

# Technology

## HEALTH CARE

### A healthy dose of IT

Canadian hospitals are beginning to see the front-line benefits of patient-focused software

BY TERENCE BELFORD

Joan Park, a case manager at Toronto's St. Michael's Hospital, sees herself as being on the leading edge of health care information technology.

In 2003, Ms. Park was part of a trial project for MEDcontinuum, a bit of software (also known as Clinical Utilization Management application) that tells nurses in charge of wards who needs a bed, who needs tests and who can be discharged.

Ever since, the software has become a handy tool to speed patients through the system.

"We have 535 beds, so space is always at a premium," says Ms. Park. "The system is great - not just because it lets us know what stage in treatment each patient is at with one glance at the monitor on the ward nurse's desk and what else needs to be done before discharge, but also because for the first time we have hard data on which to base our requests for more spending."

What it does not do, however, is involve patients themselves, she admits.

"We would like to, but there is still a paper-based system for that," she says.

St. Mike's is hardly alone in that respect, says Michael Martineau, director of Ottawa-based Branham Group's eHealth Practice. Branham does market research for the IT industry and in 2006 conducted an extensive look at the state of IT penetration in Canada's health system.

What Branham found would not surprise those on the front line of Canada's health care system. Canada's spending on health care-related IT lags woefully behind almost all other sectors of the economy, and despite trumpeting announcements of new, patient-centred software applications, few have actually been deployed.

In hospitals and clinics around the country, information and communications technology is a revolution still waiting to happen.

"We found that health care spent about \$2.3-billion last year on IT, but that represents only about 2.2 per cent of hospital and other institutional operating budgets," Mr. Martineau says. "That is about half what banks spend right now."

"Personally I think people believe hospitals are much further ahead than they actually are," he adds.

Hospitals have followed a path of investment dictated by



Case manager Joan Park, left, consults with nurse Maria Araneta at Toronto's St. Michael's Hospital. JIM ROSS FOR THE GLOBE AND MAIL

#### By the numbers

52

The percentage of health care administrators surveyed who said their IT budgets are increasing.

91

The percentage of administrative officials who said their IT budgets are insufficient to address a backlog of projects.

17

The percentage of IT budgets spent on new initiatives (approximately \$250-million to \$350-million in total spending on e-health projects for 2005/06 fiscal year).

» Source: Branham Group Inc.

their own administrative needs, Mr. Martineau says. The first applications were designed to handle repetitive, staff-intensive back-office operations. Then money got spent on basic high-volume, data-rich support functions such as pharmacies, laboratories and medical imaging.

"Next in line was human resources functions," adds Dan Matlow, president and CEO of Medworxx Inc., the Toronto-based company that supplies 150 hospitals across North America with software platforms such as their Clinical Utilization Management software.

"It is only now, really, that hospitals are starting to spend on applications involving patient care and even then the money is going to those dealing with hot-button issues."

Moving patients in and out of limited numbers of beds is one of those hot-button issues, points out Ms. Park. The MEDcontinuum system is, in fact, surprisingly simple.

The software monitors a patient's stay at the hospital and highlights any potential bottlenecks in care giving and helps staff assess how ready a

patient is to be discharged. "Right now we have 69 patients waiting for beds to open up in rehabilitation facilities," Ms. Park says. "We can't discharge them because they have nowhere to go. That is a major problem with all hospitals today."

But again, while MEDcontinuum might fit more or less into patient-focused software, in effect, one of its major uses is to help convince hospital administrators and provincial funding agencies of the need for more investment in follow-up facilities such as rehab beds.

"That is part of its value," Ms. Park says. "We can now back up our demands for more funding with hard statistics."

Mr. Martineau suggests private industry would not long stand for the impediments that prevent much needed investment in IT. He sees three main factors slowing adoption in health care. It is not the availability of applications, he says. Branham's survey identified 304 major vendors in Canada, all focused on gaining a chunk of the health care market.

He ranks those factors as lack of funding, lack of trained people to install, maintain and operate the technology and the inability of the existing system to change to accommodate new technology.

"The result is worrying," he says. "For example, in diabetes management Canada ranks just sixth in the world for its effectiveness in managing a disease that is near epidemic levels in this country."

