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GUEST EDITORIAL

The Long and Winding Road: Integration of Nurse Practitioners and Clinical Nurse Specialists Into the Canadian Health-Care System

Alba DiCenso, Denise Bryant-Lukosius

We are honoured to be co-guest editors of this issue of *CJNR* focused on advanced practice nursing (APN). In Canada, advanced practice nurses include nurse practitioners (NPs) and clinical nurse specialists (CNSs) (Canadian Nurses Association [CNA], 2008). It is fitting that *CJNR* is publishing this APN-focused issue given the leadership that Moyra Allen, founding editor of the Journal, demonstrated in her early writings about “the expanded role in nursing” (Allen, 1977). The research pieces and feature articles in this issue reflect the growing contribution of APN roles to the health of Canadians and highlight areas where further work is required to maximize their integration into the health-care system.

NPs are “registered nurses with additional educational preparation and experience who possess and demonstrate the competencies to autonomously diagnose, order and interpret diagnostic tests, prescribe pharmaceuticals and perform specific procedures within their legislated scope of practice” (CNA, 2009b, p. 1). Those who are registered as family/all-ages or primary health care NPs typically work in the community, in settings such as community health centres, family physician offices, and long-term-care facilities, with a focus on health promotion, preventive care, diagnosis and treatment of acute common illnesses and injuries, and monitoring and management of stable chronic diseases. Those who are registered as adult, pediatrics, or neonatal NPs (also known as acute-care NPs) typically provide advanced nursing care across the continuum of acute-care services for patients who are acutely, critically, or chronically ill with complex conditions. They work in areas such as oncology, neonatology, and cardiology. In 2008, there were 1,626 licensed NPs in Canada (Canadian Institute for Health Information [CIHI], 2010).

CNSs are registered nurses who have a graduate degree in nursing and expertise in a clinical nursing specialty (CNA, 2009a). Their primary responsibilities include varying amounts of clinical practice, consultation, education, research, and leadership activity. CNSs mentor nurses, contribute to the development of nursing knowledge and evidence-based practice, and address complex health-care issues for patients, families, other disciplines, administrators, and policy-makers. They are leaders in the development of nursing and interprofessional policies and practice guidelines. Specialty practice areas for CNSs are usually defined by a population, setting, disease, medical subspecialty, type of care, or type of problem. In 2008, there were 2,222 self-identified CNSs in Canada (CIHI, 2010).

While both of these advanced roles have existed in Canada for more than 40 years, role implementation has been a long, winding, bumpy journey characterized by gains and losses in momentum. The destination of full integration into the Canadian health-care system has not yet been reached. For example, although primary health care NPs were introduced in urban Canada in the early 1970s, the role virtually disappeared in the mid-1980s, for a variety of reasons, including reduced physician income, lack of NP role legislation, inadequate support from policy-makers, and an oversupply of physicians. However, in the mid-1990s, to enhance health promotion and improve health-care access, the federal government and the provinces invested in primary health care infrastructure and interdisciplinary health-care teams. This in turn prompted the revival of government interest in the primary health care NP role and initiated the second wave of its implementation. Numerous legislative, policy, funding, regulatory, and education initiatives have since facilitated implementation in all Canadian provinces and territories (DiCenso et al., 2009). Many challenges to full integration of NPs into primary health care settings remain, including restrictive legislation and regulation, inconsistencies in educational preparation across Canada, and a tenuous relationship between NPs and family physicians, both of which are autonomous clinicians with substantial overlap in scope of practice (DiCenso et al., 2009). For NPs in acute-care settings, challenges include difficulty implementing non-clinical dimensions of the role, limited scope of practice due to hospital restrictions on NPs' autonomous ordering and prescribing, inconsistent team acceptance, and difficulty funding the role due to tight hospital budgets (DiCenso et al., 2009).

Unlike that of the NP, the CNS role has continued to formally exist over the 40 years; however, hospital budget cutbacks in the 1980s and 1990s led to the elimination of many of these positions. In early 2000, interest in the CNS role returned, the intention being to bring clinical leadership back into health-care environments with the emphasis on

helping staff nurses apply evidence to practice. Some of the significant challenges that currently face the CNS role in Canada include lack of a common vision and understanding of the role, limited access to CNS-specific graduate education programs, and lack of title protection or credentialing (DiCenso et al., 2009).

This issue of the Journal includes four articles on advanced practice nursing roles, two focused on NPs in primary health care settings, one on NPs in acute-care settings, and one on CNSs. The researchers have used quantitative, qualitative, and mixed methods designs and have studied NPs and CNSs in a variety of provinces.

In their role-delineation study, Ruth Martin-Misener and colleagues use a mixed methods approach combining qualitative interviews and self-administered surveys to systematically collect data from key stakeholders (rural health board chairpersons and health-care providers) on the health needs of rural communities, service gaps, and expectations for the NP role in rural Nova Scotia. Their study illustrates the importance of obtaining input from key stakeholders and maintaining a patient focus to guide role development. Historically, the ad hoc and often crisis-driven approach to the introduction of APN roles has hindered role sustainability due to failure to use a systematic approach to establish the foundation for role delineation, implementation, and evaluation.

Once advanced practice nurses are introduced in a jurisdiction, regular tracking studies inform progress in role implementation by detailing and comparing practice in a variety of settings. Irene Koren and colleagues analyze data from a 2008 survey of Ontario primary health care NPs to explore differences in demographic, employment, and practice characteristics across settings. This survey provides a picture of current employment and practice at a time when new primary health care models such as family health teams and NP-led clinics are being introduced in Ontario, and at a time when NPs are beginning to work in non-traditional settings such as emergency departments, long-term-care settings, and public health units. Regular tracking studies can facilitate health human resource planning and identification of strategies to promote optimal role utilization by comparing APN characteristics and deployment across time and jurisdictions.

Also with a focus on role implementation, Judy Rashotte and Louise Jensen report on an in-depth qualitative study of NPs working in acute care in four adult and pediatric academic teaching hospitals in Quebec, Ontario, and Alberta. These authors describe a transformational journey from which emerge five principal themes experienced by the NPs as they become established in their new role. Rashotte and Jensen draw on the meaning of the term “bridge” to describe the NPs (often labelled “physician replacements”) as “a space between nurse and physician, one

part of the health-care system and another taking an active part on both sides and having an identity that is both and not-both.” There have been few cross-provincial studies of the implementation of APN roles.

The fourth article in this issue is a qualitative study focused on a specific dimension of CNS role implementation. Maria-Helena Dias and colleagues interviewed CNSs working with adult populations in a large, urban university hospital in Quebec to learn more about the consultation component of their role. This is an important article, for a number of reasons. First, while there have been more than a hundred primary studies or reviews published over the past 40 years about the NP role in Canada, there have been only a few about the CNS role. Consistent with this gap, we received few CNS-focused manuscripts for this issue of the Journal. CNSs and nurse leaders are struggling to establish the mandate of the CNS role in the Canadian health-care system. There is a pressing need for health services research to inform the continued development and sustainability of this role. Second, most articles about NPs and CNSs tend to centre more on direct patient care activities than on the other components of the APN role. Indeed, there is little mention of the consultation, education, research, and leadership components of the NP role in primary health care settings in the articles by Martin-Misener and colleagues and Koren and colleagues. Rashotte and Jensen note the tensions and struggles experienced by the NPs in acute care in adding extra role functions to their clinical practice responsibilities. Involvement of NPs in these other components of the APN role is an important area for future research.

Over the 40 years since the introduction of APN roles in Canada, support for their implementation has fluctuated and has been dependent on the changing political agendas shaping the health-care system. While much progress has been made, challenges to their full utilization and acceptance remain. One major challenge to role integration that surfaces in all four articles is role ambiguity or confusion, sometimes caused by role overlap with other members of the health-care team. Martin-Misener and colleagues found potential overlap in the role of NPs and public health nurses and family practice nurses in areas such as health promotion, well woman and child care, immunization, chronic disease management, and community health. Koren and colleagues found that NPs reported that their relationships with physicians “needed work” when physicians were unfamiliar with the full scope of NP practice. Rashotte and Jensen describe the NPs in acute care as “living in the in-between space” of nursing and medicine, which can cause confusion for health-care colleagues. Finally, Dias and colleagues describe CNSs as having to “constantly adjust their roles and adapt their competencies in order to meet the new demands,” causing role ambiguity and confusion.

The issue of APN role ambiguity surfaces often in the literature and is one that demands attention.

In addition to these four original research articles, this issue contains a number of other features. There are two discourses that challenge us to think about the future of APN roles in Canada. Each discourse is accompanied by a brief commentary from leaders implementing these roles in clinical settings. Ruth Martin-Misener, an NP and faculty member at Dalhousie University, was invited to share her views about whether NPs will achieve full integration into the Canadian health-care system. In her thoughtful piece, she addresses legislative/regulatory, education, and practice issues. The accompanying commentary is written by Lynn Stevenson and Linda Sawchenko, both of whom have responsibility for implementing NP roles in their respective health authorities in British Columbia. Denise Bryant-Lukosius, a CNS and a faculty member at McMaster University, was invited to share her views about the dearth of research on the CNS role in Canada and implications for the sustainability of the role. The accompanying commentary is written by Patricia O'Connor and Judith Ritchie, administrators currently implementing CNS roles at their university health centre in Quebec. Two of our Canadian nurse researcher colleagues review new editions of important APN-related sourcebooks. Marjorie MacDonald offers a comprehensive review of the fourth edition of the classic text by Ann Hamric and colleagues, and Joan Tranmer provides a thoughtful review of the second edition of a volume on outcome assessment by Ruth Kleinpell. Finally, the Happenings piece, written by the APN Chair Program staff, describes six resources created by the team to support the conduct and application of APN-related research.

The road to integrating APN roles into the Canadian health-care system over the past 40 years has indeed been long and winding. While great strides have been made, the full contribution of advanced practice nurses has yet to be realized. Much remains to be done. Key priorities include standardizing APN regulatory and educational requirements across the country, developing communications strategies for health-care colleagues and the public to promote awareness of the role, protecting funding support for APN positions, and conducting further research on the added value of these roles for the health-care system (DiCenso et al., 2009).

We have enjoyed participating in the compilation of this issue and have appreciated the excellent support provided by the *CJNR* team. We are grateful to our peer-review panel, which consisted of researchers, decision-makers, clinicians, and students, and to the authors of the various pieces that make up this issue.

References

- Allen, M. (1977). Comparative theories of the expanded role in nursing and implications for nursing practice: A working paper. *Nursing Papers*, 9(2), 38–45.
- Canadian Institute for Health Information. (2010). *Regulated nurses in Canada: Trends of registered nurses*. Ottawa: Author. Retrieved May 4, 2010, from http://secure.cihi.ca/cihiweb/products/regulated_nurses_2004_2008_en.pdf.
- Canadian Nurses Association. (2008). *Advanced nursing practice: A national framework*. Ottawa: Author. Retrieved May 4, 2010, from http://www.cna-aiic.ca/CNA/documents/pdf/publications/ANP_National_Framework_e.pdf.
- Canadian Nurses Association. (2009a). *Position statement: Clinical nurse specialist*. Ottawa: Author. Retrieved April 12, 2010, from http://www.cna-nurses.ca/CNA/documents/pdf/publications/PS104_Clinical_Nurse_Specialist_e.pdf.
- Canadian Nurses Association. (2009b). *Position statement: The nurse practitioner*. Ottawa: Author. Retrieved April 12, 2010, from http://www.cna-aiic.ca/CNA/documents/pdf/publications/PS_Nurse_Practitioner_e.pdf.
- DiCenso, A., Bryant-Lukosius, D., Bourgeault, I., Martin-Misener, R., Donald, F., Abelson, J., et al. (2009). *Clinical nurse specialists and nurse practitioners in Canada: A decision support synthesis*. Ottawa: Canadian Health Services Research Foundation.

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Discourse

Will Nurse Practitioners Achieve Full Integration Into the Canadian Health-Care System?

Ruth Martin-Misener

Introduction

Nurse practitioners (NPs) were first introduced in urban Canada in a wave of activity between the late 1960s and mid-1980s. During this time NP education programs were set up, NPs and physicians experimented successfully with collaboration, and the safety and effectiveness of the role were established in groundbreaking randomized controlled trials (Spitzer et al., 1974, 1975). In spite of these early accomplishments, the financial, legislative, professional, and public support for the role was insufficient to enable it to take hold in the health-care system (Haines, 1993; Spitzer, 1984). In the mid-1990s, calls for improved accessibility to primary health care to address the needs associated with burgeoning chronic disease and an aging population led to renewed interest in the NP role, culminating in the multi-million-dollar federally funded Canadian Nurse Practitioner Initiative (CNPI) (2006). The vision of the CNPI was “a renewed and strengthened primary healthcare system that optimizes the contributions of nurse practitioners to the health of all Canadians and a system in which nurse practitioners are recognized and utilized across Canada as essential providers of quality healthcare” (2006, p. 8). While much has been done to incorporate the NP role into the Canadian health-care system, its sustained integration remains a vision, not a reality. This is perhaps not surprising given the decades of policy legacies that have shaped, supported, and reinforced a physician-centred model of health-care delivery in Canada (Hutchison, Abelson, & Lavis, 2001). Still, the question of whether the day will come when NPs reach full integration into the health-care system lingers, the demise of past efforts a chilling reminder of how quickly a good idea can be abandoned (Spitzer, 1984).

The aim of this article is to examine the forces for and against full integration of NPs into primary and acute care. Legislative/regulatory, education, and practice issues influencing such integration are outlined.

The article draws on the findings from a recently completed decision support synthesis conducted to develop a better understanding of advanced practice nursing roles in Canada (DiCenso et al., 2009).

Legislative and Regulatory Building Blocks

The quest to achieve a cross-jurisdictional harmonized approach to the legislation and regulation of the NP role across Canada is ongoing. It is motivated by an awareness of the need for clearly defined roles to facilitate health-care access, enhance workforce mobility, and strengthen the credibility of NPs with other health professionals and the public. The Canadian Nurse Practitioner Core Competency Framework (Canadian Nurses Association [CNA], 2005), the Canadian Nurse Practitioner Exam Program (http://www.cna-nurses.ca/CNA/nursing/npexam/anc/default_e.aspx), and recent changes to the Internal Trade Agreement (Forum of Labour Market Ministers, 2009) were watersheds in moving this agenda forward. Nevertheless, agreement on a pan-Canadian legislative and regulatory framework has not been achieved, largely because inter-jurisdictional inconsistencies persist in some key areas, such as NPs' educational preparation and scope of practice (CNA, 2009).

In addition to the challenges associated with legislation that authorizes NP practice, there are many other legal acts and policies restricting how NPs provide patient care. In some provinces, legislation governing hospitals specifies that only physicians may prescribe drugs and order diagnostic tests. Consequently, in these settings NPs must practise using medical directives that can reinforce medical control structures and limit NP practice (Hurlock-Chorostecki, van Soeren, & Goodwin, 2008; McNamara, Giguère, St-Louis, & Boileau, 2009). The efficiency and comprehensiveness of NP practice are further compromised by vital statistics acts specifying that only physicians can sign death certificates and motor vehicle acts stipulating that only physicians can perform driver medical examinations. Similar restrictions are contained in the *Canada Pension Act*, the *Tax Act*, and the *Employment Insurance Act*. Clearly, the physician role is deeply integrated into our health and social systems and, in some ways, provides a measure of the distance yet to be travelled to achieve a comparable level of structural integration for NPs. Making changes to legislation sounds deceptively simple; anyone who has done it will tell you it is anything but.

Education — the Cornerstone

Although master's-level preparation for NPs is endorsed by the CNPI (2006) and the CNA (2008), three provinces continue to educate NPs for primary health care settings at the baccalaureate or post-baccalaure-

ate level. The nursing profession agrees in principle that standardization at the master's level is vital to ensuring that NPs are educated in all the competencies that define advanced nursing practice (CNA, 2008). The opposition to this idea comes primarily from provincial governments concerned about the lack of evidence to justify the time and expense associated with graduate education (DiCenso et al., 2009). Thus, it is not at all certain that CNPI's (2006) goal of having all pre-licensure NP education at the master's level by 2015 will be reached. And failure to meet this goal will likely delay realization of a pan-Canadian legislative and regulatory framework.

Several other education-related issues are influencing NP integration. The absence of pan-Canadian education standards for NP programs, beyond the current consensus on graduate entry-level education and a minimum of 700 clinical hours (Canadian Association of Schools of Nursing, 2004; DiCenso et al., 2009), results in inconsistencies in knowledge, skills, and abilities across jurisdictions. While it is clear that standards are needed, how to move forward in setting them is not. Even if we determine which organization(s) will take the lead and where the resources will come from, the availability and accessibility of specialty NP education, along with cross-jurisdictional differences in what constitutes clinical specialization, will likely confound deliberations about standards (DiCenso et al., 2009). In some provinces NPs are educated and licensed to practise in a specific clinical specialty, such as cardiology or nephrology, whereas in others they are educated and licensed to practise with a specific population, such as adults or children. At issue is how best to meet the need for NP specialty education while taking into account the realities of the Canadian context. Not only is our country geographically vast, but it also has relatively few NPs, who work in many different specialty and subspecialty areas, and resources dedicated to NP education are already stretched (Martin-Misener et al., forthcoming).

Practice

For NPs to be fully integrated into the Canadian system, they must be sufficiently numerous to make a visible and measurable contribution. The increase in the number of licensed NPs in Canada from 800 in 2004 to 1,626 in 2008 is an encouraging sign (Canadian Institute for Health Information, 2010). On the other hand, in some regions the number of NP positions has not kept pace with the supply of new NP graduates. This mismatch reflects longstanding challenges with the funding of NP positions (CNPI, 2006). More fundamentally, it underscores the need for health human resource planning that is based on population needs. It is

time we came to grips with what types of health-care providers are needed to provide particular services.

The majority of NPs practise in the primary health care sector, where there are a number of persistent challenges to their full integration. First, primary health care is predominately serviced by a physician-led model of care based on a fee-for-service (FFS) payment mechanism (College of Family Physicians & Canadian Medical Association, 2009; Hutchison et al., 2001). For the most part, this model is incompatible with the inclusion of a government-employed, salaried NP, because the NP reduces the volume of patients who require medical services, thereby compromising the physician's income.

This perspective is being challenged by promising new models in British Columbia, in which salaried NPs employed by health authorities are being integrated into FFS practices (Canadian Health Services Research Foundation [CHSRF], 2010). In these demonstration projects, the NPs work independently and collaboratively with FFS physicians to deliver services to a patient population. The health authorities provide resources to the FFS practice for NP-related overhead costs, such as utilities, supplies, and office salaries. Although the evaluation results are pending, feedback from patients and health-care providers after 1 year are "overwhelmingly positive" (CHSRF, 2010, p. 2). This is an important development, because many Canadian FFS physicians are interested in working with NPs but do not necessarily want to change their method of remuneration (DiCenso, Paech, & IBM Corporation, 2003). The new evidence from British Columbia puts a crack in what has been a glass ceiling with limited deployment of NPs in primary health care.

NP-led clinics in Ontario are another example of an innovative team-based primary health care initiative intended to improve access to and continuity of care in areas where a large proportion of the population is without a regular provider (DiCenso et al., forthcoming). These clinics are funded directly by the Ontario Ministry of Health and Long-Term Care. Evaluation of the first of these models, with its NP-led governance structure, lower physician-to-NP ratio, and consultative physician role, is positive (DiCenso et al., forthcoming). However, the Ontario Medical Association (2008) opposes the clinics, claiming that they promote an independent practice model that is inconsistent with the principles and philosophy of collaborative practice.

While there is opposition to NPs from organized medicine, many practising physicians welcome NPs as members of the health-care team (DiCenso et al., 2009; Donald et al., 2009). Equally important, there are indications that medical and nursing organizations are working together to tackle issues of mutual interest, such as liability and scope of practice (Canadian Medical Protective Association & Canadian Nurse Protective

Society, 2005; CNA, 2003). The recent emphasis on interprofessional education is another promising enabler of NP integration, as signalled by a statement by the Association of Faculties of Medicine of Canada (2010): “Changes in the scope of practice of many health care providers and the emergence of new professions such as physician assistants and advanced nurse practitioners require a curriculum focused on inter- and intra-professional practice” (p. 28).

This cooperation is important, because as health-care teams grow more common, new concerns are coming to the fore and will require novel solutions. One of these is fair remuneration for all team members. Government monetary incentives for preventive care are causing tension because they are offered only to physicians, while NPs and other members of the team also provide this care (Nurse Practitioners’ Association of Ontario, 2008). This example highlights the need for mechanisms whereby different health-provider groups can come together to negotiate health-care policy that is in the best interests of the public (Hutchison, 2008).

Finally, it is important to acknowledge that health-care teams are constantly changing and one of the new team members is the physician assistant. It is difficult to know whether the physician assistant is a threat to the NP role or is simply another type of health-care provider who can meet particular patient needs. The experience in the United States, where NPs and physician assistants have worked side by side for many years, suggests the latter.

Impact on the Health-Care System

The evidence showing that NPs are making a difference in Canada is accumulating. Patient satisfaction with the role is high (Thrasher & Purc-Stephenson, 2008), and many Canadians are willing to consult an NP but have not had the opportunity to do so (Harris/Decima, 2009; Regan, Wong, & Watson, 2010). NPs are increasing accessibility to primary health care in rural communities (Centre for Rural and Northern Health Research, 2006; Martin-Misener, Downe-Wamboldt, Cain, & Girouard, 2009), and in emergency departments they are reducing wait times, length of stays, and the proportion of patients who leave without being seen (Ducharme, Alder, Pelletier, Murray, & Tepper, 2009). A recent study of four primary health care models in Ontario found that high-quality chronic disease management was associated with the presence of an NP (Russell et al., 2009). This growing body of research is important for the continued integration of the role, because we live in an era when, more than ever, evidence and value for money matter (Health Council of Canada, 2009).

Conclusion

Without a crystal ball, it is impossible to tell for certain whether NPs will be fully incorporated into the Canadian health-care system. Weighing up the forces enabling and restraining integration, I believe there is reason for guarded optimism. It is inspiring to reflect on how far the implementation of the NP role has come in the last decade. Still, much remains to be done, and much time will likely pass, before the vision of full integration is realized. Achievement of this goal is not an end in itself but rather a means to a much greater end — a strengthened and sustained health-care system that will be there for the benefit of future generations of Canadians.

References

- Association of Faculties of Medicine of Canada. (2010). *The Future of Medical Education in Canada (FMEC): A collective vision for MD education*. Ottawa: Author. Retrieved March 11, 2010, from http://www.afmc.ca/fmec/pdf/collective_vision.pdf.
- Canadian Association of Schools of Nursing. (2004). *Report on the CASN/FNIHB Workshop on Primary Health Care/Nurse Practitioner Education*. Ottawa: Author. Retrieved March 2, 2009, from <http://casn.4poyntzdeign.com/media.php?mid=64>.
- Canadian Health Services Research Foundation. (2010). *Interior health, British Columbia: Nurse practitioners in a fee-for-service setting*. Ottawa: Author. Retrieved March 9, 2010, from http://www.chsrf.ca/Pass_It_On/apn_bc_e.php.
- Canadian Institute for Health Information. (2010). *Regulated nurses in Canada: Trends of registered nurses*. Ottawa: Author. Retrieved March 21, 2010, from http://secure.cihi.ca/cihiweb/products/regulated_nurses_2004_2008_en.pdf.
- Canadian Medical Protective Association & Canadian Nurse Protective Society. (2005). *Canadian Medical Protective Association /Canadian Nurse Protective Society joint statement on liability protection for nurse practitioners and physicians in collaborative practice*. Ottawa: Author. Retrieved March 9, 2009, from www.cnps.ca/joint_statement/joint_statement_e.html.
- Canadian Nurse Practitioner Initiative. (2006). *Nurse practitioners: The time is now. A solution to improving access and reducing wait times in Canada*. Ottawa: Author. Retrieved August 12, 2009, from http://206.191.29.104/documents/pdf/Nurse_Practitioners_The_Time_is_Now_e.pdf.
- Canadian Nurses Association. (2003). *Joint position statement. Scopes of practice*. Ottawa: Author. Retrieved March 2, 2009, from http://www.cnaaiic.ca/CNA/documents/pdf/publications/PS66_Scopes_of_practice_June_2003_e.pdf.
- Canadian Nurses Association. (2005). *Canadian nurse practitioner core competency framework*. Ottawa: Author. Retrieved March 2, 2009, from http://206.191.29.104/documents/pdf/CNPE_Core_Competency_Framework_e.pdf.

- Canadian Nurses Association. (2008). *Advanced nursing practice: A national framework*. Ottawa: Author. Retrieved January 12, 2009, from http://www.cna-aicc.ca/CNA/documents/pdf/publications/ANP_National_Framework_e.pdf.
- Canadian Nurses Association. (2009). *Recommendations of the Canadian Nurse Practitioner Initiative: Progress report*. Ottawa: Author. Retrieved April 9, 2010, from http://www.cna-aicc.ca/CNA/documents/pdf/publications/CNPI_report_2009_e.pdf.
- Centre for Rural and Northern Health Research. (2006). *Primary health care nurse practitioners: Who are they? What do they do?* Sudbury, ON: Author. Retrieved May 13, 2007, from <http://www.cranhr.ca/focus.html>.
- College of Family Physicians & Canadian Medical Association. (2009). *National physician survey*. Ottawa: Author. Retrieved March 9, 2010, from <http://www.nationalphysiciansurvey.ca/nps/home-e.asp>.
- DiCenso, A., Bourgeault, I., Martin-Misener, R., Kaasalainen, S., Kioke, S., Carter, N., et al. (forthcoming). Utilization of nurse practitioners to increase patient access to primary healthcare in Canada – thinking outside the box. *Canadian Journal of Nursing Leadership*.
- DiCenso, A., Bryant-Lukosius, D., Bourgeault, I., Martin-Misener, R., Donald, F., Abelson, J., et al. (2009). *Clinical nurse specialists and nurse practitioners in Canada: A decision support synthesis*. Ottawa: Canadian Health Services Research Foundation.
- DiCenso, A., Paech, P., & IBM Corporation. (2003). *Report on the integration of primary health care nurse practitioners into the Province of Ontario*. Toronto: Ministry of Health and Long-Term Care. Retrieved August 12, 2009, from http://www.health.gov.on.ca/english/public/pub/ministry_reports/nurseprac03/nurseprac03_mn.html.
- Donald, F. E., Mohide, A., DiCenso, A., Brazil, K., Stephenson, M., & Akhtar-Danesh, N. (2009). Nurse practitioner and physician collaboration in long-term care homes: Survey results. *Canadian Journal on Aging*, 28(1), 77–87.
- Ducharme, J., Alder, R. J., Pelletier, C., Murray, D., & Tepper, J. (2009). The impact on patient flow after the integration of nurse practitioners and physician assistants in 6 Ontario emergency departments. *Canadian Journal of Emergency Medicine*, 11(5), 455–461.
- Forum of Labour Market Ministers. (2009). *Guidelines for meeting the obligations of the labour mobility chapter of the Agreement on Internal Trade (AIT)*. Ottawa: Author.
- Haines, J. (1993). *The nurse practitioner: A discussion paper*. Ottawa: Canadian Nurses Association.
- Harris/Decima. (2009, August 13). *Canadians very comfortable with expanded role for nurse practitioners*. [Press release.] Ottawa: Author.
- Health Council of Canada. (2009). *Value for money: Making Canadian health care stronger*. Ottawa: Author. Retrieved March 11, 2010, from www.CanadaValuesHealthCare.ca.
- Hurlock-Chorostecki, C., van Soeren, M., & Goodwin, S. (2008). The acute care nurse practitioner in Ontario: A workforce study. *Nursing Leadership*, 21(4), 100–116.

- Hutchison, B. (2008). A long time coming: Primary healthcare renewal in Canada. *Healthcare Papers*, 8(2), 10–24.
- Hutchison, B., Abelson, J., & Lavis, J. (2001). Primary care in Canada: So much innovation, so little change. *Health Affairs*, 20(3), 116–131.
- Martin-Misener, R., Bryant-Lukosius, D., Harbman, P., Donald, F., Kaasalainen, S., Carter, N., et al. (forthcoming). Education of advanced practice nurses in Canada. *Canadian Journal of Nursing Leadership*.
- Martin-Misener, R., Downe-Wamboldt, B., Cain, E., & Girouard, M. (2009). Cost effectiveness and outcomes of a nurse practitioner–paramedic–family physician model of care: The Long and Brier Islands study. *Primary Health Care Research and Development*, 10(1), 14–25.
- McNamara, S., Giguère, V., St-Louis, L., & Boileau, J. (2009). Development and implementation of the specialized nurse practitioner role: Use of the PEPPA framework to achieve success. *Nursing and Health Sciences*, 11(3), 318–325.
- Nurse Practitioners' Association of Ontario. (2008). *Position statement: Team-related bonuses is the correct way to go*. Toronto: Author. Retrieved January 12, 2009, from <http://www.npao.org/Uploads/members/Position%20Statement%20Team%20Based%20Bonuses%20Correct%20Way%20to%20Go%20Mar%20.pdf>.
- Ontario Medical Association. (2008). *Ontario's doctors discouraged by provincial health care spending*. Toronto: Author. Retrieved September 23, 2009, from <http://www.oma.org/media/news/pr081119.asp>.
- Regan, S., Wong, S., & Watson, D. (2010). Public perspectives on health human resources in primary healthcare: Context, choices and change. *Healthcare Policy*, 5(3), 163–172.
- Russell, G. M., Dahrouge, S., Hogg, W., Geneau, R., Muldoon, L., & Tuna, M. (2009). Managing chronic disease in Ontario primary care: The impact of organizational factors. *Annals of Family Medicine*, 4(4), 309–318.
- Spitzer, W. O. (1984). The nurse practitioner revisited: Slow death of a good idea. *New England Journal of Medicine*, 310(16), 1049–1051.
- Spitzer, W. O., Kergin, D. J., Yoshida, M. A., Russell, W. A., Hackett, B. C., & Goldsmith, C. H. (1975). Nurse practitioners in primary care: The Southern Ontario Randomized Trial. *Health Care Dimensions*, Spring, 105–119.
- Spitzer, W. O., Sackett, D. L., Sibley, J. C., Roberts, R. S., Gent, M., Kergin, D. J., et al. (1974). The Burlington Randomized Trial of the Nurse Practitioner. *New England Journal of Medicine*, 290(5), 251–256.
- Thrasher, C., & Purc-Stephenson, R. J. (2008). Patient satisfaction with nurse practitioner care in emergency departments in Canada. *Journal of the American Academy of Nurse Practitioners*, 20(5), 231–237.

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Commentary

Lynn Stevenson, Linda Sawchenko

Ruth Martin–Misener is cautiously optimistic that nurse practitioners (NPs) will be fully integrated into the Canadian health–care system in the long term. She describes numerous recent Canadian studies that show that NPs are making a difference and highlights the landmark randomized controlled trials of NPs conducted in Canada 35 years ago demonstrating their safety and effectiveness.

Martin–Misener reminds us about the Canadian Nurse Practitioner Initiative (CNPI) vision of a renewed and strengthened primary health care system that fully recognizes NPs and utilizes them to promote the health of all Canadians. The needs of the population must be the driving force behind NP integration. While physician shortages have historically prompted the development and introduction of NP roles in both acute-care and primary health care settings, the important complementary role that NPs play as members of interdisciplinary teams is becoming apparent. Now licensed in all provinces and territories, NPs are essential providers within the system regardless of the supply of physicians.

Martin–Misener outlines several barriers related to legislation/regulation and the education and practice of NPs. In British Columbia we have experienced all of these challenges. Initial legislation and regulation specific to the scope of NP practice was very broad and enabling. However, in the intervening years — consistent with Martin–Misener’s observation — British Columbia has been slow to make other legislative changes that would facilitate the work of NPs, such as their ability to process clients requiring long-term disability care or to admit and discharge acute-care clients.

Despite continuing legislative barriers, NPs have been able to optimize their scope of practice in a wide variety of acute and primary care settings. Part of that success is related to the funding model that British Columbia developed for the first 3 years of implementation, in which monies to support NP positions and practice flowed from the government to each of the six health authorities in the province. Unfortunately, this funding model is not seen as sustainable for new positions and the government is currently exploring other funding options. The lack of stable, ongoing funding is a threat to the continued successful implementation of NPs in British Columbia.

The autonomy of NPs and the substantial overlap with physicians in terms of their scope of practice can cause tension between the two pro-

fessions (Baerlocher & Detsky, 2009). Thornhill, Dault, and Clements (2008) summarize a decision support synthesis by Barrett, Curran, Glynn, and Godwin (2007) on interprofessional collaboration and state that the real and underlying challenge to interprofessional collaboration is a cultural one: “Effective collaboration requires a rapprochement from all of the major healthcare professionals, something often limited by the fact that each has its own history and traditions” (p. 15). Thornhill et al. suggest that addressing these deep-rooted issues requires strong, consistent leadership; readiness on the part of the providers to consider different ways of doing things; an environment of trust and respect; and interprofessional education and training before and after entry to practice and across the continuum of care. Collaboration with all team members is critical and the discussion should not be limited to NPs and physicians.

We are confident that full integration of the NP role can be achieved. However, this will require vigilant and committed leadership at all levels. As noted in the Canadian Nurses Association’s (2009) progress report on the CNPI recommendations, although progress has been made, there continues to be a need to establish the master’s degree as the required credential for entry into NP practice, to standardize mechanisms for addressing legislation that impedes effective practice, to develop true collaborative practice models with appropriate and sufficient funding, and to conduct research and develop communication and marketing strategies aimed at clarifying the NP role.

References

- Baerlocher, M. O., & Detsky, A. S. (2009). Professional monopolies in medicine. *Journal of the American Medical Association*, 301(8), 858–860.
- Barrett, J., Curran, V., Glynn, L., & Godwin, M. (2007). *CHSRF synthesis: Interprofessional collaboration and quality primary healthcare*. Ottawa: Canadian Health Services Research Foundation.
- Canadian Nurses Association. (2009). *Recommendations of the Canadian Nurse Practitioner Initiative: Progress report*. Ottawa: Author. Retrieved May 4, 2010, from http://www.cna-aiic.ca/CNA/documents/pdf/publications/CNPI_report_2009_e.pdf.
- Thornhill, J., Dault, M., & Clements, D. (2008). Ready, set . . . collaborate? The evidence says “go,” so what’s slowing adoption of inter-professional collaboration in primary healthcare? *Healthcare Quarterly*, 11(2), 14–16.

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Discourse

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

Denise Bryant-Lukosius

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.

References

- Brooten, D., Naylor, M. D., York, R., Brown, L. P., Hazard Munro, B., Hollingsworth, A. O., et al. (2002). Lessons learned from testing the Quality Cost Model of Advanced Practice Nursing (APN). *Journal of Nursing Scholarship*, 34, 369–375.
- Bryant-Lukosius, D., Carter, N., Kilpatrick, K., Martin-Misener, R., Donald, F., Kaasalainen, S., et al. (forthcoming). The current and future role of clinical nurse specialists in Canada. *Canadian Journal of Nursing Leadership*.

