



# Strengthening the Role of the Clinical Nurse Specialist in Canada

## Background Paper

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Background paper to support discussions of the  
2012 Pan-Canadian Roundtable Discussion

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## CONTEXT

The Canadian health-service delivery landscape continues to evolve in response to the growing and varying health-care needs of Canadians. Key issues for meeting these needs include (but are not limited to) easy and equitable access to primary care, the aging population, chronic disease management and the requirements of complex care.

At the same time, the health-care system is under pressure in several areas, including general fiscal issues, the availability and cost of health human resources, integrating health technology, patient-safety concerns and transparent public accountability. Thus far, responses to these pressures have sought to

- increase the focus on primary care;
- decrease hospitalization;
- expand ambulatory and community-based care;
- improve wait times for acute care services and clear backlogs of patients requiring treatment;
- implement interprofessional collaborative models of service delivery and evidence-based care;
- build the capacity of regional centres of excellence; and
- increase attention on cost-effective care while maintaining optimal outcomes.

A central focus in this mix of responses has been to find the best use of health-care professional roles, particularly in relation to health human resources planning, the formative preparation of providers, scopes of practice and effective service-delivery models (Virani, 2012).<sup>1</sup> In considering this issue, attention to geographic imbalances of health resources, both in remote and isolated areas and with vulnerable populations, is important. The effective preparation, credentialing, support and deployment of nursing roles, including those of advanced practice roles such as the clinical nurse specialist (CNS), also require careful attention.

The term “advanced nursing practice” is an umbrella term comprising such roles as the CNS and the NP (Canadian Nurses Association [CNA], 2008). In the International Council of Nurses’ (2009) definition, the advanced practice nursing (APN) role denotes

a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practise. A master’s degree is recommended for entry level.

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<sup>1</sup> Examples of delivery models include nurse-led, case management, patient navigation, interprofessional teams and shared care.

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Similarly, a CNS is a registered nurse (RN) with a master's or doctoral nursing degree as well as advanced knowledge and clinical nursing specialty expertise. "CNSs are leaders in the development of clinical guidelines and protocols, and promote the use of evidence, provide expert support . . . consultation [and education], and facilitate system change" (CNA, 2009a).

In Canada, the CNS role has existed for over four decades (DiCenso, Bryant-Lukosius, et al., 2010); though its competencies, including clinical, education, research, consultation and leadership, are diverse — likely from having many types of patient population contexts where the role is employed.

Recently, the Canadian Foundation for Healthcare Improvement<sup>2</sup> has proposed a synthesis of APN roles that provides a foundation for dialogue, research and policy to strengthen the role of the CNS. A series of ten articles about a decision support synthesis (DSS)<sup>3</sup> in a special issue of the *Canadian Journal of Nursing Leadership* (2010) has confirmed the great variability of CNS roles, the lack of role clarity, the paucity of Canadian research on the role's impact and the significant challenges for implementing it.

In spite of these challenges, this renewed interest in the CNS role also presents opportunities that could greatly benefit current and future health delivery. A CNS's advanced preparation, expertise and competencies can support system changes (at multiple levels), provide clinical expertise and leadership, support the coordination of care and interprofessional collaboration, and mentor future nurses and other providers in the health-care system. Additionally, CNSs can support knowledge translation and the implementation of evidence-based practices (French, 2005) while maximizing client, provider, organization and system outcomes through the various components of their role (Bryant-Lukosius, 2010).

There is a significant need to pursue health human resource solutions if we are to match health-care providers with clients' health-care needs and address the multifaceted challenges facing the health-care system.

In addition, calls have been made for strengthening the role of the CNS (Bryant-Lukosius et al., 2010; DiCenso, Bryant-Lukosius, et al., 2010) to leverage its positive impact on producing better care for individuals and populations (i.e., access to care; supportive care; managing risks and complications; planning and coordinating care; improving team approaches to health care; providing consultation and

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<sup>2</sup> Formerly, the Canadian Health Services Research Foundation (CHSRF).

<sup>3</sup> Bryant-Lukosius et al. (2010) defines a decision support synthesis as follows: "A DSS combines research and knowledge translation strategies to summarize and integrate information and provide recommendations on a specific healthcare issue (Canadian Health Services Research Foundation [CHSRF] 2009). It generally includes a synthesis of published and grey literature and, when appropriate, may include data collected from key informants. DSSs use deliberative strategies to engage decision makers in formulating questions, framing the project scope and reviewing the draft report to generate recommendations (CHSRF 2009)" p. 142.