"The reason is that diabetics should get at least four different tests a year but half the patients don't get them because there is no electronic solution in place to ensure they do. They are not being recorded and tracked and then treated."

In an effort to grab the attention of hospital administrators, Medworxx recently introduced a program that can be used in situations such as epidemics, hurricanes or floods by notifying first- and second-line responders of what to do, when and where via an Internet portal.

"There has to be a sense of urgency involved today to get health care officials to spend," says Mr. Martineau.

## KAPICA'S LAB

### The shave is close, the cost a bit rough

BY JACK KAPICA

Over the past few years, shaver makers (Panasonic, Braun, Norelco and the rest) have turned to high technology to make the shaving process better. And the practice raised the price.

The Panasonic Hydra Clean ES8228 is part of a series of three new razors, retailing from \$169.95 to \$329.95. At that price, it has to be pretty good to wean a man from the Gillette Sensor.

The Hydra Clean ES8228 Pro Curve is the top of Panasonic's line (with the ES8077 and the ES7058), all of which boast some form of high tech.

But what exactly is the advanced technology?

The ES8228 has a self-cleaning system in which the razor is put head-first into a water-and-detergent bath. The inner blades are also angled at 30 degrees, with a head that can tilt or swivel. It is a wet-dry shaver, water-tight, so you can use it in or out of the shower.

That might be good technology, but it's not necessarily high technology. For that, you have to look at the inner blade, which has been sharpened "using nanotechnology," which means it is honed to some unimaginably tiny number of exactitude.

Well, okay, that's easy enough to call high tech. Even higher is the lithium-ion battery, which will recharge fully in an hour or so, and will deliver enough power for one shave after only five minutes. There is also a high-winding motor running at a whiney 13,000 rpm. High or low tech, the ultimate test of a shaver is how long the shave lasts. Shaving dry, the ES8228 left the face a little rough. Shaving wet - with water and foam - proved to be fine until the next morning, which actually puts the ES8228 in the same league as a disposable blade.

Those with facial hair or a beard may find the ES8228 less capable of following and defining the line along the cheekbone. Another drawback is the flip-out trimmer, which works for sideburns but is awkward for mustaches because the body of the razor blocks the view of the trimmer in the mirror.



The Panasonic Hydra Clean ES8228 Pro Curve shaver

#### Click counter

Digital photos of pages of *Harry Potter and the Deathly Hallows* appeared in the Internet before the book was released, defeating one of the strictest - and most expensive - embargoes in publishing history. Do you think we need stricter laws that would penalize such acts of copyright infringement?

Yes, those who upload should be severely punished 46%

No, it's a harmless crime, the real impact of which is overblown 54%

A poll of Globe and Mail readers at globetechnology.com Total votes: 421

## Microsoft yearns for future, customers cling to past



MATHEW INGRAM mingram@globeandmail.com

It can't be a nice feeling when one of your biggest customers says mean things about your product, even when your name is Microsoft and you are one of the world's largest software companies.

Earlier this week, Gianfranco Lanci - president of Acer, the world's fourth-largest computer maker - told the Financial Times that "the whole industry is disappointed with Windows Vista."

The PC company executive said Vista has not generated as many sales of new computers as it should have over the past seven months, and that the new operating system has stability problems.

According to Mr. Lanci, many Acer customers are asking for PCs with Windows XP installed instead of Vista, in

part because the new software requires a much more advanced set of hardware, but also because of reported stability issues with Vista.

Are Acer's complaints just sour grapes? The PC maker was clearly expecting to sell more computers as a result of Vista, but has had to scale back its growth projections. Some might argue that's an Acer problem rather than a Microsoft problem.

Acer is not the only computer manufacturer to be distancing itself from Vista, however, nor is it the only observer to be less than impressed with the impact the new software has had.

Dell, the world's second-largest PC maker (just behind Hewlett-Packard), was planning to phase out sales of PCs with XP in favour of the new operating system, but changed its mind after more than 11,000 users voted to keep XP on Dell's IdeaStorm website.

And Gartner analyst Ranjit Atwal has said that while the PC industry has been seeing strong sales, he doesn't see Vista as being responsible for

much of that growth. "There's nothing you can say that Vista does supremely differently [to XP]," he told PCPro magazine in a recent interview.

