When Canada’s premiers met as part of the Council of the Federation to discuss health-care issues in 2012, they agreed that innovation was necessary to achieve better quality health care and a sustainable health system.¹ The advancement of innovative education practices is key to both of these goals.

Context

Canada’s health system is under strain. As our aging population grows, challenges are emerging for seniors’ care and for chronic disease prevention and management. At the same time, health-care costs are rising amid increasing fiscal pressures from provincial and territorial governments, and international performance measures show Canada lagging behind other industrialized countries when quality of care is measured against financial investment.

In response to these challenges, health service design and delivery is being transformed across the country, and one of the keys to this transformation is in our preparation of health professionals. Just as we require innovation to improve the quality of patient care and the value received from our health system, we must also innovate to educate enough nurses with the right skills and knowledge to meet future health-care needs.

Accordingly, health-care leaders are increasing their advocacy for education changes while encouraging educators to keep innovating. In A Nursing Call to Action, the National Expert Commission (NEC) has called for a “radical change in health-care education.”² Echoing this call were attendees at a Dalhousie school of nursing think tank on the future of Canada’s undergraduate nursing education, which recommended establishing an inventory of nursing education innovations. The proposed inventory would capture examples of curriculum changes, teaching methods and educator-service partnerships.³

Canada is not alone in the belief that nursing education needs to change and that it must embrace innovation. The U.S. Institute of Medicine’s Initiative on the Future of Nursing⁴ also states that nursing curricula must include technology advances and consider new teaching-learning strategies.

This policy brief highlights select innovations in nursing education. A pan-Canadian mechanism is needed, however, if we are to identify and share innovations in nursing and other health professional education programs across Canada.

Innovative Program Design and Delivery

Schools of nursing throughout the country continue to embrace innovation in both the design and delivery of their education programs. In doing so, they are recognizing the changing health-care environment and the changing demographics of their students.

Distance education

By incorporating new technologies and approaches to learning when designing distance-education programs, nursing schools are closing the digital divide between in-person and virtual students.

Technology-enabled distance learning has increased access for students living in rural or remote areas who are either unable to travel or require a flexible learning schedule — just as it has for practitioners who are interested in new knowledge to advance their careers.

In 2011-2012, there were 108 nursing programs (36 bachelor, 25 post-RN, 21 master’s, 21 nurse practitioner, 5 PhD) offered electronically (either in full or in part).⁵
Distance education programs combine print-based modules, interactive web-based learning, and audio- and videoconferencing to provide education closer to home. For students, this means having the support of their family and friends along with the encouragement to stay and work in their communities. In cases where remote presence telementoring technology is not available, laboratory and clinical placements are arranged in accredited facilities.

**Fast-tracking**

Fast-tracking programs allow RN students to obtain all the competencies they need to practise safely and effectively in less than four years. These programs are particularly attractive to mature students, many of whom have family and work commitments and need more flexibility.

Shorter programs are typically available to highly motivated, university-ready students, students who already have an undergraduate degree in another field or nurses who wish to become an RN.

Many schools offer fast-tracking options within the entry to practice (ETP) baccalaureate category. The popularity of these programs has grown substantially in recent years, with 93 fast-tracking ETP RN educational programs in 2011-2012 (compared with 32 in 2005-2006) — an increase of almost 200 per cent.

**Continuing education**

Continuing education enables nurses to enhance their practice by acquiring the new knowledge needed for maintaining competence or achieving specialty certification and to advance their professional and personal development. Ongoing education fosters innovation as well as evidence-based practice and equips nurses for the demands of increasingly complex care.

Some nurses choose to add to their RN-diploma education by completing the additional courses required for a baccalaureate degree. In 2012, 1,474 students graduated from post-RN baccalaureate programs.

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**PROFILE: UNIVERSITY OF SASKATCHEWAN COLLEGE OF NURSING’S DISTRIBUTED UNDERGRADUATE BACHELOR OF SCIENCE IN NURSING PROGRAM**

Saskatchewan’s BsN program is part of the “learn where you live” initiative that employs remote presence (RP) telementoring technology to connect faculty and learners. By outfitting an RP robot with an articulated monitor, a camera and audio, telementoring allows clinical competencies to be taught and assessed in remote northern sites.

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**PROFILE: HUMBER COLLEGE PILOT PROJECT PROVIDES REGISTERED PRACTICAL NURSES WITH ADVANCED ENTRY TO YEAR THREE OF ETP BACCALAUREATE PROGRAM**

Humber’s nursing program responds to the needs of many practical nurses by assessing and recognizing their prior learning. A bridging program then provides the content and experiences a student needs to secure advanced entry to a baccalaureate RN education program. In a 2013 evaluation of the program, instructors noted the maturity and high motivation of students and the benefits of their previous clinical experience.

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**FIGURE 1: NUMBER OF INNOVATIVE FAST-TRACK ETP RN EDUCATION PROGRAMS IN CANADA, 2011-12**

* Fast-tracking education includes fast track, bridging, accelerated, advanced entry and second degree programs.

advanced knowledge and skills achieved through the completion of a graduate degree. In 2012, 696 RNs graduated from master’s programs and 66 completed nursing doctorates. Many more obtained national certification in specialties such as emergency nursing and community health nursing.

**Interprofessional education programs**

The World Health Organization identifies a number of benefits that arise from interprofessional collaboration, including reduced length of hospital stays, quality-of-life improvements for patients and families, greater access to care and enhanced patient safety.

Although interprofessional collaboration is emerging in both basic and continuing health-education programs throughout Canada, curricula changes are being called for to ensure that the skills students acquire will successfully transfer to clinical practice settings.

The NEC report also emphasized the need to transform health-care education and the importance of determining “key elements of a fully interprofessional, team-focused curriculum”—an imperative further articulated in the proceedings of Dalhousie’s think tank on the future of undergraduate nursing education.

A number of Canadian Interprofessional Health Collaborative resources are available to assist educators and accreditation organizations, including *A National Competency Framework for Interprofessional Collaboration* and materials from phases I and II of the accreditation of interprofessional health education initiative.

**Clinical simulation and e-learning**

Clinical simulation (computerized patient simulators and standardized patients) and e-learning technology provide students with opportunities to schedule learning and apply practical skills and principles in a safe environment. In the face of faculty shortages and the scarcity of clinical placements, these tools augment traditional methods and maximize teaching capacity. Simulation labs can reduce the demand for clinical placements and complement the use of health-care facilities for training. They also promote competency-based learning, help develop critical thinking and, importantly, assist in bridging the theory to practice gap.

Although Ontario was the first to adopt innovative computerized patient simulators, many nursing schools across Canada now use simulation equipment.

Information and communication technology tools are a good match with generation Y students, who, more than any other, use technology and expect immediate access to information.

**Conclusion**

In its consultations with people from across the country, the NEC heard that the health system needs to focus on building lifelong health for individuals and families while continuing to care for the sick and injured. Canadians want a sustainable primary health-care system that takes greater advantage of technology and existing health professionals, empowers patients and employs new models of care delivery.

In responding to these expectations for our health system, the context in which nurses practise will evolve, as must the approach to educating nurses and other health professionals. The need to change how we educate is congruent with current economic and workforce realities and to the practice challenges and opportunities health professionals face.

Graduates of a modernized education system infused with ideas and innovation will be the lifeblood of a strengthened health sector and a prosperous economy.