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The Case for Healthier Canadians: Nursing Workforce Education for the 21st Century

Submitted by
Canadian Association of
Schools of Nursing/
Association canadienne
des écoles de sciences infirmières
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Executive Summary

The future of our health system is dependent upon the availability and quality of health human resources, especially to underserved populations. The Canadian Association of Schools of Nursing/Association canadienne des écoles de sciences infirmières (CASN/ACESI) hosted an inaugural Nursing Education Summit (NES) with participants from provincial and national nursing and health associations. Extensive consultation followed. Education at the baccalaureate level or higher for registered nurses was re-affirmed as critical to meeting the health needs of the population. In today's increasingly complex health care environment, research demonstrates unequivocally that patient safety and outcomes are dependent on the educational preparation of professional nurses. CASN, in collaboration with national and provincial partners, and in weighing the evidence, has identified the three most pressing priorities for action:

- 1 Invest in nursing faculty supply and nursing program infrastructure**
 - Infrastructure support for increased enrolments and practice education
 - Infrastructure funding for high-quality pathways to baccalaureate degrees that increase numbers of new graduates
 - Support for high-quality, accessible delivery models for graduate programs
 - Financial assistance to nurses in Master's and Doctoral programs to support enrolment increases and facilitate full-time study

- 2 Foster innovative initiatives to sustain an appropriately prepared nursing workforce**
 - Funding for high-fidelity simulation funding in regions where this has been unavailable
 - Investment in innovative distributive delivery models to improve access for Aboriginal students and other underserved groups
 - Support for practice placements in additional settings involving student travel
 - Support for the introduction of pilot student databases that provide information on correlates for graduate success

- 3 Invest in nursing research and knowledge translation**
 - Dedicated research funding to advance evidence-informed nursing practice and education
 - Support for research centres targeting practice priorities
 - Evaluation of new models of care and staffing patterns



Together nurse educators, practitioners, researchers, administrators and policy-makers can develop a nursing workforce to meet present and future needs. Join us in moving these solutions forward. Contact our CASN/ACESI executive at inquire@casn.ca or www.casn.ca.

Nursing Education in the Canadian Context

Three major trends have an important impact on the education of Canada's professional nursing workforce: the increasing complexity of health care, an international demand for health human resources, and the recent economic climate.

Increasing Complexity of Health Care

The interaction of a variety of demographic and social factors has significantly increased the complexity of health care delivery and health services in Canada¹. They include globalisation and the associated challenge of pandemics, growing health disparities between socio-economic and cultural groups, increasingly sophisticated health care technology, the introduction of electronic information systems, and primary health care reform². Education must, therefore, prepare future registered nurses who possess the resilience, flexibility, and competencies needed to provide quality services in a continuously evolving and highly demanding health care environment.

Patient safety has become a major priority in our complex health care environment⁸. The educational preparation of nurses as the largest group of health care providers is critical in ensuring Canadians receive safe and effective health care services. A growing body of North American research over the last decade has clearly shown that patient safety and outcomes are directly related to the overall level of nursing knowledge within a health care agency⁹. Patient outcomes are significantly better when patients are cared for by registered nurses who are baccalaureate prepared. The risk of death is decreased, fewer adverse reactions to treatment occur, there are fewer procedural violations, and there is a reduction in medication errors¹⁰.

Emerging educational requirements include:

- Public and population health competencies (based on recommendations of the Learning from SARS report and other Health Canada epidemiological reports)³.
- Interprofessional and team-based practice⁴.
- Elder care⁵.
- Highly specialized critical care and home care.
- Cultural competence and service provision to underserved groups⁶: Aboriginal peoples (the fastest growing population in Canada), rural and remote communities, persons with mental health problems.
- Evidence-informed practice and knowledge translation.
- Delegation and supervision of assistive personnel⁷.
- Use of informatics and electronic information systems.