- Bryant-Lukosius, D., & DiCenso, A. (2004). A framework for the introduction and evaluation of advanced practice nursing roles. *Journal of Advanced Nursing*, 48(5), 530–540.
- Canadian Institute for Health Information. (2010). *Regulated nurses in Canada: Trends of registered nurses*. Ottawa: Author. Retrieved March 12, 2010, from http://secure.cihi.ca/cihiweb/products/regulated_nurses_2004_2008_en.pdf.
- Canadian Nurses Association. (2006). *2005 workforce profile of registered nurses in Canada*. Ottawa: Author. Retrieved March 2, 2009, from <http://www.cna-aiic.ca/CNA/documents/pdf/publications/workforce-profile-2005-e.pdf>.
- Canadian Nurses Association. (2008). *Advanced nursing practice: A national framework*. Ottawa: Author. Retrieved January 12, 2009, from http://www.cna-aiic.ca/CNA/documents/pdf/publications/ANP_National_Framework_e.pdf.
- Canadian Nurses Association. (2009a). *Position statement: The clinical nurse specialist*. Ottawa: Author. Retrieved July 23, 2009, from http://www.cna-aiic.ca/CNA/documents/pdf/publications/PS104_Clinical_Nurse_Specialist_e.pdf.
- Canadian Nurses Association. (2009b). *Tested solutions for eliminating Canada's registered nurse shortage*. Ottawa: Author. Retrieved March 15, 2010, from http://www.cna-aiic.ca/CNA/issues/hhr/default_e.aspx.
- Carr, M., & Hunt, P. (2004). *Acute Care Geriatric Nurse Network report*. Victoria: Nursing Directorate, British Columbia Ministry of Health.
- DiCenso, A., Bryant-Lukosius, D., Bourgeault, I., Martin-Misener, R., Donald, F., Abelson, J., et al. (2009). *Clinical nurse specialists and nurse practitioners in Canada: A decision support synthesis*. Ottawa: Canadian Health Services Research Foundation.
- Forster, A. J., Clark, H. D., Menard, A., Dupuis, N., Chernish, R., Chandok, N., et al. (2005). Effect of a nurse team coordinator on outcomes for hospitalized medicine patients. *American Journal of Medicine*, 118(10), 1148–1153.
- Frick, K., & Stone, P. (2009). Analyzing economic outcomes in advanced practice nursing. In R. M. Kleinpell (Ed.), *Outcome assessment in advanced practice nursing* (2nd ed.) (pp. 63–88). New York: Springer.
- Fulton, J. S., & Baldwin, K. (2004). An annotated bibliography reflecting CNS practice and outcomes. *Clinical Nurse Specialist*, 18(1), 21–39.
- Health Canada. (2006). *Primary Health Care Transition Fund. Nursing Strategy Initiative*. Ottawa: Office of Nursing Services, First Nations and Inuit Health Branch. Retrieved March 25, 2008, from [http://www.apps.hc-sc.gc.ca/hcs-sss/phctf-fassp.nsf/lkAttachments/14BCA6DC2DA7CB2B8525728E006FBE49/\\$File/16E_FS_NursingStrat.pdf](http://www.apps.hc-sc.gc.ca/hcs-sss/phctf-fassp.nsf/lkAttachments/14BCA6DC2DA7CB2B8525728E006FBE49/$File/16E_FS_NursingStrat.pdf).
- Hogan, D. L., & Logan, J. (2004). The Ottawa Model of Research Use: A guide to clinical innovation in the NICU. *Clinical Nurse Specialist*, 18(5), 255–261.
- Hutchison, B., Abelson, J., & Lavis, J. N. (2001). Primary care in Canada: So much innovation, so little change. *Health Affairs*, 20(3), 116–131.
- Lasby, K., Newton, S., & Von Platen, A. (2004). Neonatal transitional care. *Canadian Nurse*, 100(8), 18–23.
- McCorkle, R., Strumpf, N. E., Nuamah, I. F., Adler, D. C., Cooley, M. E., Jepsen, C., et al. (2000). A specialized home care intervention improves survival among older post-surgical cancer patients. *Journal of the American Geriatrics Society*, 48(12), 1707–1713.

- Myers, A. M. (1988). Needs assessment: Broadening the perspective on its utility and timing. *Canadian Journal of Program Evaluation*, 3(2), 103–113.
- Pauly, B., Schreiber, R., MacDonald, M., Davidson, H., Crickmore, J., Moss, L., et al. (2004). Dancing to our own tune: Understandings of advanced nursing practice in British Columbia. *Canadian Journal of Nursing Leadership*, 17(2), 47–57.
- Pepler, C. J., Edgar, L., Frisch, S., Rennick, J., Swidzinski, M., White, C., et al. (2006). Strategies to increase research-based practice: Interplay with unit culture. *Clinical Nurse Specialist*, 20(1), 23–31.
- Profetto-McGrath, J., Smith, K. B., Hugo, K., Taylor, M., & El-Hajj, H. (2007). Clinical nurse specialists' use of evidence in practice: A pilot study. *Worldviews on Evidence-Based Nursing*, 4(2), 86–96.
- Registered Nurses' Association of Ontario. (2007). *Healthy workplace environments best practice guidelines: Professionalism in nursing*. Toronto: Author. Retrieved March 11, 2010, from http://www.rnao.org/Storage/28/2303_BPG_Professionalism.pdf.
- Schreiber, R., MacDonald, M., Pauly, B., Davidson, H., Crickmore, J., Moss, L., et al. (2005). Singing in different keys: Enactment of advanced nursing practice in British Columbia. *Canadian Journal of Nursing Leadership*, June, 1–17. [Online.]
- Smith-Higuchi, K., Hagen, A. B., Brown, S., & Zeiber, M. P. (2006). A new role for advanced practice nurses in Canada: Bridging the gap in health services for rural older adults. *Journal of Gerontological Nursing*, 32(7), 49–55.
- Walker, J. A., Urden, L. D., & Moody, R. (2009). The role of the CNS in achieving and maintaining Magnet status. *Journal of Nursing Administration*, 39(12), 515–523.

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Commentary

Patricia O'Connor, Judith A. Ritchie

Denise Bryant-Lukosius raises important issues about the future of the clinical nurse specialist (CNS) role in the Canadian health-care system. We agree with her call to action for research related to the nature and impact of CNS functions. We agree that, without more debate and research, the role may stagnate and even disappear.

We are not surprised at the lack of research related to the CNS role. First, there is strong evidence from studies in the United States of important positive impacts of the role. Many Canadian nursing leaders have used that evidence in shaping their vision for service delivery and resource-allocation decisions in this country. Second, we believe that there is funding priority for research related to nurse practitioner (NP) roles because of controversies and role boundary issues within and across professions related to the NP role and because of political pressure on governments and medical and nursing regulatory bodies to establish NP roles. This top-down evolution of the NP role, versus the bottom-up development of CNS roles, has demanded research evidence to support policy decisions. Third, CNSs, in our experience, have focused on clinical research. At the McGill University Health Centre, for example, research has focused on end-of-life surrogate decision-making (Chambers-Evans & Carnevale, 2005), decision-making with regard to treatment for multiple sclerosis (Lowden, Lee, Ritchie, & Smeltzer, 2008), and risk assessment for pressure ulcers in the critically ill (Rose, Cohen, & Amsel, 2006).

As Bryant-Lukosius points out, few roles are designed like the CNS, to offer the depth of provider and system-wide interventions required to address complex situations. CNSs typically provide expert clinical care to persons and families experiencing complex chronic or acute illnesses, and they provide consultation and support to bedside nurses. Our academic health centre employs 54 CNSs. They work within an interprofessional collaborative practice model with populations experiencing complex multi-system illnesses. They are a resource for patients and families requiring symptom management and assistance navigating the health-care system. They play significant roles in providing (a) consultation and support to bedside practitioners, thus enhancing recruitment and retention; (b) co-leadership with physicians in terms of quality performance within specialty programs; (c) consultation for partners within our “extended” university network across the province of Quebec; (d) input

into policy development by provincial, national, and international bodies that set policy direction within their specialties; and (e) leadership for evidence-informed practice changes at the program or organization level.

We believe it is essential that senior nursing leaders clearly articulate the benefits of these many functions. In our experience, physicians, rehabilitation specialists, and social workers readily acknowledge and depend on the added value that CNSs bring to the team. This appreciation has emerged from the gradual introduction of the CNS role over 25 years. Intended to complement rather than substitute for other health-care providers, our CNSs have matured because of deliberate support for and attention to their role development. Regular reflective practice sessions, a requirement of the job, enhance CNS competencies related to conflict management and system-level change.

It is clear that CNSs contribute significantly to the academic mandate of our Centre. They have assumed most of the leading roles related to improvement of nurse-sensitive indicators. Five of the seven recipients of the Centre's Eureka! research fellowships have been CNSs (Ritchie, Chambers-Evans, Chin-Peuckert, Lariviere, & Rose, 2007). In the last 3 years, CNSs have been the lead investigator for 11 of 14 small research grants and have published dozens of articles in peer-reviewed journals. Most of the Centre's CNSs hold faculty appointments at the McGill University School of Nursing.

In Quebec, in contrast to some other provinces (Canadian Institute for Health Information, 2010), the number of CNSs has risen steadily in recent years, with more than 140 on staff in the teaching hospitals in Montreal alone. At the provincial policy level, the employment of CNSs is required for any organization applying for the highest certification level as a cancer treatment centre.

We believe that research evidence is not the only driving force in establishing NP and CNS positions. Despite strong research evidence on NP roles, many jurisdictions still struggle with their implementation. However, given the current financial pressures in health care, we predict an increasing demand for the development and evaluation of new service delivery models and work redesign. Innovations in nursing and the other health professions are desperately needed to match population needs. Such innovations will influence some CNS roles. Pressures for change present important opportunities for research on CNS outcomes. We need to develop methods and systems for tracking CNS productivity and to address the challenges in measuring performance indicators sensitive to varied leadership roles and interventions.

Are CNSs here to stay in Canada? They likely are, though the emergence of new roles will influence their numbers. It is time for nursing to more clearly report the impacts of the CNS roles, through the lenses of

both research and service delivery, and to press for the appropriate policy decisions.

References

- Canadian Institute for Health Information. (2010). *Regulated nurses in Canada: Trends of registered nurses*. Ottawa: Author. Retrieved May 4, 2010, from http://secure.cihi.ca/cihiweb/products/regulated_nurses_2004_2008_en.pdf.
- Chambers-Evans, J., & Carnevale, F.A. (2005). Dawning of awareness: The experience of surrogate decision making at the end of life. *Journal of Clinical Ethics, 16*(1), 28–45.
- Lowden, D., Lee, V., Ritchie, J. A., & Smeltzer, S. C. (2008). Patients' decision-making about treatment for multiple sclerosis. *International Journal of MS Care, 10*(Suppl 1), 22.
- Ritchie, J. A., Chambers-Evans, J., Chin-Peuckert, L., Lariviere, J., & Rose, P. (2007). Eureka! A new world of discovery in nursing at the McGill University Health Centre. *Canadian Journal of Nursing Research, 39*, 183–191.
- Rose, P., Cohen, R., & Amsel, R. (2006). Development of a scale to measure the risk of skin breakdown in critically ill patients. *American Journal of Critical Care, 15*(3), 324–346.

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Définir le rôle des infirmières praticiennes en soins primaires dans les régions rurales de la Nouvelle-Écosse

**Ruth Martin-Misener, Sandra M. Reilly,
Ardene Robinson Vollman**

Cet article présente une étude fondée sur des méthodes mixtes visant à définir le rôle des infirmières praticiennes (IP) dans les régions rurales de la province de la Nouvelle-Écosse au Canada. On a recueilli des données qualitatives par le biais d'entrevues téléphoniques auprès des présidents de conseils de santé, ainsi que des données quantitatives au moyen d'un questionnaire auquel ont répondu des IP, des médecins de famille, des infirmières de santé publique et des infirmières familiales. Les auteures décrivent le point de vue des répondants sur les besoins des communautés rurales en matière de santé; les lacunes relevées dans le modèle actuel de services de soins primaires; le rôle professionnel envisagé pour les IP dans les régions rurales et les facteurs qui facilitent ou entravent son établissement. Pour tirer le meilleur profit des avantages que présente cette fonction pour les populations des communautés rurales, il faudra prêter attention aux obstacles qui nuisent à son déploiement et à son intégration.

Mots clés : infirmières praticiennes, soins de santé primaires, rôle professionnel

Defining the Role of Primary Health Care Nurse Practitioners in Rural Nova Scotia

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This article reports on a mixed methods study to define the role of nurse practitioners (NPs) in rural Nova Scotia, Canada, by collecting the perceptions of rural health board chairpersons and health-care providers. Qualitative data were collected in telephone interviews with health board chairpersons. Quantitative data were collected in a survey of NPs, family physicians, public health nurses, and family practice nurses. The authors describe participants' perspectives on the health needs of rural communities, the gaps in the current model of primary health care services, the envisaged role of NPs in rural communities, and the facilitators of and barriers to NP role implementation. Optimizing the benefits of the NP role for residents of rural communities requires attention to the barriers that impede deployment and integration of the role.

Keywords: nurse practitioners, primary health care, rural health services, professional role

Introduction

Compared to their urban counterparts, the residents of rural Canada have higher overall mortality rates, higher rates of injury and poisoning, and higher rates of chronic diseases such as cardiovascular disease and diabetes (Canadian Institute for Health Information [CIHI], 2004; DesMeules et al., 2006). Rural residents generally have lower incomes, have less formal education, and are less likely to exhibit healthy lifestyle behaviours than residents of urban settings (DesMeules et al., 2006; Nova Scotia Department of Finance, 2003). For example, in comparison to urban residents, rural residents are more likely to use tobacco (Poulin & Wilbur, 2002), consume fewer fruits and vegetables (DesMeules et al., 2006), and have more problems with weight control (CIHI, 2003; DesMeules et al., 2006) and stress management (Hayward & Colman, 2003; Pahlke, Lord, & Christiansen-Ruffman, 2001). In addition to their health problems, rural populations have less access to primary health care (PHC) services than urban populations, in part because of travel distances but also because there are fewer family physicians (FPs) in rural areas than in urban areas (CIHI, 2005; Health Canada, 1992; Romanow, 2002). These

data have special relevance to Nova Scotia, where 39% of the province's 900,000 residents live in rural areas (du Plessis, Beshiri, Bollman, & Clemenson, 2002).

In response to these challenges, the last decade of Canadian health reform has emphasized the need for expanding the use of interdisciplinary teams to improve the accessibility and quality of PHC (Health Services Restructuring Commission, 1999; Hutchison, 2008; Romanow, 2002). This policy context revived government interest in the nurse practitioner (NP) role. Introduced in Canada during the early 1970s, the NP role was not sustained because of funding and other challenges (Haines, 1993; Spitzer, 1984) despite evidence that supported its effectiveness (Spitzer et al., 1974, 1975).

Recent efforts to integrate NPs into the Canadian health-care system have endeavoured to ensure that, this time, role integration will be successful (Canadian Nurse Practitioner Initiative [CNPI], 2006). To that end, a number of studies have advanced our understanding of the factors that influence NP role integration (Bryant-Lukosius & DiCenso, 2004; CNPI, 2006; DiCenso, Paech, & IBM Corporation, 2003).

Role definition is an important influencing factor for at least three reasons. First, it enables patients to be informed about the care providers that they select (DiCenso et al., 2003; Way, Jones, Baskerville, & Busing, 2001). Second, for health-care providers to work together effectively and harmoniously, their roles and responsibilities need to be clearly defined (Reveley, 2001). When roles are not clearly defined, role confusion can occur and lead to incomplete role implementation and deployment (DiCenso et al., 2003; MacDonald & Katz, 2002; Way et al., 2001). Third, the absence of a clearly defined role jeopardizes the evaluation of that role (Bryant-Lukosius & DiCenso, 2004).

Nova Scotia first considered the role of NPs in 1995 (Nova Scotia Department of Health, 1996). Evaluation of a pilot study found that patients were satisfied with the quality of NP services and that NPs increased health promotion and illness prevention and improved chronic disease management (Graham, Sketris, Burge, & Edwards, 2006; Nova Scotia Department of Health, 2004). Subsequently, the *Registered Nurses Act of 2001* established legal sanction of the NP role, including title protection. To practise, NPs required a formally approved collaborative practice agreement with one or more physicians (College of Registered Nurses of Nova Scotia [CRNNS], 2004).

This article reports on a mixed methods study intended to describe how rural health board chairpersons and health-care providers define the role of NPs in Nova Scotia. It summarizes their perspectives of the health needs of rural communities, the gaps in the current model of PHC serv-

ices, the envisaged activities of NPs, and the facilitators of and barriers to NP role implementation.

Methods

The conceptual framework for this study was the **P**articipatory, **E**vidence-Based, **P**atient-Centred **P**rocess for **A**dvanced Practice Nursing Role Development, Implementation, and Evaluation (PEPPA framework) (Bryant-Lukosius & DiCenso, 2004). The PEPPA framework provides a systematic, evidence-based approach to the implementation and evaluation of advanced practice nurses, including NPs. This process-based framework emphasizes identification of the health-care needs of a patient population, articulation of the goals for the NP role, and delineation of the role before evaluation. The involvement of stakeholders is regarded as critical for clarifying and gaining acceptance of the new role and addressing implementation barriers.

A mixed methods approach entails collection and analysis of more than one type of data, to ensure comprehensiveness, in-depth understanding, and credibility of the findings (Teddlie & Tashakkori, 2003). The study design was a triangulation model, meaning that qualitative and quantitative data were collected concurrently, given equal priority, and integrated into the results and discussion (Cresswell, Fetters, & Ivankova, 2004). Ethical approval was obtained from the research ethics boards at the University of Calgary and Dalhousie University as well as from Nova Scotia's nine district health authorities.

Purposive sampling (Patton, 2002) was used to select chairpersons of health boards in each district health authority, who were interviewed by telephone between May and September 2004. Each interview, approximately 1 hour in length, was audiorecorded and transcribed. Rural NPs, FPs, public health nurses, and family practice nurses were surveyed using a postal questionnaire. "Rural" was defined as a community with a core population of less than 10,000 outside the commuting area of a large urban centre designated as a census metropolitan or agglomeration area (du Plessis et al., 2002). FPs in rural settings who had hired or were known to consider hiring an NP were identified using information obtained from the College of Physicians and Surgeons of Nova Scotia. Rural nurse participants were identified using CRNNS registration information. Health-care providers employed by the Canadian Armed Forces were excluded because contextual differences in their organizational structure would have confounded the results. Based on these criteria, 11 NPs, 77 FPs, 90 public health nurses, and 50 family practice nurses were eligible to participate in the survey.

A questionnaire was developed based on an instrument used to assess the need for and role of NPs in the province of Ontario (Mitchell, Patterson, Pinelli, & Baumann, 1995). Items were added to reflect the spectrum of advanced nursing practice competencies (McMillan, Heusinkveld, & Spray, 1995). Content validity was established by an expert panel and the questionnaire was revised after piloting had identified concerns about length and complexity.

The questionnaire requested descriptive information about respondents and the PHC activities performed in their setting. To protect the anonymity of the small number of eligible NPs, detailed demographic data were not collected. The questionnaire comprised five sections: direct clinical care activities with individuals and families (66 questions), community activities (18 questions), research (8 questions), education (7 questions), and administration (8 questions). For each activity, respondents were asked to circle the answer that best identified the type of health-care provider currently performing the activity in their setting and then to circle the answer that best identified the type of health-care provider who, in their view, should be performing that activity. The activities included in the questionnaire — for example, prescribing of some of the drug categories — were deliberately not restricted to those within the scope of practice of NPs in Nova Scotia. Additional questions called for narrative comments on health needs and services in the respondent's setting, the roles of NPs and other nurses, and the barriers to NP role implementation.

Questionnaires were mailed to all eligible participants ($N = 228$) during June and July 2004 using established strategies to maximize response rates (Edwards et al., 2002). Non-responders were asked to complete and return a postcard that requested basic demographic information and their reason for not completing the questionnaire. From the data obtained on returned postcards ($n = 92$), it was determined that 26 respondents had received the questionnaire in error (Hidiroglou, Drew, & Gray, 1993). The most common reasons for not completing the questionnaire were insufficient time (59%) and lack of knowledge about the NP role (17%).

QSR NUDIST version 6 was used to assist with qualitative data management and content analysis. One researcher (RMM) coded the data into units of meaning, identified categories, and developed themes (Sandelowski, 2000). The coding structure was discussed with a second researcher (AV), and another researcher (NE) coded and analyzed one transcript to ensure consistency of coding. In addition to method triangulation, trustworthiness was enhanced through team discussions of the findings, including an explicit search for alternative interpretations of the data (Lincoln & Guba, 1985).

Quantitative data were analyzed using SPSS version 9.0. Accuracy of data entry approached 100%. Descriptive statistics were calculated on all categorical responses, and chi-square was used to determine whether there were differences by type of health-care provider (Ott, 1993). The data were analyzed for convergent, complementary, and contradictory findings (Erzberger & Kelle, 2003).

Results

Six female and three male health board chairpersons were interviewed. Each had between 3 and 5 years' experience in their role and most also had been previously involved in the health field. They described themselves as possessing a good knowledge of PHC services from having conducted community needs assessments, and many spoke of the importance of becoming familiar with the needs of the whole community.

The overall response rate to the questionnaire was 25% ($n = 51$); by group it was 64% for NPs ($n = 7$, of 11 surveyed), 19% for FPs ($n = 13$, of 69 surveyed), 27% for public health nurses ($n = 21$, of 78 surveyed), and 23% for family practice nurses ($n = 10$, of 44 surveyed). Approximately one third of respondents (37%) had previous experience working with an NP. Refusals were highest for the FP group (81.2%), slightly more than the overall refusal rate of 74.8%. However, more of the responding FPs (62%) were familiar with the NP role than either public health nurses (14%) or family practice nurses (20%).

The Need for a New Model of PHC in Rural Nova Scotia

Health board chairpersons reported that seniors accounted for over half of the residents in rural communities and that mortality, in combination with out-migration, had resulted in an overall decrease in the size of the population. Poverty, unemployment, and reliance on social assistance represented "probably the biggest single health threat" in virtually every jurisdiction. Other threats included cigarette smoking, poor nutrition, chronic disease, sexually transmitted infections, and stress and depression.

All health board chairpersons expressed concerns about the accessibility of PHC services. They indicated that most PHC and emergency health services were provided by FPs. Almost all ($n = 7$) reported having at least one NP in their district and reported that the community accepted the NP as a new health-care provider. On a related point, most health board chairpersons reported a current or projected shortage of FPs. They stated that many rural residents visited emergency departments because they did not have access to an FP or had to wait up to 3 or 4 weeks for an appointment. One chairperson stated, "[This is] a terrible situation for continuity of care" and preventive health practices. On a

similar note, they revealed that many rural patients felt underserved because the shortage of FPs denied them an opportunity to confer with their providers and thereby participate in their own health care.

Health-care providers agreed with the health board chairpersons, indicating that many FPs had appointment wait times of up to 3 weeks and no longer accepted new patients — this resulted in an inappropriate reliance on expensive hospital emergency departments for routine care and little if any access to preventive health services. When asked whether the supply of health-care providers met the needs of their rural community, more than 70% of nurse respondents indicated “no,” whereas 62% of FPs responded “yes.” Over half of all respondents (4 NPs, 3 FPs, 13 public health nurses, 7 family practice nurses) commented that the aging rural FP workforce had unacceptably heavy workloads and that recruitment and retention of younger FPs was difficult.

The Preferred Role for NPs in Rural Nova Scotia

Health board chairpersons described NPs as generalists whose role partially overlaps with the role of FPs. Some stated that it would be better and less costly if NPs carried out some services currently provided by FPs, reducing the number of FPs required in rural areas. Chairpersons stated that NPs cared for patients with common urgent health issues as well as patients requiring preventive health services and chronic disease management. They regarded outreach to vulnerable populations, such as isolated seniors, as a key component of the NP role. Chairpersons stressed that NPs have the skills to address not only physical health problems but also social and mental health concerns:

NPs help the person make the links of calling and get them on track as to where they can get help and meet those needs. It's not just acute problems; social problems, mental health problems — these are enormous.

Assessment, Diagnosis, and Management

Health board chairpersons repeatedly remarked that important components of the NP role were providing wellness and health promotion services and counselling and educating patients to become more self-reliant. NPs apparently provided patients with more time than FPs to discuss their problems. As a result, patients had the opportunity to “unearth some of the other things that might be causing their problems” and NPs could respond appropriately:

If you come in with a bad cold in the chest . . . [patients] can sit and talk to the NP. She may identify other problems, such as mental health problems, that they wouldn't talk to the doctor about because it's the doctor and he or she is busy. People don't feel rushed when they go to see her

[NP]. Not that our physicians rush them, but people have this perception of, oh, it's the doctor, I can't take all of his time.

The majority of survey respondents indicated that FPs currently performed most assessment and diagnostic activities; however, as many as 39% of respondents indicated that NPs performed some of these activities. Moreover, when asked which health-care provider should perform assessment and diagnostic activities, upwards of 91% of respondents indicated that the NP should perform them either independently or collaboratively with an FP; as many as 91% pointed out that NPs should diagnose acute illnesses and 89% that NPs should diagnose chronic illnesses. In answer to another question, 80% to 88% of respondents specified that NPs should analyze data for planning patient care, order diagnostic and laboratory tests, and perform histories and physical examinations. At least 70% indicated that NPs should conduct breast and pelvic examinations, including the Papanicola smear; carry out diaphragm measurements and intrauterine device insertions and removals; and provide care for perinatal women, well newborns, and sick babies under 3 months of age. Fewer respondents, between 45% and 60%, indicated that NPs should counsel patients regarding behavioural problems, identify abuse and neglect, and provide care for well children. Those who disagreed indicated that public health nurses and family practice nurses should carry out these activities. Care for an unstable newborn was viewed as the responsibility of FPs rather than NPs.

Prescribing Pharmaceuticals

Questions also addressed perceptions regarding the prescription of pharmaceuticals. The majority of respondents indicated that FPs currently wrote most prescriptions, although 25% to 37% reported at the same time that NPs often prescribed contraceptives, antibiotics, anti-inflammatories, antifungals, and decubitus ulcer treatments. When asked who "should" prescribe pharmaceuticals, at least 75% of respondents indicated that NPs should prescribe the aforementioned pharmaceuticals as well as antivirals, antidepressants, and insulin. Whereas 60% believed that NPs should prescribe opioids, 40% indicated that these drugs should be prescribed only by FPs.

Performing Procedures

With regard to various medical procedures, respondents reported that FPs performed most of the procedures; less than 30% indicated that NPs currently did so. When asked who should perform them, 70% to 92% replied that NPs should suture minor wounds, insert catheters, apply and remove simple casts, manage incisions, perform nail reductions, perform gastric

lavage, manage wounds, manage airways and oxygen therapy, and remove foreign bodies. Fewer respondents (30% to 56%) indicated that NPs should perform skin biopsies as well as procedures related to tonometry, anoscopy, nerve blocks, and colposcopy. The remainder indicated that NPs should not perform these procedures and that only FPs should do so.

Consultation and Referral

The questionnaire also asked about consultation and referral activities, including referral to medical specialists and other health-care providers as well as admission privileges to long-term-care and acute-care facilities. Respondents indicated that most consultation and referral activities were undertaken by FPs; fewer than 35% indicated that NPs carried out these activities in their practice. However, when asked who should perform these activities, 80% or more indicated that NPs ought to consult and refer to medical specialists, other health-care providers, and programs. In addition, 79% and 60%, respectively, indicated that NPs should admit patients to and manage their care in long-term-care facilities and hospitals. Chi-square analysis found no significant differences in the responses of NPs, physicians, public health nurses, and family practice nurses in relation to any of the aforementioned activities, nor were any substantive differences found between respondents with and without experience working with an NP.

Community Health

Health board chairpersons and health-care providers were asked about the community health activities of NPs. Chairpersons cited the essential role played by NPs in community-focused activities and strategic actions. Several described how NPs provide linkages between the community and FPs as well as among various community services, health boards, and community organizations. Chairpersons described the important role played by NPs in “meshing with” and caring about the community. One chairperson said:

She [NP] has the education and the feeling for community and for community development and for community ownership of their problems and issues and how to go about addressing [them]. And I think that's what's so vital.

While approximately half of survey respondents indicated that public health nurses and family practice nurses carried out most community health activities (for example, community assessments, program planning and evaluation, surveillance, outreach services, case finding, and linking with organizations), 30% of respondents included NPs in these activities.

Factors Influencing Implementation of the NP Role in Rural Communities

Health board chairpersons stated that it was important for NPs to work collaboratively with FPs and other health-care providers so as to provide coordinated care and avoid duplication of services. They stressed that it was essential to have FP support when introducing and integrating an NP into a rural community. In terms of implementing the NP role, they commented that some FPs were “reluctant to give up any of their turf” but that other FPs, who were “open-minded” and “forward thinking” and had worked previously with NPs, facilitated the change.

Health board chairpersons stated that it was important to identify the right health-care provider for each type of PHC service, explaining that whereas NPs focused on prevention and health promotion, FPs focused on treatment, and that both roles were important. Health board chairpersons emphasized that only when roles and relationships are clearly defined will the public fully understand the PHC services available to them:

So there's a lot of role identification that needs a little more specific clarity in these things, and then it's a promotional package that's very simple to put out to the public so that the public knows how it works and who they can go and see and when they can go and see them and how it works — how their continuity of care is going to take place.

Health board chairpersons pointed out that in some settings the requirement for NPs to have a formal collaborative practice agreement with a physician interfered with NPs' ability to improve access to health services. They elaborated, explaining that this requirement prevented NPs from extending services to patients beyond the practice population served by the collaborating FP. Thus, if an FP's practice was closed to new patients, the NP was unable to accept new patients, thereby limiting accessibility. The following statement illustrates this point:

During the pilot project, only patients in the collaborative practice could see that NP for problems. She couldn't take on persons from other practices, from other areas within the county. That is [where] the door needs to open.

Health-care providers were asked why the activities that should be undertaken by NPs were not being performed by NPs. Most cited the unavailability of NPs, largely because of the lack of funding for NP positions. They expressed frustration with the length of time, extent of negotiations, and amount of personal energy required to develop an NP role in their community. Some were critical of the scope of practice for NPs in Nova Scotia, particularly the requirement that NPs have an approved

collaborative practice agreement and the limitations on prescribing. Also mentioned was resistance to the NP role on the part of some FPs.

Similar to health board chairpersons, health-care providers commented on the importance of clearly defined roles, noting that restrictions on scope of practice served to inhibit change. They indicated that educating the community, government representatives, and other health-care providers about the NP role would facilitate NP role implementation.

Discussion

In view of the low response rate to the survey of FPs, public health nurses, and family practice nurses, the findings may not be generalizable and should be interpreted with caution. Nevertheless, the findings offer a grassroots perspective on health needs, service gaps, and expectations with regard to the NP role in rural Nova Scotia, where poverty, unemployment, and low levels of education have a significant impact on health (CIHI, 2003; Hayward & Colman, 2003). In some ways, the study represents a virtual discourse between nursing and medicine on the reform of PHC services in rural Nova Scotia. In this dialogue, health board chairpersons figuratively act as overseers, who, because of their special role in the delivery of rural health services, validate most of the findings. Both health-care providers and health board chairpersons concurred that the fundamental problems with rural health services are accessibility to prevention-focused care and timely access to non-emergent PHC services. The highly congruent and complementary perceptions of rural health board chairpersons and health-care providers about the NP role confirm that there are services that NPs can provide autonomously and collaboratively to improve PHC.

Consistent with the results of numerous other studies of NPs' perspective on their role, the findings from this study reveal that health board chairpersons and health-care providers perceive the NP role as centred on a wide range of holistic individual and family-focused health services (DiCenso et al., 2003; Holcomb, 2000; Sidani, Irvine, & DiCenso, 2000). The findings indicate that chairpersons and health-care providers are aware of an overlap in the activities performed by NPs and FPs. The qualitative data from health board chairpersons are particularly revealing in this regard. These respondents indicated that any overlap in activities can only improve access to preventive services as well as to acute and chronic care. They also deemed that a defining characteristic of the NP role is the ability of NPs to reach out and establish therapeutic relationships with patients.

The findings also reveal a potential overlap in the role of NPs and public health nurses and family practice nurses in areas such as health

promotion, well woman and child care, immunization, chronic disease management, and community health. While considerable attention has been given to the overlap in scope of practice between the role of NPs and the role of FPs, there is less awareness of where such overlap exists with other registered nurses. This is an important consideration when planning and defining the roles of health-care providers in a particular setting, especially since other studies have found that the contributions of these nurses have not been recognized (Meagher-Stewart & Aston, 2004; Todd, MacKay, Howlett, & Lawson, 2005). The present results confirm the importance of using a deliberative process to define and determine the roles and responsibilities of each health-care provider when planning and implementing PHC in a particular setting (Bryant-Lukosius & DiCenso, 2004).

For the most part, there were few differences in the perspectives of the various participants about the NP role. This congruence suggests knowledge about and acceptance of the role among those who were interviewed and chose to respond to the survey. This is important since other studies have shown that knowledge and acceptance are important facilitators of NP role implementation (Advisory Committee on Health Human Resources & Centre for Nursing Studies, 2001; DiCenso et al., 2003). Nevertheless, it must be acknowledged that this study focused on the perceptions of rural health board chairpersons and health-care providers. It is possible that their urban counterparts would hold quite different perspectives on the NP role.

On the other hand, there was disagreement among the participating health-care providers about the adequacy of the supply of health-care providers in rural communities. Whereas almost two thirds of FPs indicated that the supply was adequate, both nurses and health board chairpersons indicated that it was not. This difference may reflect the fact that some parts of rural Nova Scotia have more FPs than others (CIHI, 2004). It could be that the FP participants in our study were located in areas where the shortage was less acute. The difference could also reflect variations in the range of services needed in specific communities or differences in the views of health-care providers about the types of services required. A larger sample with detailed demographic data might reveal more divergence in the views of various health-care providers. This is an important issue to explore. FP perceptions of what constitutes an adequate supply of health-care providers, as well as their perceptions of what constitutes adequate accessibility and to what types of services, could influence perceptions about the need for the services of an NP. Furthermore, it is important that the supply of health-care providers be monitored over time, especially if the current decline in rural population continues.

Many of the challenges to implementing the NP role identified in this study are similar to those found by other Canadian studies (DiCenso et al., 2003; Goss Gilroy Management Consultants Inc., 2001). Despite the fact that health-care providers and health board chairpersons saw a clearly defined role for NPs in rural communities, deployment of NPs in Nova Scotia was limited at the time when the study was conducted. Some Canadian provinces have responded to the need for a reorganization of PHC by developing a variety of models that incorporate the NP role (Health Force Ontario, 2007; Martin & Hogg, 2004). In Nova Scotia, however, communities are expected to design their own models to meet the needs of their local populations. Theoretically, such a bottom-up, community-based approach to PHC reform holds promise for PHC services designed for maximum responsiveness to community needs. The results of the present study demonstrate that, despite the best of intentions, the onerous process and energy expenditure required to plan and implement such a change in PHC are a source of frustration. Both health board chairpersons and health-care providers were critical of the requirement for NPs in Nova Scotia to have a formal collaborative practice agreement with a physician; they regarded this as a barrier to implementation of the NP role. If the nature of the collaborative practice agreement is such that NPs cannot take on new patients if the practice of their collaborating physician is closed to new patients, then it defeats one of the purposes of the NP role: to provide PHC services for more people. Although the requirements related to collaborative practice agreements have changed since the study was conducted (CRNNS, 2009), more research is needed in order to identify the potential benefits and disadvantages of these agreements.

