

Moving Towards Harmony: Exemplars of Advanced Nursing Practice for British Columbia

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Abstract

This paper reports the Phase II findings from a three-phase qualitative study on advanced nursing practice (ANP) in British Columbia, Canada. The study intent was to guide policy development regarding new and advanced nursing roles. Comparisons across five sites are presented in relation to (a) the evolution of the role, (b) educational preparation of nurses, (c) role responsibilities, (d) role impact and benefits, (e) supports and challenges to implementation, (g) understanding of the meaning of ANP and (h) congruence with the Canadian Nurses Association framework on advanced practice. The implications of these findings are discussed.

Interest in the development of advanced nursing practice (ANP) roles has grown over the past decade in Canada. In British Columbia, there has been considerable interest by government, the nursing profession, healthcare organizations and communities in expanding the scope of nursing practice, developing new nursing roles to meet gaps in health services and providing cost-effective, accessible care to the citizens of the province, particularly to those whose access to healthcare is limited. As a result, we initiated a collaborative, three-phase research project, involving government decision-makers, researchers, healthcare employers and the nursing regulatory body to study the opportunities and challenges related to implementing new and advanced nursing roles in British Columbia (Schreiber et al. 2003).

This is the second of three papers that report the findings of this study. The first paper (Schreiber et al. 2005a) was based on the findings from Phase I. In this paper, we report the Phase II findings of five qualitative case studies conducted in other jurisdictions to explore models of ANP that might be appropriate for implementation in British Columbia. The third paper (Schreiber et al. 2005b) describes the results of a think tank in which we brought together stakeholders to report and discuss the findings from Phases I and II and to obtain their guidance in formulating policy recommendations for new and/or advanced nursing roles in the province.

In the first paper in this series, we commented on discrepancies in the literature regarding use of the terms “advanced nursing practice” (ANP) versus “advanced practice nursing” (APN), and we defined these terms. We also explained that we are using the term ANP because it was the prevalent and agreed-upon term by the CNA and nursing regulatory bodies in Canada at the time we began our study, and it is the term most consistent with our research process and data. At the same time, we agree that there is a need to move towards consistency in language. We refer the reader to our first paper (Schreiber et al. 2005a) for the full explanation.

Background

A number of ANP roles are well established in the United States, including clinical nurse specialist (CNS), advanced rural nurse practitioner (ARNP), nurse practitioner (CRNP), certified nurse midwife (CNM) and certified registered nurse anaesthetist (CRNA) (Hamric et al. 2000). More recently, a combined clinical nurse specialist–nurse practitioner (CNS-NP) role has emerged (Skalla and Hamric 2000), and the development of the case manager as an ANP role is evolving (Mahn and Zaworsky 2000), although the expansion of these roles has not proceeded without concern. For example, the merging of the CNS and NP roles has been challenged (Deane 1997; Donagrandi and Eddy 2000).

The development of ANP roles has moved more cautiously in Canada, with considerably more involvement from professional nursing bodies than in the United States. In part, this occurred because of concern in the Canadian profession about maintaining the nursing focus of advanced practice. Thus, nursing associations tended not to pursue the development of NP roles in which the scope of practice overlapped with that of medicine. In contrast, although professional nursing bodies in the United States now embrace all ANP roles, however, the initiation of various roles applies only to the CNS role (developed in response to the more medically oriented NP role) and to the CRNA role (which predated that of the NP) (Schreiber et al. 2003).

The CNS role is the best-established advanced practice role in Canada and, until recently, was the only officially recognized advanced role in British Columbia (Davies and Eng 1995; Schreiber et al. 2003). As suggested above, the NP role has had a variable and uncertain history in this country (Nurse Practitioner Association of Ontario 2003). It appears, however, that the NP role is now becoming established in several provinces in both primary and acute care settings (CNA 2003). For the most part, at least until recently, only acute care nurse practitioners (ACNPs) have been prepared at the graduate level. Midwifery in this country has emerged as a discipline regulated separately from nursing. The nurse anaesthetist role does not currently exist in Canada; however, we have recently proposed that it be explored for implementation in this country (Schreiber and MacDonald 2003).