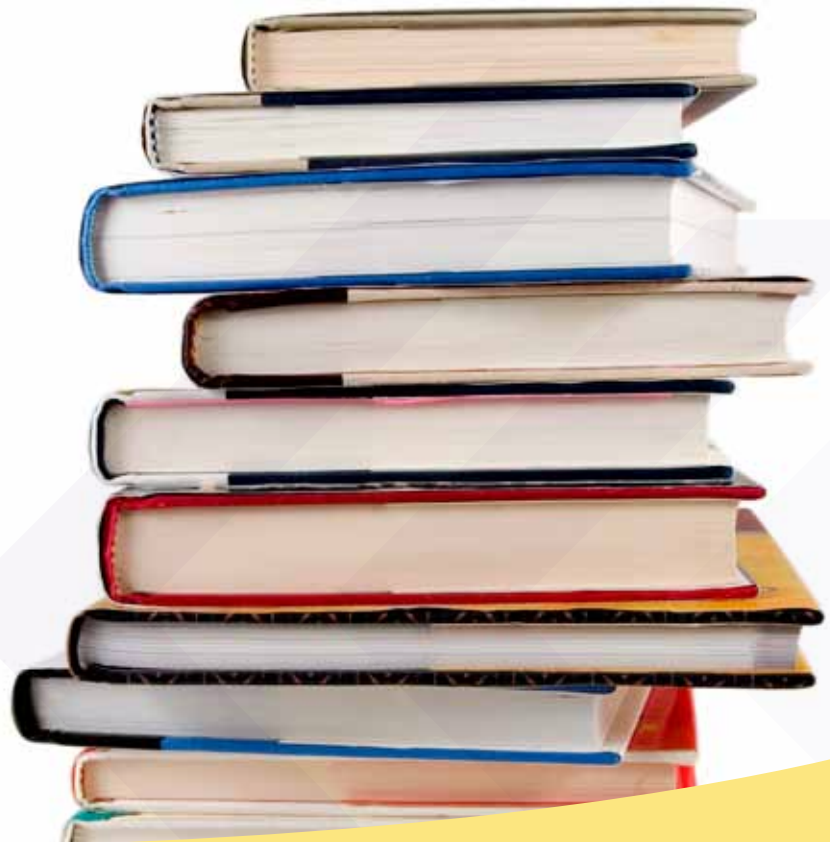
Demand for Health Human Resources

The demand for health professionals is a global dilemma for health systems. In Canada ensuring a sufficient supply of appropriately qualified health human resources to sustain the quality of our health care services is a major challenge. Unless appropriate policies are implemented, statistical analyses by the Canadian Nurses Association (CNA) demonstrate a progressively widening gap between the need for registered nurses in Canada and the numbers available to sustain health care delivery. By 2022, CNA projects a shortfall of almost 60,000 FTE registered nurses if no action is taken¹¹.

The gap between system demand for registered nurses and the supply may be further aggravated by the mobility of the nursing workforce. Nurses' relocation has increased with initiatives such as the North American Free Trade Agreement (NAFTA) and the federal/provincial Agreement on Internal Trade (AIT) whereby nurses' credentials and/or educational preparation are recognized across national, provincial, and territorial boundaries. Canadian nurses may migrate to countries such as the United States where a significant shortfall of registered nurses is projected. They might also choose more affluent areas of Canada to work, leaving some regions considerably more underserved than others.

Recent Economic Climate

Despite the global shortage of registered nurses, the recent economic recession has further complicated the issue. In some regions of Canada, hiring freezes have contributed to unemployment of new graduates, some of whom are migrating to other countries. Furthermore, staffing models with fewer registered nurses are being proposed. This pattern has occurred in the past during difficult financial times with significant negative consequences for patient outcomes, a major reduction in the quantity and academic quality of nursing education applicants who respond quickly to future employment prospects, and a resulting severe nursing shortage. In the current context, the trends related to a global nursing shortage, the aging of the nursing workforce, and the aging of the population have not changed. The recent economic situation, however, threatens to disrupt much of the health human resource planning that has been conducted by changing the demand for and migration of registered nurses, and by reducing the pool of applicants to nursing educational programs.