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specialized care for individuals needing complex disease management, palliative and mental-health care; improving satisfaction with care; support and mentorship of nurses at the front-line; improving quality and safety) and to lower costs by reducing hospital admissions and emergency visits, shortening hospital stays and decreasing the use of unnecessary tests (Canadian Centre for Advanced Practice Nurses, 2012).

The Canadian Nurses Association (CNA) has responded to these calls and is actively working with partners<sup>4</sup> to promote and enhance the role of the CNS. An advisory group has been established to plan a pan-Canadian invitational roundtable discussion to be held in early December, 2012.

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<sup>4</sup> The Canadian Association of Advanced Practice Nurses, Health Canada's Office of Nursing Policy and the Canadian Centre for Advanced Practice Nursing Research.

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## OUR PURPOSE

This background paper is intended to inform a pan-Canadian roundtable discussion to guide the development of a national vision for the CNS role in Canada, thereby enabling its development, strength and sustainability.

More specifically, this paper will do the following:

1. Summarize current knowledge about the CNS role in Canada (including demographics, trends, issues, barriers and implementation lessons learned).
2. Discuss the available research on the CNS role's impact and value proposition.
3. Address gaps and what can be done to strengthen the CNS role on the Canadian health-care landscape.
4. Identify implications and issues for the pan-Canadian discussion forum in December 2012.

This background document will also support the planning of the pan-Canadian roundtable discussion and help its participants prepare for the forum.

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## SOURCES OF INFORMATION USED FOR THE BACKGROUND DOCUMENT

Several papers and reports (both in the published and grey literature) were reviewed based on recommendations of the advisory committee and the project authority at CNA. In addition, a brief scan of the Canadian and international literature was conducted that focused on integrated and systematic reviews and impact studies, along with key reports/toolkits/resources developed to support the CNS role. Each source is briefly summarized in a table format and is available in Appendix A.

This document summarizes the key findings from the literature review. Where appropriate, implications for discussion and action are noted in shaded boxes throughout. The advisory group reviewed several draft versions of this report, incorporating their feedback into the final version.



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## KEY FINDINGS

### History of the Clinical Nurse Specialist Role in Canada

The CNS role first appears in Canada in the 1960s, though it was conceptualized in the 1940s (Davies & Eng, 1995). Internationally, in the initial 40 plus years there was an increasing number of CNSs; over the past decade, however, the number has declined (Kilpatrick et al., 2011).<sup>5</sup> The role's early growth was partly a response to the shortage of nurses after World War II. But the numbers also rose because of increasing health-care technology and complex care needs, which required expert nurses to support those in direct care to meet patient needs.

In the 1970s, masters-level education programs were established to facilitate clinical specialization, and several jurisdictions released position statements to define the scope of the CNS role. This scope was to include practice, education, research, consultation and leadership (Registered Nurses' Association of Ontario [RNAO], 2012). In the 1990s, CNSs were often hired in education and leadership positions, but this changed by the end of the decade; afterward, the CNS role began to focus more on supporting the implementation of evidence-based practices (Becker et al., 2012).

In Canada, CNS numbers have fluctuated. Currently these numbers are in decline, and there is no education program specifically designed to develop the CNS role (Martin-Misener et al., 2010). Interestingly, however, attention to the CNS role outside of Canada has never been stronger (Bryant-Lukosius et al., 2010).

### Understanding the Role of the Clinical Nurse Specialist

Despite attempts to define the CNS role, one of the most consistent themes in the literature was role confusion, which includes the inability of stakeholders (including patients and the broader public) to differentiate between CNS and NP roles (Duffield, Gardner, Chang, & Catling-Pauli, 2009). This lack of understanding makes the CNS role vulnerable when there are economic downturns and even more so when the direct clinical component is minor.<sup>6</sup>

The recent decision support synthesis (DSS) on the CNS role (Bryant-Lukosius et al., 2010; Donald, Bryant-Lukosius et al., 2010) validated the requirement for graduate education preparation with a specific clinical practice focus for CNSs. Further, it supported the role's interventions at individual, organizational and population levels as well as involvement in the nursing profession. CNSs use a

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<sup>5</sup> Kaasalainen et al. (2010) provides a detailed overview of the historical rise of CNS and NP roles in Canada.

<sup>6</sup> The erosion of the clinical component of the CNS role is discussed further in the section on implementation barriers.