This study had several limitations, chief among them the low response rate to the survey. Data from the postcards indicated that lack of knowledge about the NP role was a common reason for refusal to participate, exerting considerable influence on the response rate. The complexity and length of the questionnaire may have been another contributing factor. It is also possible that those who chose not to respond did so because they held negative views of the NP role. Finally, the small number of NPs in the province at the time of the study precluded the collection of demographic data. Had this information been obtained, the diversity of the sample could have been determined.

Notwithstanding these limitations, the study had several strengths that should be acknowledged. The mixed methods design enabled the collection of in-depth qualitative data and some quantitative data on the NP role. An important contribution of the study is its inclusion of the perspectives of health board chairpersons on the NP role in rural communities. As well, the inclusion of a variety of health-care providers allowed

for the incorporation of a range of perspectives. In particular, the views of public health nurses and family practice nurses about the NP role have not previously been studied.

Conclusion

NPs are a relatively new addition to PHC teams in rural Nova Scotia. They are defined by and valued for their holistic, health-promoting nursing approach, which engages patients as partners in the management of their own health. NPs provide individual and family-focused clinical care with an emphasis on health promotion, illness prevention, and the diagnosis and management of chronic and episodic disease. The NP role represents a significant opportunity to improve the accessibility of rural communities to a full range of PHC services. To optimize the benefits of the NP role for residents of rural communities, it is essential that barriers to its deployment and integration be removed.

References

- Advisory Committee on Health Human Resources & Centre for Nursing Studies in collaboration with the Institute for the Advancement of Public Policy. (2001). *Final report: The nature of the extended/expanded nursing role in Canada*. Retrieved January 12, 2009, from <http://www.cns.nf.ca/research/finalreport.htm>.
- Bryant-Lukosius, D., & DiCenso, A. (2004). A framework for the introduction and evaluation of advanced practice nursing roles. *Journal of Advanced Nursing*, 48(5), 530–540.
- Canadian Institute for Health Information. (2003). *Health care in Canada 2003*. Ottawa: Author.
- Canadian Institute for Health Information. (2004). *Health indicators 2004*. Ottawa: Author. Retrieved December 21, 2005, from http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_152_E&cw_topic=152.
- Canadian Institute for Health Information. (2005). *Geographic distribution of physicians in Canada: Beyond how many and where*. Ottawa: Author. Retrieved February 28, 2010, from http://secure.cihi.ca/cihiweb/products/Geographic_Distribution_of_Physicians_FINAL_e.pdf.
- Canadian Nurse Practitioner Initiative. 2006. *Nurse practitioners: The time is now. A solution to improving access and reducing wait times in Canada*. Ottawa: Canadian Nurse Practitioner Initiative, Canadian Nurses Association. Retrieved August 12, 2009, from http://206.191.29.104/documents/pdf/Nurse_Practitioners_The_Time_is_Now_e.pdf.
- College of Registered Nurses of Nova Scotia. (2004). *Guidelines for the development and approval of collaborative practice agreements: Primary health care nurse practitioner*. Halifax: Author. Retrieved November 4, 2005, from www.crnns.ca/default.asp?id=190&sfield=Content.Id&mn=414.70.81.412&search=1484.

- College of Registered Nurses of Nova Scotia. (2009). *Guidelines for collaborative practice teams and employers of nurse practitioners*. Halifax: Author. Retrieved May 6, 2009, from http://www.crnns.ca/documents/GuidelinesforCollaborativePracticeTeams_%20RevAug_18_09.pdf.
- Cresswell, J. W., Fetters, M. D., & Ivankova, N. V. (2004). Designing a mixed methods study in primary care. *Annals of Family Medicine*, 2(1), 7–12.
- DesMeules, M., Pong, R., Lagacé, C., Heng, D., Manuel, D., Pitblado, R., et al. (2006). *How healthy are rural Canadians? An assessment of their health status and health determinants*. Ottawa: Canadian Institute for Health Information. Retrieved February 28, 2010, from http://secure.cihi.ca/cihiweb/products/rural_canadians_2006_report_e.pdf.
- DiCenso, A., Paech, G., & IBM Corporation. (2003). *Report on the integration of primary health care nurse practitioners into the province of Ontario*. Toronto: Ministry of Health and Long-Term Care. Retrieved January 12, 2009, from http://www.health.gov.on.ca/english/public/pub/ministry_reports/nurseprac03/nurseprac03_mn.html.
- du Plessis, V., Beshiri, R., Bollman, R. D., & Clemenson, H. (2002). *Definitions of rural*. Catalogue #21-601-MIE. Ottawa: Statistics Canada. Retrieved December 31, 2005, from <http://www.statcan.ca:8096/bsolc/english/bsolc?catno=21-601-M2002061>.
- Edwards, P., Roberts, I., Clarke, M., DiGiuseppi, C., Pratap, S., Wentz, R., et al. (2002). Increasing response rates to postal questionnaires: Systematic review. *British Medical Journal*, 324(7347), 1183–1185.
- Erzberger, C., & Kelle, U. (2003). Making inferences in mixed methods: The rules of integration. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 457–448). Thousand Oaks, CA: Sage.
- Goss Gilroy Management Consultants Inc. (2001). *Report on the evaluation of implementation of the role of nurse practitioner-primary health care in Newfoundland and Labrador*. St. John's: Author.
- Graham, L., Sketris, I., Burge, F., & Edwards, L. (2006). Ideas at work. The effect of a primary care intervention on management of patients with diabetes and hypertension: A pre-post intervention chart audit. *Healthcare Quarterly*, 9(2), 62–71.
- Haines, J. (1993). *The nurse practitioner: A discussion paper*. Ottawa: Canadian Nurses Association.
- Hayward, K., & Colman, R. (2003). *The tides of change: Addressing inequity and chronic disease in Atlantic Canada*. Halifax: Population and Public Health Branch, Health Canada. Retrieved September 19, 2005, from http://www.phac-aspc.gc.ca/canada/regions/atlantic/Publications/Tides_of_change/tides_change_2003_e.pdf.
- Health Canada. (1992). *Health issues in rural Canada*. Ottawa: Author. Retrieved February 28, 2010, from <http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/BP/bp325-e.htm>.
- Health Force Ontario. (2007). *Health human resources toolkit*. Toronto: Author.
- Health Services Restructuring Commission. (1999). *Primary health care strategy: Advice and recommendations to the Honourable Elizabeth Witmer, Minister of*

- Health*. Retrieved February 23, 2009, from http://www.health.gov.on.ca/hsrc/phase2/rr_phc_final.doc.
- Hidroglou, M. A., Drew, J. D., & Gray, G. B. (1993). A framework for measuring and reducing nonresponse in surveys. *Survey Methodology*, 19(1), 81–92.
- Holcomb, L. O. (2000). A Delphi survey to identify activities of nurse practitioners in primary care. *Clinical Excellence for Nurse Practitioners: International Journal of NPACE*, 4(3), 163–172.
- Hutchison, B. (2008). A long time coming: Primary healthcare renewal in Canada. *Healthcare Papers*, 8(2), 10–24.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- MacDonald, J., & Katz, A. (2002). Physicians' perceptions of nurse practitioners. *Canadian Nurse*, 98(7), 28–31.
- Martin, C., & Hogg, W. (2004). How family physicians are funded in Canada. *Medical Journal of Australia*, 181, 111–112.
- McMillan, S. C., Heusinkveld, K. B., & Spray, J. (1995). Advanced practice in oncology nursing: A role delineation study. *Oncology Nursing Forum*, 22(1), 41–50.
- Meagher-Stewart, D., & Aston, M. (2004). *Fostering citizen participation and collaborative practice: Tapping the wisdom and voices of public health nurses in Nova Scotia*. Halifax: Dalhousie University School of Nursing.
- Mitchell, A., Patterson, C., Pinelli, J., & Baumann, A. (1995, June). *Assessment of the need for nurse practitioners in Ontario*. Working paper series 95-7. Hamilton: Quality of Nursing Worklife Research Unit, McMaster University/University of Toronto.
- Nova Scotia Department of Finance. (2003). *2001 census of Canada Nova Scotia perspective: Education and earnings*. Halifax: Author. Retrieved December 21, 2005, from <http://www.gov.ns.ca/finance/publish/CENSUS/Release7.pdf>.
- Nova Scotia Department of Health. (1996). *Report of the Nurse Clinician Working Group*. Halifax: Author.
- Nova Scotia Department of Health. (2004). *Strengthening primary care in Nova Scotia: Summary of the evaluation results*. Halifax: Author.
- Ott, R. L. (1993). *An introduction to statistical methods and data analysis* (4th ed.). Belmont, CA: Duxbury.
- Pahlke, A., Lord, S., & Christiansen-Ruffman, L. (2001). *Women's health and well-being in six Nova Scotia fishing communities*. Canadian Research Institute for the Advancement of Women and Nova Scotia Women's FishNet. Retrieved December 21, 2005, from <http://www.acewh.dal.ca/eng/reports/Fishnet%20Finalreport.pdf>.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Poulin, C., & Wilbur, B. (2002). *Nova Scotia student drug use 2002: Technical report*. Halifax: Province of Nova Scotia. Retrieved December 21, 2005, from http://www.gov.ns.ca/health/downloads/2002_NSDrugTechnical.pdf.
- Reveley, S. (2001). Perceptions of the effects on professional role boundaries when introducing a nurse practitioner into general practice. *Primary Health Care Research and Development*, 2, 88–97.

- Romanow, R. J. (2002). *Building on values: The future of health care in Canada*. Ottawa: Privy Council. Retrieved January 5, 2005, from www.hc-sc.gc.ca/english/pdf/care/romanow_e.pdf.
- Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing and Health*, 23(4), 334–340.
- Sidani, S., Irvine, D., & DiCenso, A. (2000). Implementation of the primary care nurse practitioner role in Ontario. *Canadian Journal of Nursing Leadership*, 13(3), 13–19.
- Spitzer, W. O. (1984). The nurse practitioner revisited: Slow death of a good idea. *New England Journal of Medicine*, 310(16), 1049–1051.
- Spitzer, W. O., Kergin, D. J., Yoshida, M. A., Russell, W. A., Hackett, B. C., & Goldsmith, C. H. (1975). Nurse practitioners in primary care: The Southern Ontario Randomized Trial. *Health Care Dimensions*, Spring, 105–119.
- Spitzer, W. O., Sackett, D. L., Sibley, J. C., Roberts, R. S., Gent, M., Kergin, D. J., et al. (1974). The Burlington Randomized Trial of the Nurse Practitioner. *New England Journal of Medicine*, 290(5), 251–256.
- Teddlie, C., & Tashakkori, C. (2003). Major issues and controversies in the use of mixed methods in the social and behavioral sciences. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 3–50). Thousand Oaks, CA: Sage.
- Todd, C., MacKay, M., Howlett, M., & Lawson, B. (2005). *The role of family practice/primary health care nurses in Nova Scotia*. Retrieved December 21, 2005, from <http://www.cbdha.nshealth.ca/bulletinboard/files5016/Family%20Practice%20Nurse%20Project%20Report%202005.pdf>.
- Way, D., Jones, L., Baskerville, B., & Busing, N. (2001). Primary health care services provided by nurse practitioners and family physicians in shared practice. *Canadian Medical Association Journal*, 165(9), 1210–1214.

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L'intégration des infirmières praticiennes dans le système des soins primaires en Ontario : étude des variantes selon les milieux de travail

Irene Koren, Oxana Mian, Ellen Rukholm

Le Centre de recherche en santé dans les milieux ruraux et du Nord mène, pour le compte du ministère ontarien de la Santé et des Soins de longue durée, des enquêtes annuelles de suivi sur les infirmières praticiennes en soins de santé primaires (IP SSP), dans le but de dresser un portrait de la profession et de l'emploi en ce domaine. Les résultats de l'enquête la plus récente, menée en 2008, sont présentés par les auteurs. L'échantillon comprenait 378 IP inscrites en Ontario cette année-là et actives dans le secteur des soins primaires. On a analysé les différences entre les milieux de soins sur le plan démographique, de l'emploi et de l'exercice. On a constaté que la répartition géographique, l'éducation, le degré d'autonomie et le profil d'exercice variaient d'un milieu à l'autre. Les données brossent un tableau de l'intégration des IP au sein du système de santé en Ontario et confirment la nécessité de continuer à décrire les modèles d'exercice et leurs effets sur les résultats en matière de soins primaires.

Mots clés : infirmière praticienne, soins de santé primaires, enquête, Ontario

Integration of Nurse Practitioners Into Ontario's Primary Health Care System: Variations Across Practice Settings

Irene Koren, Oxana Mian, Ellen Rukholm

Annual tracking surveys of nurse practitioners in the Canadian province of Ontario conducted by the Centre for Rural and Northern Health Research for the Ministry of Health and Long-Term Care provide a picture of current employment and practice. The authors present an update on the most recent survey of primary health care nurse practitioners (PHC NPs), conducted in 2008. The study sample consisted of 378 NPs registered in Ontario in 2008 and practising in PHC. Differences in demographic, employment, and practice characteristics in a variety of practice settings are explored. Geographic distribution, education, autonomy of the NP, and the practice profiles varied across settings. The findings document the integration of NPs into Ontario's health-care system and suggest a need to further describe the models of practice and their impact on PHC outcomes.

Keywords: nurse practitioner, primary health care, survey, Ontario

Nurse practitioners (NPs) are considered advanced practice nurses, an umbrella term defined internationally as registered nurses (RNs) who have acquired the expert knowledge base, complex decision-making skills, and clinical competencies for expanded practice (International Council of Nurses, 2008). In Canada, nursing regulatory bodies at the provincial/territorial level are responsible for setting the requirements for competency to practise and for licensing NPs, identifying the standards of practice, and approving NP education programs. A graduate degree in nursing is considered essential for this advanced practice role (Canadian Nurses Association [CNA], 2009). In the province of Ontario, amendments to legislation regulating NP practice in 2007 resulted in protection of the NP title and designation of three areas of specialization: Adult, Pediatric, and Primary Health Care (College of Nurses of Ontario [CNO], 2007).

For more than a decade, the Centre for Rural and Northern Health Research (CRaNHR) has been conducting tracking studies of NPs in Ontario for the Ministry of Health and Long-Term Care (MOHLTC) and the Council of Ontario University Programs in Nursing (COUPN). Collectively these studies document the integration of NPs into the

health-care system, illustrating career paths, practice profiles, and barriers to practice (Caty, Michel, Pong, & Stewart, 2000; Hurlock-Chorostecki, van Soeren, & Goodwin, 2008; van Soeren, Hurlock-Chorostecki, Goodwin, & Baker, 2009). A limitation of existing studies is the lack of detail in the description of NP practice (Pulcini, Jelic, Gul, & Loke, 2010; RCN Nurse Practitioners Association [RCN], 2006). In this article we present findings from a survey of Ontario NPs holding primary health care (PHC) certification. The survey was conducted in 2008 as part of CRaNHRR's annual tracking study commissioned by the Nursing Secretariat of MOHLTC. NP practice across PHC settings is explored to establish a more complete understanding of NP integration into the health-care system.

The number of PHC NPs in Ontario is increasing and notable changes are occurring in the distribution of NPs across PHC settings. In 2005, the College of Nurses of Ontario (CNO) reported 594 NPs registered and practising in the province, with 425 (71.5%) of these indicating their position as a PHC NP (CNO, 2005). By 2008 there were 868 NPs registered and practising in Ontario, with 710 (81.8%) practising in PHC (CNO, 2008). Over this time frame, family health teams (FHTs) and NP-led clinics were implemented as new models of health-care delivery in Ontario. These new models were designed to improve access to PHC and reduce the number of patients without a health-care provider. In both models, a variety of health professionals work collaboratively to deliver health services with a focus on chronic disease management, disease prevention, and health promotion. Since 2005, 150 FHTs have been created across the province, with 50 more planned (MOHLTC, 2009a). Findings from the 2008 CRaNHRR tracking study indicate that 30% of all PHC NPs in Ontario work in FHTs (Mian, Koren, & Pong, 2009), compared to 4% in 2005 (van Soeren et al., 2009). The first NP-led clinic was opened in 2007 in Northern Ontario (Sudbury) and in November 2007 the Government of Ontario committed to establishing 25 new NP-led clinics. Eleven NP-led clinics were announced in 2009 and an additional 14 are anticipated to be fully operational by 2012 (MOHLTC, 2009b).

A second notable change is the proportion of PHC NPs who identified their employer as "other," which increased from 18% to 25% over a 3-year span (CNO, 2005, 2008). This category includes practice settings that have not traditionally hired NPs, such as emergency departments, long-term-care facilities, and public health units (DiCenso et al., 2007; Donald et al., 2009). At the same time, the proportion of NPs employed in community health centres (CHCs), a practice setting that has traditionally hired NPs, has decreased from 38% to 30% (CNO, 2005, 2008). CHCs, which were introduced in Ontario in the 1970s as a multidisci-

plinary model of PHC, offer programs and services that address social and environmental problems affecting the health of the communities they serve (MOHLTC, 2006).

The purpose of this article is to explore differences in education, employment, interprofessional collaboration, and other practice characteristics of NPs working in PHC practice settings in Ontario. Theoretically, practice setting is defined by the influences of practice context (e.g., geographical location, whether urban or rural, organizational structure, and institutional affiliations) and organization of practice (e.g., characteristics of team members, such as age, education, skill mix, and ability to participate in decision-making) (Hogg, Rowan, Russell, Geneau, & Muldoon, 2008). The context and organization of a practice setting affect NP role implementation and integration into the health-care system (DiCenso et al., 2007). In this article special attention is paid to the characteristics of PHC NP practice in recently implemented health-care delivery models in comparison to practice characteristics in “traditional” and “non-traditional” settings.

Method

This is the third survey of PHC NPs in Ontario as part of the NP Workforce Multi-Year Tracking Study. The questionnaire was developed by the CRaNHR researchers in consultation with the Nursing Secretariat and with input from other nursing stakeholders. In addition to core questions asked annually, the 2008 survey included questions about the PHC NP's collaborative relationship with other health-care providers, barriers to practice, and retirement plans. A pilot test of the draft instrument was conducted with several practising NPs for content validity and readability. The final questionnaire comprised 70 questions that covered demographic information, educational background, practice preparation, employment (employment status, type of remuneration, funding, income, union membership, last salary increase, and satisfaction with salary), practice location, and practice profile (population served, type of practice, work hours, time spent on different tasks, and collaboration with other health professionals). Approval for the study was secured from Laurentian University's Research Ethics Board.

The target population included NPs registered in Ontario in the Extended Class practising as PHC NPs. Home addresses were obtained from the CNO for 733 NPs (out of a possible 868 registered NPs, or 85%) who indicated on their 2008 annual registration that they were interested in participating in research. A modified Dillman approach (Dillman, 2007) was used to collect the data. The study package, containing a covering letter, consent form, business reply envelope, and ques-

tionnaire, was sent at 3-week intervals. Questionnaires were tracked; second and third mailings of study packages were sent to those PHC NPs who had not returned a questionnaire prior to the start of the next mailing. Data collection began in September and continued until December 2008.

Data analysis was performed using the Statistical Package for Social Sciences, version 17.0. The analysis was based on frequency tables for categorical and nominal data and descriptive statistics for continuous data. To compare PHC NP characteristics across practice settings, contingency tables and chi-square statistics were generated for categorical data, and a one-way analysis of variance along with tests for multiple comparisons was used for continuous data.

Results

Of the 733 NPs who were contacted, 504 returned the questionnaire, for a response rate of 68.8%. Questionnaires from respondents who were not PHC NPs ($n = 73$) or that did not indicate registration class ($n = 12$) and those that arrived after the data entry cut-off date ($n = 41$) were excluded from the analysis. This left 378 questionnaires suitable for analysis. This sample represented 53% of all PHC NPs ($n = 710$) registered and practising in Ontario (CNO, 2008, p. 33).

Demographic and Educational Characteristics

The average age of respondents (45.6 years) was similar to the average age reported for Ontario PHC NPs (45.5 years). There was a slightly larger proportion of females in the study sample (96.6%) than in the target population (95.2%) (Table 1; CNO, 2008). On average, NPs working in NP-led clinics were 2 years older and NPs working in physician offices were 1 year younger than all respondents, but this difference was not statistically significant. About 70% of respondents reported a COUPN certificate or equivalent as the highest level of nursing education obtained and 22% reported having a master's degree in nursing. A larger proportion of PHC NPs working in hospitals held a master's degree (28%) as compared to NPs in all other practice settings (Table 1). The difference did not reach the significance level ($p < 0.05$).

Geographic Distribution and Practice Settings

The respondents practised in all 14 Local Health Integration Network (LHIN) regions of Ontario. The geographic distribution of their practices approximated that of the target population (Figure 1, chart 1). The sample overrepresented PHC NPs in the Toronto Central LHIN and underrepresented PHC NPs in the Hamilton, Niagara, Haldimand

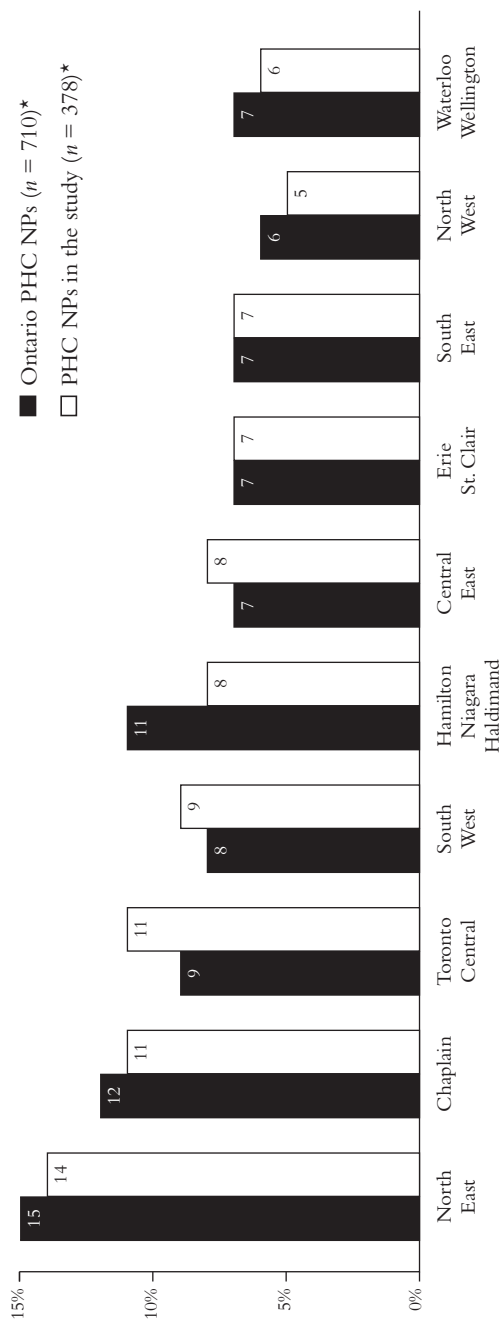
	Practice setting					P value		
	CHC (n = 121)	Physician's office (n = 87)	Hospital (n = 47)	Other ^a (n = 55)	FHT (n = 56)		NP-led clinic (n = 12)	All (N = 378)
Age^b (years)	45.5 (8.4)	44.7 (8.3)	45.3 (8.0)	46.8 (9.1)	45.8 (8.1)	47.9 (7.0)	45.6 (8.4)	0.69
Gender	94.2	††	††	98.2	100.0	100.0	96.6	0.42
Master's in Nursing (%)	20.7	19.5	27.7	23.6	21.4	†	22.0	0.34
Experience^b (years)								
As an RN	16.3 (8.9)	16.5 (9.4)	18.9 (8.1)	17.4 (9.0)	17.2 (8.4)	18.5 (7.7)	17.0 (8.8)	> 0.05
As an NP	6.8 (4.9)**	5.2 (3.9)	4.2 (3.4)**	6.2 (4.2)	5.8 (4.7)	6.4 (4.2)	5.9 (4.4)	< 0.05**
In current position	5.5 (5.0)**	3.3 (4.0)**	3.4 (2.8)**	4.6 (3.8)	2.3 (1.7)**	3.7 (3.1)	4.1 (4.1)	< 0.05**
Employment status (%)*								0.01
Full-time	71.2	83.9	95.6	81.8	91.1	70.0	81.7	
Part-time	25.4	11.5	†	12.7	†	†	14.8	
Other	3.4	4.6	††	5.5	††	††	3.5	
Unionized position (%)*	14.0	8.0	53.2	45.5	†	†	20.9	0.00
Funding (%)*								0.00
MOHLTC direct funding	46.3	31.0	†	7.3	25.0	50.0	29.1	
MOHLTC through employer	38.0	58.6	74.5	61.8	66.1	†	54.8	
Other	15.7	10.4	††	30.9	8.9	††	16.1	

(Continued on next page)

Table 1 (cont'd)		Physician's				P value	
	CHC (n = 121)	office (n = 87)	Hospital (n = 47)	Other^a (n = 55)	FHT (n = 56)	NP-led clinic (n = 12)	All (N = 378)
Remuneration (%)[*]							
Salary	81.0	74.7	††	63.6	82.1	75.0	72.0
Hourly rate	††	††	59.6	32.0	††	†	26.2
Other	†	†	†	4.4	†	††	1.8
Last salary increase (%)[*]							
In 2007–08	65.2	74.7	87.2	74.5	75.0	58.3	72.8
Annual gross income (%)[*]							
(full-time, n = 300)							
\$60,000–80,000	6.0	5.6	7.1	6.8	2.0	14.3	5.7
\$80,001–100,000	91.7	86.1	71.4	86.4	96.1	71.4	87.0
\$100,001 or more	2.4	8.3	21.4	6.8	2.0	14.3	7.3
Satisfied with salary (%)[*]							
	47.9	60.5	76.6	63.6	42.9	58.3	56.1
<p>^a "Other" practice settings include other community clinics (including mental health clinics, university or college health services, maternity clinics, etc.), Aboriginal health access centres, nursing stations/outpost clinics, public health units, long-term-care facilities, health-service organizations, and military.</p> <p>^b Mean (SD) values given for age and years of experience.</p> <p>[*] Significant differences across practice settings at $p < 0.05$.</p> <p>^{**} P value for multiple pair-wise comparisons that indicated statistically significant differences between values.</p> <p>† Values suppressed due to low counts (less than 5).</p> <p>†† Values next to the small counts are not reported, to ensure that the suppressed values cannot be derived. Suppression of values was not applied to grouped categories (e.g., other practice settings) or grouped values (e.g., last salary increase and annual gross income).</p>							

Figure 1 Geographical Distribution of PHC NPs and Their Practices in Ontario

Chart 1 Distribution across LHIN regions

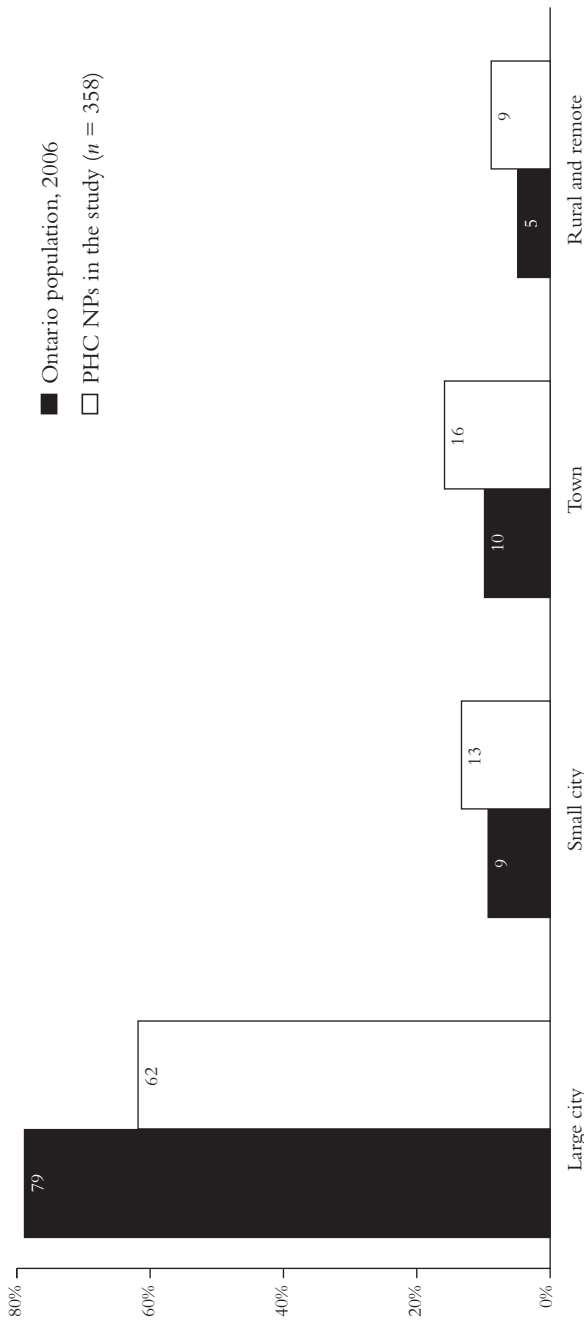


* College of Nurses of Ontario (2008, p. 33).

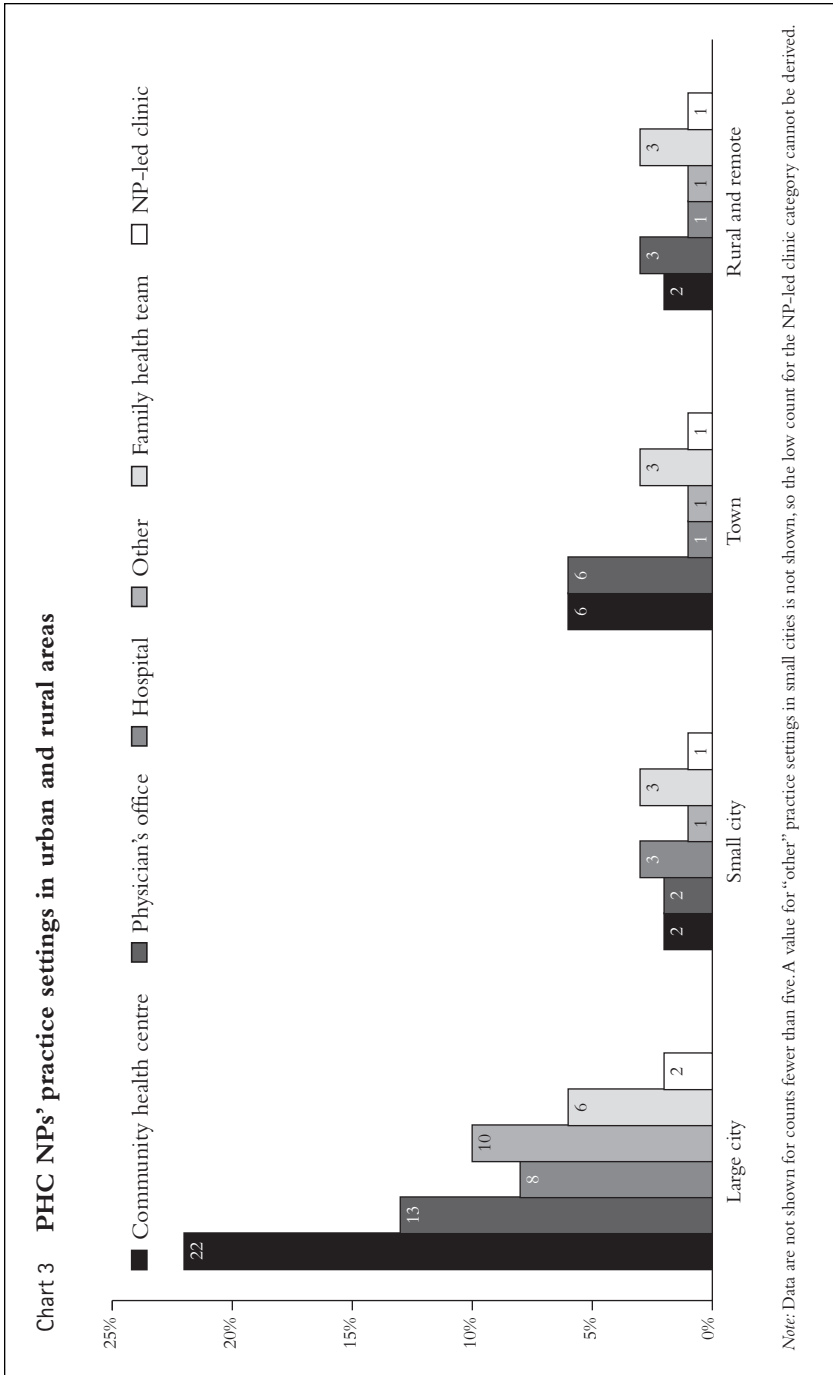
Note: Due to small numbers, data are not shown for Central West, Central, Mississauga Halton, and North Simcoe Muskoka LHIN regions and "not specified LHIN" category (n = 2 for Ontario PHC NPs and n = 20 for this study).

(Continued on next page)

Chart 2 Distribution in urban and rural areas



Note: "Large cities" include urban areas with core populations of 100,000 or more and include all neighbouring municipalities where 50% or more of the employed population commute to the urban core. "Small cities" include urban areas with core populations from 10,000 to 99,999 and include all neighbouring municipalities where 50% or more of the employed population commute to the urban core. "Towns" include municipalities with population under 10,000 in which 5% to 49% of the employed population commute to work in an urban core. "Rural and remote" include municipalities with population under 10,000 in which less than 5% commute to work in an urban core.



LHIN, but this difference was not statistically significant ($p = 0.99$). As with PHC NPs in the province, the largest percentage of respondents (14%) practised in the North East LHIN, a large geographical area (almost a third of the province's area) with a low population density. The major urban centre in the North East LHIN is the City of Greater Sudbury (population approximately 157,000). The next largest proportion of respondents practised in the Champlain (11%) and Toronto Central (11%) LHINs. The Champlain LHIN is situated in the eastern part of the province and the population is highly concentrated in the Ottawa area (approximately 774,000, or 70% of the total LHIN population). Toronto Central LHIN is home to 1,146,800 people, or 44% of the population of the City of Toronto (MOHLTC, 2009c).

Nearly 40% of PHC NP respondents worked in small cities, towns, and rural or remote areas, where 20% of Ontario's population lives (Figure 1, chart 2). PHC NPs worked in six main practice settings — that is, CHCs (32%), physicians' offices (23%), FHTs (15%), hospitals (12%), NP-led clinics (3%), and other practice settings (15%), which included mental health clinics, Aboriginal health access centres, nursing stations, university or college health services, long-term-care facilities, public health units, health services organizations, and military combined into one group due to the small number of respondents in each category. In large cities, the majority of PHC NPs worked in CHCs and physicians' offices. Almost half of all PHC NPs in small cities worked in hospitals and FHTs. In towns, most PHC NPs worked in CHCs and physicians' offices, whereas in rural and remote areas most worked in physicians' offices and FHTs (Figure 1, chart 3).

Employment, Remuneration, and Satisfaction With Salary

On average, the surveyed PHC NPs had 17.0 ($SD = 8.8$) years of experience as RNs, 5.9 ($SD = 4.4$) as NPs, and worked 4.1 ($SD = 4.1$) years in their current PHC NP position (Table 1). NPs working in CHCs had more years of NP experience than NPs working in hospitals (6.8 vs. 4.2 years; $p = 0.02$). NPs working in CHCs worked in their current position on average close to 6 years, which was significantly longer than those working in FHTs (2 years; $p = 0.00$), physicians' offices (3 years; $p = 0.00$), and hospitals (3 years; $p = 0.02$). Overall, 82% were employed full-time, 15% were employed part-time, and about 3% were self-employed or employed casually. In terms of employment status, 96% of PHC NPs in hospitals worked full-time and the largest proportion (25%) of NPs working part-time worked in CHCs (Table 1). About 20% of respondents were in unionized positions. More than half (53%) of PHC NPs working in hospitals were unionized, compared to 14% in CHCs and less than 10% in physicians' offices, FHTs, and NP-led clinics ($p = 0.0$).

