

# Transforming Health Through Nursing Innovations

**Pre-budget Brief to the House of Commons  
Standing Committee on Finance**

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This document was prepared by the Canadian Nurses Association (CNA) in pursuit of its mission, vision and goals. CNA is a federation of 11 provincial and territorial nursing associations and colleges representing 139,893 registered nurses and nurse practitioners. CNA is the national professional voice of registered nurses (RN), supporting them in their practice and advocating for healthy public policy and a quality, publicly funded, not-for-profit health system.

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## INTRODUCTION

Our treasured health system, while stressed, remains strongly grounded in Canadian values and principles. The foundations of a publicly funded, not-for-profit, accessible health system are pillars of strength that make our health-care system what it needs to be for the health of our population. It is indeed the pearl within the oyster. To achieve system-wide enhancements, we must build on these strengths to meet our key challenges head on. As such, this pre-budget brief provides recommendations that focus largely on leveraging existing resources to ensure they are working to their full capacity.

## CONTEXT AND CHALLENGES

On the front lines and throughout the health system, Canada's nearly 280,000 registered nurses (RNs) have the highest proportion of direct interaction with Canadians of any health-care providers. Among these nurses are researchers, educators, policy decision-makers and executives that manage the system day in and day out. This face time positions nurses to experience and understand care, and to build new science, knowledge and policies that underpin solutions to the challenges facing Canadian families and communities.

Improving timely access to care and implementing effective solutions to curtail the increasing cost burdens of managing and preventing chronic diseases – particularly within an aging population – are critical challenges facing health professionals, administrators and policy-makers. Nursing's key challenges, therefore, lie in the interlinked areas of:

### **The uncertain supply of services and providers**

- Access to care
- Health labour force shortage

### **The growing need and demand for health-care services**

- Chronic diseases
- Aging population

## CNA'S RECOMMENDATIONS

To bring innovations that address key health system challenges and to optimize health outcomes for Canadians, **CNA offers the following recommendations:**

1. The federal government should invest \$100 million over five years to implement actions toward meaningful improvements to collaborative pan-Canadian HHR planning.

INVESTMENT	ACTION	THE PAYOFF FOR CANADIANS
\$100 million	<ul style="list-style-type: none"><li>• Create multiple access points of care</li><li>• Implement models of delivery based on interprofessional practice that respond to labour force shortages</li><li>• Plan and deploy Canada's HHR to best address rapidly emerging challenges of chronic illness and aging</li><li>• Enhance efficiencies through pan-Canadian HHR oversight, planning and coordination</li></ul>	<ul style="list-style-type: none"><li>• Broader, faster access to health system for Canadians</li><li>• Reduce wait times</li><li>• Contain rising costs</li><li>• The right provider providing the right care at the right time.</li></ul>

2. The federal government should invest \$60 million over 10 years in a federal program to support nursing research and innovation.

INVESTMENT	ACTION	THE PAYOFF FOR CANADIANS
\$60 million	<ul style="list-style-type: none"><li>• Enhance health policy decision-making, workforce productivity and timely access through research and innovation</li><li>• Develop capacity to improve clinical practice and service delivery through nursing research and knowledge transfer</li></ul>	<ul style="list-style-type: none"><li>• Maximize innovation in health care and HHR for better health outcomes</li><li>• New discoveries to reduce morbidity, mortality, hospitalizations and costs, and maximize quality of life</li></ul>

# CANADA'S HEALTH SYSTEM: THE PEARL IN THE OYSTER

## The uncertain supply of services and providers

### Access to care

For generations our health system has been structured so that Canadians needing care had to see a physician as the first point of entry into the health-care system. Through the last century, that system became strongly focused on illness care, physicians and drugs – and our current pattern of spending reflects that history. That demand for services has outstripped the numbers of available physicians: some 4.3 million Canadians are now without a regular primary care provider able to deliver consistent care.<sup>1</sup> As a result, many people experience long waits in emergency rooms and walk-in clinics – and because they do not have regular preventive and treatment care, they may be sicker by the time they are finally seen in the formal system.