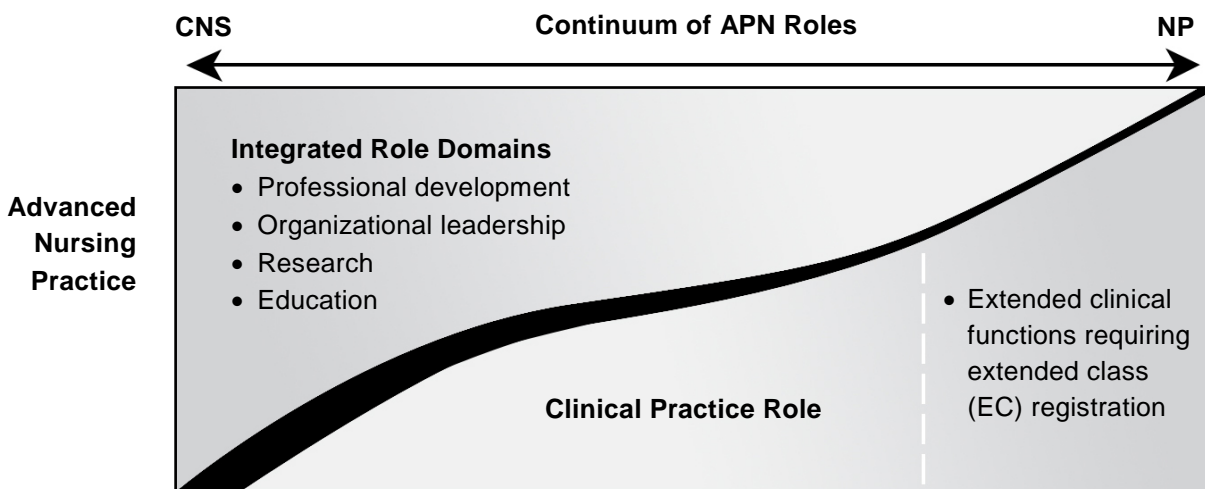
variety of evidence for decision-making. In fact, a key CNS strength is the ability to combine clinical expertise with leadership and research. This ability is what has enabled CNSs to become involved at broader organization and system levels and also in such initiatives as developing standards of practice, policies, and professional capacity.

In terms of the CNS role's implementation issues, the DSS revealed the following:

- There is no legal protection of CNS as a title.
- There is no Canadian legislation specifically for CNSs, except in Quebec, where the CNS role in prevention and the control of infections is regulated (Ordre des infirmières et infirmiers du Québec, 2012), and in mental health, where it will be regulated soon. CNSs are regulated as RNs under the RN regulations in each Canadian jurisdiction.
- There is widespread confusion about the CNS role, which is due to the role's broad-ranging use in different contexts, to variations in working to full scope of practice and to functions that overlap with those of other providers.
- Role confusion also creates uncertainties in the recruitment and hiring process, where distinguishing a CNS from an NP and from other nursing roles has been difficult.

On this last point, Bryant-Lukosius (2004 & 2008) has sought to clarify the main differences between CNS and NP roles by proposing the following APN continuum model:

**Figure 1. APN Continuum Model: Distinguishing CNS and NP Roles**



**Source:** Bryant-Lukosius, D. (2004 & 2008). *The continuum of advanced practice nursing roles*. Unpublished document.

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As the APN continuum model indicates, whereas the CNS spends “more time in the support of clinical excellence,” the NP spends more time in direct patient care, often enabling “specialists to reach greater numbers of patients and/or to provide follow-up care more efficiently” (El-Jardali & Lavis, 2011, p. 7). Nurse practitioners’ competencies are specifically directed to the ability to “autonomously diagnose, order and interpret diagnostic tests, prescribe pharmaceuticals and perform specific procedures within their legislated scope of practice” (CNA, 2009b, p. 19).

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### Role Clarity — Implications

- Review, update and recommit to CNA’s *Advanced Nursing Practice: A National Framework*. Incorporate the work done by several jurisdictions to refine the national framework.
- Adopt/adapt the Bryant-Lukosius APN-role continuum model to support a visual distinction between CNS and NP roles.
- Provide direction on the consistent use of the CNS title; consider the need for title protection.
- Design strategic communication plan to increase awareness of the CNS role, how it differentiates from other nursing roles, its competencies, and examples of how the role has been successfully integrated in the health-care system as well as opportunities for optimizing the role to meet current and future health system requirements.

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## Demographics — The Number of Clinical Nurse Specialists

Canada is known for its experience in developing and implementing advanced practice roles in nursing (Delamaire & Lafortune, 2010). As mentioned, however, the country's CNS numbers are currently decreasing against other advanced roles such as NPs. An estimated 15 per cent decline in self-reported CNS roles in Canada occurred between 2000 and 2008 (Bryant-Lukosius et al., 2010), with the greatest numbers of losses in Ontario and British Columbia.

