

These days, there are few places Danielle Collier doesn't read best practice guidelines (BPGs). Whether she's scrolling through the documents' recommendations at work, or in her car while waiting to pick up her son after school, she always has access to RNAO's BPGs thanks to her new personal digital assistant (PDA).

The tiny device is no bigger than her hand, and easily slides into her purse. But it gives her access to tools that would line an entire wall of library shelves in the real world. Collier uses her PDA to search for the latest information on drug interactions, and can beam the most recent research articles to her colleagues at Sioux Lookout Meno Ya Win Health Centre (SLMHC), where she's the professional practice leader. Last spring, 71 of the hospital's RNs received the devices as part of a Ministry of Health project to get PDAs into the pockets and practice settings of nurses across the province.

Collier says the technology helps RNs in her workplace span the 1,700 kilometres that separate them from BPG workshops in southern Ontario. Before the hospital became part of the PDA initiative last summer, Collier says keeping her nursing colleagues updated on the latest evidence-based information meant carting paper copies of articles and BPGs around in the back of her car between the health centre's eight different sites.

"Nurses up here don't feel connected to the outside world," she says. "We're so far away – it's a 22-hour drive to Toronto. When people can access best practice guidelines, they feel more a part of it all."

Today, nurses use their PDAs to quickly look up drug interactions, and receive emails about the latest research so patients instantly get the safest care. The devices are also being used in unexpected ways. Collier says some RNs have used the PDA's camera to take pictures of patients' wounds so they can track how well they're healing.

SLMHC's nurses are among the 1,300 RNs taking part in the two-year project funded by the province. Ontario's Chief Nursing Officer, Vanessa Burkoski, says she wanted to create the project to keep nurses at the forefront of the latest technology. "The future is in our hands, and once again Ontario's nurses are at the cutting edge of knowledge-based practice," she says.

Nurses are using PDAs, tablet computers

the size of a small notebook that can fit into the crook of an arm, BlackBerrys and iPhones to access the latest knowledge, right at their fingertips. Each device is equipped with software programs that allow them to instantly look up medication doses and side effects, receive email alerts when a new study is available that could affect their practice, and scroll through condensed versions of the clinical and healthy work environment best practice guidelines. Twenty-five of the BPGs have been condensed so far, and all 42 are expected to be available next year. For the past year-and-a-half, staff from

But Bajnok acknowledges that bringing BlackBerrys to bedsides requires more than showing RNs where the power button is. She believes the real challenges lie in addressing nurses' fear that stopping to click through a guideline in front of a patient will detract from the human element of the relationship, or give patients the impression that the nurse doesn't know everything she should.

"Nurses have to get to a comfort level so that when they're working with the patient, they can say 'let me double check that information for you.' The PDA can be a patient teaching tool that helps nurses

Hands on evidence

NURSES ARE USING POCKET-SIZED DEVICES TO ACCESS VOLUMES OF EVIDENCE-BASED INFORMATION RIGHT AT THEIR FINGERTIPS.

BY JILL SCARROW • ILLUSTRATION BY JOSÉ ORTEGA

RNAO's Centre for Professional Nursing Excellence have led workshops to teach nurses how to use the devices, and provided ongoing technical support to keep the project up and running.

Irmajean Bajnok, RNAO's Director of International Affairs and Best Practice Guidelines Program and the Centre for Professional Nursing Excellence, says PDAs give nurses a glimpse of a future where technology will be woven into practice.

"I think the PDA initiative is a great example of how the information can be provided right at the point of care through technology," she says. "It supports nurses as knowledge professionals and sends a message that ehealth is alive and well in nursing and health care."

address specific concerns," Bajnok says.