The Challenge for Nursing Education

Nursing education in Canada faces three broad challenges arising from this context. Schools must graduate new registered nurses who possess the depth and the breadth of knowledge, skills, and attitudes necessary for an increasingly demanding role in an evolving and complex work environment. Nursing education must also ensure a sufficient supply of nursing graduates to sustain the delivery of quality clinical services, and the future operations of nursing education programs themselves. It must also foster the production and implementation of evidence to advance best practices and optimize patient outcomes.



1 Preparing Graduates for Increasingly Complex Practice Settings

Nursing educational programs in Canada have an international reputation for high standards and often serve as models for countries seeking to improve the quality of their health care services. Nevertheless, preparing nursing graduates for entry into practice is a challenge. On the one hand, employers expect new graduates to possess the extensive and complex body of knowledge needed to provide nursing care in today's work environment. On the other hand, when the pressures of a shortfall of registered nurses arise, nursing education faces calls to shorten programs in order to accelerate their output of new graduates.

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Appropriate academic preparation

Calls for reduced or diluted academic preparation of registered nurses to increase the output of new graduates pose a serious threat to patient outcomes. Inadequately educated nurses are liable to provide poorer quality of care. Innovations in nursing education, however, have allowed schools to increase the number of graduates without altering the actual length of time spent in course work, the course content, or the program's quality. Such programs shorten the time from admission to graduation by extending the length of the school year, usually through the addition of spring/summer sessions, and also by restricting admission to students who have already completed some of the academic requirements in another university program. In 2007-2008, 31 schools of nursing (26.3%) had added a program of this nature, identified as "second-degree entry," "advanced entry," or "compressed"¹². Because this pathway to a baccalaureate degree in nursing does not fit the needs of all potentially good applicants, most schools continue to offer their

regular program. While pedagogically sound, these multiple pathways to the undergraduate entry-to-practice degree bring the challenge of additional resource and infrastructure demands.

Transition into professional practice

As the complexity of nursing's knowledge base expands, applying knowledge gained in academic programs to practice situations is increasingly challenging for new registered nurses. In contrast to other health professions, demands are made for nursing graduates to enter the profession without a transition phase¹³. There is a growing recognition, however, that like their colleagues in other health disciplines, new nurses need a transitional period with support in the workforce to effectively integrate and safely transfer the competencies they have acquired.

2 Sustaining the Nursing Workforce

For our national health care system to respond to the population's changing needs, more registered nurses must be graduated expediently. Even though new graduates from entry-to-practice programs increased from 4,816 in 1998 to 9,153 in 2008¹⁴, projections indicate the need for new graduates will continue to grow in Canada for another decade¹⁵. In addition, there are increasing demands for nursing education to provide graduate and specialization programs. Sustaining the nursing workforce will be a major challenge because of an inadequate supply of faculty and potential academic and administrative leaders to replace those who are and will be retiring, inadequate infrastructure support, and difficulties in securing practice placements for students.

Faculty infrastructure

In 2007-2008, 31% of permanent faculty were 55 years or over, 12% were 60 or over, and schools were unable to fill 70 full-time positions, representing a 2.1% vacancy rate¹⁶. Thus, at a period when both student enrolments and teaching positions are growing, nursing educators and academic leaders are retiring. Moreover, the numbers of graduate students in Canada will not be enough to meet the combined demands of the practice milieu for advanced practice nurses and the nursing education system's need for additional faculty and a new cohort of academic leaders to replace those who are retiring. Admissions to Master's programs rose annually from 758 in 2003-2004 to 977 in 2007-2008, and from 25 to 39 in Doctoral programs¹⁷, but current enrolments are insufficient to support the projected demands for Master's prepared and Doctorally prepared nurses. Nursing education programs are affected in two ways: as employers who need to recruit faculty and academic administrators, and as the organizations that are responsible for producing Master's and Doctorally prepared graduates.

Infrastructure support

Funding of nursing education is out of line with the reality of the actual costs incurred by nursing programs. Moreover, because of the nature of programs that educate students for professional practice, there are no economies of scale in increasing enrolments. A major reason for this is the practice component of undergraduate and advanced practice nursing education.

