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Revolutionary CT
A new generation of computed tomo-
graphy scanners has entered
the hospital world. The ultra fast
systems produce extremely high-
resolution images in seconds,
and greatly reduce the X-ray dose
for patients.
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Wills for healthcare
Many minds are greater than one,
in most cases. This kind of think-
ing is now used in online wills.
Our columnist Dr. Richard Wills
proposes that Wills be developed
to improve healthcare delivery.
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Over-ordering DI exams?
An Ontario physician responds to a
study that concluded GPs are or-
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Better to err on the side of cau-
sion, notes Dr. Chris Clarke, for
several reasons.
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Hospital lab automation
A near-end automation sys-
tem at the Atlantic Health Sciences
Corporation, New Brunswick, is speed-
ing up results reporting, improving
quality and helping the organiza-
tion deal with a chronic shortage
of skilled technologists. The ad-
vanced system can automatically
perform up to 140 tests.
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How to computerize your ambulatory clinics
The family practice clinic at Mount Sinai Hospital is the first of the Toronto-based medical center's many clinics to implement an electronic health record system. It's also one of the first hospital-based ambulatory clinics in Canada to do so. Pictured is Dr. David Tannen-
baum (at left), Mount Sinai Hospital's Family Physicians-in-Chief, with Dr. Himal Shah, a resident at the clinic. SEE STORY ON PAGE 6.

Quebec starts province-wide EHR project

QUEBEC CITY – The province of Quebec has
officially started its $500 million Boisvert project, an electronic health record network that will allow 95,000 doctors,
nurses and allied healthcare professionals to
access the medical charts of their patients
using a single viewing system.
The project kicked-off in May with a pil-
opilot system at a clinic in Quebec City and will
roll out across the province over the next
three years.
"It's the first time in Quebec that we'll
have a complete, longitudinal view of the pa-
tient's medical history," commented Dr. Guy
Boisson, senior clinical advisor to the Boisvert's
project director, and a former professor of
medicine at the University of Sherbrooke.
Dr. Boisson is currently the medical lead
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Mount Sinai Hospital takes lead in computerizing out-patient clinics

BY JERRY ZEIDENBERG

TORONTO – Today, most hospitals have high-powered, computerized information systems for in-patients. But oddly enough, their out-patient clinics – such as family practice, endocrinology and cardiology – tend to rely on old-fashionened pens and paper.

Mount Sinai Hospital, a teaching hospital with over 100 out-patient clinics in downtown Toronto, has set out to change this. Earlier this year, it started using an electronic medical record system at its family practice clinic, which has 10 physicians and about 25 residents handling 30,000 patient visits a year.

It’s one of the first hospitals in the province to start computerizing its out-patient clinics.

Access to a computerized system has already made a difference in the workflow of physicians, residents and patients. Several physicians have commented that their practice has improved.

The computerized system has also made it easier for patients to access their medical records.

What’s more, because the charts are electronic, different clinicians can have access to a patient’s file at the same time – they no longer need to have the paper records right in front of them.

“You can imagine a paper chart passing around from person to person and see the inefficiencies. Now everyone involved with a patient’s care can have instant access to an accurate and up-to-date chart,” said Dr. Tannenbaum, Family Physician in-Chief at Mount Sinai Hospital.

He noted that instead of paper files, which can be stored in different locations, “you’ve got all your data organized in one place.”

“Having electronic records means that we can access patient information more quickly and efficiently, which helps us provide better care to our patients.”

One of the biggest benefits of the computerized system has been the ability to quickly access patient information. This has helped to improve the efficiency of care, allowing physicians to see patients more quickly and effectively.

As a result, patient satisfaction has improved, and physicians have been able to provide more personalized care.

The computerized system has also made it easier for patients to access their medical records. Patients can now access their medical records online, which has helped to improve patient satisfaction and reduce the amount of time patients spend in the clinic.

What’s appropriate for a clinic?

Most Canadian hospitals are highly computerized, so it is not uncommon for their out-patient clinics to have a similar level of technological sophistication.

But there’s a reason for this computerization gap. Such computerized systems are typically used by support staff, commented Sam Cheechoo, President and CEO of Nightingale Informatics Inc., Orillia, Ont., the company supplying the Electronic Medical Record solution to Mount Sinai Hospital’s out-patient clinic.

He noted that it’s the administrative staff, along with nurses, lab technologists and pharmacists, who are among the busiest users of a hospital’s main systems.

However, in clinics, it’s the doctors who are the primary users, and that calls for a different type of system.

So when Mount Sinai Hospital decided to automate its clinics, as Cheechoo phrased it, “instead of putting a round peg in a square hole, they decided to go with a box of bread.”