Significant differences were found in NP funding, remuneration, annual gross income, and salary satisfaction when compared across practice settings (Table 1). Eighty-four percent indicated that their main practice was funded by the MOHLTC and 16% indicated other sources of funding (e.g., federal government, physician, municipality). The largest proportion of NP positions funded by the MOHLTC directly was in NP-led clinics (50%). The largest proportion of NP positions funded by the MOHLTC through employers was in hospitals (75%). Most respondents (72%) received a salary. Significantly larger proportions of salaried NP positions were in CHCs and FHTs (81% and 82%; $p = 0.0$) compared to other practice settings. A significantly larger proportion of NPs (60%) in hospitals were paid an hourly rate ($p = 0.00$).

Almost three quarters (73%) of respondents across all practice settings received a salary increase in 2007–08. The proportion was significantly larger ($p = 0.00$) in hospitals (87%) than in NP-led clinics (58%) and CHCs (65%). Of all respondents working full-time, only 6% earned less than \$80,000 and about 90% earned between \$80,001 and \$100,000. About one fifth (21%) of PHC NPs working in hospitals received \$100,001 or more, compared to about 2% working in CHCs and FHTs and less than 10% working in physicians' offices and other practice settings ($p = 0.02$). Almost 80% of respondents working in hospitals were satisfied with their salary, compared to 43% of NPs working in FHTs and 48% in CHCs ($p = 0.00$). Among the most valued employment incentives, PHC NPs listed higher salaries and salary increases in line with the cost of living; financial support for continuing education and professional development; and better non-financial benefits, including extended health benefits, dental and drug plans, pension plan, and disability insurance coverage (data not shown). No differences were found in respondent ranking of employment incentives across practice settings.

Clientele and Practice Profile

The majority of PHC NPs reported seeing a “typical family practice clientele” (74%) and low-income earners (62%). About half of all respondents cared for clients who were unemployed (50%) or substance users (46%). More than a third saw clients with permanent physical disabilities (37%) or clients from cultural minorities (36%). About a third or less saw clients who were recent immigrants (29%), Aboriginal (28%), transient/seasonal (20%), or homeless (18%).

PHC NP clientele differed significantly from one practice setting to another ($p < 0.05$). Almost 100% of NPs in physicians' offices (99%) and NPs in FHTs (93%) cared for “typical family practice clientele,” whereas only 47% of hospital NPs saw “typical family practice clientele” in their daily practice. The majority of NPs in CHCs (77%) and FHTs (66%) had

low-income earners as their clients, whereas less than half of NPs in physicians' offices (47%) cared for this group of clients ($p = 0.00$). Almost two thirds of NPs in CHCs and 50% in NP-led clinics cared for the unemployed population, in comparison to 35% in physicians' offices. Fifty-five percent of NPs in CHCs had cultural minorities and 50% had immigrants among their clients. This was a significantly larger proportion ($p = 0.00$) compared to NPs working in any other practice setting. The homeless population was among the PHC NP clientele in CHCs (30%) and hospitals (25%) but rarely in physicians' offices or FHTs.

Table 2 describes PHC NP practice characteristics in different settings. In terms of age groups, PHC NP clientele was composed of 43% adults, 25% seniors, 16% children and infants, and 14% adolescents, on average. The PHC NPs in CHCs had a larger proportion (40%) of infants, children, and adolescents (0–18 years) and PHC NPs in hospitals, NP-led clinics, and other practice settings had a larger proportion (33–35%) of seniors (65+ years) among their clientele. No differences were found across practice settings in terms of the proportion of adults (19–64 years) among NP clientele.

NPs working in FHTs spent more time on direct patient care (81%) compared to other practice settings (71%; $p = 0.03$). Those working in NP-led clinics spent more than twice as much time on nursing administration, including budgeting, hiring, and health-services planning, compared to NPs in any other practice setting (p value for multiple pair-wise comparisons ranged from 0.02 to 0.04).

Almost a third of PHC NPs' time was devoted to treatment of minor illnesses, 25% was spent on chronic disease management, and 22% on health promotion and disease prevention. PHC NPs working in CHCs, FHTs, and NP-led clinics spent more of their time (24–26%) on health promotion/disease prevention activities compared to PHC NPs working in hospitals (16%). The difference was statistically significant for CHCs and hospitals ($p = 0.005$) and CHCs and FHTs ($p = 0.03$). Time spent on counselling was significantly greater for NPs in CHCs (17%) compared to hospital NPs (10%) ($p = 0.003$). NPs estimated that they could not order more than 30% of the drugs and about a quarter of the laboratory and diagnostic tests that they judged their clients needed as these were not on the current lists that set limits on the prescriptive and diagnostic authority of NPs in the province. The percentage of needed drugs not on the list was significantly higher for NPs working in hospitals (41%) and physicians' offices (39%) compared to NPs in CHCs (27%) and FHTs (28%); $p = 0.003$ for pair-wise comparison between CHCs and hospitals ($p = 0.003$), for CHCs and physicians' offices ($p = 0.001$), and for hospitals and FHTs ($p = 0.046$).

	Practice setting					P value
	Physician's office		NP-led clinic		All (N = 378)	
	CHC (n = 121)	Hospital (n = 47)	Other ^a (n = 55)	FHT (n = 56)		
	<i>Percentage of clients in the age group</i>					
Infants/children (0–12 years)*	23.0	7.7	8.5	15.4	16.3	16.2
Adolescents (13–18 years)*	17.2	6.7	15.6	12.1	11.5	13.9
Adults (19–64 years)	42.6	48.1	38.4	42.5	38.8	42.7
Seniors (65+ years)*	16.9	35.4	33.2	22.6	33.2	24.6
	<i>Estimated percentage of time spent on activities</i>					
Direct patient care	77.0	75.5	71.4**	80.5**	71.3	76.8
Nursing administration	5.4	5.2	5.3	4.9	12.9**	5.4
Research/scholarly work/teaching	7.9	10.2	11.2	7.7	10.2	8.8
Non-nursing tasks	6.1	8.3**	6.6	3.4**	5.6	5.9
	<i>Estimated percentage of time spent on activities</i>					
Health promotion/disease prevention	24.4**	22.2	15.8**	19.6	24.3**	22.1
Treatment	29.5	33.3	31.1	32.0	28.3	30.6
Chronic disease management	21.4**	24.5	31.9**	19.8**	30.3	24.8

(Continued on next page)

Table 2 (cont'd)

	CHC (n = 121)	Physician's office (n = 87)	Hospital (n = 47)	Other ^a (n = 55)	FHT (n = 56)	NP-led clinic (n = 12)	All (N = 378)	P value
<i>Estimated percentage of time spent on activities (cont'd)</i>								
Palliative care	0.8	1.2	0.9	3.1**	0.9	0.3	1.3	< 0.05**
Counselling	16.9**	14.5	9.7	15.3	12.8	13.3	14.5	< 0.05**
Advocacy	5.0	3.2	4.1	5.2	2.5	4.0	4.1	> 0.05
Drugs needed that are not on drug schedule (%)	26.5**	38.7**	40.7**	30.7	28.2**	33.6	32.1	< 0.05**
Number of collaborating physicians	3.5**	5.1	6.2**	3.7	5.1	1.5**	4.4	< 0.05**
<i>Proportion of NPs with collaborating physician</i>								
On-site	62.8	67.8	71.7	17.0	††	†	54.5	
Off-site	5.0	†	†	28.3	†	50.0	9.6	
Both or other	32.3	††	††	54.7	49.1	††	35.8	

^a "Other" practice settings include community clinics (including mental health clinics, university or college health services, maternity clinics, etc.), Aboriginal health access centres, nursing station/outpost clinics, public health units, long-term-care facilities, health-service organizations, and military.

* Significant differences across practice settings at $p < 0.05$.

** P value for multiple pair-wise comparisons that indicated statistically significant differences between values.

† Values suppressed due to low counts (less than 5).

†† Values next to the small counts are not reported, to ensure that the suppressed values cannot be derived.

Significant differences were found across practice settings in NP work hours, appointments, on-call responsibilities, and home visiting. PHC NPs worked 35–36 hours per week. Respondents in hospitals and FHTs worked the longest hours (40–41 hours per week). This was significantly more than NPs in CHCs, who worked 30–31 hours per week, and NPs in other practice settings, who worked 32–33 hours per week ($p = 0.00$). The respondents estimated that they had 13 ($range = 2–30$) face-to-face appointments and five ($range = 1–35$) telephone consultations in a typical day. PHC NPs in physicians' offices had more appointments than NPs in CHCs (14 vs. 11; $p = 0.00$). About a third worked in multiple locations (three locations, on average). A significantly larger proportion of PHC NPs in NP-led clinics (83%; $p = 0.00$) worked at multiple sites, compared to NPs in FHTs (42%), CHCs and physicians' offices (about 30%), and hospitals (15%). Overall, 13% of PHC NPs had on-call responsibilities. The proportion differed significantly across practice settings, with 22% of PHC NPs in CHCs, 15% in other practice settings, 10% in FHTs, 9% in hospitals, 4% in physicians' offices, and 0% in NP-led clinics having on-call responsibilities ($p = 0.02$). Forty-three percent of all NPs surveyed made home visits. The proportion of NPs making home visits differed significantly across practice settings ($p = 0.00$). A larger proportion was found among NPs in CHCs (55%), FHTs (53%), physicians' offices (46%), and NP-led clinics (42%), compared to NPs in other practice settings (35%) and hospitals (6%).

Interprofessional Collaboration

On average, the respondents collaborated with about four physicians in their practice (the number ranged from 0 to 30). The majority of NPs in hospitals (72%), physicians' offices (68%), and CHCs (63%) had physicians working on-site (Table 2). Seventy-five percent had worked with their main collaborating physician for 5 years or less and 87% spent less than 2 hours per week consulting with them. Regardless of the average time spent on consultations, 85% thought that they usually had sufficient consultation time. A high percentage of the respondents agreed that their main collaborating physician — that is, the physician with whom they worked most often — understood the NP role (87%) and supported them to work to their full scope of practice (93%). Most (92%) reported that the collaborative relationship had improved with time and more than 75% reported a high degree of or total satisfaction with the collaborative relationship. No differences were found in this regard across practice settings. Nearly half (43%) of the PHC NPs reported that relationships with physicians outside their practice “needed work.” This proportion was significantly larger among NPs in CHCs (60%) and NP-led clinics (58%),

in comparison to NPs in hospitals (44%) and physicians' offices (45%) ($p = 0.02$).

PHC NPs provided care for 80% of their clients autonomously or with minimum consultation. However, NPs across settings ranked importance of "enabling NPs to work autonomously and to full scope of practice" differently: 42% of NPs working in hospitals and NP-led clinics ranked this as "the most important to improve," compared to 20% of NPs in FHTs ($p = 0.02$). No differences were found across practice settings in NP ranking of the importance of "increasing mutual respect, trust and communication between members of different professions" and "building inter-professional awareness and understanding of each profession's role."

Discussion

An understanding of the context and organization of practice settings (Hogg et al., 2008) is important to the integration of the NP role into the health-care system (DiCenso et al., 2007). Sidani, Irvine, and DiCenso (2000) examined the implementation of the PHC NP role in Ontario shortly after the government passed the *Expanded Nursing Services Act* enabling NP practice in the province. They report overall satisfaction among NPs with their role, although NPs frequently cited concerns about inadequate remuneration, heavy workload, and lack of public awareness of the NP role. At the time of the survey, most PHC NPs were practising in CHCs and their practice profile in relation to client characteristics and services provided by the NP was described as consistent with expectations (Sidani et al., 2000). The present study informs progress in the implementation of the PHC NP role by detailing NP practice in a variety of PHC settings with respect to education, location of practice, practice profiles, and interprofessional collaboration.

The findings of this study reveal differences in the highest level of nursing education attained by PHC NPs across practice settings. In Ontario, the required education for PHC NPs is at the post-baccalaureate level, unlike most jurisdictions in Canada and internationally, where the education standard is a master's degree. Of note is the increase in the number of PHC NPs with a master's degree in nursing, as compared to the 2005 NP workforce study (van Soeren et al., 2009). The finding that more PHC NPs in hospital settings than in other settings had a master's degree in nursing may reflect organizational expectations.

The geographic distribution of PHC NPs in Ontario is explained in part by chronic shortages of family physicians and uneven access to health care (Chan & Shultz, 2005; CRaNHR, 2002). PHC NP practice in the North East LHIN, for example, is a direct result of policy intended to improve access to underserved areas (MOHLTC, 2009b).

Changes in the practice profiles of PHC NPs since the 2005 NP workforce study (van Soeren et al., 2009) include a decrease in the proportion of PHC NPs working in CHCs. This could be attributable to an increased number of NPs working with family physicians and the introduction of FHTs in both urban and rural parts of the province. PHC NPs working in CHCs had more years of experience as an NP compared to NPs practising in hospitals, a finding that may reflect the appeal of the organizational structure of hospitals for NPs with less experience. For example, salaries and unionization were highest for PHC NPs working in hospitals as compared to the other settings, and satisfaction with salaries was also highest for PHC NPs in hospitals. This is an important consideration for policy, as salaries varied greatly across settings and salary-based incentives were the most valued incentives across practice settings.

Challenges to NP role implementation were particularly evident in some practice settings. For example, in NP-led clinics, NPs spent more than twice as much time on nursing administration compared to NPs in other practice settings. This could be inherent in the leadership role NPs have taken on, or it could be that these clinics lack sufficient administrative support. NPs in FHTs and physicians' offices spent relatively little time on nursing administration and more time on direct client care. Restriction on prescriptive and diagnostic authority was most evident in hospitals and physicians' offices. Legislation introduced in 2009 has the capacity to more fully integrate NPs into the province's health-care system (Nurse Practitioners' Association of Ontario, 2009).

Collaborative practice involving NPs and family physicians is one part of a human resource strategy for health-care delivery (Way, Jones, Baskerville, & Busing, 2001). D'Amour, Ferrada-Videla, San Martin-Rodriguez, and Beaulieu (2005) argue for a conceptual basis for inter-professional collaboration and suggest that a deeper understanding of common theoretical elements, including "sharing, partnership, interdependency, power and process" (p. 118), would be helpful. Our work shows that, for the most part, PHC NPs across all practice settings provide the majority of client care autonomously while occasionally consulting with other health professionals. When a client's health needs require care beyond the PHC NP's scope of practice, the NP must consult or collaborate with a partnering physician. Although collaborative relationships between NPs and family physicians are relatively new and the structure of the relationship varies with the practice setting, expressed satisfaction with the relationship was high.

Satisfaction with interactions between professionals has been described as an outcome in theoretical frameworks of interprofessional collaboration and the related concept of teamwork (D'Amour et al.,

2005). Furthermore, the success of collaboration has been postulated to depend upon three main elements: interactional determinants, organizational determinants, and systemic determinants (San Martin-Rodriguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005). The high level of practice satisfaction reported by our study participants may be explained by any or all of these determinants. Lack of familiarity with the full scope of NP practice on the part of physicians not working directly with NPs may be a reason why NPs reported that relationships with these physicians "needed work." Administrative barriers to NPs being recognized as a direct referral source and the sensitivity that surrounds payment matters under the Schedule of Benefits for Physician Services (Nurse Practitioner Integration Task Team, 2007) may also explain this finding.

This study had a number of limitations. The analysis relied on self-reported data. Some data, such as proportion of time spent on different activities and hours worked, were reported by respondents as estimations and averages. As the sample was drawn from a list that excluded NPs who did not give the CNO consent to release their home addresses for research purposes, a selection bias exists. Due to the small number of NP-led clinics, results related to this group should be considered with caution. Finally, due to the small numbers of respondents working in practice settings such as long-term-care facilities, public health units, and mental health clinics, responses were grouped and reported under one category ("other") to ensure the confidentiality of respondents. This impeded us from exploring and revealing similarities and differences in NP practices among these settings and with the other practice settings.

Implications

The growth in PHC NPs prepared at the master's level globally and within Canada (Canadian Institute for Health Information, 2008; CNA, 2009; Pulcini et al., 2010; RCN, 2006) suggests a need to examine PHC NP education and regulation policy in Ontario to raise the minimal educational requirement to that of other jurisdictions. A consultation process should be undertaken with the CNO, the provincial government, and the COUPN to include a clear statement of level of education required for NP registration in NP regulation, similar to that used in the regulation of RNs, which clearly states the level of education required for registration. An understanding of the burden of nursing administration in NP-led clinics relative to other practice settings and the impact on practice is required to better inform practice organization processes and funding policy directions. Overall, the findings suggest a need to further describe the models of practice and their impact on primary health care outcomes.

References

- Canadian Institute for Health Information. (2008). *Regulated nurses: Canadian trends 2004–2008*. Retrieved March 8, 2010, from http://secure.cihi.ca/cihiweb/products/regulated_nurses_2004_2008_en.pdf.
- Canadian Nurses Association. (2009). *Nurse practitioner position statement*. Retrieved March 8, 2010, from http://www.cna-aiic.ca/CNA/documents/pdf/publications/PS_Nurse_Practitioner_e.pdf.
- Caty, S., Michel, I., Pong, R., & Stewart, D. (2000). Nurse practitioner graduates: Where are they now? *Registered Nurse Journal*, 12(2), 6–8.
- Centre for Rural and Northern Health Research. (2002). *Ontario's NPs: A snapshot three years after graduation*. Retrieved March 11, 2010, from <http://www.cranhr.ca/focus.html>.
- Chan, B. T. B., & Shultz, S. E. (2005). *Supply and utilization of general practitioner and family physician services in Ontario. ICES investigative report*. Toronto: Institute for Clinical Evaluative Sciences.
- College of Nurses of Ontario. (2005). *Membership statistics report 2005*. Toronto: Author.
- College of Nurses of Ontario. (2007). *Nurse practitioner now a protected title*. Retrieved March 11, 2010, from <http://www.cno.org/pubs/qp/2007/qpvol6no3.pdf>.
- College of Nurses of Ontario. (2008). *Membership statistics report 2008*. Toronto: Author.
- D'Amour, D., Ferrada-Videla, M., San Martin-Rodriguez, L., & Beaulieu, M. (2005). The conceptual basis for interprofessional collaboration: Core concepts and theoretical frameworks. *Journal of Interprofessional Care*, 19(Suppl 1), 116–131. doi:10.1080/13561820500082529.
- DiCenso, A., Auffrey, L., Bryant-Lukosius, D., Donald, F., Martin-Misener, R., Matthews, S., et al. (2007). Primary health care nurse practitioners in Canada. *Contemporary Nurse*, 26(1), 104–115.
- Dillman, D. A. (2007). *Mail and Internet surveys: The tailored design method*. Hoboken, NJ: John Wiley.
- Donald, F., Mohide, E. A., DiCenso, A., Brazil, K., Stephenson, M., & Akhtar-Danesh, N. (2009). Nurse practitioner and physician collaboration in long-term care homes: Survey results. *Canadian Journal on Aging*, 28(1), 77–87.
- Hogg, H., Rowan, M., Russell, G., Geneau, R., & Muldoon, L. (2008). Framework for primary care organizations: The importance of a structural domain. *International Journal for Quality in Health Care*, 20(5), 308–313.
- Hurlock-Chorostecki, C., van Soeren, M., & Goodwin, S. (2008). The acute care nurse practitioner in Ontario: A workforce study. *Nursing Leadership*, 21(4), 100–116.
- International Council of Nurses. (2008). *The scope of practice, standards and competencies of the advanced practice nurse*. Geneva: Author.
- Mian, O., Koren, I., & Pong, R. (2009). *Primary Health Care Nurse Practitioner Tracking Study: The 2008 survey report*. Sudbury, ON: Centre for Rural and Northern Health Research, Laurentian University.

- Ministry of Health and Long-Term Care. (2006). *Community health clinics take big step forward*. Retrieved March 11, 2009, from http://www.health.gov.on.ca/english/media/news_releases/archives/nr_06/jul/nr_071706.html.
- Ministry of Health and Long-Term Care. (2009a). *Family health teams*. Retrieved March 11, 2009, from http://www.health.gov.on.ca/transformation/fht/fht_mn.html.
- Ministry of Health and Long-Term Care. (2009b). *Nurse practitioner-led clinics*. Retrieved March 10, 2009, from http://www.health.gov.on.ca/transformation/np_clinics/np_mn.html.
- Ministry of Health and Long-Term Care. (2009c). *Population health profiles*. Retrieved March 11, 2009, from http://www.health.gov.on.ca/transformation/providers/information/resources/profiles/im_profiles.html.
- Nurse Practitioner Integration Task Team. (2007). *Report of the Nurse Practitioner Integration Task Team (2007)*. Retrieved March 4, 2009, from http://www.health.gov.on.ca/english/providers/program/nursing_sec/report_task_team_2007.html.
- Nurse Practitioners' Association of Ontario. (2009). *Submission to Social Policy Committee. Response to Bill 179. Regulated Health Professions Statute Law Amendment Act*. Toronto: Author. Retrieved March 11, 2009, from <http://www.npao.org/Uploads/NPAO%20Submission%20Bill%20179%20Oct52009.pdf>.
- Pulcini, J., Jelic, M., Gul, R., & Loke, A. (2010). An international survey on advanced practice nursing, education, practice, and regulation. *Journal of Nursing Scholarship*, 41(1), 31–39.
- RCN Nurse Practitioners Association. (2006). *Nurse practitioners 2006: The results of a survey of nurse practitioners conducted on behalf of the RCN Nurse Practitioner Association*. Retrieved March 6, 2010, from <http://icn-apnetwork.org/>.
- San Martin-Rodriguez, L., Beaulieu, M., D'Amour, D., & Ferrada-Videla, M. (2005). The determinants of successful collaboration: A review of theoretical and empirical studies. *Journal of Interprofessional Care*, 19(Suppl 1), 132–147. doi:10.1080/13561820500082677.
- Sidani, S., Irvine, D., & DiCenso, A. (2000). Implementation of the primary care nurse practitioner role in Ontario. *Canadian Journal of Nursing Leadership*, 13(3), 13–19.
- van Soeren, M., Hurlock-Chorostecki, C., Goodwin, S., & Baker, E. (2009). The primary healthcare nurse practitioner in Ontario: A workforce study. *Nursing Leadership*, 22(2), 58–72.
- Way, D., Jones, L., Baskerville, B., & Busing, N. (2001). Primary health care services provided by nurse practitioners and family physicians in shared practice. *Canadian Medical Association Journal*, 165(9), 210–214.

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Le cheminement évolutif des infirmières praticiennes en soins actifs

Judy Rashotte, Louise Jensen

L'étude fait appel à la phénoménologie herméneutique selon l'approche de van Manen pour explorer la nature des expériences vécues par les infirmières praticiennes (IP) en soins actifs au sein des hôpitaux universitaires du Canada. Les auteures ont mené des entrevues auprès de 26 IP. L'analyse révèle que les IP suivent un cheminement évolutif caractérisé par *un désir de dépassement*; ce sentiment est au cœur du rôle de *pionnières* qu'elles sont appelées à assumer. Cinq thèmes se dégagent des entrevues : *le désir de se surpasser* (se rapprocher des patients, être autonome, affirmer ses compétences et son rôle et surmonter des défis); *une impression de désorientation* (se sentir déroutée, incertaine, perdue, tout en aspirant à surmonter les difficultés); *l'affirmation de son identité comme IP* (se sentir compétente, confiante, à sa place, engagée et satisfaite); *les exigences liées à de nouvelles responsabilités* (porter deux chapeaux à la fois); *le dépassement de soi* (devenir une infirmière spécialisée). Le cheminement de l'infirmière praticienne en soins actifs se dessine comme une expérience complexe, mais méconnue dans la plupart des cas.

Mots clés : soins actifs, infirmière praticienne

The Transformational Journey of Nurse Practitioners in Acute-Care Settings

Judy Rashotte, Louise Jensen

This study explored the nature of the lived experience of being nurse practitioners (NPs) in acute-care settings in Canadian teaching hospitals using hermeneutic phenomenological inquiry guided by van Manen's approach. A total of 26 NPs were interviewed. Data analysis revealed that NPs experienced a transformational journey as they searched for *being more*, the overarching phenomenon that best characterizes their overall experience, which occurred in the context of *being pioneers*. Five themes emerged: *being called to be more* — being more connected, in control, visible, challenged, and able to make more of a difference; *being adrift* — being disconnected, uncertain, lost, and staying afloat; *being an acute-care NP* — being competent, confident, comfortable, committed, connected, and content; *being pulled to be more* — being a wearer of two hats; and *being more* — being an advanced practitioner. The NP journey reveals the complex, largely invisible experience of being an acute-care NP.

Keywords: acute care, advanced nursing practice and education, liminality, nurse practitioner, nurse relationships/professional issues, nursing roles, phenomenology, transformational process, transition

Although the nurse practitioner (NP) role in primary health care has been well documented, less is known about its role in acute care. The number of studies examining this NP specialty has grown as the role has been implemented worldwide to meet the needs of acutely ill patients (Chang, Mu, & Tsay, 2006; Kaan & Dunne, 2001; Norris & Melby, 2006). The NP role has been researched in terms of role classification, responsibilities, and functions (Kleinpell, 2005; Kleinpell, Hravnak, Werner, & Guzman, 2006); demographics, educational preparation, geographic region of practice, and type of employment setting (Hurlock-Chorostecki, van Soeren, & Goodwin, 2008; Sidani et al., 2000); quality of care provided, as compared to that provided by physicians (Carter & Chochinov, 2007; Russell, VorderBruegge, & Burns, 2002; Sidani et al., 2006a); and patient satisfaction (Fanta et al., 2006; Sidani et al., 2006b). Multiple studies in a variety of acute-care settings have examined how the role has been operationalized and legitimized (Reay, Golden-Biddle, & Germann, 2006), barriers to effective NP utilization (Irvine et al., 2000; van Soeren & Micevski, 2001), and its associated economic impact (Hoffman, Tasota, Zullo, Scharfenberg, & Donahoe, 2005; Meyer & Miers, 2005).

There is a paucity of studies exploring the ontological nature of the NP role, most of which have been undertaken with primary health care NPs (Brown & Draye, 2003; Brykczynski & Lewis, 1997), although one study explored the neonatal NP role as perceived by parents (Beal & Quinn, 2002). The experience of acute-care NPs in Taiwan during their first year of role transition has also been examined (Chang et al., 2006).

Given the lack of research on the experience of being an NP, the purpose of this study was to explore the following question: *What is the nature of the lived experience of being and becoming an NP in acute care?* For the purposes of the study, acute care refers to the level of health services that can be provided only in a secondary- or tertiary-care hospital. In acute-care settings, medical conditions are usually characterized by a sudden onset of or a sharp rise in severe symptoms and a short course, and treatment is aimed at cure or prolongation of life and symptom management.

Method

A qualitative method based on hermeneutic phenomenological inquiry grounded in the philosophical writings of Heidegger (1927/62) and Gadamer (1960/89) was selected. The study was guided and operationalized by van Manen's (1997) interpretive framework; therefore, it was both descriptive and interpretive in nature.

Setting and Participants

The participants were chosen using purposive sampling. NPs who met the following criteria were recruited: (1) English-speaking, (2) graduated from a university-based nursing program with an NP focus, (3) practised in an acute-care NP role for at least 2 years, and (4) employed at least 20 hours weekly in an NP role. The last two criteria ensured that the participants had had time to accumulate experiences as an NP. NPs were recruited from four adult and pediatric teaching hospitals in the Canadian provinces of Alberta, Ontario, and Quebec. Ethical approval was obtained from the University Health Research Ethics Board and the research ethics board of each hospital. Names of NPs were accessed through the professional nursing association, the institution's human resources department, and/or nursing administrators. Letters describing the study were then distributed via intra-hospital mail, as per the hospital's directives.

Data Collection

Participants engaged in one face-to-face in-depth interview with the first author in a private, quiet setting of the participant's choosing. A flexible interview guide with open-ended questions was used. Interviews lasted an average of 2.5 to 3 hours and were audiorecorded. Prior to the inter-

view, formal consent was obtained. Each conversation generally began with the prompt *Share with me a day in your life as an NP* and proceeded gradually to what drew the participants to the NP role, their education and learning, seminal influences that shaped them in the role, key relationships, accounts of what they found satisfying and dissatisfying about their work in the course of a day, real-life clinical decision-making, and visions of their future. Participants were encouraged to enrich or clarify their comments by sharing specific stories about encounters in their work situation. Field notes complemented the data. Art work, scientific and literary readings, films, impromptu discussions with NPs at conferences, and chat-room conversations on an advanced nursing practice e-mail forum provided additional thoughts for reflection.

Data Analysis

Three principal approaches suggested by van Manen (1997) guided the uncovering of hidden meanings within the NPs' experiences and the structures of meaning or themes: (1) the sententious or holistic approach; (2) the selective or highlighting approach; and (3) the detailed, line-by-line approach (p. 92–93). This initial level of analysis was conducted for each transcribed interview and then the resulting aggregate of formulated meanings was organized into clusters of themes by the authors, working closely with a group of advisors expert in this research methodology and in the Canadian NP movement. Through the process of making comparisons and asking questions, connections between categories emerged. A subsequent interpretive analysis was undertaken and the themes were then reflectively transformed into “more phenomenological sensitive paragraphs” (van Manen, 1997, p. 95), using the technique of varying the examples to demonstrate the invariant aspects of the phenomenon as it came into view (p. 121).

Methodological Rigour

The criteria of credibility, fittingness, auditability, confirmability, and redundancy were used to support the study's rigour (Leininger, 1994). For example, for three participants a second interview was held 2 to 6 weeks after the first, to explore further reflections about their experiences that arose following the first conversation and to more deeply probe ideas raised. No new issues or themes were generated; rather, thoughts previously mentioned were reaffirmed through the sharing of additional stories, thereby lending support to the trustworthiness of the data. Data were collected until redundancies were observed in the concurrent data analysis. The preliminary analyses were shared with a few participants and with several NP groups working in similar settings; this served as an opportunity to evaluate the interpretive work.

Results

The sample comprised 26 NPs of both genders. The participants worked in neonatal, pediatric, and adult critical care; adult and pediatric neurology, neurosurgery, oncology, cardiology, and cardiovascular subspecialty services; and adult nephrology/dialysis, orthopedics, family medicine, gerontology, and infectious diseases. Six of the NPs had previously been clinical nurse specialists (CNSs). Table 1 provides a descriptive summary of the participants.

Table 1 Descriptive Summary of Participants	
Characteristics	<i>n</i>
Gender	
Female	4
Male	2
Age	
31–40	10
41–50	13
≥ 51	3
Number of Years as NP in Acute-Care Setting	
2–5	14
6–10	9
11–15	2
16–20	1
Number of Years of Nursing Experience	
11–15	7
16–20	3
≥ 21	16
Type of Specialty	
Adult	12
Pediatric	14
Subspecialty	
Adult Critical Care	1
Pediatric Critical Care	8
Medicine	12
Surgery	3
Medicine/Surgery	2

Analysis revealed that becoming an NP involved a journey from one mode of being to another, a transformative process embedded in a dialectical experience, which is the overarching phenomenon that best characterizes these participants' overall experience. The NPs' journey was directed both *outward* into the world and *inward* into the self. The journey was not linear or unidirectional; rather, its nature was intertwining, dynamic, and iterative as a result of learning, growing, doing, struggling, and accommodating, within relationships that were different from those previously known. Some transformations were dramatic, but most were insidious and cumulative in nature and resulted from many ordinary, day-to-day experiences. The journey, which occurred within a context of *being pioneers*, took longer or was more intense for some than for others. Five principal themes emerged within the transformational journey: *being called to be more*, *being adrift*, *being an acute-care NP*, *being pulled to be more*, and *being more*. Table 2 lists the themes and subthemes. Brief excerpts of data along with the participants' words or terms (in quotation marks) are presented to illustrate the journey.

The Context of the Transformational Journey

The participants considered themselves pioneers of the NP role in acute-care settings. As pioneers, they had left well-established communities of practice in order to build new ones. As a collective they had yet to develop their own rituals, artifacts, and histories binding them together across time and space such that there was a common sense of belonging and identity. Except for neonatal NPs, this was typically an endeavour they faced alone:

The thrust at that time was to phase out the CNS role, to have the NP role, which started here about 10 years ago. And the role started because there was a shortage of residents. And then eventually people saw that NPs, in an expert scope of practice with a specific and well-defined patient population, could take the burden off the physicians. I'm not sure that the role was ever really thought out as to what the benefits could be for the patients, but nursing then took that opportunity to try and articulate that . . . But nobody really knew what the NP role was going to look like. So I really led that process of creating a vision and developing a role . . . And I think that part of pioneering something new, that we had no idea of what was going to happen, was a definite challenge.

Being Called to Be More

The journey began with the recognition that what they were doing no longer fit with what they wanted to do and who they wanted to be as nurses. The participants were required to seize the opportunity or create

<p>Table 2 <i>Themes and Subthemes of the NPs' Transformational Journey</i></p>
<p><i>Being Called to Be More</i> Being more connected Being more in control Being more visible Being more challenged Being able to make more of a difference</p>
<p><i>Being Adrift</i> Being disconnected Being uncertain Being lost Staying afloat</p>
<p><i>Being an Acute-Care NP</i> Being competent Being confident Being comfortable Being committed Being connected Being content</p>
<p><i>Being Pulled to Be More</i> Being a wearer of two hats</p>
<p><i>Being More</i> Being an advanced practitioner</p>

one, with the NP role seen as possibly being “the perfect fit,” thus fulfilling the call to be more. This call concerned being able to “have the opportunity to work with patients, hands on, all the time,” which was an integral part of the perfect fit. Five dominant forces were revealed (and rarely was the call associated with only one of these): *being more connected*, *being more in control*, *being more visible*, *being more challenged*, and *being able to make more of a difference*.

Being more connected. “I was afraid that I had begun to move too far away from the patients . . . and I never wanted that feeling of being disconnected to happen again.” As noted by this NP, being more connected, physically and emotionally, to patients and families was a strong force. Likewise, others explained that being a clinical manager or clinical educator was “too far away from the patient.” The NP role opened up the

possibility of being able to combine teaching with leadership and research while still remaining close to the patient.

Being more in control. Some participants were strongly attracted to being able to have both increased responsibilities and the autonomy to act in their clinical practice, something that had eluded them as bedside nurses. One participant said, “It was a little bit of independence, which I think was probably the most important thing, and challenge, but mostly it’s the autonomy issue”:

A patient has a headache. As a nurse you’ve certainly got the knowledge and expertise to know they need Tylenol, but you can’t give them Tylenol until you call the physician to get an order. I found that kind of thing incredibly frustrating . . . the patient’s suffering while you’re jumping through these hoops to get something that the nurse should be able to do . . . So I thought I might jump ship and go into medicine, which didn’t really appeal to me because I love nursing. . . . At that time the NP role was being piloted at our hospital . . . and I decided that it might just be the perfect fit for me.