Nursing curricula must include substantial learning opportunities in clinical courses in the practice setting. These courses typically require low faculty-to-student ratios (on average, one instructor to seven or eight students). Thus, small increases in student enrollments increase the number of faculty required. Furthermore, clinical practice experiences require substantial administrative support to organize and coordinate. As a result, most schools of nursing have significantly increased their numbers of contractual part-time faculty. In 2007-2008, 70% of nursing faculty (6,312) were fulfilling part-time contracts of less than one year¹⁸.

Practice education

With increasing enrollments there has been a corresponding increase in the demand on health care agencies for clinical placements. Programs of nursing are currently experiencing difficulties in securing appropriate placements for students. Although alternative settings are available and some are being used, many are located at a distance from where the program is being offered. Students, therefore, need travel stipends to access them. Unless settings at a distance from the school can be used, a lack of practice placements will restrict further enrollment increases.



3 Advancing Evidence-informed Practice

In today's complex environment, nursing research is essential to address health service issues and develop the knowledge base necessary to promote and implement best practices in patient care. Nursing education must provide the educational and training opportunities for undergraduate students to learn to integrate an evidence-based approach when providing nursing care, and for graduate students to develop the skills to design and lead studies relevant to nursing practice. Moreover, faculty responsibilities include generating research-based evidence and fostering its use in the practice setting.

Creation and implementation of best evidence

Nursing research in Canada has increased substantially and is contributing to improved patient outcomes. Nonetheless, a significant challenge for nursing education in advancing evidence-informed practice is a dearth of funding to support (a) research that develops practice-relevant evidence for nursing, (b) studies that synthesize existing evidence scientifically to determine best practices, (c) activities to translate scientific knowledge into formats such as practice information sheets that are easily implemented in the practice milieu, and (d) nursing research centres that focus on enhancing the knowledge base of priority practice areas.

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Solutions for the Present and the Future

There is a need for effective collaborative partnerships between nursing education, professional associations, regulatory bodies, the practice milieu, and provincial, territorial and federal decision-makers to address the challenges faced by nursing education. Solutions for each of the major challenges are outlined in table 1. A number are primarily related to curricula or curriculum development; others, although linked to curricula, require investment.

Table 1: Challenges and Solutions

Challenges	Solutions (Curricula-focused)	Solutions (Investment-based)
Preparing graduates for increasingly complex practice settings	<p>Curricula preparing graduates to meet entry-to-practice competencies identified by the Canadian Nurses Association or the Ordre des infirmières et infirmiers du Québec</p> <p>Interprofessional education to prepare nursing graduates for patient-centred collaborative care</p> <p>Accreditation benchmarking to assess the capacity of nursing programs to prepare new graduates for a demanding health care environment</p>	<p>Increased research-informed use of high-fidelity simulators and virtual simulations to develop critical thinking and technical competencies for multi-faceted, patient situations</p> <p>Dissemination of educational innovations that optimize high-quality learning cost effectively</p> <p>Effective transition programs for new graduates to optimize public safety, prepare and retain new nurses in the workforce</p>
Sustaining the nursing workforce	<p>Recruitment of students with the aptitude, academic abilities, and motivation to meet curriculum demands; support students to foster student retention</p> <p>Accessible program delivery models supporting access to graduate studies in all areas of Canada</p>	<p>Financial support for graduate students to increase enrolments to meet needs for advanced practice nurses and new faculty</p> <p>Infrastructure support for increased enrolments and additional pathway to baccalaureate degrees</p> <p>Program delivery models to improve access for Aboriginal students and enhance health services to First Nations, Inuit and Métis communities</p> <p>Support for practice placements in distant settings (housing & transportation costs)</p> <p>Provincial databases of student data that record student progress, demographics, economic, and employment data to provide correlates of success</p>
Advancing evidence-informed practice		<p>Dedicated research funding for nursing practice, education and service research</p>

Call to Action

A key to a vibrant and viable health care system is the appropriate educational preparation of a sufficient number of registered nurses who are able to draw on a solid body of research evidence to provide optimum care. Now is the time to take action to sustain the nursing workforce in Canada, build nursing research, and ensure our health services provide safe, truly “universal”, high-quality health care. The Canadian Association of Schools of Nursing (CASN) is calling on decision-makers and funders to support initiatives to address the challenges affecting nursing education.