While there are approximately 2,200 self-identified CNSs in Canada, according to 2010 data from Canadian Institute for Health Information (CIHI) (2012), this number is considered high because it includes both baccalaureate- and master's-prepared nurses. (Kilpatrick et al. (2011) estimates, using 2009 CIHI data, that there are about 800 master's-prepared CNSs.)

From a cross-sectional survey (Kilpatrick et al., 2011) of self-identified CNSs in Canada (with a 59 per cent response rate<sup>7</sup>) we learned the following:

- The majority worked in urban settings (93 per cent) and inpatient units (62 per cent).
- Seventy-five per cent saw patients in their practice and worked in a broad range of specialty areas.
- Less than 50 per cent were members of a union.
- Fifty per cent reported to a senior nurse in their organization.
- Less than a third used a specific framework to guide their practice.

Additionally, the authors concluded that the CNS numbers were highly vulnerable to cutbacks and policy decisions.

Although most CNSs are found in acute care, the following are Canadian examples of innovative CNS roles in other sectors:

- CNS role in oncology — involves planning and facilitating evidence-based practices within a transdisciplinary team in Ontario. The role also addressed patient care with the view to maximizing quality care and nursing-sensitive patient outcomes (Virani, 2012).
- CNS role in aboriginal health — involves managing complex care needs in First Nations, a program introduced by Health Canada's First Nations and Inuit Health Branch (Veldhorst & DiCenso, 2006).

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<sup>7</sup> There were 471 respondents out of a total of 798 graduate-prepared CNSs.

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- CNS role in prevention and control of infections in Quebec (Ordre des infirmières et infirmiers du Québec, 2012).
  - CNS role for older adults in rural areas in assisted living/long-term care in Alberta (Smith-Higuchi, Hagen, Brown, & Zeiber, 2006).
  - CNS role in wound management — includes clinical management in community and home clinics; capacity development of nurses; research; outreach; and knowledge translation in Manitoba (National Expert Commission, 2012).
  - Postoperative wellness model — has allowed CNSs to increase from 300 to 800 patients per year in British Columbia. It uses an evidence-based, fast-track surgery and rapid-recovery approach that includes proactive supports for controlling pain, nausea, constipation and food intake, while allowing patients to leave hospital sooner without feeling pushed out (National Expert Commission, 2012).

There appears to be greater interest in the uptake and implementation of CNS roles when a clear link exists between patient or population needs and the services CNSs can provide; interest is further supported when organizations prioritize policies able to communicate this link.

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### Demographics — Implications

We need a better way to identify the number of CNSs in each jurisdiction and track the trends in CNS positions, the types of CNS roles, where these roles are deployed and how effectively they are used. If current systems cannot accommodate such monitoring, a separate national CNS workforce database may need to be developed and maintained.

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## Overview of Trends/Issues

Bryant-Lukosius et al. (2010) identified the following issues in the understanding and implementation of CNS roles in Canada:

- A lack of a common vision for the CNS role
- The lack of a coordinated CNS voice
- A paucity of research on the CNS role (as it related to outcomes for clients, staff, organizations and systems)
- The lack of a CNS credentialing mechanism
- Limited access to CNS-specific graduate education
- Few role descriptions that address role-confusion implementation barriers

## Common Vision/Coordinated CNS Voice

Baker (2010) does not regard the decline of CNS roles in Canada as surprising, especially when we consider the nature of its evolution and the ad hoc manner in which it has emerged in the Canadian health-care system. To move the CNS role forward, she has called for interactive, iterative, multilinear and complex discussions. The current effort to develop a common vision and dissemination strategy, however, can assist in continuing the dialogue already begun — although developing and validating a common vision for the CNS role will require that we engage a broad range of stakeholders.

## Research

The proliferation of research on the CNS role internationally contrasts strongly with the lack of such research in Canada. Over several decades, just 10 primary studies have focused on the CNS role in the country (Bryant-Lukosius, 2010). Recently, the loss of research chairs in advanced nursing practice and nursing human resource planning has compounded this problem.

Yet, Canadian policy decision-makers are specifically interested in the outcomes associated with implementing the CNS role (Bryant-Lukosius et al., 2010). A need therefore exists for demonstrating this role's impact on outcomes in patients and populations, the nursing profession, health teams, organizations and systems. Both formative research and rigorous evaluation are required if we are to support effective implementation of the CNS role.