Being more visible. The search for a more collaborative practice and for the feeling of “really being valued” spoke to the NPs’ quest to be more visible. The NP role was seen as an opportunity to be affirmed and recognized for what they really knew and did, instead of having their actions attributed to the physician:

The doctor and residents and respiratory therapist go from bed to bed and the nurse gives report. And so many times they’re all like this [turned away, bored look] until the nurse is done talking and then the resident essentially says the exact same thing as the nurse. And it’s like brand new news to them because it isn’t the nurse talking any longer.

Being more challenged. The desire to be “stretched” or to “expand one’s wings,” the need to be challenged and to “feed [one’s] inquisitive nature” concerned being more challenged. For some, being a pioneer in this role was the challenge they were seeking: “I felt I was one of the first people that saw the nurse practitioner as a way to expand my wings.” All participants wanted to be more challenged clinically. One NP said, “I thought it would be the perfect fit for someone who wants to constantly strive for more knowledge and skills that can be used at the bedside, close to the patients and their families”:

A lot of the excitement is in the diagnosis, seeking information, putting the clues together . . . And maybe part of it is the inquisitiveness or the intuition that takes you to the next step: Have you thought of ____? Did you ____? Would this have made a difference? Why are we doing things

the way we're doing them? Have you ____? . . . And I felt I was fairly competent at the bedside and ready for another learning opportunity and role expansion.

Being able to make more of a difference. The participants wanted opportunities to better meet the holistic and multiple health-care needs of patients and families, especially in a more timely matter, and to use their creativity to bring about system-wide changes. They also envisaged being able to provide more consistency and continuity of care, instead of the “episodic” contacts that tend to occur within the medical model of care. The NP role was seen as an opportunity . . . know the patient’s clinical condition in more depth and to have a larger repertoire of interventional skills to better help the patient and family:

The driving force for me was that there was this role that was written in the literature, that neonatal NPs can do so much more for your families and patients . . . Here was an opportunity for nurses to provide continuity of care and consistency of the relationship with the families while writing orders.

Additionally, most participants, particularly those who had been CNSs, were drawn to making more of a difference to nurses and the nursing profession “by marrying teaching, research, and leadership with advanced nursing care at the bedside.”

Being Adrift

Being adrift, a time of transition lasting 2 years or more, was characterized by turbulence, primarily associated with the medical management of patients. Being adrift was a painful time, when the participants were required to let go of old ways of being and their old identity and learn new ways of thinking, acting, and relating to others. They experienced feelings of being disconnected, being uncertain, and being lost. Staying afloat was required if they were to survive. This transitional experience was affected by such factors as serving as the catalyst for change, the individual NP’s emotional and physical well-being and level of knowledge and skills, environmental resources and support, and the expectations of others, who were themselves in transition due to the introduction of this role.

Being disconnected. The focus of NPs’ learning was necessarily the medical agenda; therefore, they had “no time to be present with the patients and families” in the way they preferred, which left them feeling disconnected. The search for being more connected seemed even more elusive and the resulting turbulence they experienced left them questioning their choice and lamenting what they had left behind:

I just don't have enough time. I'm too busy doing stuff. I find I miss bedside nursing . . . When I walk in sometimes when I'm doing rounds, I get jealous . . . because they're communicating with the little girl and they're talking to the mom and teaching her how to give the Septra, and I'm ordering the pills and I'm doing the spinal tap . . . I want to be on the other side of the fence again and be that comforting person at the bedside and put the cloth on her forehead.

In the absence of NP mentors, pioneering NPs described “being the physician’s shadow” for months and even several years, adding to their sense of being disconnected from nursing. At the same time, there was a strong realization that they would never be accepted by medicine except at the outer edge of the experience. There was an emerging sense of not really being part of either group, of not really fitting in anywhere:

It's hard, because you should be, from a clinical perspective, on the physicians' team, but they've got their own little team too. And so there are many teams in which you take part but you're not always a part of; you're just a part of them when they think you should be a part. And so it's sort of like floating in your own little space.

Being uncertain. NPs provided medical care to patients with complex, acute, and often life-threatening conditions, sometimes making clinical judgements rapidly in tense situations. They felt “overwhelmed,” “vulnerable,” “inadequate,” “confused,” and “mentally exhausted” as they continued to learn “from the ground level up” how to “attack” patient care management while learning to master the required procedural skills. Some NPs described being uncertain as merely “unsettling”; however, most described feeling “terrified,” “scared,” and “frightened” — emotions that were present to some degree most if not all of the time and heightened when they performed something new:

It was very frightening at the beginning. For my first 2 years of working, every time I had a call to come see something the one thing I used to do when I got woken out of bed was say, Dear God, help me make it through the night; help me make the right decision.

NPs were preoccupied with “horrible thoughts” about poor clinical decision-making and a hyper-vigilance born out of worry for the safety of patients and staff because they “did not know” what to do or how to do it, what they should and should not know in order to clinically manage the patients, or how to think, speak, and write like a physician. They spent inordinate amounts of time day in and day out going through the events of the day, endlessly questioning themselves: “What have I ordered? Was there something better? Should I have done it differently?”

Some even returned to the hospital after going home because of the second guessing:

And it was such hard work to do this. When I had to order Lasix, it was like — should it be Q6, Q8, Q12H? I don't know. Once a day? You've got to think about this, this, this, and this. You need to look at a weight gain, and fluids, fluid balance, urine output. And it was just so tiring because there was so much to think about.

Being lost. The sense of loss of identity grew from being disconnected and being uncertain. The constant focus on writing orders, performing procedures, and being explicitly told to “stop thinking like a nurse” by their physician colleagues led them to wonder, “Is this what being an NP is all about?” “Am I just a resident?” “Is this what I really want?”

So where's the NP in what I do? That's the challenge. At the beginning, people referred to me as a resident. Nurses were calling me, “Are you my resident today?” “No, I'm not your resident today; I'm your NP today.” And I think that was because the training was fairly medical. So it was a struggle and a challenge getting away from the fairly medical training and bringing back the good that I got in nursing training and putting it together.

Feeling like an “impostor” contributed to the sense of being lost. One NP explained that it was 10 months before she “no longer minded coming to work” because she felt as if she was “living with a false identity.” An inability to articulate what it was she did and how she did it, rather than “this is where I can be found throughout the week,” contributed to her sense of homelessness and lack of a sense of self as an NP. Although this perception was augmented by the lack of a graduate degree and NP certificate, their acquisition did not diminish it:

I didn't belong here. This wasn't home, this wasn't welcoming, and I was an impostor in my role . . . Well, I've got the title but I still didn't have my master's yet, I still didn't have my NP certificate yet, and yet I'm in the role, and I'd been in the role for a couple of years before I finished all the schooling pieces, only to then realize that the schooling pieces and everything didn't shape how I functioned as much as just the experience on the floor.

Staying afloat. Not all was lost during this time. Despite the turbulence, staying afloat became a motivator in itself: “Well, we're going to be the first ones out of the gate, before everybody else.” The will to succeed was a matter of “pride,” while the struggles and tensions were perceived as the sacrifice necessary to attain the rewards. Positive affir-

mations, hours of studying, jumping into the fray, checking and rechecking orders, issuing medical directives or clinical guidelines, and using their worry to promote learning became strategies for coping with the worries associated with being uncertain. Maintaining close physical proximity to the physicians in their practices was also essential to staying afloat. This “lifeline” or “safety line” concerned the physicians’ availability as support for NPs in their need to become knowledgeable and skilful in the medical management of patients. Several participants were unable to develop or maintain this lifeline and were forced to leave the role, if only temporarily. Physician support was exemplified by physicians’ willingness to share information, demonstrate, teach, and coach:

When you’re first doing the role and carrying the responsibility, you need to have a system in place for support. You need to have physicians who don’t mind you popping in, maybe even several times a day, to say, “I just want to run this by you. What do you think about this? Is that right?” And they’ll confirm it or they’ll say, “Yeah, that’s right 90% of the time, except in this case.”

Being an Acute-Care Nurse Practitioner

The first time I felt like a real NP was my first night solo with a . . . critically ill infant and getting through all of the trials and tribulations . . . feeling confident . . . getting the airway efficiently, getting the lines in and pushing fluids, and getting the orders . . . and the sense of accomplishment with being able to do those skills . . . and being able to be there for the family as well . . . having everyone’s trust and their confidence . . . and this real sense of togetherness . . . and a real sense of success and making a difference in this family’s and baby’s life . . . knowing I was a key player in that team dynamic. It was an incredible feeling.

With time, experience, and reflective engagement, NPs gradually journeyed through being adrift to being an acute-care NP. Being an acute-care NP entailed a complex process of doing, talking, thinking, feeling, and belonging to a clinical practice team that recognized, acknowledged, and valued the performance by NPs of clinical components of practice traditionally performed by physicians. Gradually, a new energy surfaced and a feeling of inner security emerged from being competent, confident, and comfortable in performing the various elements of their clinical practice. This security opened the way for NPs to negotiate a means of being committed and connected to the patients, their families, and the health-care team in a way that was morally acceptable to them and that led to their being content.

Being competent. Being competent was demonstrated by NPs’ ability to independently diagnose health problems; understand their significance;

make multiple correlations in their mind in the form of running differentials; initiate, articulate, and defend the medical plan of care; and take responsibility for implementing the plan, all with a diminishing sense of angst. They even learned to live with the risk of initiating a medical treatment plan before all the definitive information was available.

NPs described how they had learned to (a) use the written language in an appropriate form in the physician's progress notes and discharge summaries; (b) speak in telegraphic sentences, for, as one NP noted, "without appropriate verbalization, how else would others know what you're thinking?"; (c) look the physician in the eye when defending their treatment choices, particularly during daily medical rounds; (d) wear a mask of certainty while learning to live respectfully with uncertainty; and (e) take calculated risks, all the while holding the lifeline more and more distant. Once the NPs knew that they could "think like a physician," they actively pursued the integration of this form of thinking with "thinking like a nurse," knowing that what they did as a nurse within the NP role made a difference that could not be realized medically:

A few physicians have said to me, "Oh, you're thinking like a nurse again," as if it's a bad thing . . . They're thinking more, what's this person's immediate health problem? . . . And they don't really take into account the rest of the patients' lives and what's going on with them . . . Whereas now I like to know more about the people and more of the social aspects than just the actual medical base . . . because I think it all plays in . . . Sometimes it's the other things in their lives that are going on that if you just sit there and talk to them, then I don't need to change anything medically because there's really nothing medically wrong.

Being confident. Gradually, self-doubt was replaced by self-assuredness. As NPs acquired more clinical knowledge and skill, they began to believe they could be trusted, by both themselves and others, to do the right thing for patients and families. One NP said, "It took me 2 years to get [the] confidence . . . to say, yes, I made the right decision; I'm satisfied that I'm doing it right; it's correct, and nothing bad is going to happen." After gaining confidence, NPs no longer double- and triple-checked their orders, nor did they need or want to verify every decision with a physician: "I'm confident enough now that for most diagnoses I know what it is; I communicate it [to] the parents and talk about the plan of care even before the physician comes into the room."

As a result of NPs' ability to differentiate between decisions that were easy due to their routine nature (despite their possible complexity), they were now confident in articulating, defending, and negotiating the boundaries of their scope of practice, as illustrated by the comment of one NP working in nephrology: "I don't do neuro and I've never put in

a chest tube and I never will.” Being clinically competent also created the possibility for advocacy and taking a stance for patient needs that at times was different from the stance of their medical partners.

Being comfortable. Being comfortable comprised feelings of pleasure, enjoyment, and even gladness — a sense of finally coming home. The feeling of turbulence was gradually replaced by one of calm, and there was a growing sense of being part of a community, albeit in a new way. The weight of the practice was no longer a burden but rather was a source of deep satisfaction. Clinical problems were now perceived as exciting opportunities to be “stretched.” For example, one NP, as a result of feeling confident in her own competence, was comfortable enough to found an autonomously managed neurosurgical assessment clinic for a particular subpopulation of patients, “seeing between 400 and 500 children a year.”

Being committed. Acting skilfully, being present in the moment with the patient and family, listening, providing information, reassuring, explaining, particularizing and personalizing care, and exploring with the patient and family the meaning of the illness event were revealed as integral to NP practice and to the participants’ sense of identity as NPs. For instance, an NP working in a pediatric oncology service discussed undertaking the performance of bone marrow aspirations. Her story reveals that being committed includes technological competence. Because the diagnostic procedure was performed perfectly, a repeat procedure was unnecessary, the findings were reliable, the patient experienced little post-procedure discomfort, and adverse effects were minimized. Also, embracing the procedure gave the NP an opportunity to consider the developmental needs of the children, along with pain and sedation management issues. A choice of pharmacological approaches, enhanced by hypnosis and play therapy, became part of the procedure.

Being connected. Part of being an acute-care NP was developing relationships with patients and families. Although there often were too few hours in the day for quality time with all patients and families, NPs worked hard to provide occasions for building connected relationships. Some NPs gave families their business cards and encouraged them to call; one NP used spare moments in her week to call four or five of her patients just to see how they were doing; others stayed behind during daily rounds to talk with families who seemed overwhelmed, instead of expecting them to wait until rounds were completed. NPs created opportunities for consistency and continuity and took pains to ensure that patients and families did not get lost in the system. For example, an NP practising in an infectious diseases subspecialty was concerned about patients who might be “falling through the cracks.” She built a “one stop care” practice to educate them about their illness, help them to negoti-

ate among multiple care providers, and bring health promotion into the picture. If patients were late for an appointment or “came on the wrong day,” she welcomed them regardless and met with them for as long as necessary.

Being content. NPs now experienced a feeling of satisfaction and even joy with what they were doing in their clinical practice, because they had finally found some or all of the “more” that they had been seeking. They had a sense of belonging. They rediscovered a sense of self by experiencing their practice in a fuller way. NPs now realized that being an NP did not mean abandoning a nursing framework of care. Although NPs acknowledged that medicine and nursing were still distinct, they no longer saw them as mutually exclusive. They discovered that they now lived in a new world, a space between medicine and nursing: “I guess I live in my own world . . . the NP takes all of the nursing and that extra bit of medical knowledge and comes together somewhere in the middle.” By living in this “in-between space” that they found very satisfying, NPs created new possibilities for caring:

I'm sort of stuck between . . . for example, physicians will say, “Turn off all the sedation and let the kid wake up.” But the nurses are the ones literally sitting on the kid and seeing this child cry and being uncomfortable. And sometimes they see me a bit as a traitor because I'm the one who actually writes the order — stop, d/c sedation . . . but the medical team see me a bit as a traitor too . . . “Stop being a nurse now” . . . But I can see that both parties need to be defended. So I go and say to the attending, “I don't think we should stop sedation because this kid's been on it for so many days,” and I try to negotiate . . . And there's times where it's “stop the sedation” and I can understand what the medical rationale is . . . so I try to explain to the bedside nurse, also saying, “Well, if we get into trouble, I'll be there and I'll try to find a solution for you.”

Being Pulled to Be More

“I think that at the 5-year point I began to feel there was . . . a routine nature to the role and I could do more.” The participants gradually emerged from being acute-care NPs — initially the “first and only priority” — to experience new tensions and struggles arising from the shift in externally or internally driven performance expectations in other dimensions of their role as advanced practice nurses. Consequently, this time in the journey was once again a time of polarization. Participants described *being a wearer of two hats*:

But am I wearing my CNS hat or am I wearing my NP hat now? What is it that I'm doing in all of this? Part of me feels it's more the CNS role. So if I get going with the survivors' program, work with them one-on-one,

is that the CNS role or the NP role? But in some ways I'm always doing the NP piece too . . . And I've struggled to really maintain and develop some skills in terms of research and some other aspects of the CNS role. So I've really tried to wear two hats basically at the same time . . . So how should this role look? . . . I'm just struggling with that right now, actually, at this point in my career.

Being a wearer of two hats. NPs now found themselves with two identities — wearing the “CNS hat” (education, leadership, research) and the “NP hat” (direct clinical practice). Their time was diverted from one role to another, the direct practice role sacrificed to the other domains of practice or, conversely, the other domains of practice sacrificed to direct practice. For some, this polarization resulted from a resistance to engage in all the various domains of advanced practice when the search for the “perfect fit” had been personally achieved in the direct clinical practice domain. NPs experienced this time as one of being “given” added responsibilities by management. *Being pulled to be more* was an irritant because these “extra” role functions interfered with the hands-on work they loved to do. “There’s always this struggle. My primary interest in this role is patient management, but it isn’t enough to give good patient care — nursing management wants to see more output than that.” For others, the polarization resulted from a lack of knowledge or skill in these domains and/or external barriers to taking on these challenges, such as physician resistance, time constraints, and organizational “can’t do philosophies,” while the call to find the “perfect fit, to experience “more,” remained only partially met.

Being More

With new opportunities for learning and an ongoing dialectic engagement, some NPs underwent another inner transformation, gradually unifying the direct practice, education, research, and leadership domains of advanced nursing practice such that increasing the level of participation in any one domain of practice did not dispense with any of the others, but, on the contrary, increased the requirements of the others. During this time of being more, as experienced in being an advanced practitioner, all domains of practice were viewed as inseparable and mutually constitutive, their complementarity giving the role its richness and dynamism. Ultimately, the unification became how some NPs identified themselves and how they were viewed by others.

Being an advanced practitioner. Having “wrestled” with the question of which hat to wear when, some NPs decided that they were “just going to have it all.” They generated questions from their clinical practice that they then took through the research process; engaged frontline

nurses in the research and project work, which included participating in presentations and preparing submissions for publications and the translation of findings into local practice; and developed multiple and varied partnerships. It was during this time that NPs found a greater sense of personal nursing fulfilment through their opportunities to make a more diverse and broader difference to patients and families and to their profession:

[Physicians'] usage of some of the medications that are less senior-friendly has been on Ortho. [Because of our teaching], when I screen the consults on Ortho now, I'm not sitting there taking [them] off Tylenol #3 and discontinuing Gravol. Those drugs are gone. And so I get to affect patient care in that way too. Now the Ortho nursing manager and I are going to work together to go through the computerized medication records and do a comparison, between our teaching periods, about uses of targeted drugs and then do a cost analysis of the changes. And then as a nurse practitioner when I'm doing consults, they'll ask me questions, whether it's the nurses on the team or the social workers or discharge planning. Next, I'm going to work with some nurses and maybe some students on a little research project about Foley catheters because of all the nosocomial infections in seniors.

Discussion

If NPs are to be accepted for more than responding to physician shortages and are to be supported in their own development, it is essential that we understand who NPs are in terms of their unique and significant contributions to patient care. This study uncovered the complex, largely invisible experience of being and becoming an acute-care NP. The participants were faced with tremendous turbulence during the initial years. Much of the distress during the first part of their transformational journey was related to the state of transition. Indeed, the transition resulted in an emotional journey during which the new NP had to leave behind old ways of being and the identity associated with them before redefinitions of self and the situation could develop.

The work of the cultural anthropologists Van Gennepe (1909/60) and Turner (1969, 1974) helps us to find meaning in the NPs' experience of being adrift. In *The Rites of Passage*, Van Gennepe distinguishes three stages of transition. During the first stage, one is separated from one's status in society. This separation results in a marginal and liminal state: the second stage. After initiation, the person is finally reintegrated into the social structure in the newly achieved role status: the third stage. During the state of being adrift, NPs had a sense of being disconnected or removed from the practice community with which they were most familiar.

Viewed from the perspective of Van Gennep's "rites de passage," this literal or symbolic removal from normal patterns set up the NPs' experience of liminality.

Liminality is etymologically connected to the word limbo. NPs found themselves living between two spaces, of being "betwixt and between" (Turner, 1969). They were passing from being in a nursing position with its traditional laws, customs, and conventions to being in a position with new and different laws, customs, and conventions. Their activities during that time tended to be perceived by others as extreme; they appeared strange and sometimes disturbing and dangerous. Since this liminal state was inter-structural, unclear, and contradictory, NPs were apt to be perceived as contaminated or impure, as aberrations, and even as a threat to the status quo (Turner, 1974). As a result, NPs did not always have the support of their communities as they changed from being one type of person to another. This accentuated the experience of being disconnected and uncertain.

NPs had feelings of insecurity, disequilibrium, disorientation, anxiety, apprehension, and disorganization, along with the numerous and varied feelings that accompanied the loss of relationships, confidence, and control. Transitions involved going through the no man's land between the old reality and a new, yet to be discovered reality (Turner, 1969). Yet NPs realized that, in order to establish a role that was their own, they had to distance themselves from both nurses and physicians. The experience of being lost was related not simply to what NPs were going to do but, more fundamentally, who they were going to be. This internal struggle forced them to question their loyalty to their profession and to their new career. Were they co-opting their nursing values for goals that were achievable only at the expense of those values?

Being lost was experienced as conflict between an either/or existence and feeling neither like a nurse nor like a physician. The NPs' past was severed and they had become two unconnected pieces. There were two *I*s, which were perceived as oppositional. There was the nursing *I* with whom the participants were familiar and connected. This was the *I* they enjoyed and wanted to promote and enhance at the outset of the journey. The other *I*, the one engaged in traditional medical acts, the visible one, was a stranger. They could not accept this *I* because it was not what they wanted, but they could not reject it because it was part of their new self. They needed the knowledge and skills they were acquiring in order to be more challenged, more visible, and more in control. Yet their old self clashed with their newly discovered self. Thinking like a physician was experienced as oppositional to thinking like a nurse.

Painful though it was, the experience of being adrift offered the NPs an opportunity to be creative, to develop into what they needed and

wanted to become, and to renew themselves. The struggle to stay afloat somehow made innovation and revitalization possible. This was a time of rapid and extensive learning and growth. The struggle to stay afloat provided NPs with moments of undeniable joy and satisfaction and a glimpse of how to find the perfect fit.

As a result of the NPs' passage through this turbulent time, new ways of being began to emerge and they found new energy. Being competent, confident, and comfortable as an NP, they were better able to be committed and to make a difference; that is, they discovered some or all of the fit for which they had been searching. As a result, they began to undergo an identity transformation and to become content in the role. After the transformation they began to see that what made them unique as nurses was the very fact that NPs were poised between two worlds. This was precisely what defined their identity. Amin Maalouf's (1996/2000) memoir, *In the Name of Identity*, challenges us to ask whether NPs are half nurse and half physician. The answer is no. The NP's identity cannot be compartmentalized. The findings of the present study show that being content is about resolving the tug-of-war between NPs' affiliation with the medical world and their allegiance and attachment to nursing. The acute-care NP experiences the in-between world in an entirely new way, one that is generative in building bridges and/or serves as a bridge.

Drawing upon Aoki's (1983) reflections on the meaning of the term bridge, being a bridge and bridging can be seen as NPs acting in ways that expedite service, helping patients to move from one place to another. However, looking at bridge/bridging only in this way keeps the NP role instrumental in nature. Aoki encourages us to view bridge/bridging as a dwelling place for NPs, a space between nurse and physician, one part of the health-care system and the other taking an active part on both sides and having an identity that is both and not-both. This illustrates why the unification of medicine and nursing is so significant and possibly why NPs should not be pressed to take sides or ordered to stay within their own discipline. And it is noteworthy in light of a discourse suggesting that NPs are only resident replacements.

There are several limitations to this study. The investigation was restricted in terms of geography and health-care settings. NPs working in other provinces or in secondary-care institutions might have had different experiences to recount. Another limitation is that the broad experience of being an NP was explored. The findings are suggestive of Benner's (1984) stages of clinical competence. Yet NPs experienced a sense of hyper-responsibility at the beginning of their journey, not at the competent stage in the novice-to-expert continuum that Benner identifies. This may be because the NPs knew what it means to be a compe-

tent nurse and therefore understood the tensions and risks involved in managing a clinical situation. Additional research is needed to investigate the stages of clinical competence for acute-care NPs.

The findings make it apparent that the whole picture is a complex one, much of which has been invisible. For example, the ways NPs make a difference embedded in a moral imperative of caring as integrated with medical curing activities raise questions about the structure of their practices. If the time spent with patients and their families is conducive to holistic care, should NP practices be restructured so that more time is afforded them to do so? Explication of the nature of their journey also calls into question the tendency to underestimate the complexities of taking on this role and the duration of the transformational process. Educators, administrators, nurses, and physicians need to acknowledge the profound effect the journey has on NPs. Further research could investigate specific strategies for addressing the turbulence encountered by novice NPs and for helping them to enable caring practices.

References

- Aoki, T. (1983). Experiencing ethnicity as a Japanese Canadian teacher: Reflections on a personal curriculum. *Curriculum Inquiry*, 13(3), 321–335.
- Beal, J. A., & Quinn, M. (2002). The nurse practitioner role in the NICU as perceived by parents. *American Journal of Maternal Child Nursing*, 27(3), 183–188.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park, CA: Addison-Wesley.
- Brown, M. A., & Draye, M. A. (2003). Experiences of pioneer nurse practitioners in establishing advanced practice roles. *Journal of Nursing Scholarship*, 35(4), 391–397.
- Brykczynski, K. A., & Lewis, P. H. (1997). Interpretive research exploring the healing practices of nurse practitioners. In P. Kritek (Ed.), *Reflections on healing: A central nursing construct* (pp. 518–535). New York: National League of Nursing Press.
- Carter, A. J. E., & Chochinov, A. H. (2007). A systematic review of the impact of nurse practitioners on cost, quality of care, satisfaction and wait times in the emergency department. *Canadian Journal of Emergency Medicine*, 9(4), 286–295.
- Chang, W. C., Mu, P. F., & Tsay, S. L. (2006). The experience of role transition in acute care nurse practitioners in Taiwan under the Collaborative Practice Model. *Journal of Nursing Research*, 14, 83–92.
- Fanta, K., Cook, B., Falcone, R. Jr., Ricketts, C., Schweer, L., Brown, R., et al. (2006). Pediatric trauma nurse practitioners provide excellent care with superior patient satisfaction for injured children. *Journal of Pediatric Surgery*, 41(1), 277–281.
- Gadamer, H. G. (1989). *Truth and method* (2nd ed.) (J. Weinsheimer & D. G. Marshall, Trans.). New York: Crossroad. (Original work published 1960)

- Heidegger, M. (1962). *Being and time* (J. Macquarrie & E. Robinson, Trans.). Oxford: Blackwell. (Original work published 1927)
- Hoffman, L. A., Tasota, F. J., Zullo, T. G., Scharfenberg, C., & Donahoe, M. P. (2005). Outcomes of care managed by an acute care nurse practitioner/attending physician team in a subacute medical intensive care unit. *American Journal of Critical Care, 14*, 121–132.
- Hurlock-Chorostecki, C., van Soeren, M., & Goodwin, S. (2008). The acute care nurse practitioner in Ontario: A workforce study. *Nursing Leadership (CJNL), 21*(4), 100–116.
- Irvine, D., Sidani, S., Porter, H., O'Brien-Pallas, L., Simpson, B., McGillis, L. H., et al. (2000). Organizational factors influencing nurse practitioners' role implementation in acute care settings. *Canadian Journal of Nursing Leadership, 13*(3), 28–35.
- Kaan, A., & Dunne, J. (2001). Development of a nurse practitioner role in heart failure management: An Australian experience. *Progress in Cardiovascular Nursing, 16*, 33–34.
- Kleinpell, R. M. (2005). Acute care nurse practitioner practice: Results of a 5-year longitudinal study. *American Journal of Critical Care, 14*, 211–221.
- Kleinpell, R. M., Hrvnak, M., Werner, K. E., & Guzman, A. (2006). Skills taught in acute care NP programs: A national survey. *Nurse Practitioner, 31*, 7–13.
- Leininger, M. (1994). Evaluation criteria and critique of qualitative research studies. In J. M. Morse (Ed.), *Critical issues in qualitative research methods* (pp. 95–115). Thousand Oaks, CA: Sage.
- Maalouf, A. (2000). *In the name of identity* (B. Bray, Trans.). New York: Penguin. (Original work published 1996)
- Meyer, S. C., & Miers, L. J. (2005). Cardiovascular surgeon and acute care nurse practitioner: Collaboration on postoperative outcomes. *AACN Clinical Issues, 16*(2), 149–158.
- Norris, T., & Melby, V. (2006). The acute care nurse practitioner: Challenging existing boundaries of emergency nursing in the United Kingdom. *Journal of Clinical Nursing, 15*, 253–263.
- Reay, T., Golden-Biddle, K., & Germann, K. (2006). Legitimizing a new role: Small wins and micro-processes of change. *Academy of Management Journal, 49*(5), 977–998.
- Russell, D., VorderBruegge, M., & Burns, S. M. (2002). Effect of an outcome-managed approach to care of neuroscience patients by acute care nurse practitioners. *American Journal of Critical Care, 11*, 353–364.
- Sidani, S., Doran, D., Porter, H., Lefort, A., O'Brien-Pallas, L., Zahn, C., et al. (2006a). Processes of care: Comparison between nurse practitioners and physician residents in acute care. *Nursing Research, 19*(1), 69–85.
- Sidani, S., Doran, D., Porter, H., Lefort, A., O'Brien-Pallas, L., Zahn, C., et al. (2006b). Outcomes of nurse practitioners in acute care: An exploration. *Internet Journal of Advanced Nursing Practice, 8*(1).
- Sidani, S., Irvine, D., Porter, H., O'Brien-Pallas, L., Simpson, B., McGillis-Hall, L., et al. (2000). Practice patterns of acute care nurse practitioners. *Canadian Journal of Nursing Leadership, 13*(3), 6–12.

- Turner, V.W. (1969). *The ritual process: Structure and anti-structure*. New York: Aldine de Gruyter.
- Turner, V.W. (1974). *Dramas, fields, and metaphors: Symbolic action in human society*. Ithaca, NY: Cornell University Press.
- Van Gennep, A. (1960). *The rites of passage*. Chicago: University of Chicago Press (Original work published 1909)
- van Manen, M. (1997). *Researching lived experience: Human science for an action sensitive pedagogy* (2nd ed.). London, ON: Althouse Press.
- van Soeren, M., & Micevski, V. (2001). Success indicators and barriers to acute nurse practitioner role implementation in four Ontario hospitals. *AACN Clinical Issues*, 12(3), 424–437.

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Le volet consultation du rôle d'infirmière clinicienne spécialisée

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Au Canada, le rôle de l'infirmière clinicienne spécialisée (ICS) comporte cinq grands volets : l'exercice clinique, la consultation, l'éducation, la recherche et la direction. La présente étude porte sur le volet consultation, tel que décrit par les ICS, plus précisément sur les facteurs qui facilitent ou entravent sa mise en œuvre. Les auteures se sont fondées sur une approche qualitative et descriptive pour interroger 8 ICS qui travaillent auprès d'une population adulte dans un hôpital universitaire. Selon les données recueillies, gérer les situations de crise, assurer la continuité des soins et appuyer le travail des autres professionnels et équipes de santé constituent trois aspects essentiels du volet consultation. L'ambiguïté des rôles perçue par les autres professionnels ainsi que les demandes et attentes constantes attribuables à un milieu en constante évolution comptent parmi les principaux défis que doit relever l'ICS dans son travail. Ces facteurs exigent de l'ICS qu'elle clarifie constamment son rôle en fonction de l'époque et du lieu.

Mots clés : exercice clinique, infirmière clinicienne spécialisée, consultation

The Consultation Component of the Clinical Nurse Specialist Role

Maria-Helena Dias, Jane Chambers-Evans, Mary Reidy

The clinical nurse specialist (CNS) role in Canada has 5 key components: clinical practice, consultation, education, research, and leadership. This study focuses on the consultation component: how it is described by CNSs and the facilitators and barriers to its implementation. A qualitative descriptive design was used to interview 8 CNSs who worked with adult populations in a university hospital setting. The findings indicate that managing crisis situations, ensuring continuity of care, and supporting other health professionals and health-care teams are key areas of consultation. Role ambiguity perceived by other professionals and constant demands and expectations due to a changing environment constitute the major challenges of CNS practice, requiring CNSs to continuously clarify their role in accordance with changes in time and place.

Keywords: advanced nursing practice, clinical nurse specialist, consultation

The clinical nurse specialist (CNS) is one of two advanced practice nursing roles in Canada (Canadian Nurses Association [CNA], 2008). In the Canadian Nurses Association's recent position statement on the role (2009), CNSs are defined as registered nurses who hold a master's or doctoral degree in nursing, have expertise in a clinical nursing specialty, promote excellence in nursing practice, and serve as role models and advocates for nurses by providing leadership and by acting as clinicians, researchers, consultants, and educators. They consult on complex cases, promote an evidence-based culture, and facilitate system change (CNA, 2009). CNSs have been shown to improve quality of care and patient outcomes, reduce costs, and support nursing practice and knowledge (CNA, 2009; Darmody, 2005; LaSala, Connors, Pedro, & Phipps, 2007; Sparacino & Cartwright, 2009; Urden, 1999). Fulton and Baldwin (2004) compiled an annotated bibliography of studies that evaluated CNSs and found that CNSs reduced hospital and emergency admissions, improved prenatal care, and reduced complications for cancer patients.

The CNS role was introduced in Canada in the 1960s as a direct response to the increasing complexity of both clinical care and the health-care system. Despite consistent descriptions of their role dimensions, CNSs struggle with role implementation. In a recent Canadian study of the advanced practice role (Pauly et al., 2004), CNS participants maintained that their knowledge and skills were being underutilized, their practice was constrained, and they were undervalued in their prac-

tice settings. These findings are consistent with those of studies completed in the 1990s, which also found that, despite a clear description of the role and the outcomes, the CNS role remained ambiguous (Davies & Hughes, 1995; Scott, 1999).

The National Association of Clinical Nurse Specialists (2004) in the United States describes the CNS in terms of three spheres of influence in the patient/client, nurses/nursing, and system/organizational fields. A comprehensive literature review (Lewandowski & Adamle, 2009) provides a detailed description of the CNS role and the outcomes achieved. However, recent studies have found that role blurring, inconsistent titles and education, lack of goal-setting for the CNS role, lack of understanding of the CNS role by other health professionals, and inadequate institutional support have contributed to ambiguity of the role (Bryant-Lukosius, DiCenso, Browne, & Pinelli, 2004; Lloyd Jones, 2005; Pauly et al., 2004). Lewandowski and Adamle (2009) claim that lack of understanding may be linked to the hidden work of the CNS and that the problem may be accentuated by the diversity within and across the role.

Given that CNSs consult with a variety of groups, including clients, other nurses and health-care providers, health-care organizations, and policy-makers, misunderstanding of the role could hamper its effective utilization and the achievement of positive health-care outcomes. As it is consultation competency that underpins the ability to introduce change, improve practice, and work within an interdisciplinary setting, it is essential that we deepen our understanding of consultation and the factors that may facilitate or inhibit this dimension of role enactment.

It is through the use of consultation and collaboration that clinical practice and systems improvement occur (Barron & White, 2009; Dunn, 1997). Historically, the CNS's consultation role dimension served well in complex situations by educating patients/families to respond to their own needs. More recently, clinical consultation has been described as a bridge between knowledge and practice, the primary goal being to promote the clinical expertise of nurses and other health professionals and so facilitate their empowerment (Barron & White, 2009; Lewandowski & Adamle, 2009). Further, innovation, change, and program development are part of the administrative consultative field.

Building on Caplan's (1970) work in mental health consultation, Barron and White (2009) build on the model, postulating four types of consultation based on the patients, the consultee, organizational needs, and the needs of individuals or groups experiencing difficulty with organizational objectives. The model, which focuses on the processes, outcomes, and characteristics of the players involved, informed our work. It describes the four-phase consultation process (assessment, intervention, evaluation, and reassessment) and the ecological field in which it takes

place. This field represents the interconnection and interrelation of the systems and contexts that influence the consultation process. The most important elements are the characteristics of the consultant (CNS), the consultee, and the patient/family as well as the situational factors that influence the purpose and outcomes of the consultation.