However, other health-care professionals can provide many of these health needs in ways that offer comparable outcomes, are often for less cost and are just as satisfying to patients. For example:

- An American study tested a multidisciplinary care model in a hospital setting to assess the potential impact of effective interprofessional collaboration on hospital care. The results found that “collaborative physician/nurse practitioner multidisciplinary care management of hospitalized medical patients reduced length of stay and improved hospital profit without altering readmissions or mortality.”<sup>2</sup>
- Conclusions stemming from a review of the impact of nurse practitioners (NP) on emergency departments indicated that there are significant benefits to including NPs in emergency department staffing models. According to the study, care provided by NPs leads to a high rate of patient satisfaction, is equal to care provided by residents in mid-training, and can reduce wait times in emergency rooms. The study concludes, “the medical community should further explore the use of NPs, particularly in fast track areas for high volume departments. In rural areas, NPs could supplement overextended physicians and allow health centres to remain open when they might otherwise have to close. These strategies could improve access to care and patient satisfaction for selected urban and rural populations as well as make the best use of limited medical resources.”<sup>3</sup>
- According to a study published in the *Journal of Clinical Nursing*, evidence demonstrating the effectiveness of nurse interventions in dermatological care is mounting. The review reported that when nurses were involved in the delivery of specialized dermatology care, the severity of conditions was reduced and topical therapies were used more effectively. Patients reported additional benefits of “faster access to treatment, a reduction in referrals to the general practitioner or dermatologist and an increase in knowledge.”<sup>4</sup>

Innovative approaches to managing HHR needed in chronic disease care show significant promise. Nurse-driven changes in the course of care at Edmonton's diabetic education centre led to an average **reduction in wait times to access the program from 4-8 months to two weeks.**

RN home visits to elderly home clients are associated with **less depression, lower costs for prescription drugs and greater physical functioning** than clients who receive traditional home care.

A new NP model of service delivery has **reduced the wait times** at St. Michael's hospital emergency room by 61% (16.7 hours) for patients who need complex medical care or admission, and by 45% (4.6 hours) for patients with minor conditions.

## Health labour force shortage

Canada faces a looming, critical shortage of health-care professionals. In particular, we will be short almost 60,000 full-time equivalent RNs by 2022.<sup>5</sup> This shortage stands to be exacerbated by health-care reform in the U.S., where more than 30 million Americans who are currently uninsured are expected to have access to health care.<sup>6</sup> This will increase demand for internationally educated health-care professionals, especially those educated in Canada, thanks largely to NAFTA and similarities in language and culture. Despite the U.S. government's plan to remain self-sufficient in its HHR, the largely privately run health sector can choose to entice nurses and scientists from Canada. It is imperative to CNA that the knowledge and expertise of our educators and researchers is harnessed for excellence and leadership in innovation through sustainable funding in Canada as the ground shifts in the U.S.

Along with the rest of the population, the physician and nursing workforces are aging at rates that overwhelm the capacity of the system to ensure an adequate pipeline of young, new entrants into both workforces. Improving health service delivery demands that we rethink who is delivering what service to which Canadians and how we can speed up the system, maximize scopes of practice, shake off old patterns that do not add value, and think about innovative ways to deliver quality services while containing costs.

We can:

- speed up the system;
- maximize scopes of practice;
- shake off old patterns; and
- find innovative ways to deliver services and contain costs.

- An emerging leading practice internationally is the interprofessional, collaborative and team approach to care. Getting there is no simple jump for nursing or medicine, but requires a dramatic shift in thinking to achieve real improvements in primary care and outcomes. Pohl and colleagues recommend “substantive changes in the way health care professionals in all primary care disciplines are trained, regulated, and held accountable for the care they deliver.” Most importantly, they go on to recommend that “all primary care providers be required to develop skills that support effective collaboration, with each other and with patients, families, and communities.”<sup>7</sup>
- Avoiding expensive duplication means letting go of entrenched patterns. A study in the U.S., for example, found no added benefit to medical supervision of nurse anesthetists, and recommended that the Centers for Medicare and Medicaid Services “allow certified registered nurse anesthetists in every state to work without the supervision of a surgeon or anesthesiologist”<sup>8</sup> – freeing up precious physician resources.

Making these changes happen in practice demands a shift in curriculum and clinical experiences at the undergraduate level, as well as the will to implement these models in health care settings.”<sup>9</sup> Change is possible when planned, evaluated and coordinated.

