Go mobile, doctor

Physicians are increasingly using tablets and smartphones to access patient data on the go • BY WENDY GLAUSER

Whether physicians are using smartphone technology in their own family practices or using hospital IT systems, Canadian doctors are increasingly turning to mobile devices to facilitate patient care.

According to a survey released last year by market researcher Essential Research, 62% of Canadian physicians own smartphones and 86% use the devices for professional purposes.

Dr. Eric Sturtz, a physician in the department of family medicine at North York General Hospital in Toronto, says he finds his tablet computer handy to show patients images when explaining a diagnosis, as he did when recently describing diverticulosis to a patient.

In other cases, mobile devices are replacing face-to-face conversations altogether.

Dr. John Semple, chief of surgery at Women's College Hospital in Toronto, is currently wrapping up a pilot project that allows surgeons to follow postoperative patients using a program that the IT solutions company QoC Health developed.

In the pilot, 60 patients recovering from breast reconstruction or orthopedic surgeries were sent home with customized smartphones and tablets on which to record their recovery. Each day, patients were prompted to answer 12 recovery-related questions, such as “Are you feeling nauseated?” and “Are you feeling stressed or depressed?” using simple, touch screen technology. Patients who answered questions in a way that indicated potential recovery problems would be flagged and followed up with, either over the phone or in person.

In addition, patients took photos of their incisions each day, which were automatically sent to the doctors’ system. “We can tell quite a bit just by looking at a picture of the surgical site,” said Dr. Semple.

If such technology becomes the standard of care, Dr. Semple says it will save the health system money by reducing follow-up appointments. “A patient wouldn’t have to drive down from Owen Sound to Toronto in the middle of February if we already knew..."
they were doing all right.”

While Dr. Semple had thought some patients would struggle with the technology, especially given they were on analgesics, he said all of the patients fulfilled their requirements. “They loved it,” he said. “It made them feel like they were still connected.”

While concerns about misunderstandings abound when mobile tech is introduced to patient care, the technology also has the potential to increase understanding between physicians and patients, says Dr. Semple. “The experience of the patient going through the recovering period is not really well-understood,” said Dr. Semple. “This pilot was really an amazing insight into that.”

At the three University Health Network (UHN) hospitals in Toronto, meanwhile, it’s provider-to-provider communication that’s getting a mobile overhaul. A year ago, a smartphone-enabled program called Clinical Message was implemented in UHN hospitals to replace “dysfunctional” paging technology, as Dr. Rob Wu, research director at the Centre for Innovation in Complex Care at UHN, describes it.

In April, the technology received a bronze award in the international Edison Awards in the medical category. The system allows nurses and other health-care providers to anchor messages to a specific patient in the system and clearly explain the problem and urgency. The nurse who sent the message is subsequently notified when the physician replies.

Not only does the platform end pager tag, it also better informs an incoming physician when a patient is handed over. Whereas communications between health-care providers on a specific patient are often conducted in bits and pieces through various e-mail accounts and phone conversations at most Canadian hospitals, the UHN system keeps communication about particular patients all in one place. “You can look at the communication and see what’s been going on with the patient,” said Dr. Wu.

Given that physicians are already using their smartphones in other aspects of patient care, Dr. Wu says it makes sense they use the same handheld device for communication with other providers. For example, physicians are already taking photos of symptoms that “are not so easy to chart,” such as rashes or ulcers in order to monitor them over time.

Eventually, Dr. Wu said he expects patients will also be brought into the communication system. For example, they could receive text notifications outlining “what their care plan is for the day and who their team is.”

Indeed, patient comfort with—and desire for—mobile technology is part driving the mobile trend. When Dr. Stutz co-conducted a survey measuring more than 150 patient responses to seeing their doctor look up medical information online, he found that most patients’ confidence in their physician stayed the same or went up. (That said, when the source consulted was Internet search engines, confidence levels decreased for about 40% of patients.)

Physicians, too, are seeing the benefit of mobile tech in health-care delivery and communication, says Dr. Semple. “Initially, a lot of the surgeons thought it would just be an extra layer of work,” he said of the QoC Health program. “The ones who have seen it are very favourable to it and they see the value of it.” MP