The purpose of this study was to describe the consultation component of the CNS role in a university hospital with an adult population. The research questions were four in number: *What are the goals and objectives of the consultation component of the CNS role? How does the CNS describe the consultation process? What are the contextual barriers or facilitators that influence the consultation component of the CNS role? What characteristics of the CNS (the consultant) and the consultee are necessary for consultation effectiveness?*

Method

Design

The study used a qualitative descriptive design based on a process of naturalistic inquiry. The aim of this approach is to understand and describe a phenomenon according to the experience of and meaning given to it by the participants (Loiselle, Profetto-McGrath, Polit, & Beck, 2004; Macnee, 2004). It allows for flexibility and adaptation to what is being discovered during data collection (Loiselle et al., 2004).

Setting and Sample

CNSs were recruited at a large urban university hospital, located in the Canadian province of Quebec, with a 20-year history with the CNS role. After approval had been obtained from the institution's Research Ethics Board, a letter describing the study was sent to all those CNSs employed in the hospital who worked with an adult population. CNSs who were master's-prepared and had at least 5 years' experience as a CNS were eligible to participate. Of the 16 CNSs who met these inclusion criteria, eight agreed to be interviewed.

Procedure

The primary researcher conducted individual semi-structured interviews in French or English with each CNS in the hospital setting. The interviews lasted from 60 to 90 minutes and were audiorecorded. Demographic data were also gathered. Barron and White's (2009) conceptual model, which inspired the development of the study, informed the interview questions and guided the analysis. The participants were asked to describe: (a) how consultation fit into their practice, (b) the consultation process, (c) the goals of consultation and indicators of consultation outcomes, (d) situational factors influencing consultation, and (e) the rela-

tionship/dynamic between the consultant and the consultee and the abilities required for successful consultation. The transcribed interviews were analyzed according to Miles and Huberman (2003). New data were compared and reviewed throughout the process, to ensure a comprehensive understanding of the phenomenon.

Ensuring Rigour

In order to attain rigour, the researcher must ensure authenticity, credibility, and confirmability (Graneheim & Lundman, 2004). Authenticity was ensured by validating the content interpretation with the two participants who provided the richest interviews, to confirm that the eventual findings reflected their experience. To ascertain credibility, the researchers independently coded the same interviews (inter-coder reliability). As themes and subthemes emerged, the researchers validated their findings with each other. Credibility of the results was further determined by validating the themes with an expert on the CNS role. Differences and similarities were discussed. Confirmability was ensured by keeping a journal (memo, audit trail) describing the research process and documenting decisions made throughout the study.

Results

All eight participants were women. They ranged in age from 41 to 60 years and had 11 to 40 years' nursing experience. Seven had between 5 and 10 years' experience in the CNS role and one had more than 11 years. Their specialty areas were medicine (including emergency medicine), surgery, neurosciences, cancer care, women's health, and mental health.

Goals and Objectives of the Consultation Component of the CNS Role

The participants described the main goal of their consultation activity as improving quality of care by sharing knowledge or making recommendations based on their expertise so that the consultee could plan appropriate patient care:

When someone calls me about a patient . . . you try to get them to think more broadly about the situation, which I think is definitely the role of the consultant. It's to get them to see it through a different set of lenses.¹

CNSs indicated that they spent between 20% and 75% of their time in consultation and that the volume of consultations was increasing, particularly in the areas of crisis management and especially at end of life

¹ In keeping with regulations regarding anonymity, only the primary investigator is aware of the identity of each participant.

and in conflicts between health professionals:

Particularly at end-of-life situations . . . the nurses think that the doctors should stop long before the doctors think that they should stop. So there's a lot of communication strain, so part of my job is to get the two sides talking.

Crisis management also included addressing the needs of family members:

. . . actively treating families that are struggling with levels of care, incorporating what that means. It's elevating or actualizing family goals about comfort and perceptions of quality of life . . . then looking at how one moves a family or all the team.

The CNSs who were consulted for complex and difficult cases often assumed responsibility for ensuring the continuity of a patient's care beyond their unit, across different settings and throughout the hospitalization:

I work with patients that transition across settings . . . the patient crosses many settings and sometimes my role is to make sure that there is continuity of care across those settings. It doesn't mean that the patient care needs related to our specialty have to suffer . . . Sometimes it's ensuring safety across settings too.

The CNSs described sharing their knowledge with nurses, with interdisciplinary teams, and within their own specialty teams. Often, the knowledge they shared was perceived as a means of supporting the consultee or team as they increased their competence in dealing with a specific health issue. In one instance, the CNS was instrumental in having the team view the patient more holistically, which served to increase the team's ability to handle similar situations. One CNS stated that her goal with respect to consultation was to help consultees "do a reality check."

Consultation Process

The CNSs encountered major challenges relating to the consultation component of their role. All participants discussed the implications of working in an environment or within an organization that is constantly changing to adapt to new health-care realities, new technologies, and the complexities of patient/family care. They had to continually adjust their roles and adapt their competencies to the new demands. This resulted in role ambiguity, contributed to the lack of clarity concerning the role, and necessitated a constant shifting of objectives. The participants agreed that it was difficult even for them to delineate where one competency ended and another began. The multiple roles, often on the same unit, con-

tributed to the ambiguity. This was the case for clinical practice, education, and consultation:

There have been many changes at many levels related to the type of care that we provide. Also, patients are getting older. There are more referrals . . . to new technologies . . . they have more concomitant disease[s] that before they didn't have, and so the population has changed as well.

In order to address the challenges, the CNSs used two strategies: constant clarification of the dimensions of their role and objectives with their colleagues, and participation in reflective practice. The participants adjusted their roles to meet the demands of the organization, the changing policies of the health-care system, new standards of care, and the monthly rotation of medical teams:

I'm functioning differently now than I was a while back. They need clarification of that and I need to put it into words, put it into a job description again or a description of my role within a project . . . roles that we're constantly being challenged to face.

All CNSs working at this hospital took part in facilitated reflective practice sessions with trained facilitators. Reflective practice provided an opportunity to present cases or situations, examine behaviour, and refine and implement problem-solving strategies. CNSs felt that reflective practice empowered them to voice personal and system issues in order to transform and improve the quality of care with innovative interventions or new programs:

Basically, the goal of reflective practice is to have effective communication, so that when you find yourself in a situation you [can] think and respond to what is happening, to what is being said, in a way where you're facilitating the communication . . . Reflective practice enables you to communicate better . . . It stems from the art of negotiation.

Contextual Factors Influencing Consultation

Facilitators of CNS consultation included administrative support, the influence of previous CNSs, role models, and peer support:

It was very encouraging to have the support of my director when I was expressing my vision. The nursing department is very supportive in promoting advanced nursing practice, the role of the clinical nurse specialist, and her status as a consultant.²

² Free translation by the researcher, as the interview was conducted in French.

The Consultation Component of the Clinical Nurse Specialist Role

The access to people with experience in the CNS role is very helpful when you're trying to develop your own version of that role. So you have different models. I think it would be very difficult to be the first CNS, [to be] in a place where there had never been a CNS before, because you'd really be flying kind of blind . . . I've had the advantage of having a lot of different role models that I think were helpful.

The CNSs identified interpersonal conflicts as a challenge to consultation activities. Conflicts emerged when there were differences of opinion between the CNS and other health professionals. These were particularly difficult when the CNS was consulted on a problem about which the person in the CNS role was viewed as having the expertise:

Sometimes the physician and I disagree as to what is the best plan of care. Those are always awkward to work with. I guess the ones that don't go well are when the information process doesn't necessarily go through . . . Sometimes there are underlying agendas.

There was overlap between consultation and other role dimensions, such as education and research. Because of their relative lack of research experience, CNSs reported feeling inadequately prepared at the graduate level to undertake academic activities, such as teaching nursing students or acting as a student advisor:

Because you're meant to be an expert in research development . . . for example, mentoring three courses at the university . . . I felt totally unequipped to mentor anybody in the process of developing a clinical research project.

Characteristics of the Consultant (the CNS) and the Consultee

CNSs reported that the success of consultation depended on the type of relationship between the consultant and the consultee and their individual attributes. Professional respect and collaboration were essential. Consultation was seen as the connecting of knowledge and clinical practice with the goal of promoting clinical expertise and empowering health professionals. In this regard, the ability to influence and negotiate with others (nurses, interdisciplinary teams, stakeholders) was seen as particularly beneficial:

I think involving a CNS in the care can be very good for patient outcomes. We have influence in terms of what actually happens to the patient, both in terms of educating the patient and [in terms of] affecting the quality of care that the patient receives. We make it go faster just by our very presence, and we clarify a lot of the ambiguity in the situation . . . The CNS

has a lot of power. It's power of influence, power in terms of affecting the quality of care, influencing programs.

The participants explained that the CNS had to have two sets of abilities. The first set had to do with the individual CNS and included the ability to work on an interdisciplinary team, to influence and negotiate care modalities that are unique to the specific patient, and to move programs forward, as well as reliability and autonomy. The second type was described as competencies. These included expertise in role modelling and coaching as well as the skills required to engage in collaboration/partnership, empowerment, and advocacy.

Discussion

The CNS role is shaped by an understanding of advanced practice nursing, graduate education, organizational expectations, and expertise in a clinical specialty. By sharing their knowledge through consultation, CNSs increase nursing knowledge and effect change, which result in improved nursing practice, quality of care, and health outcomes. Their expertise enables them to negotiate across disciplines and settings with the objective of impacting nursing practice, resource allocation, and program development within the consultation dimension of the CNS role. The participants' power of influence and negotiation were linked to their expertise, leadership, reputation within the organization, ability to verbalize health issues, and past success in negotiating innovative care modalities.

Although CNS role competencies are described as separate entities, in reality they tend to overlap. The participants had difficulty delineating when consultation ended and education began and vice versa. The principal goal of consultation remains sharing knowledge in order to improve quality of care.

The consultation process used by the participants in our study was similar to that described in Barron and White's (2009) model, which guided the development of the research questions and interview guide. Our findings demonstrate that the consultation process is influenced by the relationship that develops between the consultant and the consultee, who each come to the consultation with his or her own characteristics and competencies. Contextual factors, challenges, and strategies also influence the consultation process.

The increase in requests for consultation in "crisis" situations (as identified by the participants) was seen as testament to the fact that the CNS is viewed as an expert in resolving such situations. This is consistent with the literature reporting the CNS to be a role model and skilled communicator with patients and families, team members, and other

health professionals (Ahrens, Yancey, & Kollef, 2003). The participants saw managing crisis situations as being different from managing complex situations, and as occupying much of their consultation time. To our knowledge, the element of crisis management is new in the literature. Development and tracking of indicators that demonstrate the impact and cost-effectiveness of the CNS role remain a source of frustration. However, the participants reported several informal indicators, such as number of consultations about conflicts between health professionals and family members or unplanned “hallway” consultations; these consultations were viewed by the participants as informal because they could not be linked directly to health-care improvement.

The participants in this study found their CNS role to be ambiguous on many levels. Despite efforts to clarify the role, they found that consultees often did not know when to consult the CNS because of constant shifts in roles and expectations. These factors are consistent with descriptions in the literature of role blurring and the invisibility surrounding the indirect work within the three spheres of influence: patient, nursing, and system (Bryant-Lukosius et al., 2004; Darmody, 2005; Davies & Hughes, 1995; Goudreau et al., 2007; Lewandoski & Adamle, 2009; Scott, 1999).

The participants were cognizant of the importance of addressing this ambiguity. Being well aware of what their role entailed, and knowing that the ambiguity stemmed from the changing expectations of their role in response to an evolving environment, they developed two strategies: role clarification, and reflective practice. Role clarification was a deliberate response to other health professionals’ lack of understanding about their role and to the lack of clarity regarding their consultation competencies and objectives. The participants valued reflective practice as a way to develop professionally and solve problems effectively. They also perceived peer support as important, due in part to the diversity of their specialization and the fact that they faced similar system issues. Sharing experiences among each other was an enriching element.

Social Pertinence and Implications

The health-care system faces significant challenges, including a shortage of resources and an aging population requiring more complex and costly care. Our findings indicate that the CNS, by sharing expert knowledge, identifying and resolving health-care issues, responding to crisis situations, ensuring continuity of care, and building care teams, is instrumental in moving the system forward. The privileged position of CNSs in the health-care system enables them to implement, evaluate, and improve the quality of care as they assume the role of consultant in patient care.

This study provides relevant information for nursing leaders and administrators in developing and maintaining the consultation compo-

ment of the CNS role. In order to promote the value of the CNS in the health-care system, the role must be well defined and understood. Administrative support is crucial during development and implementation of the role. Role modelling and mentorship are essential to development of the consultation component of the CNS role, and reflective practice appears to be an interesting approach for improving practice and providing support. Education programs would provide CNSs not only with the theoretical foundation of advanced practice but also with the time and space they need to practise and to observe the implementation of the various role components, including consultation. Research must be given a more prominent place in the academic setting, as well as within the health-care organization, especially if CNSs are to participate in the expansion of nursing science.

Strengths and Limitations

A strength of this study is its examination of the consultation component of the CNS role from the perspective of the CNS. Limitations include the recruitment of CNSs from only one hospital, which was a large institution in an urban setting, and the collection of data from CNSs providing care to adult populations only. Future studies could examine the CNS perspective on the consultation component of their roles in other types of settings and with pediatric populations. They could also examine the perceptions of members of the health-care team about the consultation component of the CNS role.

Conclusion

The goal of this study was to describe the CNS consultation component in an adult hospital setting. Managing crisis situations, ensuring continuity of care, and supporting the development of individuals or health-care teams are key areas of consultation. Role ambiguity perceived by other professionals and constant demands and expectations from a changing environment constitute the major challenges of CNS practice requiring that they continuously clarify their role. It is essential that exploration and documentation of activities and outcomes related to the consultation component of their role be continued.

References

- Ahrens, T., Yancey, V., & Kollef, N. (2003). Improving family communication at the end of life: Implications for length of stay in the intensive care unit and resource use. *American Journal of Critical Care*, 12(4), 317–323.
- Barron, A. M., & White, P. A. (2009). Consultation. In A. B. Hamric, J. A. Spross, & C. M. Hanson (Eds.), *Advanced practice nursing: An integrative approach* (4th ed.) (pp. 191–216). Philadelphia: W. B. Saunders.

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- Bryant-Lukosius, D., DiCenso, A., Browne, G., & Pinelli, J. (2004). Advanced practice nursing roles: Development, implementation and evaluation. *Journal of Advanced Nursing*, 48(5), 519–529.
- Canadian Nurses Association. (2008). *Advanced nursing practice: A national framework*. Ottawa: Author.
- Canadian Nurses Association. (2009). *Clinical nurse specialist: Position statement*. Ottawa: Author.
- Caplan, G. (1970). Definition of mental health consultation. In *The theory and practice of mental health consultation* (pp. 19–34). New York: Basic Books.
- Darmody, J.V. (2005). Observing the work of the clinical nurse specialist. *Clinical Nurse Specialist*, 19(5), 260–268.
- Davies, B., & Hughes, A. M. (1995). Clarification of advanced practice nursing: Characteristics and competencies. *Clinical Nurse Specialist*, 9, 156–160.
- Dunn, L. (1997). A literature review of advanced clinical nursing practice in the United States of America. *Journal of Advanced Nursing*, 25, 814–819.
- Fulton, J. S., & Baldwin, K. (2004). An annotated bibliography reflecting CNS practice and outcomes. *Clinical Nurse Specialist*, 18(1), 21–39.
- Goudreau, K. A., Baldwin, K., Clark, A., Fulton, J., Lyon, B., Murray, T., et al. (2007). A vision of the future for the clinical nurse specialist. Prepared by the National Association of Clinical Nurse Specialists. *Clinical Nurse Specialist*, 21(6), 310–320.
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurses Education Today*, 24, 105–112.
- LaSala, C. A., Connors, P. M., Pedro, J. T., & Phipps, M. (2007). The role of the clinical nurse specialist in promoting evidence-based practice and effective positive patient outcomes. *Journal of Continuing Education in Nursing*, 38(6), 262–270.
- Lewandowski, W., & Adamle, K. (2009). Substantive areas of clinical nurse specialist practice. *Clinical Nurse Specialist*, 23(2), 73–90.
- Lloyd Jones, M. (2005). Role development and effective practice in specialist and advanced practice roles in acute hospital settings: Systematic review and meta-synthesis. *Journal of Advanced Nursing*, 49(2), 191–209.
- Loiselle, C., Profetto-McGrath, J., Polit, D. F., & Beck, C. (2004). Understanding qualitative research and methodology. In C. Loiselle, J. Profetto-McGrath, D. F. Polit, & C. Beck, *Canadian essentials of nursing research* (pp. 207–232). Philadelphia: Lippincott Williams & Wilkins.
- Macnee, C. L. (2004). *Understanding research: Reading and using research in practice*. Philadelphia: Lippincott Williams & Wilkins.
- Miles, M. B., & Huberman, A. M. (2003). Introduction. In M. B. Miles & A. M. Huberman, *Analyses des données qualitatives* (pp. 11–36). Brussels: De Boeck.
- National Association of Clinical Nurse Specialists. (2004). *Statement on clinical nurse specialist practice and education*. Harrisburg, PA: Author.
- Pauly, B., Schreiber, R., MacDonald, M., Davidson, H., Crickmore, J., Moss, L., et al. (2004). Dancing to our own tune: Understandings of advanced nursing practice in British Columbia. *Canadian Journal of Nursing Leadership*, 17(2), 47–57.

- Scott, R. A. (1999). A description of the roles, activities, and skills of the clinical nurse specialist in the United States. *American Association of Critical Care, Clinical Issues*, 13(4), 183–190.
- Sparacino, P. S. A., & Cartwright, C. C. (2009). The clinical nurse specialist. In A. B. Hamric, J. A. Spross, & C. M. Hanson (Eds.), *Advanced practice nursing: An integrative approach* (4th ed.) (pp. 349–379). Philadelphia: W. B. Saunders.
- Urden, L. (1999). Outcome evaluation: An essential component of CNS practice. *Clinical Nurse Specialist*, 13(1), 39–46.

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Happenings

Resources to Facilitate Research in Advanced Practice Nursing

Renée Charbonneau-Smith, R. James McKinlay, Julie U. Vohra

The Canadian Health Services Research Foundation/Canadian Institutes of Health Research (CHSRF/CIHR) Chair in Advanced Practice Nursing (APN) is held by Dr. Alba DiCenso. The Chair Program in APN has a 10-year mandate to increase the number of nurse researchers in Canada conducting policy-relevant research related to APN. The Chair Program facilitates the conduct and uptake of APN-related research through the education and mentoring of researchers and linkages with decision-maker partners. Central to its activities are partnerships with decision-making organizations that both advise on the relevance of projects for their decision-making needs and disseminate the evidence that is generated (Bryant-Lukosius, Vohra, & DiCenso, 2009).

The Chair Program has produced a number of resources to support the conduct and application of APN-related research. The following resources will be briefly described below: (1) **Participatory, Evidence-Based, Patient-Centred Process for APN Role Development, Implementation, and Evaluation (PEPPA framework)**; (2) graduate course on APN research methods; (3) workshop on evidence-informed decision-making; (4) toolkit on APN data collection; (5) database on APN literature; and (6) policy briefs to disseminate research findings. Many of these resources can be freely accessed via the Chair Program Web site (<http://www.apn-nursingchair.mcmaster.ca>).

PEPPA Framework

The PEPPA framework was created to provide a guide for APN researchers, health-care providers, administrators, and policy-makers in optimally developing and implementing APN roles (Bryant-Lukosius & DiCenso, 2004).

The framework comprises a nine-step process (see Figure 1). Steps 1 to 6 focus on establishing role structures. This includes health-care decision-making and planning around the need to develop and implement a

new model of care that may require an APN role. Step 7 concerns role processes and entails initiating the implementation plan and introducing the APN role. Steps 8 and 9 include the short- and long-term evaluations of the APN role and the new model of care to assess progress and sustainability in achieving predetermined goals and outcomes. A core component of this step-by-step approach is the collective involvement of key stakeholders, including patients, in the planning and evaluation process (Bryant-Lukosius & DiCenso, 2004).

The PEPPA framework has been used to guide systematic programs of research focused on the nurse practitioner (NP) role in long-term-care (Donald et al., 2009; McAiney et al., 2008) and specialty settings (McNamara, Giguère, St-Louis, & Boileau, 2009), APN roles in oncology (Bryant-Lukosius et al., 2007; Martelli-Reid et al., 2007), and advanced physiotherapist roles (Robarts, Kennedy, MacLeod, Findlay, & Gollish, 2008). It is being used by regional health authorities to implement new NP roles (Advanced Practice Nursing Steering Committee, Winnipeg Health Authority, 2005; Sawchenko, 2007) and to develop policies to support the implementation of clinical nurse specialist (CNS) roles (Avery, Hill-Carroll, Todoruk-Orchard, & DeLeon-Demare, 2006). For more information about the framework, visit <http://www.apnnursingchair.mcmaster.ca/peppa.html>.

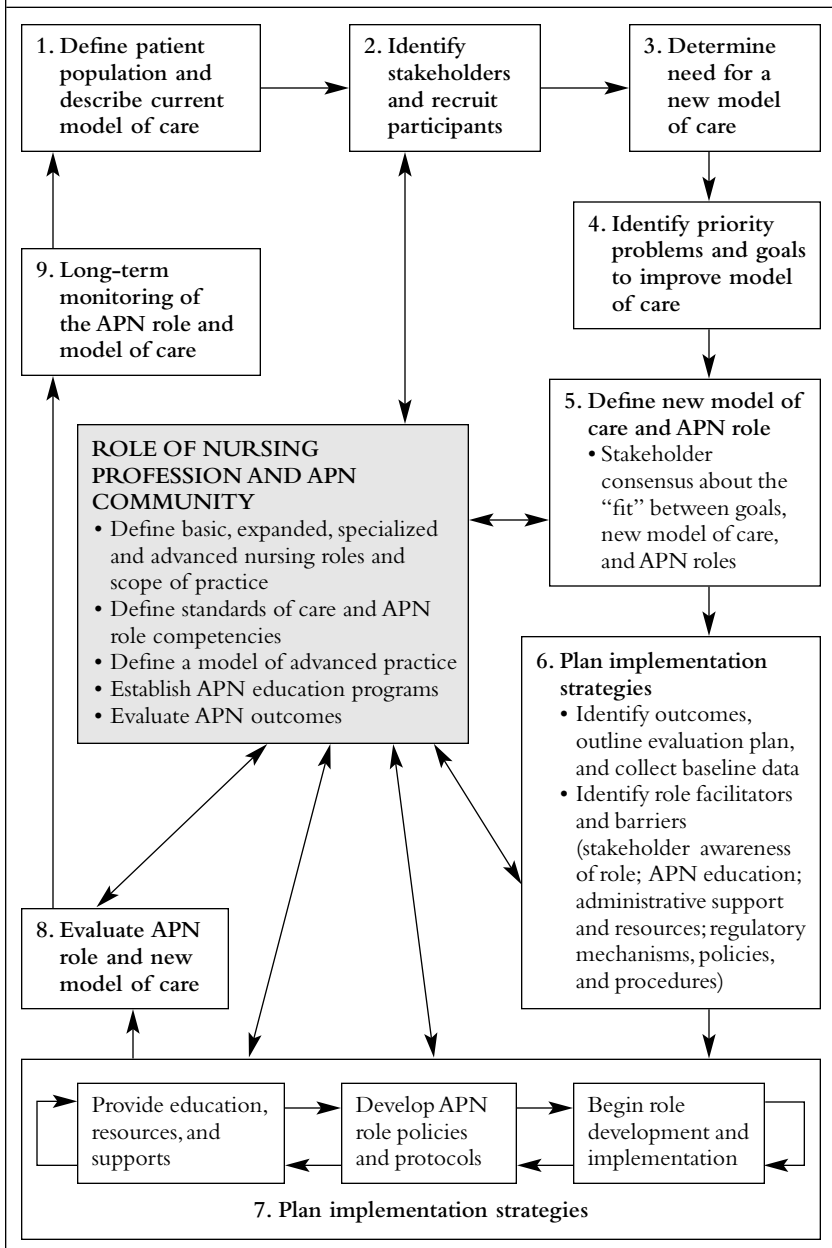
Graduate Course on APN Research Methods

Every spring since 2003, the Chair Program has offered a distance graduate course titled Research Issues in the Introduction and Evaluation of Advanced Practice Nursing Roles that is open to graduate students, practising advanced practice nurses, nurse managers, and other health-care decision-makers involved in the development of APN roles. In the course, students from across Canada examine definitions and models of advanced nursing practice, learn the research designs and methods for applying each step of the PEPPA framework in the introduction and evaluation of new APN roles, examine strategies for developing effective partnerships with decision-makers, and learn how to write an APN-related research proposal. The course combines face-to-face and distance education modalities and is taught in a small group using problem-based learning. At the end of the course, each student defends a peer- and faculty-reviewed APN-focused research proposal. More information can be found at http://www.apnnursingchair.mcmaster.ca/education_learning.html.

Workshop on Evidence-Informed Decision-Making

The Evidence-Informed Decision Making Workshop is a 1-week intensive course offered annually by the Canadian Centre for Evidence-Based

Figure 1 *The PEPPA Framework: A Participatory, Evidence-Based, Patient-Centred Process for Advanced Practice Nursing Role Development, Implementation, and Evaluation*



Nursing at McMaster University. Evidence-informed decision-making (EIDM) is the purposeful and systematic use of the best available evidence to inform the assessment of various options and related decision-making in practice, program development, and policy-making. One of the small groups is APN-focused. It comprises advanced practice nurses, educators, administrators, and policy-makers seeking to expand their EIDM skills specifically related to the development, implementation, and evaluation of APN roles. This workshop helps participants to hone their skills in searching for and accessing evidence and critically appraising its relevance and quality; interpreting and applying the evidence; and identifying strategies for implementing evidence-informed decisions. For further information, visit http://www.apnnursingchair.mcmaster.ca/education_learning.html or <http://ccebnc.mcmaster.ca>.

Toolkit on APN Data Collection

The APN Data Collection Toolkit is a free Web-based, publicly accessible compendium of instruments used in APN research designed to assist researchers and decision-makers who develop, implement, and/or evaluate APN roles. The goal of the toolkit is to allow decision-makers to quickly access APN-related data-collection instruments, assist researchers in designing APN studies, and help students in planning their own APN research. The toolkit assembles both qualitative and quantitative instruments that have been used to collect data in APN-related studies, including instruments that may be useful in answering questions that are clinically focused or that relate to health services (Bryant-Lukosius, Vohra, & DiCenso, 2009; Vohra & Bryant-Lukosius, 2009).

The instruments are organized according to the steps in the PEPPA framework. Information listed on the Web site includes a summary of psychometric properties, other APN studies that have used the instrument, author contact information, and, where available, the instrument in PDF form. New summaries are continually added as they are completed; an example of an instrument summary is presented in Figure 2. The toolkit can be freely accessed at <http://apntoolkit.mcmaster.ca>.

Database on APN Literature

The APN Literature Database is associated with McMaster University's Health Information Research Unit. It is a freely available, Web-based keyword-searchable database of published papers and grey literature related to the development, implementation, and evaluation of APN roles. The database was designed for practitioners, decision-makers, policy-makers, managers, researchers, and graduate students who need to quickly locate literature related to APN roles. It includes APN-based primary

studies, literature reviews, policy documents, and theoretical and practice-based papers. The search is updated every 4 months, with new results uploaded to the database. The database is searchable using keywords, authors, and/or year of publication and can be freely accessed at <http://plus.mcmaster.ca/searchapn/QuickSearch.aspx>.

Figure 2 <i>Sample APN Toolkit Entry – Instrument to Measure Practice Patterns of Nurse Practitioners in Long-Term Care Related to Pain Management</i>	
Original Citation	Kaasalainen S, DiCenso A, Donald FC, Staples E. Optimizing the role of the nurse practitioner to improve pain management in long-term care. <i>Can J Nurs Res.</i> 2007 Jun;39(2):14–31.
Contact Information	Please see website for details.
Price and Availability	Contact author for permission to use. Visit APN Toolkit website to view instrument.
Brief Description of Instrument	Examines the practice patterns of NPs in long-term care with a focus on pain management. Checklist of what activities are currently preformed by the NP in regards to pain management, and what activities NP should be performing. Identifies barriers to and facilitators of NP role implementation in pain management (open ended response).
Administration Time	15–20 minutes.
Scale Format	Primarily yes/no, short answer, open-ended.
Administration Technique	Self-administered questionnaire.
Scoring and Interpretation	Counts/frequencies. Content analysis of open-ended responses. Item frequencies reported in citation.
Content and Face Validity	Items based on results of literature review and review of similar instruments. Reviewed by NPs, representatives of nursing and physician organizations for face and content validity.

Policy Briefs

An important knowledge translation strategy for disseminating research findings is the creation of policy briefs. These targeted one-page plain language summaries of policy-relevant APN research are developed for each student thesis project as well as for all APN research projects produced through the Chair Program. A feature of the policy briefs is a highlight of the main issue leading to, and the purpose of, the current research followed by a brief description of its methods, findings, and implications. Each policy brief ends with its most visible feature, the Bottom Line, which is a one-sentence summary of the impact of the research. Policy briefs are a quick and easy way to disseminate research findings to policy-makers, decision-makers, and fellow researchers. To see an example of a policy brief, visit <http://www.apnnursingchair.mcmaster.ca/whatsnew.html>.

Conclusion

Over the last 8 years the CHSRF/CIHR Chair Program in APN has developed a wide range of freely accessible evidence-based resources to assist advanced practice nurses, novice and seasoned researchers, and health-care decision-makers in systematically developing, implementing, and evaluating APN roles. National long-term research funding has been key to the development of these resources that support practice- and policy-relevant APN research in Canada and internationally.

References

- Advanced Practice Nursing Steering Committee, Winnipeg Regional Health Authority. (2005). *A guide to the implementation of the nurse practitioner role in your health care setting*. Retrieved January 21, 2008, from http://www.wrha.mb.ca/staff/nursing/files/np_toolkit_000.pdf.
- Avery, L., Hill-Carroll, C., Todoruk-Orchard, M., & DeLeon-Demare, K. (2006). *Improve patient care and outcomes: Adding a clinical nurse specialist to your team. A guide for successful integration*. Winnipeg Regional Health Authority. Retrieved February 4, 2010, from http://www.wrha.mb.ca/professionals/nursing/files/cns_toolkit.pdf.
- Bryant-Lukosius, D., & DiCenso, A. (2004). A framework for the introduction and evaluation of advanced practice nursing roles. *Journal of Advanced Nursing*, 48(5), 530-540.
- Bryant-Lukosius, D., Green, E., Bakker, D., Paulse, B., Wiernikowski, J., Snider, A., et al. (2007). *Increasing capacity for the effective implementation of oncology APN roles for under-served populations: A collaborative, facilitative approach*. Retrieved July 10, 2008, from <http://www.changefoundation.ca/nursingawards.html>.

- Bryant-Lukosius, D., Vohra, J., & DiCenso, A. (2009). Resources to facilitate APN outcomes research. In R. Kleinpell (Ed.), *Outcome assessment in advanced practice nursing* (2nd ed.) (pp. 277–296). New York: Springer.
- Donald, F., Mohide, E. A., DiCenso, A., Brazil, K., Stephenson, M., & Akhtar-Danesh, N. (2009). Nurse practitioner and physician collaboration in long-term care homes: Survey results. *Canadian Journal on Aging*, 28(1), 77–87.
- Martelli-Reid, L., Bryant-Lukosius, D., Arnold, A., Ellis, P., Goffin, J., Okawara, G., et al. (2007, October 29). *A model of interprofessional research to support the development of an advanced practice nursing role in cancer care*. Poster presentation at the Canadian Association of Nurses in Oncology Conference, Vancouver.
- McAiney, C. A., Haughton, D., Jennings, J., Farr, D., Hillier, L., & Morden, P. (2008). A unique practice model for nurse practitioners in long-term care homes. *Journal of Advanced Nursing*, 62(5), 562–571.
- McNamara, S., Giguere, V., St-Louis, L., & Boileau, J. (2009). Development and implementation of the specialized nurse practitioner role: Use of the PEPPA framework to achieve success. *Nursing and Health Sciences*, 11(3), 318–325.
- Robarts, S., Kennedy, D., MacLeod, A. M., Findlay, H., & Gollish, J. (2008). A framework for the development and implementation of an advanced practice role for physiotherapists that improves access and quality care for patients. *Healthcare Quarterly*, 11(2), 67–75.
- Sawchenko, L. (2007). An evidence-informed approach to the introduction of nurse practitioners in British Columbia's Interior Health Authority. *Links*, 10(3), 4. Retrieved February 4, 2010, from http://www.chsrf.ca/other_documents/newsletter/pdf/links_v10n3_e.pdf.
- Vohra, J., & Bryant-Lukosius, D. (2009). The Advanced Practice Nursing Data Collection Toolkit: A compendium of research tools. *Topics in Advanced Practice Nursing E Journal*, October 7.

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Book Reviews

Advanced Practice Nursing: An Integrative Approach (4th ed.)

Edited by Ann B. Hamric, Judith A. Spross, Charlene M. Hanson
St. Louis: Saunders Elsevier, 2009, 822 pp.
ISBN 978-1-4160-8

Reviewed by Marjorie MacDonald

This is the fourth edition of the popular textbook on advanced practice nursing (APN) in the United States. Because there is no similar Canadian text on APN, this is the one most likely to be used in nursing schools across the country. We use it in more than one course in the graduate programs in my own school. This latest edition meets the standard set by previous editions in terms of its comprehensive coverage of key issues and topics relevant to American advanced practice nurses, educators, and administrators. Many of the issues are less relevant to the Canadian context because of the different stage of APN development in Canada, differences in our definition of APN, different health-care systems, and significant regulatory and reimbursement differences. This concern will be taken up below.

Overall, this edition is thoroughly up to date, incorporating the latest literature and research. The chapter authors are well known in their respective areas of expertise. The book's organization and framework are comprehensive and cohesive, and the content flows logically from the book's underlying premises, which are unchanged from the previous edition. The editors continue to express the conviction that APN must have a defined core to provide a framework that standardizes the understanding of advanced practice across the profession. The entire text explicates that core in relation to the focus of each major part of the book.

Each previous edition has included significant new content, and this edition is no different. The content is divided into four sections: Historical and Developmental Aspects of APN, Competencies of APN, Advanced Practice Roles: The Operational Definitions of APN, and Critical Elements in Managing APN Environments. The first part, containing four chapters, focuses on the history of APN development in the United States, conceptualizations and definitions of APN, and role development. New topics have been added, including research on the history of prescriptive authority and recent work to conceptualize APN emerging from the APRN Joint Dialogue Group (2008). Chapter 3

contrasts the more expansive definition of APN put forward in the document *Essentials of Doctoral Education for Advanced Nursing Practice* (American Association of Colleges of Nursing, 2006) with the narrower definition reflected in this book, which embodies a hegemonic American perspective and which arguably conflicts with the developing conceptualization of APN in Canada. The danger lies in Canadian nurses uncritically adopting this US perspective without careful consideration of the uniquely Canadian values undergirding our health-care system and our definition of nursing, which includes individuals, families, groups, communities, and populations as clients. Given that public health nurses were not at the table for a consensus meeting to define the nature of APN practice in the United States (APRN Joint Dialogue Group, 2008), it is no surprise that the nature and focus of public health nursing, for example, would be excluded from consideration as a definitional feature of APN. There is a significant but marginalized opposition in the United States to the definition of APN presented in this book. In chapter 2 Hamric acknowledges that many different definitions and interpretations of APN exist in the United States but argues that for APN to achieve its full potential the profession must agree on key issues, such as definition.