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CASN will work collaboratively with national, regional, and provincial partners to move these solutions forward for healthier Canadians. To join us, contact our CASN/ACESI executive at inquire@casn.ca or www.casn.ca.

Endnotes

- ¹ M.J. Kirby and M. LeBreton, *The Health of Canadians - The Federal Role. Volume Two: Current Trends and Future Challenges* (Ottawa, ON: The Standing Senate Committee on Social Affairs, Science and Technology, Parliament of Canada, 2002).
- ² World Health Organization, *The World Health Report 2008 - Primary Health Care (Now More Than Ever)*, <http://www.who.int/whr/2008/en/index.html> (accessed November 11, 2009).
- ³ Health Canada, *Learning from SARS: Renewal of Public Health in Canada; Report of the National Advisory Committee on SARS and Public Health*, Chaired by Dr. David Naylor, <http://www.phac-aspc.gc.ca/publicat/sars-sras/pdf/sars-e.pdf> (accessed November 11, 2009).
- ⁴ Accreditation of Interprofessional Health Education (AIPHE), *Principles and Practices for Integrating Interprofessional Education into the Accreditation Standards for Six Health Professions in Canada*, 2009, <http://www.afmc.ca/aiphe-afiss/activities-principles.html> (accessed November 11, 2009).
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- ⁶ R. Kinoshameg, Aboriginal Nurses Association of Canada (A.N.A.C.), *Aboriginal Health Human Resources Initiative (AHHRI) 2005 - 2010*, www.abo-peoples.org/programs/health_AHHRI.html (accessed February 12, 2009).
- ⁷ Canadian Nurses Association, *Tested Solutions for Eliminating Canada's Registered Nurse Shortage* (Ottawa, ON: Canadian Nurses Association, 2009).
- ⁸ D. Gregory et al., "Nursing Education: Where is Patient Safety?" *Journal of Nursing Education* 46 no. 2 (2007): 79-82.
- ⁹ J. Ellis et al. on behalf of CHSRF and partners, *Staffing for Safety: A Synthesis of the Evidence on Nurse Staffing and Patient Safety, 2006* (Ottawa, ON: Canadian Health Services Research Foundation, 2006).
- ¹⁰ L. McGillis Hall et al., "Nurse Staffing Models, Nursing Hours, and Patient Safety Outcomes," *Journal of Nursing Administration* 34 no. 1 (2004): 41-45; and A. Tourangeau et al., "Impact of Hospital Nursing Care on 30 Day Mortality for Acute Medical Patients," *Journal of Advanced Nursing* 57 no. 1 (2006): 32-44.
- ¹¹ Canadian Nurses Association, *Tested Solutions*, 2009.
- ¹² Canadian Association of Schools of Nursing and Canadian Nurses Association, *Nursing Education in Canada Statistics 2007-2008 Registered Nurse Workforce, Canadian Production: Potential New Supply* (Ottawa, ON: Canadian Nurses Association, 2009).
- ¹³ Judy Boychuk Duchscher, "A Process of Becoming: The Stages of New Nursing Graduates' Professional Role Transition," *Journal of Continuing Education in Nursing* 39 no.10 (2008): 441-450.
- ¹⁴ Canadian Association of Schools of Nursing and Canadian Nurses Association, *Nursing Education*, 2009.
- ¹⁵ Canadian Nurses Association, *Tested Solutions*, 2009.
- ¹⁶ Canadian Association of Schools of Nursing and Canadian Nurses Association, *Nursing Education*, 2009.
- ¹⁷ Ibid.
- ¹⁸ Ibid.

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