

Discourse

The Clinical Nurse Specialist Role in Canada: Forecasting the Future Through Research

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Canada recognizes two advanced practice nursing (APN) roles — nurse practitioner (NP) and clinical nurse specialist (CNS) (Canadian Nurses Association [CNA], 2008). In this APN-focused issue of *CJNR*, readers learn about the remarkable progress being made in the development and integration of NP roles in the Canadian health-care system. In contrast, disappointingly few CNS-related manuscripts were submitted. Similarly, a recent decision-support synthesis examining Canadian APN roles (DiCenso et al., 2009) revealed a growing body of research evidence about NPs but limited advancement in our understanding of the CNS role and its impact. The years 1970 to 2009 saw the publication of 124 primary studies or reviews concerning NPs (DiCenso et al., 2009). For the same period, only 10 CNS publications were identified. Factors contributing to the low output of CNS-related research have not been systematically identified. Possibilities include the lack of funding opportunities and a limited supply of PhD-prepared CNSs and other investigators interested in developing research programs in this area. Also, CNSs may be more involved in research on clinical issues relevant to their specialty than in health services research focused on their role.

This Discourse will identify the implications of the shortfall of research evidence concerning CNS roles and the possible consequences, for the Canadian health-care system, of maintaining the status quo. Research priorities for forecasting the future of CNS roles will be outlined.

Implications of the Research Shortfall for the Sustainability of CNS Roles

There is no system in place to accurately track CNS roles in Canada, but available data suggest that between the years 2000 and 2008 the number

of self-identified CNSs declined from 2,624 to 2,222 (Canadian Institute for Health Information, 2010; CNA, 2006). Over the last 40 years, CNS deployment has fluctuated between periods of increased hiring to improve nursing practice and periods of cutbacks in positions to address funding constraints. Lack of role clarity and lack of role support from health-care decision-makers have also contributed to the variable deployment and the vulnerable sustainability of CNS roles (DiCenso et al., 2009).

While the number of CNSs may have declined over the last decade, the CNS role has demonstrated some staying power over the last four decades and is not likely to quickly disappear from the Canadian health-care landscape. CNSs are employed in a broad range of specialties, such as cardiac care, critical care, oncology, pain management, palliative care, pediatrics, neonatology, and gerontology (Bryant-Lukosius et al., forthcoming). They also work in various hospital, ambulatory, and long-term-care settings, and innovative CNS roles have emerged in new areas, such as emergency departments, community-based practices, and rural and remote settings serving complex and underserved populations (Health Canada, 2006; Smith-Higuchi, Hagen, Brown, & Zeiber, 2006).

However, if the current trend of limited research on the CNS role continues, there is a risk that the experience of the last 40 years will be repeated, with relatively stagnant and inconsistent role growth and insufficient data to inform the evolution of the role so that it can keep pace with changing patient and health-system needs. Health-care decision-makers recently participated in a national roundtable to make recommendations on APN roles (DiCenso et al., 2009). One of their recommendations was a call for high-quality outcome data on APN roles to assist them in making evidence-informed decisions about health human resource planning, the organization and delivery of health services, and the allocation of health-care dollars. Lack of funding is a barrier to the introduction of CNS roles (DiCenso et al., 2009). Future funding increases for additional CNS roles will likely require provincial governments and health-care administrators to reallocate funds from other sources in their shrinking global budgets. To make this investment, decision-makers will need to be confident that CNS roles would lead to improved quality of care and improved patient outcomes at an equal or lower cost than current practices (Frick & Stone, 2009). If decision-makers continue to be uncertain about the health-care gaps CNSs can address and the cost-benefits of CNS roles, CNSs will remain vulnerable to budget cutbacks and policy changes and will be replaced by other roles for which there may be better evidence. Even when the need for new CNS positions has been demonstrated, efforts to recruit individuals have not always been successful (Health Canada, 2006). The perceived

instability of CNS roles may make it difficult to recruit and retain highly qualified individuals for future CNS positions.

Consequences of Maintaining the Status Quo

Perhaps the most dire consequence of the lack of research in this country, and the failure to optimally develop and integrate CNS roles, is that the full benefits of the roles for patients will not be actualized — and the potential benefits are significant. There is extensive high-quality research from the United States with consistent results demonstrating the positive outcomes of CNS roles. These outcomes include better patient health outcomes and improved survival rates, especially for patients with high-risk, complex, and specialized needs; increased patient satisfaction with care; and lower acute-care costs, due to shorter hospital stays and fewer readmissions (Brooten et al., 2002; Fulton & Baldwin, 2004; McCorkle et al., 2000). There have been few rigorous evaluations of Canadian CNS roles, but some studies show promising results related to quality of care, nursing knowledge and skills, patient satisfaction, and patient self-care (Carr & Hunt, 2004; Forster et al., 2005; Hogan & Logan, 2004; Lasby, Newton, & Von Platen, 2004). Differences between the Canadian and American health-care systems and how CNSs are educated, regulated, funded, and deployed in the two countries may impact on role outcomes. Further research to examine the effectiveness of CNS roles in the Canadian context could make a substantive contribution to improving the delivery of our nursing and health services.