Part 2 of the book outlines the seven core competencies of APN: direct clinical practice, expert coaching and guidance, consultation, research, leadership, collaboration, and ethical decision-making. Some new content has been included in this edition. For example, in chapter 9 the notion of systems leadership has been added to that of clinical and professional leadership. Also, the argument that direct clinical practice includes *only* practice with individuals and families has been strengthened within the definition of APN in chapter 5. It is this definition that some nursing specialties, most notably public health nursing, take particular exception to. I was very pleased to see that social justice, however brief and narrowly understood, has been added to the conceptualization of advanced practice as it relates to ethical decision-making. A social justice focus has a long history in public health nursing, and it is interesting to see the emerging emphasis on social justice in APN at the same time that public health nursing is being excluded from its definition.

In part 3 the editors include a discussion of the various established APN roles (Clinical Nurse Specialist, Primary Care and Acute Care Nurse Practitioner, Nurse Anesthetist, Nurse Midwife) as well as the blended role of clinical nurse specialist/nurse practitioner and currently emerging APN specialties such as the NP Hospitalist role, Forensic Nursing, and Wound, Ostomy, and Continence Nursing. One chapter that was included in the third edition (The Advanced Practice Nurse

Case Manager) has been eliminated entirely from part 3 of this new edition, although no explanation for this decision is provided in the preface or the early chapters. In the previous edition, the case manager role was discussed as a new APN role and the chapter authors expressed some uncertainty with respect to whether the APN Case Manager role would become a sanctioned APN specialty. Its absence from this edition suggests that the editors have concluded that Case Manager is not a unique advanced practice role.

In the Canadian context, only two APN roles have been identified: nurse practitioner (NP) and clinical nurse specialist (CNS). Although the Nurse Anesthetist role is emerging in Ontario, its future is uncertain and it seems unlikely that an Advanced Practice Nurse/Midwife role will be developed in Canada, although advanced midwifery practice may well develop (MacDonald, Schreiber, & Davis, 2005). I worry that at this stage of APN's development in Canada, restricting the definition of APN to established roles will defeat the opportunity for the emergence of new forms of advanced practice. An earlier study of opportunities and challenges for advanced practice in Canada (Schreiber et al., 2003) identified many nurses who exemplified the characteristics and competencies of advanced practice according to the CNA Framework on Advanced Nursing Practice. These nurses did not, however, fit the role definitions of NP or CNS. Are we to leave these innovative practices out of consideration? I would argue that this is one of the dangers of adopting, uncritically and in its entirety, the American conceptualization of advanced practice nursing reflected in this book.

In part 4 the authors discuss in some depth the various environments within which American APNs must practise, and they provide good direction on how to manage practice in those environments. Some of the chapters have less relevance to APN practice in Canada — for example, business planning and reimbursement mechanisms. Others, however, are quite relevant and very useful; these include the chapter on strengthening APN in organizational structures and cultures. Another change is that the final chapter in the third edition, Outcome Evaluation and Performance Improvement, has been divided into two chapters in the fourth edition, one providing an excellent integrative review of the research on APN outcomes and the other discussing the use of data and information technology to improve practice.

Overall, this is an excellent, comprehensive, well-written text on the status, development, issues, and conceptualization of APN in the United States. There is much here to learn from and to use in our teaching and practice in Canada, but I recommend that we view it through a critical lens.

References

- American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice*. Retrieved January 26, 2010, from <http://www.aacn.nche.edu/DNP/pdf/Essentials.pdf>.
- APRN Joint Dialogue Group. (2008). *Consensus model for APRN regulation: Licensure, accreditation, certification and education. APRN Joint Dialogue Group report*. Retrieved January 26, 2010, from <http://www.aacn.nche.edu/Education/pdf/APRNReport.pdf>.
- MacDonald, M., Schreiber, R., & Davis, L. (2005). *Exploring new roles for advanced nursing practice. A discussion paper*. Ottawa: Canadian Nurses Association.
- Schreiber, R., MacDonald, M., Davidson, H., Moss, L., Pinelli, J., Regan, S., et al. (2003). *Advanced nursing practice: Opportunities and challenges in British Columbia. Final report*. Victoria: University of Victoria. Retrieved January 28, 2010, from <http://nursing.uvic.ca/people/documents/ANPFinalReport.pdf>.

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Outcome Assessment in Advanced Practice Nursing (2nd ed.)

Edited by Ruth M. Kleinpell
New York: Springer, 2009, 311 pp.
ISBN 978-0-8261-2583-5

Reviewed by Joan Tranmer

Assessing the outcomes of advanced practice nursing (APN) care is imperative, especially in economically and socially challenging times. Ruth M. Kleinpell has provided advanced practice nurses, researchers, and decision-makers with an updated book on strategies and resources relevant to the assessment of outcomes of advanced nursing practice. The chapters in the book, authored by experts in their fields, provide theoretical and practical overviews of APN outcomes research, measurement strategies for specific nursing specialties and patient conditions, and, importantly, a framework for developing APN roles and assessing their effectiveness.

The first part of the book focuses on methodological issues in outcomes research. Chapter 1 sets the stage by identifying and classifying types of outcomes relevant to the assessment of APN interventions, including outcomes related to care, patients, and performance, and studies in which these outcome measures have been assessed. Chapter 2, *Analyzing Economic Outcomes in Advanced Practice Nursing*, provides an overview of types of economic evaluation analyses and details for the practitioner and researcher to consider when incorporating economic evaluation into their assessments. This is extremely valuable information, and it is presented in a comprehensive but succinct manner. Chapter 3 clearly presents the challenges faced by advanced practice nurses in selecting both nurse-sensitive and organizationally relevant outcomes. Issues related to data availability and efficiency and specificity of measures are discussed. Chapter 4, *General Design and Implementation Challenges in Outcome Assessment*, outlines common design issues, such as ensuring that the study design and purpose are linked; selecting objective, measurable, and relevant outcomes; and maximizing the design and analysis to link cause and effect, and not solely associations. One of the more helpful suggestions in this chapter is to use, where possible, established theoretical or organizing frameworks. The final chapter in this first section provides advice on locating outcome measurement assessment tools for APN. The first five chapters of the book serve as a comprehensive template for advanced practice nurses to use when planning outcome assessment and evaluation of practice in their organization.

The next five chapters are centred on outcome assessment methodologies relevant to cardiovascular nursing, ambulatory care, clinical nurse specialist practice, nurse-midwifery, and advanced practice in nurse anesthesia. Each chapter details specific examples or illustrations of relevant outcome measures, study questions/designs, and analysis of findings. The case examples illustrate very clearly the pitfalls, challenges, and opportunities associated with outcome assessment. In this group of chapters, the different roles and scopes of practice for the various APN positions are impressive. For example, the chapter in which Nancy Dayhoff and Brenda Lyon explore outcome assessment in clinical nurse specialist practice illustrates the broad and complex scope of the CNS role. These authors provide a very useful summary that categorizes the outcomes of CNS practice and roles across three spheres of influence — patient-client, nurse, and organization-network — and give examples of advanced practice interventions and potential evaluation strategies.

The final chapter of the book, *Resources to Facilitate APN Outcomes Research*, offers an overview of three key resources to facilitate APN research: an innovative Research Chair Program sponsored by the Canadian Health Services Research Foundation, an evaluation framework, and an APN data-collection toolkit. The chair of the Research Chair Program, and a co-author of this chapter (Alba DiCenso), articulates the impact of a well-funded chair program in increasing the capacity of applied APN research at both a clinician and a graduate-student level. One of the key outputs of the Research Chair Program has been the development, by another co-author (Denise Bryant-Lukosius) during her doctoral and postdoctoral studies, of the **P**articipatory, **E**vidence-Based, **P**atient-Centred **P**rocess for **A**dvanced Practice Nursing Role Development, Implementation, and Evaluation — the PEPPA framework. The PEPPA framework is a nine-step process, including steps related to establishing roles and structures, implementation processes, and evaluation. As the authors state, there is sufficient evidence to support the effectiveness of APN roles, but now the questions need to focus on the identification of those patient populations, conditions, and models of care in which APN roles are most effective.

The editor and authors of this book are to be commended for providing an important resource for advanced practice nurses and nurses in leadership and professional practice positions who are challenged to develop and evaluate models of nursing care delivery. Outcomes assessment and evaluation are necessary for the future development and growth of nursing. *Outcome Assessment in Advanced Practice Nursing* is an important resource for fulfilling this professional mandate.

Book Reviews

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Relations infirmière-médecin et qualité des soins : constats découlant d'une enquête nationale auprès des infirmières

**Chris Kenaszchuk, Kathryn Wilkins, Scott Reeves,
Merrick Zwarenstein, Ann Russell**

L'article s'intéresse au rapport entre les relations professionnelles infirmière-médecin et l'évaluation par les infirmières des soins que prodigue l'équipe des soins infirmiers. Le projet se fonde sur un échantillon représentatif d'infirmières autorisées travaillant dans des hôpitaux au Canada. On a eu recours à une analyse de régression logistique multiple pour examiner le lien entre les interactions interprofessionnelles et les rapports des infirmières concernant une prestation moyenne ou médiocre des soins par l'équipe pendant le dernier quart de travail effectué. On a constaté un lien significatif entre la qualité des relations infirmière-médecin et la qualité des soins prodigués par l'équipe d'infirmières, après avoir neutralisé les autres facteurs potentiels. Ces facteurs, qui ont tous une incidence sur la qualité des soins, comprennent : un faible degré de collaboration entre infirmières, l'insatisfaction au travail et un mauvais état de santé signalé par les intéressées. L'analyse met en lumière le rôle important que jouent les relations interprofessionnelles dans l'évaluation par les infirmières de la qualité des soins dans les hôpitaux canadiens.

Mots clés : relations interprofessionnelles, qualité des soins, relations infirmière-médecin

Nurse–Physician Relations and Quality of Nursing Care: Findings From a National Survey of Nurses

**Chris Kenaszchuk, Kathryn Wilkins, Scott Reeves,
Merrick Zwarenstein, Ann Russell**

This article investigates the association between nurse–physician working relations and nurse-rated quality of nursing team care. The analysis is based on a nationally representative sample of registered nurses working in Canadian hospitals. Multiple logistic regression was used to examine the association between the quality of nurse–physician working relations and nurses’ reports of fair or poor nursing team care on the last shift worked. Unfavourable quality of nurse–physician working relations was significantly related to lower quality of nursing team care, controlling for other potential influences. These influences included low nurse co-worker support, job dissatisfaction, and self-rated poor general health, each of which was also related to lower care quality. The analysis highlights the importance of interprofessional working relations to nurse-perceived quality of patient care in Canadian hospitals.

Keywords: nurse relationships/professional issues, interprofessional care, nursing roles, care delivery, quality of patient care, nurse–physician collaboration, National Survey of the Work and Health of Nurses

Introduction

The Institute of Medicine’s (2001) finding of “abundant evidence of poor quality” health care (p. 226) and the recent nursing shortage have motivated re-examinations of health-care quality. Novel approaches to nursing quality-of-care measurement are emerging, including at least one psychometric survey instrument (Lynn, McMillen, & Sidani, 2007) and the National Database of Nursing Quality Indicators (Gallagher & Rowell, 2003). In spite of these efforts, a gap still exists, because until recently nurses’ views on quality of care have largely been missing.

A relatively new source of survey data on nursing care quality is a self-perceived evaluation scale that uses qualitative, ordered-categorical rating scales. Results from several surveys have been reported, and the majority view of nurses has been that the quality of care on their units and wards is frequently good, very good, or excellent (American Nurses Association, 2005; Gunnarsdóttir, Clarke, Rafferty, & Nutbeam, 2007; Rafferty, Ball, & Aiken, 2001; Rafferty et al., 2007; Shindul-Rothschild,

Long-Middleton, & Berry, 1997; Ulrich, Buerhaus, Donelan, Norman, & Dittus, 2005; Van Bogaert, Clarke, Vermeyen, Meulemans, & Van de Heyning, 2009; West, Barron, & Reeves, 2005). For example, the American Nurses Association (2005) reports that the 76,000 nurse respondents to its RN Satisfaction Report typically rated the quality of care provided on their unit as good to excellent. In every survey, however, a sizeable number of respondents have judged some aspects of quality of care to be at the lower end of these scales. For instance, data from the *American Journal of Nursing's* 1996 Patient Care Survey (Shindul-Rothschild et al., 1997) showed that 14% of nurses rated quality of care as poor or very poor. Data from the International Hospital Outcomes Study (Rafferty et al., 2001) showed that quality of care was judged as fair or poor by between 10% and 20% of nurses. Recent studies from European nations report nurse-assessed rates of fair or poor care quality of 5.8% (Gunnarsdóttir et al., 2007), 16.0% (Rafferty et al., 2007), and 29.0% (Van Bogaert et al., 2009). We believe there is cause for concern when nurses are unable to reach unanimity on whether care quality is very good or excellent as opposed to fair or poor.

Studies of the nursing work environment (e.g., Aiken & Patrician, 2000; Lake, 2002) — stemming in part from the nursing shortage — have dominated recent nursing research. Much empirical work has attempted to identify the impact of the nursing work environment on nurses' job satisfaction and implications for quality of nursing care. The objective of this article is to examine the association between an important aspect of the nursing work environment — nurses' self-reported working relations with physicians — and nurse-reported quality of nursing team care. We use recent data from a nationally representative survey of Canadian nurses.

Literature Review

Physicians and nurses frequently have difficulty working together, partly because the power relationship between the professions has not been symmetrical (Becker, Geer, Hughes, & Strauss, 1961; Reeves, Nelson, & Zwarenstein, 2008; Stein, 1967). Medical knowledge and authority have been found to dominate clinical decision-making over nursing knowledge, with a result that — from the nursing perspective — the nursing role becomes under-valued (Coombs & Ersser, 2004).

Observational evidence has linked nurse-physician relations with patient outcomes. Nurse perceptions of good nurse-physician collaboration were correlated with reduced mortality risk and readmission to intensive care units (Baggs, Ryan, Phelps, Richeson, & Johnson, 1992). Several reports have linked favourable nurse-physician relations with

higher nurse-perceived quality of care among, for example, oncology nurses (Friese, 2005), US magnet hospital nurses (Kramer & Schmalenberg, 2003, 2005), UK nurses participating in the International Hospital Outcomes Study (Rafferty et al., 2001), and Icelandic (Gunnarsdóttir et al., 2007) and Belgian (Van Bogaert et al., 2009) nurses. In a study involving intensive care nurses, quality of nurse-physician communication was related to the perceived frequency of medication errors as reported by nurses, but was not related to reports of ventilator-associated pneumonia or catheter-related sepsis (Manojlovich & DeCicco, 2007).

This article contributes to the body of evidence on nurse-physician relations and quality of nursing team care. First, it enlarges the time periods covered by most research to date — the magnet hospitals studies (the 1980s) and the International Hospital Outcomes Study (IHOS; 1998–99). It expands the investigation into the current decade, through 2005, to supplement other reports (Gunnarsdóttir et al., 2007; Van Bogaert et al., 2009). Second, we extend results on perceived quality of nursing team care in Canada to a nationally representative sample of nurses; previous Canadian results associated with the IHOS were based on samples of hospital nurses from three targeted provinces (Sochalski & Aiken, 1999). Third, the article estimates the specific association between nurse-physician relations and nurse-reported quality of nursing team care, while controlling for potential confounders. This is important because only a few investigations have subjected the nurse-physician relations construct to explanatory challenges in a multiple regression framework (e.g., Gunnarsdóttir et al., 2007; Van Bogaert et al., 2009). These investigations found some associations between facets of the nursing work environment and perceived quality of nursing care to be statistically significant and others not. Nurse-physician relations were significantly associated with nurse-rated quality of patient care in both, however.

Two other reports include nurse-physician relations as predictors of nurse-assessed care quality (Aiken, Clarke, & Sloane, 2002; Laschinger, Shamian, & Thomson, 2001). Both report statistically significant mediated or direct relationships in expected directions between nurse-physician relations and nursing care quality. The difficulty with these studies, however, is that the measure of nurse-physician relations was aggregated into higher-order constructs of “organizational characteristics” and “organizational supports.” The coefficients reported by these studies are not purely estimates of the effects of nurse-physician relations; rather, they are estimates of the effects of an amalgam of multiple indicators of the nursing work environment, and they do not disentangle specific effects of nurse-physician relations on nurse-reported care quality from effects of other nursing work environment factors. In the report by Laschinger

et al. (2001), it is difficult to discern whether the multiple indicators of organizational characteristics are formulated as the measurement side of the structural equation model or are constructs calculated in some other way.

Past reports suggest the existence of a constellation of nursing practice factors and related individual outcomes. These relationships are correlational and have been tested as directional associations flowing from nursing work environment factors such as nurse-physician collaboration to negative outcomes, including job dissatisfaction, job stress, and low reported quality of care. Hence, investigations of perceived nursing care quality likely can be focused and expanded to good effect: focused around effects of nurse-physician relations and expanded to include effects of explanatory variables that have heretofore been viewed as endogenous to the nursing work environment. This article reconceives these associations by casting several nurses' outcomes as explanatory factors for perceived quality of nursing care and pits them against one another in a logistic regression model.

Methods

Design and Data Source

The 2005 National Survey of the Work and Health of Nurses (NSWHN) was conducted by Statistics Canada in collaboration with the Canadian Institute for Health Information and Health Canada (Shields & Wilkins, 2006). This was a nationally representative survey that collected cross-sectional information from regulated nurses in Canada. It included questions on nurses' physical and mental health, job functions, work environments, and perceived quality of care given to patients.

The NSWHN sample was drawn using a stratified design to ensure adequate sample sizes for each of the 10 Canadian provinces and the combined northern territories and for each of three types of nurses. For the defined strata, the sample was selected at random from membership lists provided to Statistics Canada by the 26 provincial and territorial nursing organizations and regulating bodies representing all registered nurses (RNs), licensed practical nurses, and registered psychiatric nurses in Canada. Data collection took place between October 2005 and January 2006. The survey was administered by telephone; the duration of a typical interview was 30 minutes. Of the 24,443 nurses initially selected for the sample, 21,307 were successfully contacted; of these, 1,015 (4.8%) were not employed in nursing at the time of the survey and were deemed out of scope and another 1,616 (7.6%) declined to participate. Complete responses were obtained from 18,676 of the 23,428 sample members who were within scope (79.8%). To compensate for differences

in the probability of inclusion in the sample as well as for non-response, weights developed for the NSWHN by Statistics Canada were applied to the data. Thus each nurse in the sample “represents” a certain number of nurses not in the sample as well as herself or himself, and weighted estimates are then representative of the population of Canadian nurses. The weighting procedures used for the NSWHN were similar to those used for the Labour Force Survey (Statistics Canada, 2008). To limit heterogeneity of influences on nurse-physician relations, the analysis is based on weighted data from the 4,379 RN respondents who were employed in hospitals and giving direct patient care at the time of the survey.

Outcome Measure: Quality of Nursing Team Care

The survey question was, “Overall, how would you describe the quality of nursing care delivered by your nursing team during your last shift?” Response options were *excellent*, *good*, *fair*, and *poor*. Responses were aggregated into two categories for the analysis by combining *excellent* and *good* responses into one category and *fair* and *poor* into another. We modelled the fair/poor combination as the outcome event.

Nurse-Physician Relations Predictor Variable

Nurses’ working relations with physicians were measured with the nurse-physician relations subscale items of the Revised Nursing Work Index (NWI-R) (Aiken & Patrician, 2000). In the NSWHN data, Cronbach’s coefficient alpha for the nurse-physician relations subscale was 0.82; this is consistent with alpha coefficients reported previously (Aiken & Patrician, 2000; Lake, 2002; Li et al., 2007). Nurse respondents reported the degree to which they agreed with three statements: (1) physicians and nurses have good working relations, (2) there is a lot of team work between nurses and physicians, and (3) there is collaboration between nurses and physicians. Judgements were made on a four-point ordered scale: *strongly agree*, *somewhat agree*, *somewhat disagree*, and *strongly disagree*. Numeric values between 0 and 3 were assigned to the categories such that higher numeric scores would correspond with qualitatively poorer working relations. Values were summed on the three questions; sum scores could range between 0 and 9. For bivariate analysis, the weighted distribution of scores was divided into quartiles; the lower three quartiles were combined into one group and the highest quartile into another. In regression analysis, the variable was used as a continuous variable.

Control Variables

Job dissatisfaction and low co-worker support were included as covariates. *Job dissatisfaction* was coded as present if a respondent answered *some-what* or *very dissatisfied* to the question, “On the whole, how satisfied are

you with this job?” Two survey items that tapped *low co-worker support* were, “You were exposed to hostility or conflict from the people you work with” and “The people you work with were helpful in getting the job done.” Identical Likert-type response options were available for both items: *strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree*. Low co-worker support was defined as a response of either *strongly agree* or *agree* to the first item or *strongly disagree* or *disagree* to the second item.

Three other covariates were retained in the final regression model. Nurses were asked about their overall level of *general health*. Two groups were formed from five ordered categorical response options. The reference group included respondents reporting *excellent, very good, or good*. The effect group included those answering *fair* or *poor*. Variables for *clinical work area (medical/surgical, critical, ambulatory, other)* and years of *nursing experience* (a continuous quantitative variable) were also retained.

Statistical Analysis

Frequencies and cross-tabulations were used to produce descriptive statistics and to examine associations between fair or poor quality of nursing team care, nurse-physician working relations, and covariates. Multiple logistic regression was used to estimate the impact of nurse-physician working relations on quality of nursing team care while controlling for individual characteristics and conditions of the nursing practice setting described above. To account for stratification in the NSWHN design, the bootstrap method was used to produce coefficient estimates, standard errors, odds ratios, and confidence intervals (Kleim & Bélanger, 2007; Rust & Rao, 1996).

Selection of covariates investigated for inclusion in the model was guided by the literature review, examination of bivariate relationships, and a method of regression model-building known as “best subsets.” This entailed fitting all regression models possible with the variable pool and then selecting candidate models with assistance from statistical tests and stopping criteria (Hosmer & Lemeshow, 2000; King, 2003). Substantive knowledge and clinical experience guided the selection of nominated models to submit to further logistic regression analysis. Most covariates retained in the final regression model were statistically significant at a level of $p < 0.05$. Model goodness-of-fit was assessed with the Hosmer-Lemeshow test (Hosmer & Lemeshow, 2000) and was judged to be acceptable ($\chi^2 = 7.11, 8 \text{ df}, p = 0.52$). The concordance index c is an estimate of the area under the receiver operating characteristic curve (AUC) for binary responses (Hanley & McNeil, 1982) that ranges between 0.5 and 1.0. The c value for the model was 0.71. There are no apparent guidelines indicating the adequacy of AUC values for nursing care quality pre-

diction models; however, among other types of behavioural models this value would not be termed “high.” For example, an AUC value of .82 for violent behaviour predictions is termed “relatively high” by Swets, Dawes, and Monahan (2000, p. 11). But the value of 0.71 is not exceptionally low, for a recent clinical health study reports average AUC values of .82 ($N = 5$ studies) and .74 ($N = 6$ studies) for physician- and scoring-based predictions, respectively, of patient mortality in intensive care units (Walter & Sinuff, 2007). Analyses were performed using SAS 9.1.

Results

Among hospital-employed RNs whose job involved giving direct care, 12% reported that the nursing care given by their nursing team on the last shift was no better than fair or poor (Table 1). Nearly half (46%) reported receiving a low level of support from their co-workers, and 13% reported that they were dissatisfied with their job. About 7% reported that their general health was fair or poor.

Table 1 Descriptive Statistics			
Factor	Sample N	Weight Estimate	Weighted %
RNs employed in hospitals, giving direct care	4,379	143,000	100.0
Report <i>fair</i> or <i>poor</i> quality of team care	472	16,700	11.9
Nurse-physician working relations scale score (<i>mean, SD</i>)	4,352 (2.4, 2.0)		
Low co-worker support	1,976	65,800	46.3
Job dissatisfaction	496	18,500	12.9
Fair/poor overall health	263	9,300	6.5
Works in medical/surgical unit	968	32,700	22.9
Works in critical care/operating/recovery/emergency	1,362	44,600	31.2
Works in ambulatory care	188	5,900	4.2
Works in other care areas	1,792	58,000	40.6
Years employed in nursing (<i>mean, SD</i>)	4,375 (17.0, 10.7)		
<i>Source: 2005 National Survey of the Work and Health of Nurses.</i>			

Table 2 Percentage of Nurses Reporting Fair or Poor Quality of Nursing Care Delivered by Team on Last Shift, by Level of Nurse-Physician Working Relations and Other Selected Variables	
	Fair or Poor Care Given by Team (%)
Total	11.9
Level of nurse-physician working relations	
Higher (worse)	21.0*
Lower ^a (better)	9.3
Years employed in nursing	
0-7 ^a	15.0
8-16	12.9
17-26	11.7
27-46	7.7*
General health	
Fair/poor ^a	26.4
Excellent/very good/good	10.9*
Support from co-workers	
Low ^a	15.5
High	8.6*
Dissatisfied with current job	
Yes ^a	30.6
No	9.1*
Hospital unit of employment	
Medical/surgical care ^a	15.0
Critical care/operating/recovery/ emergency	10.5*
Ambulatory	F
Other care areas	12.0
<p><i>Source:</i> 2005 National Survey of the Work and Health of Nurses.</p> <p>^a Reference category. For level of nurse-physician working relations, "higher" refers to the highest quartile of weighted distribution of nurse-physician working relations scale and indicates relatively poor working relations; "lower" refers to the three lower quartiles and indicates better working relations.</p> <p>* Differs significantly from estimate for reference category ($p < 0.05$).</p> <p>F Coefficient of variation exceeds 33.3%; estimate too unreliable to be reported.</p>	

Bivariate analyses indicated that nurses whose scores on the nurse-physician working relations index fell into the highest (most unfavourable) quartile of the weighted distribution were twice as likely (21% vs. 9%) to report that their nursing team had given fair or poor care, compared with nurses in the lower three quartiles (Table 2).

The number of years employed in nursing was inversely related to the likelihood of reporting fair or poor care by the nursing team; 8% of nurses with at least 27 years' experience reported fair or poor care, compared with 15% of those who had been in nursing for fewer than 8 years. Nurses' self-rated level of health was strongly related to reported quality of nursing team care. Over one quarter (26%) of those claiming fair or poor health reported that their nursing team had delivered only fair or poor care, compared with 11% of those reporting better health.

Perceived level of co-worker support was also related to reported quality of nursing team care; 9% of nurses with high levels of support reported that fair or poor care had been delivered by their team, compared with 16% of nurses with lower levels of support. As expected, job

Table 3 <i>Adjusted Odds Ratios for Fair or Poor Nursing Team Care Given on Last Shift</i>		
Factor	Adjusted Odds Ratio (95% CI)	p value
Nurse-physician relations ^a	1.21 (1.15–1.29)	0.00
Low co-worker support	1.54 (1.19–1.99)	0.00
High co-worker support ^b	1.0 (NA)	—
Dissatisfied with job	3.16 (2.28–4.38)	0.00
Not dissatisfied with job ^b	1.0 (NA)	—
Fair/poor overall health	2.12 (1.35–3.33)	0.00
Excellent, very good, good overall health ^b	1.0 (NA)	—
Clinical unit		
Critical care	0.86 (0.66–1.14)	0.29
All other units ^b	1.0 (NA)	—
Years employed in nursing ^a	0.98 (0.96–0.99)	0.00
<i>Source:</i> 2005 National Survey of the Work and Health of Nurses. ^a Used as a continuous variable. "Nurse-physician relations" was coded so that higher scores indicate qualitatively worse (more negative) working relationships. ^b Reference category.		

dissatisfaction was related to quality of care. Nurses who expressed dissatisfaction with their current job were more than three times as likely to report fair or poor nursing team care as those who were satisfied with their job. Finally, nurses working in critical care units, operating rooms, recovery rooms, or emergency departments were slightly but significantly less likely to report fair or poor team care, compared with nurses working in medical and surgical care units (10.5% vs. 15.0%).

In multiple logistic regression analyses, nurse-reported working relations with physicians were significantly associated with nurse-assessed quality of nursing team care given on the last shift (Table 3). Even in the presence of other independent variables, qualitative decreases in nurse-physician relations — indicated by increasing scale scores — modestly increased the probability of reported fair and poor team care over excellent and good care (OR 1.21, 95% CI 1.15–1.29).

Control variables significantly associated with reported fair or poor team care included low support from co-workers (OR 1.54, 95% CI 1.19–1.99), being in fair or poor overall health (OR 2.12, 95% CI 1.35–3.33), and job dissatisfaction (OR 3.16, 95% CI 2.28–4.38). Greater nursing experience was significantly associated with decreased probability of fair and poor care (OR 0.98, 95% CI 0.96–0.99). Working in a critical care unit was not significantly associated with reported nursing care quality in the full regression model.

Discussion

When asked to evaluate quality of nursing team care on the most recent shift, about 12% of Canadian RNs working in hospitals rated it as fair or poor; this is similar to levels reported elsewhere (e.g., Rafferty et al., 2001). Findings like these may cause concern for hospital nursing managers because they are nurses' self-reported assessments of recent nursing care given by themselves and/or their nursing team colleagues.

At the outset we noted an increasing use of qualitative, ordered-categorical survey items for measuring nurse-rated quality of nursing care. The data collected using such measures have infrequently been analyzed using multiple regression methods. In the few studies that have incorporated data into a linear model framework, the nurse-physician relations construct was subsumed into higher-order constructs such as organizational support (Aiken et al., 2002; Laschinger et al., 2001). It was argued that the nurse-physician relations construct could usefully be disaggregated from higher-order constructs and tested against other factors in a model of nursing care quality. The argument was supported by reported results. Our logistic regression model shows that factors rooted in both classic and contemporary research on health-care processes have inde-

pendent associations with nurse-reported quality of nursing team care. These include nurse-physician relations, co-worker support, job satisfaction, personal health, and years of nursing experience.

Our analysis of perceived nursing care quality and nurse-physician relationships diverges from other models by its differential placement of substantive predictors in the explanatory path. Recent research (Aiken et al., 2002; Gunnarsdóttir et al., 2007; Van Bogaert et al., 2009) has conceived the nursing practice environment as predictive of job satisfaction and emotional exhaustion outcomes. In contrast, our model fitted job satisfaction and general health as independent variables and demonstrated their influence on perceived nursing care quality. We presented an additional predictor of care quality that does not have an apparent corollary in the Nursing Work Index's measurement of the nursing practice environment: co-worker support.

Nurse-Physician Relations

The difficult work relations between nurses and physicians have been known for decades. However, few studies have demonstrated a connection between quality of working relations and quality of care. We find that an association between nurse-physician relations and quality of nursing team care is present in a nationally representative sample of hospital-based nurses, and persists when effects of other important factors are held constant. These findings support conclusions by other researchers regarding the importance of improving nurse-physician relationships (Ulrich et al., 2005).

There is an abundance of research on nurse staffing levels, some of it addressing the effects of nursing shortages on quality of care (Clark, Leddy, Drain, & Kaldenberg, 2007; Sochalski, 2004). Nurses believe the shortage has reduced the time available to collaborate with team members (Buerhaus, Donelan, Ulrich, Norman, & Dittus, 2006). Inadequate staffing may negatively impact the humanistic aspects of patient care that nurses value (Gunther & Alligood, 2002). Nurse staffing levels are important considerations for analyses of quality of care; accordingly, we included a variable to control for nurse-assessed adequacy of nurse staffing in a preliminary regression analysis. Coefficient estimates for the presented model were similar with and without a measure of staffing adequacy but model fit declined considerably when it was included. We excluded it from the final model for this reason.

Other Independent Variables

Co-worker support is a form of lateral social relations that could have a protective function in the workplace by acting as a stress buffer. To our knowledge, the significant association between low co-worker support

and fair or poor care quality that we found has not been demonstrated previously. Intraprofessional nurse relations that are so unsupportive as to be characterized by hostility, conflict, and lack of help-giving behaviour in performing nursing work independently contribute to nurse perceptions that quality of team care is suboptimal.

The significant association between job dissatisfaction and fair or poor care was expected. Job satisfaction is a de facto criterion in quality of care assessment, as explained by Kramer and Schmalenberg (2005).

We reported a negative effect of nurses' general health on perceived quality of nursing care. This finding may be reflective of results reported by Laschinger et al. (2001). Their research showed a negative direct effect of job burnout on care quality when job burnout was an endogenous variable. Our health measure was not analogous with job burnout because it was not a pure affective construct; however, job burnout could be construed as one facet of general health. Because the Laschinger et al. (2001) model tested a mediated and amalgamated effect of nurse-physician collaboration on care quality, a direct effect of nurse-physician collaboration net of job burnout was not estimated. In this respect our model contributes some evidence for a negative relationship from nurses' self-reported health to perceived quality of care independent of nurse-physician collaboration effects.

Our finding of an inverse effect of nursing experience on nursing care quality is consistent with the findings of other research. Increased nursing experience is related to several better nurse outcomes: Older RNs are reported to have better relationships with nursing management and hospital administration than younger RNs (Buerhaus et al., 2006). Greater job satisfaction has been found among nurses with more seniority (Tabak & Koprak, 2007) and among older RNs (Buerhaus et al., 2006). More seniority has also been associated with lower stress (Tabak & Koprak, 2007).

Limitations

The study has several limitations. The cross-sectional nature of the data does not support causal inferences. Research on nurse-physician relations and nursing care quality should capitalize on research designs that are suitable for causal attributions, such as natural experiments and randomized intervention trials (Zwarenstein et al., 2007).

The NSWHN data were based on nurses' self-reports, which were subjective. No validation of the data against objective sources was undertaken, and perceptions may differ among individuals. Validity of perceived quality of care data should be investigated with reference to other quality measures such as clinical practice indicators and patient satisfaction. It is not known what standards nurses used to assess quality of nursing team

care, and assessments of interprofessional working relations may vary according to personality traits and other individual differences. Nor is it known whether nurses reporting fair or poor nursing care quality believed that care was continuously fair/poor on the shift or whether there was one memorable, specific instance of poor care.

Other factors that may influence quality of team care could not be considered because the data were not available from the NSWHN. For example, there was no information on the constitution of the “nursing care team” that nurses reported on. This is important because aspects of team composition like staff-to-patient ratios and professional staffing mix — the ratio of RNs to licensed practical nurses and auxiliary staff — have been associated with care outcomes (McGillis Hall, Doran, & Pink, 2004) and may be associated with nurse-perceived quality of care. They could not be considered in this analysis. No adjustment could be made for hospital size or administrative system, and information on patient characteristics that may have influenced perceptions of quality of nursing team care was not available.

Conclusion

This study provides new findings on factors reflecting the workplace climate that may influence the quality of patient care. Based on data from a large, nationally representative sample of Canadian nurses, the analysis indicates that the probability of delivering fair or poor patient care is higher in a workplace environment where working relations between nurses and physicians are less favourable. A portion of perceived lower-quality care can be explained by poor nurse-physician relationships and perhaps eliminated or reduced by improving those relationships.