“With the Nightingale system, we wanted a solution that is tailored specifically for clinics, with features that support the unique needs of clinic staff.”

Nightingale was chosen because it provides a comprehensive suite of tools specifically designed for clinics.

“Nightingale’s knowledge of how family physicians work and interact, and appreciated the solution’s ability to be customized to meet the clinic’s needs.”

Nightlight On Demand, the new solution has been connected to the hospital’s diagnostic imaging system, and its lab and three other labs in the city allowing EMR and lab test results to flow quickly into the records of patients.

“From a patient safety standpoint, I’m impressed by the data flow into our EMR,” said Dr. Tannenbaum. Outside labs used to take up to a week to post results. Now it’s less than a day, sometimes even a matter of hours.

“I saw a patient at 5:30, examined his chart at 6:30, and the results from the Mount Sinai lab were already there,” he said.

The medications component of the Nightingale On Demand system allows drug interactions to be easily identified. When a clinician adds a medication to a patient’s file, the system will automatically flag it if it conflicts with a prescribed medication or allergy.

Also reassuring: doctors have become more disciplined in recording data. “The Nightingale On Demand solution has improved how we track our patients at various points of care, from the waiting room to the pharmacy. The quality of data is better than what appears on paper because the templates force us to be more disciplined in how we record and provide information.”

And since some doctors have handwriting that is difficult to read, the physicians, who now receive printed prescriptions, noticed a difference right away.

Setting up the system was no small feat, however, and actually took longer than expected. Not only was the work of creating interfaces to the hospital’s various information systems (including lab results, the patient management system and the telephone answering service) extensive, but also setting up the computer network and training for the staff.

But Dr. Tannenbaum is not disappointed, saying the system is doing everything he expected.

“One can’t say that everything is perfect,” said Dr. Tannenbaum. “You can’t have errors in this data, and it took several months to sort out some of the issues and get the interfaces right.”

All of the preliminary work, however, has set the stage for other hospital clinics to computerize. "This is now to help the family practice clinic, as it will make it easier to share information with the clinics visited by patients – such as nutrition and fertility. As it stands now, other clinics and in-patient departments can theoretically obtain access to the family practice records, using Citrix remote access systems. But this would require setting up security and access privileges for various care-givers. Communication will be easier once more clinics have the Nightingale system up and running.”

Dr. Tannenbaum noted that better communication with the data systems in other hospitals would also be useful, as "many of our patients go to other hospitals in emergencies.” As a result, a good deal of patient information is scattered around the city.

Better communication would also help out the research side, says Dr. Tannenbaum, who is also an associate professor of medicine at the University of Toronto. As well as training residents who graduate from U of T’s medical school, the family practice clinic is heavily engaged in research studies.

He noted that 10 family practice clinics at sites across the city are working together on research, and connectivity through electronic records would greatly ease the task.

The researchers are tracking patient data, sorting out trends and establishing best practices for quality outcomes.

On a related front, Dr. Tannenbaum sees patient involvement and self-management as huge issues in the near future, with patients gaining access to their electronic records. "It’s the next big hurdle," said Dr. Tannenbaum.

Rehab website expands, introduces a standardized process

Continued from page 1

The excellent opportunity to observe how the introduction of an e-health system impacts a clinical environment, while emphasizing what is already known about the need for extensive consultation and stakeholder involvement in order to foreground practitioner needs.

With the information gathered, and the lessons learned while revising the stroke form, the RITTS may then be able to expand further yet, introducing new standards for other diagnostic categories, such as acquired brain injury or spinal cord injury.

After expansion, the RITTS team will put into place a consistent methodology for creating standardized, online referral delivery systems, data sure to be of great value during the progressive regional shift towards e-health systems and online delivery alternatives.

Finally, the RITTS is poised to announce its plans to be HLT compliant by 2009, putting the system in an excellent position to be used as a standardized delivery method.

HLT, or Health Level 7, is a messaging standard through which different information systems are able to communicate with one another. The HLT standard is about to be used throughout the Champlain region. However, becoming compliant with the standard is an intricate and often lengthy process. As such, few systems in the Champlain region are poised to achieve HLT compliance.

Mr. Mulligan goes on to say, “Becoming HLT compliant will ultimately benefit the patient population. The RITTS will be able to connect with other applications in the region, and that increased collaboration will mean a much more efficient exchange of information. For example, there will be less duplication of patient records.”

Changing attitudes towards electronic patient health records and online health systems are fueling the RITTS continuing development. The website is introduced to new users every day and, as the region continues to embrace e-health systems, the RITTS will develop and expand as a comprehensive rehab referral delivery tool to meet the growing demand.