Diane Doran, a professor at the Lawrence S. Bloomberg Faculty of Nursing at the University of Toronto, says her research has also shown plenty of practical reasons that can hinder getting more nurses to be tech-savvy. Doran is the lead investigator on a team studying how technology improves nurses' ability to access information, and the effect it has on patient outcomes. She says things as basic as spotty wireless Internet access or having to carry around devices like the larger tablet could mean PDAs spend more time tucked in their cases than at a patient's bedside. But she says those are tiny obstacles when compared to the benefits. Doran says PDAs are improving the way nurses can communi-

cate with their colleagues on different floors or hospital sites because they can now send a quick text message. Nurses are also reporting significant increases in their awareness and use of research, and in the quality of care they can provide.

Doran says her data is also starting to show how the technology is improving the quality of nurses' work lives, especially in long-term care. She believes the increased benefit may be because the PDAs are giving RNs in long-term care and the community access to information hospital staff has long been able to find in the organization's library

says. "We're able to provide better care."

George Fieber says better care motivates him to stick with the project. Fieber is the professional practice leader at Thunder Bay Regional Health Sciences Centre, and joined the PDA initiative when it began last year. He says RNs are using tablets across the hospital, with varying degrees of success. Nurse practitioners in acute care units, for instance, can now do research on the go, and lower nurse-to-patient ratios in the intensive care unit meant those RNs were able to spend time getting used to the tool. But he says it was harder for nurses on the busy

pensable to practice as a stethoscope is today. Bauer led some of the workshops to teach nurses how to use the tools, and she says if RNs start to feel frustrated with their PDA, they should just remember one thing: they master more complex nursing knowledge and skills during every shift.

"Each and every day of my nursing career, I learned things that were far more complicated than the PDAs," she says. "This is just a tool to do the other work, which is far more complicated."

In Ottawa, public health nurse Nadine Hodgins says it was easy to adapt to her tablet. Hodgins is a member of Ottawa's Live it Up team that visits high schools to promote healthy eating and exercise to students. During the school year, Hodgins is usually on the road. The tablet allows her to keep in touch with principals and teachers without wasting precious time traveling back to the office to read emails. Hodgins says she's also glad to have the tablet on hand so she can double-check her facts, or show students the city's website where they can get information on sexually transmitted infections. It's also handy if a teacher asks Hodgins to teach students about sexual health.

"We sometimes get requests from teachers about something that's beyond physical activity and nutrition. Then we can look at the school curriculum and see how the public health resources we have match up," she says.

Back in Sioux Lookout, Collier says the PDA is more than a tool that can save time and paper – it also shows the nurses management understands that they need the latest knowledge. She believes the devices are particularly helpful to recruit new graduates who won't want to work in isolated northern communities unless they're plugged into the latest research. Patients have also started to notice the PDAs. In fact, Collier says it's funny when a patient comments on how state-of-the-art SLMHC's nurses are, since they're using the latest technology in a building constructed long before computers became a must-have appliance in everyone's home.

"We're in a hospital that's 70 years old. So the fact that we're pulling out PDAs is pretty neat," she says. **RN**



or by talking to another team member.

"In long-term care, there may only be one RN working, so she doesn't have ready access to other colleagues to consult with," she says.

Jill Geiger can attest to that. She usually works the night shift at Bluewater Rest Home in Zurich, 70 km northwest of London. That means she's the only RN on duty at 3 a.m., so if she has a question about a new medication a resident is on or wants to look up nutrition recommendations to prevent constipation in RNAO's best practice guidelines, she can do it quickly on her tablet instead of relying on cumbersome books that may be outdated before the ink on their pages is dry.

"The fact you've got current information at your fingertips, that's wonderful," she

medical/surgical floor to work tablets into their shifts. Fieber says more nurses got excited about PDAs once they were linked to patient information on the hospital's electronic health records, and when the hospital became a candidate to be an RNAO Best Practice Spotlight Organization and set out to implement five BPGs over three years. Now, for example, RNs can use the electronic health record to instantly see which patients will need information about caring for an ostomy when they go home, and show them an electronic presentation based on a newly released BPG on the topic.

Nancy Bauer can understand why it takes time to make PDAs an integral part of practice, but she believes that, one day, reading a BPG on an iPhone will be as indis-

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