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## Research — Implications

- Need for a long-term, systematic and rigorous research agenda on the CNS role, addressing implementation and outcomes (health, team function, organization and system). Lessons learned from NP research can be used to inform such an agenda.
- Establish appropriate funding for a CNS-role research program over a span of 10 years or more.
- Develop research capacity and interest in this area.
- Develop close relationships between researchers and policy decision-makers to ensure that eventual research findings address the questions that are of interest to decision-makers.

## Education

A 2010 survey of 31 education programs in for CNSs in Canada found that, while graduate level education exists for CNSs, it consists of generic master's degrees without any specific clinical specialization. The survey's findings on CNS education were summarized as follows:

Of the 31 programs, 27 responded to the survey. Based on combined website and survey data, one of 31 programs offered a CNS-specific program, but enrolment to this program was closed due to lack of funding, a second program offered an advanced practice leadership option to prepare CNSs and clinical leaders and a third program was exploring the possibility of developing a CNS stream. Another program offered two CNS-specific courses, and six programs offered general advanced practice courses that could be relevant to but were not specifically designed for CNSs. The types of courses varied among graduate programs but focused on developing clinicians, educators, leaders and/or researchers to practise at an advanced level. The limited access to CNS-specific graduate education in Canada is a key issue challenging CNS role integration ... (Bryant-Lukosius et al., 2010, p. 147)

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The current lack of consistent educational preparation for CNSs, including consistent education standards and credentialing, is a widely documented barrier to the integration of CNS roles (as CNSs) in the health-care system (Bryant-Lukosius et al., 2010; Martin-Misener et al, 2010; RNAO, 2007). The failure to have national or recognized standards also leads to a lack of credibility for those who want to work in this role.

CNA's *Advanced Practice Nursing: A National Framework* (2008) provides guidance for addressing the current deficiency by standardizing educational curricula for CNSs. Leadership in this area can be further provided by the Canadian Association of Schools of Nursing, in collaboration with other partners. In considering what these curricula might include, current opinions are mixed on whether they should be overlapping or distinct for CNSs and NPs (Martin-Misener et al, 2010).

Other barriers related to the education of CNSs include the following:

- A lack of funding to support educational programs, faculty development, clinical placements and ongoing mentorship (Martin-Misener et al, 2010).
- A deficiency of Canadian specialty education for CNSs (Martin-Misener et al., 2010).<sup>8</sup>
- Tension between the efficiencies and length of the training program and the ability to develop expertise in all components of the CNS role<sup>9</sup> (Bryant-Lukosius et al., 2010).
- A lack of interprofessional education in advanced practice (Martin-Misener et al., 2010).

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<sup>8</sup> A response to this barrier has been the establishment of an oncology APN mentorship program in Ontario (Alvarado, Keatings, & Dorsay, 2003). Developed in 2007 by the Ontario oncology APN community of practice, Cancer Care Ontario and the school of nursing at McMaster University, this program now includes all nurses involved in cancer-related services.

<sup>9</sup> CNSs reported that they specifically lacked research competency skills.



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## Role Education — Implications

- Advocate and support standardized education for CNS roles across jurisdictions in Canada.
- Monitor the state of educational programs to support the preparation of CNSs in Canada.
- Advocate for CNS preparatory programs, including the funding required to establish a supply of appropriately educated CNSs. Protect this funding from becoming diluted when mixed with other funding allocations (e.g., for NPs).
- Develop specialty-education programs, including those like the oncology nursing mentorship program in Ontario.

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## Implementation of CNS Roles

Table 1 below summarizes the themes and subthemes of implementing APN roles, as provided by the decision support synthesis (DSS) discussed previously (Dicenso & Bryant-Lukosius, 2010).

