other applications.

Feedback from the sites using the system is uniformly enthusiastic. Health Information Management staff welcome the productivity benefits. "Not having to pull and track patients' charts reduces errors and allows us to be more efficient with managing documents," says Christina Legaspi, Health Records, Sturgeon Hospital. "Doctors can log on in a secure mode and update a patient's chart without having to come to Health Records...it saves a lot of time."

The application has proved to be easy to learn and to use. Physicians praise the application's convenience and impact on quality of care. "It allows me to complete and sign-off patient charts at the Sturgeon Hospital while I'm on-site at the University Hospital. This saves time and assists in providing better care for my patients," explains Dr. Suresh Reddy, BSC MD FRCPC, Division of Nephrology and Immunology, Department of Medicine, University of Alberta and Internal Medicine/CCU/ICU, Sturgeon Hospital.

For Capital Health, the proof of success is in the performance metrics we have established for the project. The numbers to-date are highly encouraging: after 1 year, 66% of physicians have signed up for e-signature versus a goal of 60%. In addition, 76% of eligible documents are flowing through the system. Beginning in the third quarter of 2007, we expect to be able to demonstrate the reduction in the percentage of incomplete charts due to electronic signature. Once we complete the rollout to the remaining facilities, we will begin to measure the financial impact in terms of cost savings.

For Meta, the project was an important achievement. "This has been a significant undertaking at a major healthcare institution," says Eli Nahmias, President of Meta. "We feel fortunate that Capital Health has again come to us for a solution, and that our collaboration is producing such positive results." ●