January 2010

# HealthForceOntario Newsletter

*A report to Ontario's health care leaders.*

## Windsor "Thrilled" to Welcome Medical Students

Windsor's new medical education building opened its doors to the first class of 24 medical students last fall. And the Windsor community opened its arms.

*Dr. Deborah Hellyer, Respirologist, Windsor Regional Hospital*

"We're thrilled to have the Schulich satellite campus here," said Dr. Deborah Hellyer, a respirologist at Windsor Regional Hospital. "This area has been under-serviced for years and the new medical campus will bring more physicians to the community. We also believe that if students are trained here, there's a better chance of them staying after they graduate."

The University of Windsor partnered with the University of Western Ontario's Schulich School of Medicine and Dentistry to establish the program. Once the program is fully enrolled, the campus will host close to 100 students.

University of Windsor President, Ross Paul, is also enthusiastic: "We are already seeing the results," says Ross. "This spring, two graduates of Western's Schulich Medical Program, who did their clinical practice in Windsor, have announced that they are returning to set up practice."

According to the Assistant Dean of the program, medical students also stand to benefit from the Windsor experience. "Students doing their family medicine rotations here get loads of hands-on experience and have excellent role models," says Dr. Raphael Cheung. "Family physicians in Windsor are in the hospital, at the HIV clinic, the homeless clinic, the sports medicine clinic, the teen health clinic and the methadone clinic. They work in a huge variety of high-profile settings."

### Four new medical school campuses

Students at new medical school campuses in Niagara, Kitchener-Waterloo, Mississauga and Windsor will be exposed to new areas of the province and to the style of medicine practiced there.

"Students at the medical education campuses learn what it's like to practice away from the tertiary and quaternary care centres," explains Jeff Goodyear, the director in the Health Human Resources Strategy Division, Ministry of Health and Long-Term Care, who is responsible for the program. "And when they graduate, they will feel comfortable setting up practice in those same kinds of locations."

The new campuses, affiliates of existing medical schools, are part of an Ontario government commitment to increase the number of first-year spaces in medical schools by 15 per cent that began in 2005/06:

- **Windsor:** The satellite of Western's Schulich School of Medicine and Dentistry welcomed its first class of 24 students in September.
- **Kitchener-Waterloo:** 15 students began medical studies on the Hamilton campus of McMaster University's Michael G. DeGroote School of Medicine in September 2007 and then transferred to the Waterloo Regional Campus in mid-December of the same year. Video-conferencing technology links the two campuses. In September 2008, the campus admitted its second cohort of 20 students.

*Construction of the new Medical Education Building at the University of Windsor gets a close look from Civil Engineering student Ogheneruemuse (Christy) Ekpekurede.*

- **St. Catharines:** McMaster also enrolled 15 students in its Niagara Regional Campus in August 2008. Students have been on site in St. Catharines since December 2008. Faculty hope to double the class size within the next two years.
- **Mississauga:** Construction of the University of Toronto medical campus is underway and full-time students are expected to start classes in 2011. Meanwhile, Mississauga's Credit Valley Hospital and Trillium Health Centre have begun offering more clinical placements for University of Toronto medical students and medical residents.

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# Message from Joshua

**Welcome.**

The goal of the HealthForceOntario strategy is to make sure that Ontarians have access to the right number and mix of qualified health care providers, now and in the future. Education is a linchpin of that strategy. But educating more health professionals is not enough. Changing how we educate health providers is equally, if not more, important. We need to be innovative to increase the system's capacity to serve patients. Here we take a look at some of those innovative approaches:

- An effective health education strategy needs to address our current providers as well as those who are re-licensed. Continuing education is an important tool for keeping our providers challenged and engaged. Nurses in Ontario are going back to school to become nurse practitioners and nurse endoscopists. Nurses and respiratory therapists are training to become anesthesia assistants, building their careers and gaining specialized skills. There is more about these opportunities for career laddering on **page 6**.
- Novel approaches to education can also help improve the distribution of our health human resources. Through education we can expose providers to practice in different locations and settings so that they become comfortable practicing there. To that end, we are opening medical school campuses in Mississauga, St. Catharines, Kitchener-Waterloo and Windsor. There is more on the Windsor campus on the **first page**.
- The impact technology is having on health education is extremely important. On **page 4**, we can read about how the Ontario Telemedicine Network uses videoconferencing and webcasting to break down the barriers of time and distance to education. On **pages 3 and 4**, we learn how simulation equipment is giving students clinical-quality experience in a laboratory setting.