**Table 1. Decision Support Synthesis — Themes and Subthem**

<b>1. Role Development and Introduction</b> <ul style="list-style-type: none"><li>• ad hoc role development and implementation</li><li>• overlapping scopes of practice</li><li>• utilization of the APN role</li><li>• recruitment and retention</li><li>• fragmented approach to APN role integration</li></ul> <b>2. Role Clarity and Awareness</b> <ul style="list-style-type: none"><li>• role clarity</li><li>• titling</li><li>• health-care team awareness of APN roles</li><li>• public awareness of APN roles</li></ul> <b>3. Educational Preparation</b> <ul style="list-style-type: none"><li>• educational requirements across Canada</li><li>• curriculum issues</li><li>• mismatch between education and practice</li><li>• resources</li><li>• funding and continuing education</li></ul>	<b>4. Legislation and Regulation</b> <ul style="list-style-type: none"><li>• scope of practice</li><li>• title protection</li></ul> <b>5. Role Implementation</b> <ul style="list-style-type: none"><li>• organizational and health-system environment</li><li>• interprofessional collaboration</li><li>• union membership</li></ul> <b>6. Intraprofessional and Interprofessional Relationships</b> <ul style="list-style-type: none"><li>• between CNSs and NPs</li><li>• between APNs and health-care team</li><li>• between APNs and physicians</li></ul> <b>7. Funding</b> <ul style="list-style-type: none"><li>• APN role funding</li><li>• remuneration</li></ul> <b>8. Evidence</b> <ul style="list-style-type: none"><li>• producing and using evidence</li></ul>
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**Source:** DiCenso, A., & Bryant-Lukosius, D. (2010). *Clinical nurse specialists and nurse practitioners in Canada: A decision support synthesis*. Canadian Health Services Research Foundation.

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## Facilitators

DiCenso et al. (2010) and Bryant-Lukosius et al. (2010) identified a number of facilitators (validated by other studies)<sup>10</sup> that have helped to increase the uptake of CNS roles in Canada. A key facilitator was the CNS role's ability to fill identified gaps in patient care and the health-care system.

Filling these gaps with more CNSs required support from role models and peers as well as from and health and clerical administrators. Also important were having clearly defined roles (with an emphasis on promoting evidence-based practice) and, for the CNS being hired, a relevant specialty knowledge base.

Other key factors in successful CNS implementation included using a systematic planning process that involved stakeholders as early as possible, having a focus on patient needs and raising awareness about the CNS role among health providers and the public. Senior organizational leaders and system-level champions have also been noted as significant influences in the development of the number and type of new CNS roles (O'Connor & Ritchie, 2010). Lastly, CNSs themselves have indicated that their provider-level contributions are an important part of improved quality of care (Kilpatrick et al., 2011).

## Barriers

### *Summary of Barriers Discussed*

The numerous barriers to CNS role implementation discussed above include (1) the absence of a clear understanding of the CNS role; (2) the failure to develop a common, shared vision about the role in Canada; (3) the limited access to CNS-specific education; (4) the lack of title protection and credentialing; and (5) the overlap functions with other provider roles. The invisibility of the CNS role, sometimes referred to as “not having a strong voice,” has also been noted as a barrier (Charbach et al., 2012).

To address some of these challenges, Carter et al. (2010) recommends engaging stakeholders, creating networks, facilitating mentorship, communicating clear messages about the CNS role and negotiating role expectations with physicians and others. Additionally, this paper notes that CNS roles must be appropriately designed if we are to prevent unreasonable expectations. CNSs may not successfully meet targets or influence outcomes if burdened with too many responsibilities and (consequently) too little time.

Recent global economic crises and increased fiscal pressures also bring challenges for implementing CNS roles in the health-care system. These include financial constraints that result in a lack of new funds to increase staffing positions or supports for existing CNS roles. Yet, opportunities remain for

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<sup>10</sup> E.g., Charbach, Williams, & McCormack (2012) and Dias, Chambers-Evans & Reidy (2010).

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CNS implementation under these conditions: first, in the chance to show the role's value, i.e., its ability to provide needed services in a cost-effective manner and reduce health-care system costs while improving outcomes; second, in the pockets where CNS vacancies still exist and where an increased supply would be helpful (e.g., rural and remote areas).

One other worrisome trend in the implementation of CNS roles is the de-emphasis on its clinical component in favour of administrative responsibilities and other indirect care elements. The clinical aspect of the role includes providing direct care, consulting on patient care, supporting clinical care and addressing population-based services. Since the clinical component is a “cornerstone” of the APN role (for CNSs and NPs) (CNA, 2008, p. 22) its erosion has consequences. For instance, clinical expertise is not continually maintained; over time, CNSs can lose credibility with other providers who look to them for their unique contributions to clinical care; and patient/population groups do not experience the same benefits they would have otherwise had.

### ***Lack of Research Support***

The lack of Canadian research to demonstrate (1) the effectiveness of the CNS role (i.e., its impact on outcomes that include cost-savings); (2) the outcomes of non-clinical CNS activities; (3) CNS role delineation; and (4) promising models of practice leaves us without a valuable tool that could be used to support CNS implementation in the country (Bryant-Lukosius et al., 2010). Having CNSs more involved in research about their roles, while encouraging them to become more politically savvy and engage decision-makers, could enhance the current situation. Where research support is made available, communicating these findings (both within organizations and through publications and the sharing of success stories) is essential for improving implementation. Since many of these successes are found in CNSs' positive contributions through teamwork, CNSs need to articulate their unique impact in these efforts and accept their due credit.