Continued loss of CNS roles may also occur at a time when we need them the most. By the year 2022, it is projected, Canada will have a shortage of over 60,000 nurses, with negative downstream effects for patients and families in terms of timely access to safe, high-quality nursing services (CNA, 2009b). Enhancing RN productivity and increasing RN recruitment and retention through improved role support in the workplace are recommended solutions for reducing this shortage. CNSs were first introduced in Canada to support nurses and to improve nursing practice at the bedside (DiCenso et al., 2009); thus, they are uniquely positioned to address the fallout from this looming shortage. Few roles are designed to offer the depth of provider and system-wide interventions needed to tackle such complex issues. In several Canadian studies, CNSs described how they promote evidence-based practice (Pepler et al., 2006), influence clinical and administrative decision-making (Profetto-McGrath, Smith, Hugo, Taylor, & El-Hajj, 2007), and integrate research, education, and leadership expertise to improve patient care at three levels — individual patients and nurses/health-care providers, the clinical unit, and the organization (Pauly et al., 2004; Schreiber et al.,

2005). In the United States, Magnet status is a prestigious designation awarded to hospitals that attract and retain highly qualified nurses and have achieved excellence in professional nursing practice. In a recent study of Magnet hospitals, 87% and 92% of administrators reported that CNSs were important for, respectively, achieving and maintaining Magnet status (Walker, Urden, & Moody, 2009).

Research Priorities

The development of the CNS role requires the collective commitment of the nursing profession and in particular CNSs, innovation and a vision for the role, ethics and values, accountability, and autonomy (Registered Nurses' Association of Ontario, 2007). Research data can inform and integrate many of these elements and build a solid platform for determining the future role of the CNS. For example, while declining numbers of employed CNSs triggers concern about role sustainability, the actual complement of positions required to meet health-care needs is not known. Research to describe and monitor trends in CNS deployment, to determine the number of vacant CNS positions, and to assess patient and organizational needs for CNS expertise would be invaluable. Well-conducted needs assessments using rigorous research methods can provide evidence-based guidance for health-care planning that maintains a focus on patient needs (Myers, 1988).

Lack of role clarity and stakeholder understanding of CNS roles is a major barrier to integration (Bryant-Lukosius et al., forthcoming). Role delineation studies to reach stakeholder consensus on CNS features and priorities will be essential for establishing a national vision of the role and for determining the required competencies, education, and credentials. Research to assess the outcomes of existing CNS roles will help to identify promising models of practice that can be applied to other settings and will start to build the case for CNS impact. In addition to clinical functions, improving nursing practice through leadership, education, research, and evidence-based practice activities is characteristic of CNS roles (CNA, 2009a). The outcomes of non-clinical CNS activities are not always tangible; this has led to the loss of CNS positions, especially in the face of economic pressures to maintain clinical services. Priority should be given to measuring the outcomes of non-clinical role dimensions.

Stakeholder involvement throughout the research process contributes to effective APN role implementation through improved stakeholder understanding and support for the role (Bryant-Lukosius & DiCenso, 2004). CNS roles are not consistently well understood by government policy-makers and health-care administrators, and therefore may not be considered when decisions on the use of APN roles are made (DiCenso

et al., 2009). Engaging decision-makers at key stages of the research process can facilitate policy-relevant research that addresses priority health-care issues specific to CNS roles. Also, decision-makers can become better informed about CNS roles through their research involvement and may be more apt to champion the uptake of study findings as a result.

Steady improvements in the integration of NPs into primary care settings teach us that system and policy changes necessary for effective APN role utilization occur in small increments rather than as single events (Hutchison, Abelson, & Lavis, 2001). CNSs and CNS researchers need to be politically savvy and well connected and must cultivate positive relationships with key decision-makers and policy-makers. Such relationships may give rise to opportunities to conduct and support the uptake of CNS research and other role-integration strategies.

Since 2001, I have transitioned through a number of roles in the Canadian Health Services Research Foundation and the Canadian Institutes of Health Research Chair Program in Advanced Practice Nursing, as a junior faculty member, postdoctoral fellow, and, now, senior scientist. During this period the majority of graduate students and advanced practice nurses participating in the Chair Program have been NPs. Although we promote our research learning opportunities widely across the country, I was one of only a few CNSs to participate in the Chair Program. It is important that we identify more effective ways to engage CNSs in research about their roles. In the past decade, initiatives such as the APN Chair Program and the Canadian Nurse Practitioner Initiative have fostered a growing scientific community of NP scholars and researchers. A national research agenda and efforts to develop CNS researchers will help to create a similar scientific community and culture of scholarly inquiry around CNS roles.

CNSs have played an important part in the delivery of advanced nursing services in Canada. However, their full integration into the health-care system will require high-quality research evidence. Over the next decade, research will play a critical role in forecasting the evolution, needs-based deployment, and impact of the CNS role in Canada.

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