

Technology helps transform Trillium Health care

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<http://www.itworldcanada.com/a/Daily-News/9471fd08-c056-4f9e-87a6-47ee1ab7da35.html>

For link to interview with Benoît Long, follow this link:

<http://video.itworldcanada.com/?bcpid=1886192401&bctid=22907597001>

With its spa-like features, decentralized care and a wireless infrastructure, patients who check into the new Mississauga wing get better faster and reportedly don't want to leave.

[Trillium Health Centre's](#) new \$100-million West Wing, a showcase of evidence-based hospital design, officially opened in Mississauga, Ont., last week.

The 190-bed in-patient wing encourages healing by taking all aspects of recovery into consideration - from the physical rooms themselves to increased visits from family and friends to the efficiency of health-care workers.

"Patients report feeling like they are at a spa, not a hospital. And they are getting more bedside attention from their nurses, because of the decentralized care model and wireless nurse call devices," said Trillium president and CEO Janet Davidson in an issued press release.

The West Wing is participating in a five-year research study as part of [The Centre for Health Design's](#) Pebble Project, which promotes improving the quality of health care through architecture and design.

Trillium will measure outcomes such as patient satisfaction, medication use, nursing satisfaction, workflow efficiency, time required to access data, bed turnaround times, internal patient transfers, response times and length of stay.

"Evidence-based hospital design is a growing movement in new hospital constructions. There is plenty of published data supporting the notion that physical environments impact the delivery of health care, especially where it comes to patient outcomes, but also where it comes to health-care workers' emotional exhaustion and stress," said Davidson.

Large windows in every patient room increases natural sunlight, which studies have linked to higher recovery rates. Peace and quiet is promoted by directing staff pages and calls to wireless devices instead of loudspeakers in the halls.

Fifty per cent of the beds are located in private rooms. Semi-private rooms provide the illusion of privacy with separate entrances, screens and beds angled at 45 degrees.

The rooms also feature increased space for visitors to help family and friends feel more comfortable during their stay. Visits are further encouraged by the placement of “quiet rooms” for family members on every floor, as well as a gym, conference room, designated therapy/education room and patient lounge areas.

All rooms include wireless Internet access and arm-mounted televisions, which patients can use to activate cable and paid premium channels.

The entire wing is barrier-free and every room includes wheelchair accessible washrooms and showers. A separate seamless bacteria-resistant handwashing sink for staff and visitors is built into each room to reduce the spread of infection.

Operating on the decentralized patient care model, the wing is also equipped with wireless networks, an integrated communications infrastructure and a variety of electronic input devices.

Nurses receive calls from patients on mobile devices from Cisco Systems Inc., which allows them to immediately react to requests rather than waste time walking to patient rooms first. If a nurse is unavailable, the patient will automatically be re-routed to another.

Electronic whiteboards replace traditional whiteboards at nurse stations and provide legible patient data, schedules, alerts and test results in real time. Portable computing systems, called Workstations on Wheels (WOWs), roll directly up to patient beds.

“We are going to be able to aggregate all of that information to a single system that’s going to give us a pulse for the entire organization - where the beds are, where rooms need to be cleaned, which patients are out of their rooms that will be coming back - all of that is really a new science of patient logistics that is growing,” said Benoît Long, vice-president and CIO at Trillium.

The hospital is also at the forefront of electronic health records. Trillium is more than halfway through a seven-year, \$100-million program to transform its infrastructure from the ground up and allow interoperability between its system and the community, said Long.

“It has to become seamless. The patients don’t really care who has the information, they just want to make sure someone does, because otherwise, the patient is the data. They carry around all that information and most of the time, their record is only as good as their memory,” he said.

Trillium was one of the first hospitals in Canada to connect directly to family physician offices and automatically transfer patient information, Long pointed out.

During her speech at the opening ceremony, Mississauga Mayor Hazel McCallion said the message she most often receives during visits to hospitals is that patients are looking forward to going home.

But this wasn't the case in her visit to the new in-patient facility. "They want to stay here," said McCallion. "That's something really special."

The physical environment is transforming patient perceptions of recovery speed, confirmed Long. "We are getting patient feedback now that tells us that they feel like they are going to get better faster," he said.