For me, the HealthForceOntario education initiatives are a particular point of pride because they have their roots in a collaboration between the Ministry of Health and Long-Term Care and the Ministry of Training, Colleges and Universities. Like health care providers, we are abandoning silos to work in partnership. Our students, and Ontarians, are profiting from it.

In closing, I'd like to stress that we cannot settle on a single approach to health education – knowledge is constantly expanding, technology is changing and team-based approaches are increasingly common. The stories here are exciting because they represent only a fraction of the work driving that evolution. There are so many stories to tell. Watch for them in future editions.

Sincerely,

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# Dummy Makes a Smart Teacher

*Georgian College nursing student, Dawn Knight, checks on sim baby in the lab.*

**Since SimMan started showing up for nursing classes three years ago**, he's been making a great impression on students and their teachers.

SimMan is an ultra-realistic, computerized, full-body training mannequin that talks, blinks, breathes and has a pulse. In fact, there are entire sim-families – from infants to seniors to pregnant moms – that are helping prepare students for health care careers at all Ontario nursing schools thanks to $20 million in HealthForceOntario funding.

Training mannequins have been used for years, but SimMan is a much more sophisticated teaching tool. He "lives" in a clinical simulation (or "sim") lab which gives students the chance to rehearse high-pressure scenarios before they are thrown into them on the job. SimMan can be programmed to simulate a life-threatening "event" such as a heart attack or allergic reaction. Students in the lab assess the impact of interventions by monitoring changes to his lifelike breathing, pulse and other responses.

At Algonquin College in Ottawa, more than 700 nursing students have used the sim lab since it opened in 2004 as the first of its kind in Canada.

"I'm really excited about the potential of the sim lab because I think this can really change how nursing it taught," says Barbara Foulds, PhD, Associate Dean of Health, Algonquin College. "It creates the opportunity for students in a very realistic environment to practice mock codes and learn what to do when things go wrong."

Students are saying that the chance to rehearse in a safe environment makes them more confident in their ability to handle situations in the real world. And that rehearsal seems to pay off. Algonquin conducted a study of the effectiveness of the sim lab as a teaching tool and found that there were no significant differences in educational outcomes between clinical and simulated experiences. Because it is so effective, simulation also relieves the crunch to find clinical placements for students.

"That cognitive rehearsal piece adds an invaluable component to their education," says Foulds. "Students are better prepared because they know the sequence of what needs to happen. They've had a chance to actually walk through it and that makes a big difference."

At Georgian College in Barrie, the overwhelmingly positive response of nursing students to the sim lab has suggested it has potential to bring together students from other health disciplines.

"I'm a big believer in interprofessional education," says Cassandra Thompson, PhD, Dean of Health Sciences at Georgian College. "In addition to our Bachelor of Sciences in Nursing and Practical Nursing programs, we're exploring the use of the sim labs in more programs – the paramedics are using it now – and we plan to bring together interprofessional teams in the lab. We're taking a look at how we can integrate collaborative approaches to simulated health care learning."

Given these glowing reviews and the potential for new and expanded roles in health care, we can expect to see a lot more of SimMan and his siblings in classrooms in the future.

*The sim baby gives students the opportunity to become confident in nursing procedures.*

## Michener's Simulation Centre Brings the Team Together

The principles of interprofessionalism have been enshrined in the curriculum at Toronto's Michener Institute for Applied Health Sciences since 2006. At the end of last year, students were putting those principles into action in a new, 20,000+ square foot simulation centre.

The *CAE-Michener Centre for the Advancement of Simulation* includes 24 Objective Structured Clinical Examination (OSCE) rooms and as many as eight simulation suites. Technology at the centre includes simulation mannequins, standardized patients (actors), screen-based simulators and simulated electronic health records.

Students benefit from team-based simulations in environments that mirror operating rooms, emergency rooms, hospital rooms and triage settings. They assess and care for patients in a range of scenarios, such as a pandemic outbreak or a vehicle crash. Medical radiation, respiratory therapy and medical laboratory technologies students use the facility, as do nursing, medical and pharmacy students.

The Michener Institute exclusively educates health professionals – many of them in high-demand professions – with funding provided under the HealthForceOntario health human resources strategy.