### ***Health Human Resource Planning***

As with research support, a deficiency of population-based health human resource planning in Canada is affecting the CNS role. This lack of planning is related to the absence of role clarity. These conditions have in turn led to a situation where there is no clear need for the role and no educational programs that can respond to that need. As a result, there is no balance between supply and demand in Canada; rather, because the role's development has been ad hoc, situations arise in which educated CNSs either do not find appropriate employment, or else, where the role actually is developed, difficulties occur in recruiting CNSs. In some instances, the lack of role clarity has led to recruiting nurses for CNS roles where they are not appropriately educated and skilled.

In addition, due to the shortage of physicians and changing patient needs (among other reasons), Delamaire and Lafortune (2010) have discussed the need to scale up APN roles nationally. In

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assessing APN pilot projects, however, they note that even those with positive results in terms of patient care and cost savings have not been extended more widely. They see this failure to scale up APN roles as a lost opportunity for delivering health services more effectively and efficiently.<sup>11</sup>

### ***Lack of Leadership Support***

The importance of senior leadership and nurse-manager support has been well-documented (Carter et al., 2010), and the need for such leadership and support has been associated with practical difficulties in implementing CNS roles (e.g., ensuring role clarity, providing required resources, supporting networking, delegating authority). This need has also created difficulty in protecting the role from cutbacks, sustaining the role over time and expanding the number of CNS roles in the health-care system.

### ***Toolkits***

Resources developed to support the integration of APN roles in practice, including the role of the CNS, provide a framework and a systematic process for planning and implementing these roles. Examples of these resources include the following:

- The PEPPA framework — a “participatory, evidence-based, patient-focused process for advanced practice nursing role development, implementation, and evaluation” (Bryant-Lukosius & DiCenso, 2004, p. 530). PEPPA sets out nine steps for determining whether a new APN role is needed, whether it will be effective and whether it can support a systematic process for planning the development and implementation in a specific context.
- The Winnipeg Regional Health Authority (2012) toolkit — an initiative that addresses a range of CNS role areas, including organizational culture, leadership, readiness (team, organization, patient), recruitment/retention, communication, infrastructure, unionization, regulatory bodies, orientation/ongoing support and the Canadian Nurse Practitioner Initiative toolkit.

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<sup>11</sup> Group practices and team formats have been shown to be better suited for APN roles that included CNS roles. Also, when CNS roles are supplementary (or complementary), rather than being physician replacements, they have been found to be more successful in terms of patient care, while either cost-neutral or more cost-effective than usual care.

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## Role Implementation — Big-Picture Level — Vision

- Develop a common shared vision for the CNS role in Canada.
- Galvanize a collective commitment to the sustainability and expanded use of the CNS role in the Canadian health-care system. Involve key stakeholder groups in the planning of CNS role integration. Stakeholders will need to include CNSs themselves, employers, educators, policy decision-makers, researchers, students and the broader public.
- Establish a systematic process for health human resource planning at the population level that includes the appropriate use of CNS roles. Leverage and/or update existing needs assessments to inform the planning process, which includes identifying the following elements:
  - Environments/contexts and service-delivery models where CNSs can contribute significantly
  - The number of CNSs and their specialties
  - Where CNSs are currently deployed in the health-care system
  - Where there are gaps and opportunities
  - What role competencies CNSs should focus on (needs assessments may be necessary for specific sub-populations and local jurisdictions)
- Address the barriers identified in integrating CNS roles.
- Leverage existing resources and toolkits.

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## VALUE PROPOSITION

A value proposition for the CNS role should centre on clearly defining where and how it can be deployed, and on what its value is to patients, the public, health-care providers, health-care organizations and the health-care system. While the overall expectations of the CNS role (as outlined in CNA's *Advanced Nursing Practice: A National Framework*) have been confirmed through research (Appendix A), much of it has been conducted outside Canada (Begley et al., 2010; NHS National Cancer Action Team (2010). The existing research validates the expectations of the CNS role as follows:

- Improves client and health-system outcomes related to health status, functional status, quality of life, satisfaction of care and cost efficiency
- Decreases hospital admissions
- Decreases emergency-department visits
- Decreases length of stay resulting in cost savings for institutions
- Decreases readmissions
- Promotes innovations (including evidence-based practices) and work at advanced levels of clinical practice

The benefits and values of the CNS role, based on available Canadian and international research evidence and evaluations, need to be clearly articulated. Their development must also be an ongoing activity as part of the effort to maintain an easily available database.