Gartner said in a recent press release that Vista has "so far failed to stimulate the market in the way many hoped." The consulting firm said that "our market data suggest Vista has had very limited impact on PC demand or replacement activity."

For its part, Microsoft maintains that Vista is one of its most successful software launches, and that with 40 million copies sold, the new version of Windows is "on track to be the fastest-selling operating system in Microsoft's history."

The company also recently reported strong financial results, with record annual revenue of more than \$50-billion (U.S.), up by 15 per cent over the previous year.

Much of the credit for that goes to Vista, Microsoft said, although the release of Office 2007 also accounted for some of the strength. Some analysts were less than impressed,

however. "Vista appears to be disappointing," Lehman Brothers analyst Israel Hernandez told the Seattle Times, noting that revenue growth for the Windows division was below his expectations.

"I think it missed most Street expectations," the Wall Street analyst said. "One quarter after the biggest product cycle in the company's history, you'd think you'd see a little more upside."

The software giant also scaled back its Vista-related sales estimates, telling analysts that it now expects the new product to account for 78 per cent of its operating-system revenues, down from earlier projections in the 85-per-cent range.

"What that seems to say is that XP has stronger legs than you would expect after the release of a new operating system," industry analyst Michael Cherry told PCWorld magazine.

Part of the reason for that, Mr. Cherry says, could be the higher hardware requirements for running Vista.

"Most of the machines I see

## BUSINESS TO BUSINESS

### Business Opportunities

**WANTED TO PURCHASE** small tech firm with IT exec product, client base. 20/yr. seasoned IT Exec wishes to take Co. to the next level. techforsale@hotmail.com

### EMPLOYMENT OPPORTUNITIES

Every day in The Globe and Mail.

**www.myvocalvalet.com** A talking computer mouse makes free phone calls, reads news, memos, and sets alarm on voice command

### Capital Wanted/Available

**GOV'T FUNDS** for R & D to 68% of costs. Record. Refs. We get paid when you get paid. W.A. Easton P.Eng., C.A. eastoneng@aol.com

### Distributors Wanted/Available

**GREEN DISTRIBUTORS** wanted for patented Oil Lift cleaning technology products. Contact info@oillift.net or www.oillift.net and www.oceansplan.com

### Franchises

**FAST GROWING** U.S. based franchisor with solid track record, years of experience offers master franchise opportunities in Canada. To request info call Laura Corbett 586 619 2160 x 310 and mention ad.

### CANADA-WIDE CLASSIFIED FEATURES

Every day in The Globe and Mail.

**HOME-BASED FINANCIAL SERVICES** Franchise. Business to Business. Call 1-800-387-0860.

### Franchises

**WANTED:** Entrepreneurial business person. 30 year old experienced franchisor launching new fast casual dining concept. Hottest new trend in the restaurant business industry. Locations available in GTA. Call Carol 1-866-567-5648

### Internet Directory

**TIME SHARE** resales 60 - 80 % Off Retail! Best Prices, Seasons and Resorts. Over 400 resorts online! Please Call for FREE Magazine! Call at 1-800-640-5074 or visit [www.holidaygroup.com/globe](http://www.holidaygroup.com/globe)

### Investment Loans

**RULE OF 72 = Your Nest Egg.** Make the rule of 72 call or your rule. www.ruleof72.biz or 1-800-480-0012

### EMPLOYMENT OPPORTUNITIES

Every day in The Globe and Mail.

### Investment Opportunities

**HOTEL:** London, Ont. Dntn. 27 rms. + 3,000 sq. Bar. Asks \$950K. 13% NOI. Sam Nastat, Sutton Grp Rlty., (647) 802-7138

### Legal Services

**WANTED** - Lawyer(s) or law firm specializing in criminal, conspiracy, personal injury, estate law & large law suits pending. Call Kevin: 416-629-0918 or 416-733-8268.

### Mortgages

**ATTENTION ROMSPAN** investment clients. Please contact the email address below if you wish to be part of a customer satisfaction survey. [anonymousebox@hotmail.com](mailto:anonymousebox@hotmail.com)