The findings from Phase I of our study indicated confusion in British Columbia about the meaning of ANP and considerable variation in roles, responsibilities, educational preparation and authority to practise of self-defined advanced practice nurses (APNs). For this reason, we were interested in learning from other jurisdictions how their ANP roles were structured, regulated and enacted in a range of settings and with varied populations and health needs. We hoped to determine which models might be most appropriate to meet the needs of BC citizens and healthcare organizations and to guide policy makers. To that end, we explored selected nursing roles that were considered exemplars of those we might consider for British Columbia.

Purpose

The purpose of Phase II of the project was to explore and describe models of advanced nursing practice in jurisdictions outside British Columbia and to determine their potential usefulness and feasibility for this province. An advisory group, composed of various healthcare providers, employers, policy makers, educators and the public, met throughout the research project to advise and assist the research team.

Method

A case study approach was selected as the most appropriate research method to address the objective. A case study is defined as “an empirical study that investigates a contemporary phenomenon within its real life context, when the boundaries of that phenomenon and its context are not clearly evident and in which multiple sources of evidence are used” (Yin 1984: 23). Multiple cases and cross-case analyses deepen understanding and explanation and increase transferability (Guba and Lincoln 1989; Sandelowski 1986), although caution in generalizing beyond a single case is warranted.

Between October 2001 and April 2002, five case studies were conducted in settings with established innovative nursing roles. Members of the research team, including principal investigators, co-investigators and the project coordinator, were involved in data collection and analysis.

Case selection

Five sites were sampled to reflect variation in location (urban vs. rural), setting (acute care vs. community), area of specialization, regulatory framework, funding arrangements (base budgeted, global funding, fee-for-service), longevity of the role, population served and the experience and education of the nurse. In Canada, we selected two acute care sites (tertiary oncology with an ACNP role and neonatal intensive care [NICU] with a well-established CNS-NP role) and one urban community health centre with a registered nurse (extended class) [RN(EC)] NP role. In the United States, we selected a rural primary care clinic staffed only by NPs

and an urban operating room in which a CRNA role was well established. The US primary care site was selected, in part, to provide contrasting regulatory and financial frameworks for comparing practice in the two countries. Although Canada has not yet established the CRNA role, its prominence worldwide led us to explore its feasibility for British Columbia. An estimated 65% to 70% of anaesthesia in the United States is provided by CRNAs, and nurse anaesthetists practise in 110 countries around the world (American Federation of Nurse Anesthetists 2005; Schreiber and MacDonald 2003).

Sampling within cases

In each of the case study sites, participants included nurses, physicians, other healthcare providers, administrators, patients and key informants in regulatory/professional organizations and in government. Documents, such as job descriptions, program descriptions, newsletters, legislation, standards of practice, annual reports and practice protocols, were also sampled.

Data collection and analysis

A framework based on the important concepts that emerged from Phase I was modified to guide Phase II data collection. The framework also included the practice competencies in the Canadian Nurses Association (CNA) framework on advanced nursing practice (CNA 2002). Data were collected through individual interviews, job shadowing (observation) and document reviews. In addition, analytical case study discussions among the research team members were audio-taped and included in the qualitative thematic analysis.

Findings

Detailed descriptions of the case study sites appear in the final study report (Schreiber et al. 2003). A summary of the differences across the five sites on major elements in the framework are presented in Table 1. In this section, we discuss the comparisons across sites on several elements in the framework. In addition, we discuss the understanding of the nature of ANP held by participants and briefly review the extent to which the nursing practice in each site was congruent with the ANP competencies outlined in the CNA (2002) framework.

Evolution of the role

At all sites, the ANP role developed as a result of the confluence of three key features: physician shortages, gaps in service and a welcoming political climate. Many nurses have expressed concern that advanced nursing roles developed in response to physician shortages will be medically driven rather than grounded in nursing (Bryant-Lukosius et al. 2004). In our case studies, for example, physician shortages were a key factor enabling the development of the role. Despite this opportunistic beginning, the roles in all sites clearly evolved as nursing roles, even though there

was overlap with the traditional medical scope of practice. Historically, new nursing roles have often developed in response to client and community need. In all cases, groups of clients were not receiving the care or services they required prior to the role's development, although the reasons were different at each site. For example, in the tertiary oncology centre, inadequate symptom management for patients undergoing radiation treatment was identified by an ACNP. With organizational and medical staff acceptance, she developed a symptom management clinic to address the problem, using advanced nursing knowledge as well as more medically focused diagnostic and treatment skills.