Deployment of the CNS role requires considerable work on assessing needs, priorities, health human resource planning and local stakeholder engagement, if we are to ensure CNSs practise to their full scope. To help define the value proposition, however, we must share and communicate promising models of CNS roles and innovations. For example, CNS roles have been implemented in the care of low birth weight infants, children with chronic disease, acutely ill adults and the elderly in nursing homes (Naylor et al., 2004); in developing clinical pathways (Gurzick & Kesten, 2010); in perioperative care (Glover et al., 2006); in rapid response teams (Polster, 2008); in a shared-care CNS-MD model (Sanders, 2008); and in the prevention and control of infections (Ordre des infirmières et infirmiers du Québec, 2012).

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## IMPLICATIONS FOR THE PAN-CANADIAN ROUNDTABLE DISCUSSION

This report was designed to assist the advisory group in developing the agenda and outline for the pan-Canadian CNS roundtable discussion and to assist by informing the attendees at the discussion forum. With these purposes in mind, please consider the following:

- The report should be circulated to all participants as pre-forum reading material.
- The implications identified in this paper can be used for potential areas of discussion as it relates to developing a national vision for the CNS role, which includes establishing a consensus on its definition and components or features.
- Use the background information to support the development of key priority areas for national attention with short, medium and long-term time frames.
- Identify promising models of practice for broad dissemination.
- Develop key messages for disseminating broadly to a range of audiences and stakeholders.
- Engage stakeholders and cultivate national and local champions for the role.
- Clearly identify responsibilities for specific action areas.



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## APPENDIX A: RESEARCH STUDIES ON THE CNS ROLE (SORTED BY TYPES OF IMPACT)

Studies supporting CNS impact on patient outcomes	Studies supporting CNS impact on nurses and other-provider impact	Studies supporting CNS impact on system outcomes	Studies supporting CNS impact on cost savings or other financial outcomes
<p>Fulton &amp; Baldwin (2004) —(annotated bib. of 70 studies)</p> <p>Butler et al., (2011) (systematic review) — hospital staffing models with CNSs — improves some patient outcomes</p> <p>Brooten et al., (2002); McCorkle et al., (2000) — increased patient satisfaction, lower acute-care costs due to shorter hospital stays and fewer readmissions</p> <p>Carr &amp; Hunt (2004); Forster et al., (2005); Hogan &amp; Logan (2004); Lasby et al., (2004) — quality of care, nursing knowledge and care, patient satisfaction, patient self-care</p> <p>McCorkle et al., (2000) — improved quality of life and survival rates — elderly patients following surgery for cancer, home care</p> <p>Ryden et al., (2000) — better incontinence, pressure ulcers, mental health compared to standard care</p>	<p>Pepler et al., (2006) — promoting evidence-based practice</p> <p>Pauly et al., (2004); Schreiber et al., (2005) — integrating research, education, and leadership experience for individual patients, nurses/providers and clinical unit/organization</p> <p>Barnason et al., (1998); Linde &amp; Janz (1979) — Increased health-provider knowledge and skills</p> <p>Catania et al., (2012) — physician collaboration, autonomy, administrative support, teamwork, and contribution to the mission of the cancer program</p>	<p>Walker, Urden &amp; Moody (2009) — magnet hospitals</p> <p>Profetto-McGrath et al., (2007) — influencing clinical and administrative decision-making</p>	<p>Fulton &amp; Baldwin (2004) — lower acute care costs</p> <p>McCorkle et al., (2000) — reduced health-care costs — home care — elderly post-surgery</p> <p>Newhouse et al., (2011) — CNSs in acute care settings reduce length of stay, cost of care for hospitalized patients</p>
<p>Foster et al., (2005) (Canadian) — RCT-CNS as nurse team coordinator — no differences in readmission, deaths or adverse events, high patient-ratings on quality of care</p> <p>Mitchell-DiCenso et al., (1996) — CNSs/NPs blended role in NCU — outcomes equivalent to residents in pediatrics — morbidity, mortality, parent satisfaction, costs and long- term developmental delays</p> <p>Lasby et al., (2004) (Canadian) — neonatal transitional care — lengthened breastfeeding, decreased demand on system, enhanced maternal confidence and satisfaction</p>	<p>Carr &amp; Hunt (2004) (Canadian) — study of evidence-based practice</p> <p>Hogan &amp; Logan (2004) (Canadian) — research-based family assessment instrument, improved team knowledge, family centeredness, assessment and interventions with families</p>		







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