It is important to keep the results of this analysis in perspective. Only one in eight nurses reported that the quality of care delivered by their team in the last shift was fair or poor. Nonetheless, fair or poor care could be persistent in some settings and could be a precursor to significant problems. First-hand reports of such care from the caregivers involved in its delivery should be considered seriously, as should their association with nurse-physician working relations.

References

- Aiken, L. H., Clarke, S. P., & Sloane, D. M. (2002). Hospital staffing, organization, and quality of care: Cross-national findings. *Nursing Outlook*, *50*, 187–194.
- Aiken, L. H., & Patrician, P. A. (2000). Measuring organizational traits of hospitals: The Revised Nursing Work Index. *Nursing Research*, *49*, 146–153.
- American Nurses Association. (2005). *Survey of 76,000 nurses probes elements of job satisfaction*. Retrieved November 29, 2007, from <http://www.nursing->

- world.org/FunctionalMenuCategories/MediaResources/PressReleases/2005/pr04018524.aspx.
- Baggs, J. G., Ryan, S. A., Phelps, C. E., Richeson, J. F., & Johnson, J. E. (1992). The association between interdisciplinary collaboration and patient outcomes in a medical intensive care unit. *Heart and Lung, 21*, 18–24.
- Becker, H. S., Geer, B., Hughes, E. C., & Strauss, A. (1961). *Boys in white: Student culture in medical school*. Chicago: University of Chicago Press.
- Buerhaus, P., Donelan, K., Ulrich, B., Norman, L., & Dittus, R. (2006). State of the registered nurse workforce in the United States. *Nursing Economics, 24*, 6–12.
- Clark, P. A., Leddy, K., Drain, M., & Kaldenberg, D. (2007). State nursing shortage and patient satisfaction: More RNs – better patient experience. *Journal of Nursing Care Quality, 22*, 119–127.
- Coombs, M., & Ersser, S. J. (2004). Medical hegemony in decision-making — a barrier to interdisciplinary working in intensive care? *Journal of Advanced Nursing, 46*, 245–252.
- Friese, C. R. (2005). Nurse practice environments and outcomes: Implications for oncology nursing. *Oncology Nursing Forum, 32*, 765–772.
- Gallagher, R. M., & Rowell, P. A. (2003). Claiming the future of nursing through nursing-sensitive quality indicators. *Nursing Administration Quarterly, 27*, 273–284.
- Gunnarsdóttir, S., Clarke, S. P., Rafferty, A. M., & Nutbeam, D. (2007). Front-line management, staffing and nurse-doctor relationships as predictors of nurse and patient outcomes: A survey of Icelandic hospital nurses. *International Journal of Nursing Studies, 46*, 920–927.
- Gunther, M., & Alligood, M. R. (2002). A discipline-specific determination of high quality nursing care. *Journal of Advanced Nursing, 38*, 353–359.
- Hanley, J. A., & McNeil, B. J. (1982). The meaning and use of the area under a receiver operating characteristic (ROC) curve. *Radiology, 143*, 29–36.
- Hosmer, D. W., & Lemeshow, S. (2000). *Applied logistic regression* (2nd ed.). New York: John Wiley.
- Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington: National Academy Press.
- King, J. E. (2003). Running a best-subsets logistic regression. *Educational and Psychological Measurement, 63*, 392–403.
- Klein, G., & Bélanger, Y. (2007, August 1). *Using bootstrap variance calculations for a survey with a simple design: The case of the 2005 National Survey of the Work and Health of Nurses*. Presented at the Joint Statistical Meetings, Section on Survey Research Methods, Salt Lake City, Utah.
- Kramer, M., & Schmalenberg, C. (2003). Securing “good” nurse-physician relationships. *Nursing Management, 34*, 34–38.
- Kramer, M., & Schmalenberg, C. (2005). Best quality patient care: A historical perspective on magnet hospitals. *Nursing Administration Quarterly, 29*, 275–287.
- Lake, E. T. (2002). Development of the Practice Environment Scale of the Nursing Work Index. *Research in Nursing and Health, 25*, 176–188.

- Laschinger, H. K. S., Shamian, J., & Thomson, D. (2001). Impact of magnet hospital characteristics on nurses' perceptions of trust, burnout, quality of care, and work satisfaction. *Nursing Economics, 19*, 209–219.
- Li, Y. F., Lake, E. T., Sales, A. E., Sharp, N. D., Greiner, G. T., Lowy, E., et al. (2007). Measuring nurses' practice environments with the Revised Nursing Work Index: Evidence from registered nurses in the Veterans Health Administration. *Research in Nursing and Health, 30*, 31–44.
- Lynn, M. R., McMillen, B. J., & Sidani, S. (2007). Including the provider in the assessment of quality care: Development and testing of the Nurses' Assessment of Quality Scale—Acute Care Version. *Journal of Nursing Care Quality, 22*, 328–336.
- Manojlovich, M., & DeCicco, B. (2007). Healthy work environments, nurse-physician communication, and patients' outcomes. *American Journal of Critical Care, 16*, 536–543.
- McGillis Hall, L., Doran, D., & Pink, G. H. (2004). Nurse staffing models, nursing hours, and patient safety outcomes. *Journal of Nursing Administration, 34*, 41–45.
- Rafferty, A. M., Ball, J., & Aiken, L. H. (2001). Are teamwork and professional autonomy compatible, and do they result in improved hospital care? *Quality in Health Care, 10*(Suppl 2), ii32–ii37.
- Rafferty, A. M., Clarke, S. P., Cole, J., Ball, J., James, P., McKee, M., et al. (2007). Outcomes of variation in hospital nurse staffing in English hospitals: Cross-sectional analysis of survey data and discharge records. *International Journal of Nursing Studies, 44*, 175–182.
- Reeves, S., Nelson, S., & Zwarenstein, M. (2008). The doctor-nurse game in the age of interprofessional care. *Nursing Inquiry, 15*, 1–2.
- Rust, K. F., & Rao, J. N. K. (1996). Variance estimation for complex surveys using replication techniques. *Statistical Methods in Medical Research, 5*, 281–310.
- Shields, M., & Wilkins, K. (2006). *Findings from the 2005 National Survey of the Work and Health of Nurses*. Catalogue #83-003-XPE. Ottawa: Statistics Canada.
- Shindul-Rothschild, J., Long-Middleton, E., & Berry, D. (1997). 10 keys to quality care. *American Journal of Nursing, 97*, 35–43.
- Sochalski, J. (2004). Is more better? The relationship between nurse staffing and the quality of nursing care in hospitals. *Medical Care, 42*(Suppl S), 67–73.
- Sochalski, J., & Aiken, L. H. (1999). Accounting for variation in hospital outcomes: A cross-national study. *Health Affairs, 18*, 256–258.
- Statistics Canada. (2008). *Methodology of the Canadian Labour Force Survey*. Retrieved June 3, 2009, from <http://www.statcan.gc.ca/cgi-bin/af-fdr.cgi?l=eng&loc=/pub/71-526-x/71-526-x2007001-eng.pdf>.
- Stein, L. I. (1967). The doctor-nurse game. *Archives of General Psychiatry, 16*, 699–703.
- Swets, J. A., Dawes, R. M., & Monahan, J. (2000). Psychological science can improve diagnostic decisions. *Psychological Science in the Public Interest, 1*, 1–26.

- Tabak, N., & Koprak, O. (2007). Relationship between how nurses resolve their conflicts with doctors, their stress and job satisfaction. *Journal of Nursing Management, 15*, 321–331.
- Ulrich, B. T., Buerhaus, P. I., Donelan, K., Norman, L., & Dittus, R. (2005). How RNs view the work environment. *Journal of Advanced Nursing, 35*, 389–396.
- Van Bogaert, P., Clarke, S., Vermeyen, K., Meulemans, H., & Van de Heyning, P. (2009). Practice environments and their associations with nurse-reported outcomes in Belgian hospitals: Development and preliminary validation of a Dutch adaptation of the Revised Nursing Work Index. *International Journal of Nursing Studies, 46*, 54–64.
- Walter, S. D., & Sinuff, T. (2007). Studies reporting ROC curves of diagnostic and prediction data can be incorporated into meta-analyses using corresponding odds ratios. *Journal of Clinical Epidemiology, 60*, 530–534.
- West, E., Barron, D. N., & Reeves, R. (2005). Overcoming the barriers to patient-centred care: Time, tools, and training. *Journal of Clinical Nursing, 14*, 435–443.
- Zwarenstein, M., Reeves, S., Russell, A., Kenaszchuk, C., Conn, L. G., Miller, K. L., et al. (2007). Structuring communication relationships for interprofessional teamwork (SCRIPT): A cluster randomized controlled trial. *Trials, 18*, 23.

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Gagner et perdre du terrain : les paradoxes de l'itinérance en milieu rural

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Catherine Ward-Griffin, Rick Csiernik, Carolyne Gorlick,
Elsabeth Jensen, Patrick Riesterer**

Cet article examine les questions relatives au logement et à l'itinérance en milieu rural en établissant une comparaison avec le contexte urbain. Elle se fonde sur une analyse secondaire de données recueillies lors d'une étude sur la santé mentale et le logement menée de 2001 à 2006 dans le cadre des Alliances de recherche universités–communautés. Les résultats mettent en lumière certaines préoccupations concernant le manque de services, un facteur susceptible de précipiter un déménagement de la campagne à la ville. Les services de transport inadéquats posent souvent des difficultés aux habitants des régions rurales qui tentent d'accéder aux services. Bon nombre de répondants ont rapporté préférer vivre à la campagne, mais qu'il leur avait fallu choisir entre le lieu de résidence et l'accès aux services essentiels. Dans certains cas, des familles entières ont été déracinées dans leur quête de services adéquats. Une fois arrivés en milieu urbain, les participants ont éprouvé des difficultés à accéder à un emploi, à un logement et aux services, une source de déception à l'égard de leur nouvel environnement. La raison première invoquée par les personnes qui ont recours aux refuges est le manque de ressources et de solutions de rechange. Il faudra augmenter les services offerts en région rurale de façon à remplacer le modèle actuel de gestion de crise par un modèle de soins axé sur la promotion de la santé et la prévention des maladies.

Mots clés : santé mentale, région rurale, itinérance, pauvreté

Gaining Ground, Losing Ground: The Paradoxes of Rural Homelessness

**Cheryl Forchuk, Phyllis Montgomery, Helene Berman,
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The study examined rural housing and homelessness issues and looked at similarities and differences between rural and urban areas. It involved a secondary analysis of focus group data collected in a 2001–06 Community University Research Alliance study of mental health and housing. The findings highlight concerns regarding the lack of services, which can precipitate a move from a rural to an urban community. Inadequate transportation services often posed a challenge to rural residents attempting to access services. Many participants preferred rural living but felt they had to choose between residing where they wanted to and having access to essential services. In some cases entire families were uprooted in pursuit of services. Once in an urban environment, rural participants had ongoing difficulty obtaining employment, housing, and services, which in turn led to disappointment in their new environment. The primary reason given for entering the shelter system was lack of alternatives and supports. Increased services need to be allocated to rural communities so that a health promotion and illness-prevention model of care can replace the current emphasis on crisis management.

Keywords: mental health, rural, homelessness, poverty

Background

A recent Canada-wide study estimated that 6 million Canadians, or 19% of the population, live in rural areas (Statistics Canada, 2008). Compared to their urban counterparts, rural Canadians are profiled as having poorer health status, engaging in more economic and lifestyle risk behaviours, attaining lower educational levels, and having fewer socio-economic resources (Canadian Population Health Initiative, 2006). Despite variations among provinces with respect to urban-rural income differences, in 2000 rural annual income was approximately 20% less than urban annual income (Statistics Canada, 2004). Persons diagnosed with enduring mental illness are a lower-income rural sub-population. The amounts received by single adult persons relying on Ontario Disability Support are generally “a mere 63% of the poverty line” (Schizophrenia Society of Ontario, 2006). Low income does not cause mental illness, but vulnerable persons are at greater risk of “drifting” to even lower socio-economic

strata (Hurst, 2007; Wilton, 2004). Unable to pay for their basic needs, such as shelter, these individuals are at increased risk for homelessness.

“Degrees of destitution” (Speak, 2004) may not be apparent to outsiders, since rurality’s distance and lack of density can distort the nature and magnitude of poverty. By association, rural homelessness is also hidden from public and policy decision-makers. Living in inadequate accommodations or with violent others, staying temporarily with friends or relatives, and seeking non-local services contribute to the invisibility of rural homelessness in Canada (Burns, Bruce, & Martin, 2003; Rupnik, Tremblay, & Bollman, 2001) and internationally (Milbourne & Cloke, 2006). Of particular relevance to Canadian rural areas, income changes secondary to loss of employment also cause homelessness (Burns et al., 2003). Manufacturing-related jobs are substituted with low-paying, limited-contract employment — if indeed they are substituted at all. The few Canadian studies that have sought to gain a better understanding of rural homelessness among persons with mental illness consistently report a lack of housing accessibility, adequacy, and affordability (Canada Mortgage and Housing Cooperation, 2003; Canadian Institute for Health Information, 2008; Skott-Myhre, Raby, & Nikolaou, 2008).

While there is little available Canadian research on rural issues and homelessness, the problems that have been identified are complex. Resources for disadvantaged persons in rural Canada are sparse, which contributes to poverty and inaccessibility of affordable and suitable housing. The research also shows a dire need for better access to mental health services for rural individuals (Brannen, Johnson Emberly, & McGrath, 2009). These factors greatly affect a person’s chances of becoming homeless and negatively affect one’s overall well-being and quality of life. As a result, many people relocate to urban centres to access services. This national housing issue demands further investigation on the basis that it is a social, political, and economic problem with severe consequences for the rural population (Bruce, 2006).

In addition to housing needs, persons with mental illness have unique health-service needs. According to Philo, Parr, and Burns (2003) in their critical review of the rural international mental health literature, the rates of psychiatric illness in rural areas are undetermined. The combination of lack of continuity and inaccessibility of services, travel distances, lack of readily available transportation, and attrition of health professionals exacerbates stress and affects the ability of this population to secure adequate income and housing (Canadian Mental Health Association, 2005; Moore & Skaburskis, 2004; Philo et al., 2003). While the needs of rural persons with mental health issues are similar to those of their urban counterparts, integrating mental health and social services in rural areas has proved to be a challenge.

Purpose

The purpose of the study was to identify and describe housing and homelessness issues related to rural as compared to urban residents. More specifically, the investigation was guided by two research questions: 1. *What are the housing issues described by shelter residents from rural areas compared to those from urban areas?* 2. *What are the homelessness issues described by participants from rural areas compared to those from urban areas?*

Method

Design

This study was a secondary analysis of data from the Community University Research Alliance, an investigation of mental health and housing. The original study collected quantitative and qualitative data from 2001 to 2006. Its qualitative approach was ethnography, which involved thick descriptions of housing circumstances for persons with mental health issues. In the original study, 550 persons were recruited to participate in focus groups. A total of 63 focus groups were conducted in southwestern Ontario and its surrounding smaller communities within a 200-kilometre radius of London, Ontario. The original study, including the present analysis, received ethical approval from the Health Sciences Research Ethics Board at the University of Western Ontario.

Sample

The sample for this secondary analysis included informants who defined themselves as “rural” residents at the time of the interview or who had previously lived in a rural area. They were not asked to specifically identify their rural home community. There were four categories of informant. The “consumer” groups comprised persons who had a diagnosed mental illness. Most of these individuals were current or former consumers of mental health services. The “peer support worker” groups comprised consumers who were successfully living in the community and who provided help to other consumers attempting to reintegrate into the community. The “family” group informants were for the most part mothers and fathers of consumers; however, spouses, siblings, and children also took part in the discussion. The fourth category of participants, “service providers,” comprised community mental health workers such as nurses, doctors, social workers, and police officers, as well as landlords. Aside from the service providers, the majority of participants came from low socio-economic strata.

Data Collection and Analysis

In the original study, the main qualitative data-collection strategy was semi-structured focus group interviews conducted in diverse urban and

rural locations. The interviews focused on such topics as current housing situation, recent changes in housing, housing preferences, and experiences of finding, securing, and maintaining affordable housing. Although the interviews included no specific questions about “rurality,” many of the participants discussed aspects of the influence of geographic location on health and housing. The focus groups generally comprised 8 to 14 participants. The trained interviewers ensured that every participant had an opportunity to take part in the group discussion; this sometimes meant that additional focus groups were held, either concurrently with or subsequent to the scheduled interview. All interviews were audiorecorded and transcribed verbatim as soon as possible following an interview. Transcripts were reviewed by the interviewer for accuracy. All identifiers were removed during transcription.

The data-analysis team for this study consisted of several members of the original investigation and some additional researchers. Analysis involved reading all of the original transcripts to identify participants’ references to rural experiences. Once relevant data were identified, content analysis — a process of systematically coding and grouping qualitative data to identify discernable patterns or themes — was undertaken (DeSanits & Ugarriza, 2000; Hsieh & Shannon, 2005; Morgan, 1993). This process involved several researchers independently reading the transcripts to code data. As patterns were identified in the data, focused codes were identified. The code list was continuously revised to accommodate new perspectives and to collapse overlapping groups of data. In turn, the code list guided the analysis and more abstract themes became identifiable with increased familiarity of the data.

Findings

Participants described a dynamic theme of gaining and losing ground constituted by a complex interplay of health, place, and social and service processes. Efforts at community integration (and, for some, re-integration) were necessary for desired health outcomes. Rural attributes, however, challenged the efforts of clients, families, and community mental health workers to establish or maintain health and to secure adequate housing. Gaining ground was described as having physical, social, and service supports that enabled participants to live in a familiar, socially connected rural setting of their choosing. Losing ground, in contrast, referred to having limited choices and opportunities and being viewed as “a hick from the sticks” — vulnerable and dependent. Participants described gaining and losing ground in four areas: *social ties, mental health and social services, transportation, and relocation.*

Social Ties

Participants often described their physical and social geographies in ideal terms: “peaceful,” “tranquil,” “tight-knit,” “full of relaxing recreational options.” Rural places provided them with a sense of security and belonging. As one participant stated, “Everyone has their place in the social fabric, even if you’re only a second cousin.” However, attending to the needs of a rural person diagnosed with some form of mental illness, or being the recipient of such attention, altered the perceived value of “close-knit” social connections.

Consumers, families, and service providers spoke about the implications of a community’s small size, noting that “everybody [knows] everyone else’s business.” Consumers who “fall in with a bad crowd” shared the stress of stigmatization as well as discrimination. Their stress was heightened when the conflict involved social service providers. Such strained relationships negatively influenced their ability to secure supports and services. Some consumers, in order to cope, made the choice to relocate to an urban area. Lack of supports and resources led to homelessness and uncertainty about the future:

I couldn’t live there. I was ashamed of myself. So I moved to . . . a bigger city where there [were] more people. I guess I figured . . . I could hide or something. I had a car, so I slept in the car so I wouldn’t have to pay rent. That way, my money would go farther . . . I was trying to figure out where [I] was going.

By association, their families also perceived stigma.

Mental Health and Social Services

Numerous factors contributed to the inaccessibility of mental health services in rural areas, including shortages of primary care workers or specialists, insufficient support and service programs, lack of trusting relationships with health-care workers, overburdened health-care providers, long waiting lists, and lack of transportation to and from services.

Some individuals tried to gain ground by relying on the private sector for mental health services (psychologists, counsellors, psychiatrists). However, even these services were limited and their cost was a barrier for many people living with mental illness. Without access to supports or services, the consumers were put at risk of relapse:

There are no external options. There used to be a private psychiatrist, so if for some reason a person did not qualify for adult mental health services or they were kicked out for whatever reason [or were] ineligible for it, there was at least a private site that you could access and still maintain psychiatric services.

Given the few external options available, trust in the abilities of one's health-care worker was critical. Lack of trust often contributed to the consumer's sense of powerlessness:

The fact that there's a monopoly in the area relating to psychiatric clinical support — that's not a criticism, that's just the way it is . . . it's like there's a monopoly on psychiatric services and if that psychiatric service has made a decision on somebody — you know, like [with] any monopoly — you're kind of stuck, going, "Well, now what?"

The emphasis within rural mental health services was crisis intervention rather than prevention or rehabilitation. This emphasis led to negative outcomes for consumers, the community, and the system. The limited availability of treatment served to increase the likelihood that consumers and their families would experience crises. Moreover, crisis services also faced severe shortages. In some communities, crisis services were available during business hours only, with very few resources being offered evenings and weekends. While consumers waited to be seen they contacted crisis lines, only to get no answer and have no option but to leave a voice message; they often had to wait hours or even days for someone to return their call. For those without access to a phone, as was often the case among the homeless or consumers with limited income, crisis services were not able to return their calls; these people were forced to try again or to seek relief from other services. One consumer appraised the crisis services available in her community:

Maybe 4 days then, and if they have a holiday then they're off the Wednesday, and that gives you Thursday, Friday, and Saturday to have your nervous breakdown. I mean, you know, because you have to call crisis on the weekend, and who wants to do that? I'm making a joke of it, but it's not funny.

Professionals and crisis line volunteers had similar concerns. These service providers all viewed the system as "very reactive and not proactive." They felt overwhelmed, partly due to the structure of current mental health services and the dearth of human resources available.

In the absence of crisis support, many consumers lost ground. Prolonged crises often led to decreased functioning and the prospect of eviction. Those who had difficulty accessing crisis services often engaged in risky behaviours and/or found themselves homeless before they could secure the services they needed. One consumer said, "You have to throw a brick through a window to get shelter."

Some individuals tried to gain ground by entering the legal system in order to access services. Such actions reflected consumers' frustration and desperate need for services. If consumers "can't get the help they need"

when they need it, a “vicious circle” develops and they end up shuffling between the legal and health-care systems. Some professionals believed that if mental health services were more accessible, consumers “wouldn’t have to resort to violence.”

Even when consumers were able to access crisis services without resorting to violence, the process was still perceived as challenging. If there was no doctor available to conduct a psychiatric assessment, it was necessary for the consumer to be transported to an urban area even if he or she did not require hospitalization. Arriving at crisis services only to be denied care was a source of anger and frustration for consumers, their families, and the workers. Several people shared their stories of being “turned away” after long waits. One mother, who was also a peer support worker, described her wait for emergency services with her daughter, who was experiencing psychosis:

We’ve had to sit there and wait and wait and wait, and then they give her a high dose of some sort of a needle in order to put her to sleep so that she won’t cause any more trouble. She still lies there and waits and waits. It has been very, very frustrating when you’re trying to be there and be a comfort and a calming influence and you’re just sitting there.

Because of the lack of resources, voluntary admission was very rare. In most cases, consumers could receive psychiatric care only involuntarily. In many rural areas, being involuntarily admitted or “forced” had become a condition for access to any form of psychiatric services.

Vulnerability to illness placed individuals at serious risk of homelessness. Compared to urban areas, rural areas have far fewer resources for preventing and managing homelessness, and have few emergency shelters or crisis beds. In their search for housing, therefore, consumers moved frequently, being forced to adopt a nomadic lifestyle. Relocation was necessary, as some perceived that they had worn out their welcome and others needed to flee from abuse, creditors, family, the law, or their “own personal demons.” Many simply needed to have access to services.

While waiting as long as “5 to 6 years” for housing, consumers often tried to avoid losing ground by relying on their families for help. Without family and timely housing supports, consumers felt that their only choice was to return to unhealthy or unsafe environments. Moving in and out of shelters became a strategy for remaining safe. Lack of housing and support services caused consumers to lose ground, as they became “stuck,” grew “hopeless,” or “cycled in and out of services”:

Couch surfing becomes a way of life due to limited housing options, lack of support services, long waiting lists, lack of affordable housing, and low

income. Such temporary fixes in order to keep a roof over your head and away from unsafe situations impedes having a life.

Consumers and their families often perceived that they had no housing options within their community. Many possible arrangements, such as geared-to-income housing or group homes, were assessed as sub-standard due to disrepair or location in an unsafe neighbourhood. Some individuals with mental health issues had no choice but to reside in a retirement or nursing home. For places without an Assertive Community Treatment team, long-term care far from home was consumers' only option for gaining ground, unless they could be cared for by family members.

Simply increasing the number of dwellings was not perceived as a solution by consumers, families, or workers. Housing was viewed as a mediator of health. If consumers lack access to services that are responsive and sensitive to their needs and abilities, they are unlikely to secure permanent housing and achieve recovery. A community worker explains:

If we set up housing — a huge apartment building — and said, “Everybody who’s homeless or going to be, come and see us, we’ve got a place for you,” within 2 months a lot of those people will be homeless again, because the cause of their homelessness was never addressed. You have to address the basic problem, and every person is different — why they’re homeless.

To address lack of formal services, rural networks came up with creative solutions. Local grassroots organizations and informal volunteers provided housing and other services to consumers. The rural communities represented in this study relied heavily on donations of money and housing space rather than depend on funded shelters and community agencies. In one community, for example, a church generously provided space for community groups; however, this generosity resulted in scheduling conflicts with other events. In another community a 24-hour consumer-run drop-in centre offering a few beds and a kitchen was a valuable resource for individuals at immediate risk of homelessness. Volunteers opened up their homes as emergency shelters and initiated consumer groups.

Transportation

Transportation was a frequent concern for consumers, family members, and community workers. Transportation plays a key role in people's tendency to gain or lose ground. Transportation was more than a means of getting from one place to another; it was an aspect of making and maintaining connections, becoming integrated into communities, and adher-

ing to treatment regimens. It was also an essential component of the safety strategy for rural women living in abusive situations. Many consumers wanted to gain ground by becoming involved in support groups. However, without adequate transportation, many lost ground instead of gaining it. Often, people who had a mental illness but no transportation became isolated and despondent and subsequently relapsed. Consumers and workers often spoke of being frustrated by how much time they had to spend travelling. Longer distances were particularly onerous if consumers had to rely on others for transportation or if driving conditions were poor because of the weather.

Available transportation was described in terms of “lucky,” “too expensive,” or “non-reimbursable from Ontario Works or Ontario Disability.” Several communities had no public transit and therefore consumers had to rely on family, friends, or neighbours. If their situation was perceived as a crisis, they often relied on police services. Some resorted to hitchhiking. One individual shared her story about the dangers associated with lack of transportation:

I hitchhiked home [from the hospital] because I don't have any family . . . and it was very scary as an older woman. But [the driver], he says, "Don't worry, honey." He says, "You come from the hospital?" I said, "Yeah." . . . Well, I tell you, I was scared. Even though the man had a cross dangling [from his mirror], I was still very scared.

Relocation

A number of rural residents and their families reported trying to gain ground by relocating in order to access mental health services, housing, or safety. One woman described her need to keep moving:

I, uh, I couldn't, like, abuse was, ran through the house. So I couldn't take it no more. So I finally stood up for myself and I went and told somebody and I was taken out of the house and sent to another place and then, like, foster homes. And then just kept on running away and doing all that, and then just continued on from there.

Participants were faced with the dilemma of moving away from home or living without proper access to the services they required. However, relocation for the sake of “a new life” entailed additional risks: isolation and lack of urban preparedness. These risks often resulted in people losing rather than gaining ground.

Often, it was a community worker's recommendation that led an individual to relocate to an urban community. Many clients could be “processed” for either psychiatric services or housing only if they were situated in an urban environment. Many individuals lamented the fact

that they had to move. Often, family members moved with the consumer in order to provide support. One mother recognized her daughter's need for services, yet relocation threatened her daughter's safety and security:

They want to send [daughter] to [name of city]. I said, "Over my dead body," because she needs to stay home — she needs her family, friends, church, and community. I'm over 70. I visit her every day or every other day. It's a grave concern, you know, when you have someone who there's no place for.

If people decided to relocate, they risked losing their informal social network. The anonymity of the city was viewed as both a blessing and a curse. The city presented many opportunities unavailable in small towns, such as more services, employment, housing, and education. As well, many people relocated to urban centres in order to access shelters. While access to a shelter could be extremely beneficial, shelters could also be very dangerous, especially for people from small towns who were unaware of the realities of shelter life. Participants claimed that shelters had some dangerous residents and were "riddled with thefts, violence, and drugs." Many participants who relocated from rural areas expressed disappointment with what they were confronted with in the city. Once people moved to the city and entered the shelter system, they were "bounced" from one shelter to another. Moving in and out of shelters became their strategy for maintaining a sense of safety. Some former rural residents even expressed a preference for living on the streets, for they felt safer there than in the shelters that had been their reason for moving to the city in the first place.

Discussion

Challenges

The findings suggest that the structure of housing and mental health supports available in rural communities undermines people's efforts to improve their health and living conditions. Ensuring that rural residents have better access to health and housing services may not only allow them to remain in their home communities, but also help prevent them from becoming homeless in the first place. Given the connection between the lack of access to services and the lack of transportation, mobile services may be an effective solution. Agencies serving rural communities might look into the possibility of creating their own public transit systems. For example, providing a hospital van may be a way to address both service issues and transportation issues in rural communities. Finally, perhaps responsibility for the administration of social housing should be shifted back to the province, given that many rural communi-

ties are unable to afford public housing due to their small municipal tax base. The project's findings suggest that implementing these few changes could help rural residents living with mental health issues to gain more ground than they lose.

The limited services offered to those with mental health issues tend to focus on crisis rather than prevention. The findings show that when mental health crises are left unmanaged, many individuals are unable to cope, which in turn results in the loss of their accommodations. Exacerbating the problem is the fact that most rural communities have few if any shelters and lack affordable transport to the services that are available. While communities try to supplement these supports through voluntarism, the needs of the rural homeless population are so great that the supply cannot meet the demand. In this study, there simply were not enough volunteers and service providers available within the rural communities to help everyone in need. Those consumers who were unable to access the services they required often moved to the city. However, many were unable to adjust to city life and found themselves homeless. Once they moved into urban shelters for the homeless, they found it difficult to get out again. Despite attempts by consumers and families to find help, they often experienced frustration in the face of inaccessible or inadequate services.

Resilience

It would be misleading to report that all the rural individuals at risk of homelessness were forced to relocate to urban environments due to the lack of choice. Individuals in rural areas were not passive victims of forces beyond their control. They devised many innovative strategies in an effort to stay in their communities. Families often went to great lengths to keep their loved ones in their rural homes. A number of individuals opened their homes to those in need and became peer support workers. Some persons with mental health issues resorted to living in tents, makeshift cabins, or abandoned cars. Others hitchhiked from one rural community to another. While often forced to move to an urban area, some returned to their rural roots once they regained a degree of stability in their lives. Nevertheless, many former rural residents were uprooted by their experiences with mental illness and the inadequacy of locally available services.

Policy Development and Recommendations

With regard to homeless policy, attention and analysis have typically focused on urban populations (Bruce, 2006). Issues of rural homelessness awareness and housing affordability, availability, and action appear to have been overlooked or simply ignored in policy discussions and decision-

making. To look at urban issues in isolation from rural issues is to miss the issue of forced migration from a rural to an urban landscape in search of services. Yet while rural communities are losing members, urban centres can inherit problems as uprooted rural residents may well be more prone to homelessness in an urban setting. Articulating these issues clearly, and then linking them to relevant policies, is essential for effecting constructive change with respect to the complex issue of homelessness in the rural setting.

Conclusion

Gaining ground and losing ground were not exclusive categories in this study. The homeless people who took part in the study spoke about times when they felt they were overcoming the challenges of their everyday lives and in fact gaining ground. However, the same individuals spoke about setbacks, frustration with an unsupportive social system, and forced relocation from rural to urban settings. In this respect, they perceived that they were losing ground. While the participants clearly demonstrated a great deal of strength and resilience in the face of adversity by relying on informal support, the balance was heavily tipped against them; they had a very real sense that they were losing more ground than they were gaining.

In the absence of any means of supporting rural individuals in their home communities, urban centres will continue to inherit the problem of uprooted rural individuals at high risk for homelessness. Emphasizing health promotion and preventing crisis situations could serve to improve quality of life for the rural population and reduce the number of both rural and urban homeless persons.

References

- Brannen, C., Johnson Emberly, D., & McGrath, P. (2009). Stress in rural Canada: A structured review of context, stress levels, and sources of stress. *Health and Place, 15*(1), 219–227.
- Bruce, D. (2006). Homelessness in rural and small town Canada. In P. Milbourne & P. Cloke (Eds.), *International perspectives on rural homelessness* (pp. 63–78). New York: Routledge.
- Burns, A., Bruce, D., & Marlin, A. (2003). *Rural poverty discussion paper. Rural and Small Town Programme*. Retrieved November 2, 2008, from http://www.rural.gc.ca/researchreports/pov/poverty-pauvrete_e.phtml.
- Canada Mortgage and Housing Corporation. (2003). *Housing needs of low income people living in rural areas: Literature review*. Ottawa: Author. Retrieved September 3, 2008, from <http://www.cmhc-schl.gc.ca/odpub/pdf/63352.pdf?lang=en>.

- Canadian Institute for Health Information. (2008). *Mental health and homelessness*. Ottawa: Author. Retrieved October 28, 2008, from http://intraspec.ca/mental_health_report_aug22_2007_e.pdf.
- Canadian Mental Health Association. (2005). A "house" in the country. *Network Magazine*, 21(1), 19–20.
- Canadian Population Health Initiative. (2006). *How healthy are rural Canadians? An assessment of their health status and health determinants*. Ottawa: Public Health Agency of Canada. Retrieved September 23, 2008, from http://www.phac-aspc.gc.ca/publicat/rural06/pdf/rural_canadians_2006_report_e.pdf.
- DeSanits, L., & Ugarriza, D. N. (2000). The concept of theme as used in qualitative nursing research. *Western Journal of Nursing Research*, 22, 351–372.
- Hsieh, H-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288.
- Hurst, C. (2007). *Social inequality: Forms, causes, and consequences*. Boston: Pearson Education.
- Milbourne, P., & Cloke, P. (2006). *International perspectives on rural homelessness*. London: Routledge.
- Moore, E., & Skaburskis, A. (2004). Canada's increasing housing affordability burdens. *Housing Studies*, 19(3), 395–413.
- Morgan, D. L. (1993). Qualitative content analysis: A guide to paths not taken. *Qualitative Health Research*, 3(1), 112–121.
- Philo, C., Parr, H., & Burns, N. (2003). Rural madness: A geographical reading and critique of the rural mental health literature. *Journal of Rural Studies*, 19, 259–281.
- Rupnik, C., Tremblay, J., & Bollman, R. D. (2001). Housing conditions in predominantly rural regions. *Rural and Small Town Canada Analysis Bulletin*, 2(4), 1–15.
- Schizophrenia Society of Ontario. (2006). *Mental health advocates welcome increases to Ontario Disability Support Program (OPSP)*. Retrieved November 9, 2007, from www.eopa.ca/opa-sso_responsetoprovincialbudget.pdf.
- Skott-Myhre, H., Raby, R., & Nikolaou, J. (2008). Towards a delivery system of services for rural homeless youth: A literature review and case study. *Child Youth Care Forum*, 37, 87–102.
- Speak, S. (2004). Degrees of destitution: A typology of homelessness in developing countries. *Housing Studies*, 19(3), 465–482.
- Statistics Canada. (2004). Study: Rural-urban income gap. *The Daily*, December 23. Retrieved November 6, 2008, from <http://www.statcan.ca/Daily/English/041223/d041223b.htm>.
- Statistics Canada. (2008). Study: Canada's rural demography. *The Daily*, November 4. Retrieved November 6, 2008, from <http://www.statcan.ca/Daily/English/081104/d081104a.htm>.
- Wilton, R. (2004). Putting policy into practice? Poverty and people with serious mental illness. *Social Science and Medicine*, 58, 25–39.

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