"The simulation centre represents a significant leap forward for interprofessional education at Michener," says James Robertson, Michener's Vice President, Corporate Services and Strategic Advancement. "It's also a powerful assessment tool. Leadership and communication, consensus-building and conflict resolution skills can all be assessed in the centre."

# Telemedicine Offers Education 24/7

When Dr. Carlo Martinoli, Associate Professor of Radiology at the University of Genoa, Italy, stepped up to the podium at McMaster University to discuss the intricacies of wrist and hand ultrasounds, he was also taking centre stage on what has been called the largest collaborative telemedicine service in the world.

Dr. Martinoli's lecture was webcast live to health professionals across the province by the Ontario Telemedicine Network (OTN), using leading-edge, two-way videoconferencing. Following the webcast, his presentation was archived on the OTN website library and made available 24/7. For time-pressed health care students and health professionals across Ontario, OTN's library of webcasts is an easily accessible resource that helps them keep up with best practices in health care.

> "Ten years ago, I could never have imagined telemedicine wouldn't be absolutely everywhere within five years…"

But the OTN is much more than an e-lecture hall and library. It is also an efficient and effective advanced communications tool that provides network services for administrative and clinical videoconferences that link communities across Ontario.

With the support of the Ministry of Health and Long-Term Care, OTN was formed in 2006 through the merger of three award-winning, provincially-funded telemedicine networks: CareConnect in Eastern Ontario; NORTH Network in Central and Northern Ontario; and VideoCare in Southwestern Ontario.

OTN is a huge success. It has connected 545 sites across Ontario and in 2007/08, facilitated more than 38,000 clinical, 7,800 educational and 6,800 administrative events.

Currently, OTN services are growing at 20 per cent annually, but that growth curve has taken a while to build, acknowledges Ed Brown, CEO of the OTN.

Brown recalls spending a lot of "windshield time" driving across the province to meet with hospital administrators to discuss the benefits of the network. A passionate advocate for telemedicine, Brown saw the potential of the technology a decade ago when he launched the NORTH Network.

"Ten years ago, I could never have imagined telemedicine wouldn't be absolutely everywhere within five years," says Brown. "Now, we're happy that telemedicine is being seen as completely mainstream."

"It's an Ontario success story that is spreading around the world," says Brown, who mentions recent visitors from Siberia, Sweden, Alaska, Kazakhstan, Singapore and South Africa who are also successfully using this technology in their countries.

OTN has become a critical part of the complex infrastructure that helps health care providers deliver better services to patients. "We're a facilitator that helps organizations deliver their services," says Brown. "From a clinical perspective, it's about delivering better access to care for patients. From an educational perspective, it's about delivering best practices to practitioners who can't easily access that knowledge, due to either geographical or time constraints."

As telemedicine moves even more firmly into the mainstream, a demand for patient education is growing. OTN is developing e-training capabilities for delivery over the Internet and has begun working with Family Health Teams and Community Care Access Centres to deliver telehomecare to help patients manage their chronic diseases.

Given the rapid rate of change, it seems a good bet that even more innovative telemedicine services are just a click away.

# The Grow Your Own Nurse Practitioner Program Bears Fruit

Long-vacant positions are suddenly sprouting skilled nurse practitioners, thanks to an innovative education funding approach. Nurses and their employers couldn't be happier.

"The Grow Your Own Nurse Practitioner Program is a fantastic initiative," said Jenny Schiffl, a nurse practitioner in the new Primary Health Care Centre at the Haldimand War Memorial Hospital in Dunnville, 60 kilometres south of Hamilton. "Direct primary health care in an under-serviced area has been improved and I have been able to start my advanced level studies, so it really is a win-win program."

> "The Grow Your Own Nurse Practitioner Program is a fantastic initiative."

Launched in 2006, the Grow Your Own Nurse Practitioner Program (GYO NP) helps communities recruit nurse practitioners and helps nurses expand their skills. Organizations with a ministry-funded NP position that has been vacant for more than a year can use those funds to sponsor a local registered nurse to study to become a primary health care nurse practitioner. The re-allocated funds can be used to pay for tuition, books and the nurse's salary while attending school. In exchange, the new primary health care NP must agree to work for the sponsoring organization for two years (or three years part-time).

Schiffl completed her studies at McMaster University last fall and credits the GYO program with making it possible. "The Primary Health Care Nurse Practitioner Program is very demanding," said Schiffl. "Working – even part-time – while completing it would be very, very difficult, if not impossible."