## **The growing need and demand for health-care services**

### **Chronic diseases**

Chronic diseases accounted for an estimated 89% of deaths in Canada in 2005 alone,<sup>10</sup> and cost the system over \$90 billion annually in treatment and lost productivity.<sup>11</sup> On any given day, 33% of Canadians suffer from at least one chronic health condition.<sup>12</sup>

Putting it bluntly, *Health Affairs* said in 2009 that “the U.S. health care delivery system, historically built around acute care, needs to reshape itself to cope with chronic conditions.”<sup>13</sup> Canada faces the same crunch. According to the World Health Organization, cost-effective interventions do exist – important given the assertion that “as both direct and indirect costs of chronic disease are significantly high, an effective prevention approach can indeed minimize the economic and social burden to the health of society as a whole.”<sup>14</sup>

### **Aging Canadians**

Beyond the population health demands created by chronic disease, the worrisome supply side of Canada’s health services’ equation is further shaken up by the reality that the number of Canadians aged 65 and older will increase from 4.2 million in 2005 to 9.8 million by 2036.<sup>15</sup> Fears around the potential health system demands of those additional 5.6 million older Canadians are not new – but the increased load has not been adequately addressed.

Going forward demands that health professionals from all disciplines step away “from traditional approaches to care that were grounded in the medical model and in concepts of acute and episodic care”<sup>16</sup> to take on a longer-term and more holistic life view. Many challenges and complications of chronic illness and aging fall within the scope of nursing practice and can be addressed satisfactorily – at costs the system can bear – without or before more costly medical or surgical interventions. For example:

- “Evaluations of interdisciplinary care consistently find that patients who receive care from allied health professionals in addition to their primary care physicians fare at least as well as those receiving care from their doctors alone, and many studies find significant improvements.”<sup>17</sup>
- A study assessing the acceptability of a model of chronic disease management, in which primary care patients see NPs for structured visits using an evidence-based encounter form, found that 80% of physicians and 95.7% of NPs surveyed believed that the proposed model of care would improve the control of chronic illnesses.<sup>18</sup>
- “Chronic disease management was superior in community health centres” where “clinicians found it easier than those in the other models to promote high-quality care through longer consultations and interprofessional collaboration. Across the whole sample and independent of model, high-quality chronic disease management was associated with the presence of a nurse-practitioner.”<sup>19</sup>

Beyond ongoing demands for nurses to practice in acute hospital settings, governments must imagine new service delivery models to answer the rapidly emerging challenges of chronic illness and aging. Canada’s nurses have solutions and are prepared to work with governments to develop and deliver safe, cost-effective models of care.

# CNA's RECOMMENDATIONS

## Implementing Health Human Resource Solutions

The responsiveness of Canada's health system toward managing and preventing chronic diseases, promoting healthy aging and providing timely, high-quality care can be strengthened through the establishment of a formal mechanism, such as a national HHR observatory, to promote the sharing and adoption of innovative, practical solutions to the health workforce crisis. Supported by testimony from stakeholders appearing before the House of Commons Standing Committee on Health,<sup>20</sup> and recommended in the committee's report, this mechanism would:

- enable coordination and implementation of critical HHR targets, models and efficiencies;
- provide a knowledge translation function through which best practices are implemented and are easily shared among stakeholders;
- To build on successful IPC pilot programs, provide dedicated, sustainable funding for promoting and implementing interprofessional collaborative practice (IPC) models of care in new settings and jurisdictions;
- Increase the availability of health information technologies, reduce communication barriers and enhance the integration of information sharing so as to facilitate health team access to patient health information; and
- set, achieve and report on hard targets and outputs to ensure value on investment is delivered.

Governments operate and exist within political boundaries, and managing the complexity of Canadians' health needs, including mobile communicable diseases, across 13 jurisdictions demands leadership on a national level. To provide effective care for chronically ill and aging Canadians, health professionals must practise to their full potential in a coordinated, multidisciplinary fashion. They need to be educated, regulated and deployed and outcomes need to be monitored – and we need to plan for those human resources across the coming generation. We need to be ready to meet the most challenging health needs in our history.

## Advancing health through research and innovation

The academic preparation and lifelong learning of Canada's health professionals, the effectiveness of their practice, and their impacts on patient and system outcomes depend on investments in scientists, research and innovation.