Solving the impossible is also how Nigel Couch, Programs and Operations Manager for the Multicultural Council of Windsor-Essex County, might describe the program. Despite having funding available for several years, the council was unable to fill the primary health care nurse practitioner position. "Part of the reason," explains Couch, "is that the council is an umbrella organization that works with 15,000 clients each year, many of whom have specialized needs."

"Some of our clients come from war-torn countries, many of them have language issues," he said. "When it came to finding a primary health care nurse practitioner, we needed someone to work with us who understands these needs, who understands cross-cultural sensitivities and who is comfortable working through translators."

Through GYO NP, the council was able to recruit a good candidate who started working with clients last fall.

For Couch, there is no question of the GYO NP's value. "Because of this program, we are able to make good health care more accessible for clients with high needs."

**The Ontario Primary Health Care Nurse Practitioner Education Program is delivered by a consortium of ten universities. In the fall of 2006, the ministry increased the number of education seats from 75 to 150 and, in the summer of 2007, announced funding for an additional 50 seats by 2012. For more information about the program, visit healthforceontario.ca and type "nurse practitioner" in the search box.**

**For more information about the Grow Your Own Nurse Practitioner Program and the 2008 guidelines for application, visit healthforceontario.ca, type "grow" in the search box and scroll to the bottom of the page.**

# New Career Path for RNs and Respiratory Therapists

New Ontario programs to train nurses and respiratory therapists in anesthesia are leading to an increase in the number of operations per day, reduced overtime as operating rooms finish on time, standardization of equipment and procedures, better working environments and better patient care.

"As the technology in the operating room becomes more complex, there is a growing need for assistants with specialized training and skills," explains Susan Dunington, a respiratory therapist and critical care professor at Toronto's Michener Institute for Applied Health Sciences. "To meet the need, respiratory therapists and registered nurses are being given an opportunity to train for a new career as an anesthesia assistant."

"As the technology in the operating room becomes more complex, there is a growing need for assistants with specialized training and skills."

The anesthesia assistant's responsibilities include various levels of preparing, sedating and monitoring patients, depending on whether the assistant holds a basic or advanced certificate. In all cases, the procedures are carried out as part of an anesthesia care team under the supervision of an anesthesiologist who is freed up to deliver more complicated care.

130 people have completed basic training and 63 have completed advanced training through the Michener Institute. The two-year old Michener program was developed in collaboration with the Faculty of Medicine at the University of Toronto and is funded under the HealthForceOntario strategy. Fanshawe College in London began a similar program, equivalent to the advanced Michener certificate, in September 2008 for professionals with 4,000 hours of health care work experience.

Graduates are at work in operating rooms across the province, many at sites that are participating in the HealthForceOntario Anesthesia Care Team Demonstration Project. The new role is being well received and is achieving its objectives.

"I have visited all nine demonstration sites and this new role has been overwhelmingly accepted by anesthesiologists and everyone involved in perioperative care," says Dr. Keith Rose, Executive Vice President and Chief Medical Executive at Sunnybrook Health Sciences Centre and project lead for the province's Anesthesia Care Team Demonstration Project.

There is only one other anesthesia assistant program in Canada, at Cariboo College in British Columbia. The two Ontario programs, with a third being considered for Ottawa's Algonquin College, demonstrate Ontario's commitment to offering new roles for health care professionals.

The University of Toronto also began offering a certificate program in anesthesia care for Nurse Practitioners (NP's) in January 2009. As members of anesthesia care teams, NP's with certification in anesthesia care will collaborate in the care of patients requiring pain management and/or receiving sedation and anesthesia.

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**HealthForceOntario** is the province's strategy to ensure that Ontarians have access to the right number and mix of qualified health care providers, now and in the future.

The **HealthForceOntario** strategy is:

- Identifying and addressing Ontario's health human resource needs.
- Engaging partners in education and health care to develop skilled, knowledgeable providers, and create the health care delivery teams that will make the most of their abilities.
- Introducing new and expanded roles to increase the number of providers working in health care and build on the skills of those already in the system.
- Making Ontario the employer-of-choice for all health care providers.

The Ministries of Health and Long-Term Care and Training, Colleges and Universities are delivering on the **HealthForceOntario** strategy in partnership with the province's health care consumers and providers.

**To contact the Interprofessional Care Strategic Implementation Committee, please email: ipcsic@healthforceontario.ca**

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