These deeply connected pillars depend on a foundation from which the cadre of nurse scientists who are equipped to educate the next generation and who conduct the majority of patient care and health systems research are built. Nurse scientists leveraged tremendous value from previous federal investments in nursing research and innovation: that first generation of Canadian-trained nurse researchers, small in number, have educated a whole new wave of junior scientists who are only now building their own careers and abilities to compete successfully for funding at the national level. But our senior scientists are retiring, and ongoing investments are needed to avoid jeopardizing the talent and capacity that is coming to fruition across the country.

At the same time, investments are needed to help interpret, disseminate and apply research findings and innovations in ways that modernize the nursing workforce, improve care deliver services and aid in meaningful decision-making at organizational and system levels.

### Federal investments in nursing science pay off...

A nurse-led Ontario study found that of the approximately six million home care visits conducted in 2002, 10% of clients receiving home care could benefit from equal or better quality care at centralized nurse clinics. This move would **generate equal quality health outcomes while freeing up 146 full-time equivalent RNs** to work in other areas of the health system experiencing shortages. **Estimated savings: \$10 million.**

At the University of Toronto, Dr. Linda O'Brien-Pallas' chair in Nursing Human Resources, funded through the federal Nursing Research Fund, has raised Canada's profile in this area of science to global leadership levels. Her work now grounds Canada's F/P/T framework for HHR planning. During the course of her tenure she supervised dozens of master's and doctoral students; **their work is now leading to compelling findings that have impacts on human resources, patient safety and organizational outcomes.** The work of two of her former students, Linda McGillis Hall and Gail Tomblin Murphy for example, are **now attracting global attention for the ways they help shape operational decisions around care delivery models and skill mix at the organizational level, hiring and deployment practices and health human resources planning and policy from local to international levels.** All these interlinked outcomes have been achieved as a result of strategic federal investments in nursing science.

Nurses have developed innovative technologies and services that have improved the treatment of disease and reduced the costs of health services. For example:

- **Telehealth** – To introduce telehealth services in Moncton, NB, nurse Lois Scott set up a telephone-based counseling and advice service that has now expanded nationally. Twenty-four-hour health information and advice services provided by RNs across Canada have decreased non-urgent emergency department visits by up to 32 per cent.<sup>21</sup>
- **Patient outcomes** – The implementation in Ontario of a nurse-led best practice guideline on wound care resulted in a 66 per cent reduction in costs compared with standard community care, and a 33-57 per cent reduction in infections and lower extremity amputations.<sup>22</sup>
- **Improved access** – Dr. Alba DiCenso's in-depth research on the introduction and evaluation of NP roles provided the evidence to support safe and effective integration of NPs in a variety of clinical settings, and impacted legislation and regulation across the country. NPs in primary care have reduced wait times and improved access to care across Canada.<sup>23</sup>
- **Health promotion** – Dr. Elizabeth Saewyc's work on youth issues, and British Columbia's province-wide Adolescent Health Survey, helped to determine the appropriate age for administering the human papillomavirus (HPV) vaccine. The BC Solicitor General used information about trends in youth binge drinking to change laws related to liquor licensing and fake identifications.

In their many roles across the continuum of care, nurses are well-positioned to develop innovations and thus help shape health system transformation. But they need support. New funding to develop nursing science would enhance Canada's health, productivity and prosperity by strengthening the education, innovations and evidence-based practice of those who deliver the largest chunk of health services. To keep pace in a world of technological advances, financial constraints, changing demographics and population health needs, nurses rely on nurse scientists for evidence to support continuous improvement in clinical practice and service delivery. Approval of a 10-year federal funding program will ensure Canadian nurses are at the leading edge and continue to bring forth innovative solutions for a strong health system and better health care.

## SOLUTIONS THAT MATTER – SOLUTIONS THAT WILL LAST

In its mandate to improve the health of Canadians, the federal government needs to take into account the array of preventive, treatment and palliative programs and services that collectively contribute to human health outcomes. CNA and Canada's RNs are doing the same. Key among these at a national level are the country's precious human resources – the most expensive and most necessary input into the health equation.

To be effective, sustainable and accessible for all Canadians, health human resources need to be planned and deployed on a broad national scale. The federal government has an important leadership role to play in ensuring that the base of science grounding the health disciplines is sound, current and innovative so that health professionals practising on that knowledge base are employed in cost-effective, productive ways that generate the best possible outcomes for Canadians. The strategic investments in nursing science and HHR recommended by CNA will improve the health of Canadians and make our health-care system sustainable and stronger than ever.

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