A welcoming political climate at the provincial/state level was important at all sites, but particularly at the sites in which legislation had been passed to define the scope of practice. The passage of legislation serves to highlight the overlap in the scope of practice of nurses and physicians, thus generating more opposition than in those settings in which the authority to practise is based on medical delegation. Nonetheless, a welcoming political climate is required for enactment of legislation.

Educational preparation

In all but the Ontario urban community health centre, the nurses in advanced roles had graduate preparation with a minimum of a master's degree in their nursing field of specialty as a requirement for advanced practice. Most participants at all sites spoke about the importance of graduate preparation for ANP. There was a difference between the acute care and community-based sites in Canada with regard to the assumptions made about the educational preparation needed to practise in advanced roles. Whereas all participants in the acute care and the rural community case study sites believed graduate preparation was essential, some participants working in the urban community health centre and some key informants did not see a need for graduate preparation for NP roles in community settings. Experience was viewed as more important.

Responsibilities and functions

Detailed descriptions of the specific responsibilities and functions of advanced practice nurses at each site can be found in the original study report (Schreiber et al. 2003). A summary of the key responsibilities is outlined in Table 1. In general, the responsibilities and functions of the nurses varied considerably, depending on the practice setting, the jurisdiction in which the role took place and the authority to practise. In addition, we observed considerable variation in the organizational philosophies, missions, mandates, nature of health issues being addressed, populations served and financing of services. Despite the differences in all these factors, there were some common aspects of the role across all models: (a) an overlap with the scope of medical practice, (b) a high degree of autonomy and independence, (c) an emphasis on facilitating access to care for clients and (d) an emphasis on

teaching and mentoring.

Overlap with medicine. In all models, the nurses were doing work that might traditionally be seen as falling within the scope of medical practice. However, the extent to which the nurses' responsibilities overlapped with medical practice varied, as did the regulatory authority for their practice. In three of the models (the CNS-NP in the NICU, the CRNA in the urban operating room and ARNP in the rural primary care clinic), the nurses did most of the same work carried out by physicians in the same or similar settings. The nurses in these models managed cases of similar complexity and difficulty as their physician counterparts. The high level of expertise, in-depth knowledge and technical competence of the nurses in these ANP roles was observed and recognized by all participants and key informants within these settings, including physicians. The APNs in these settings either worked under their own legislative authority (CRNA and ARNP) or under medical delegation to carry out those functions extending beyond the regulated scope of nursing practice (CNS-NP).

In the tertiary oncology centre, the ACNPs supported clients in the management of their symptoms and the side effects of radiation treatment. In doing so, the ACNPs assessed, diagnosed, treated, monitored and evaluated patients and prescribed medications with a co-signature from a physician. In this model, the ACNPs carried out responsibilities that neither physicians nor registered nurses were doing. The physicians viewed the ACNPs as having a level of specialized expertise in symptom management that was much greater than their own in that area. These nurses also carried out their extended role responsibilities under delegated authority.

Finally, in the urban community health centre, the RN(EC) nurses functioned in an extended role, performing up to 80% of the responsibilities that a general practitioner would have in a similar setting. In this model, the NPs provided routine primary care for common and frequently occurring conditions, and the physicians managed more complex care. This model contrasted with the ARNP model in the rural primary care clinic in that the ARNPs were the only primary care providers in the organization and they provided all primary care services in that setting, with referrals to specialists as necessary. This difference reflected the much broader legislated scope of practice and higher level of educational preparation of the ARNPs. The RN(EC) NPs practised under their own legislated authority, but this authority was severely limited by prescriptive lists of diagnoses, tests and medications from which they could order.

There were commonalities as well as marked differences in the responsibilities and functions of the advanced nursing roles at all sites. Differences were particularly evident among the roles within the two types of setting – acute and community care. In the acute care settings, the major difference among the three roles was the

extent to which nursing knowledge and skills were in the foreground. In two of the acute care models (CNS-NP and CRNA), the most visible aspects were those responsibilities typically viewed as “belonging” to medicine, such as administering anaesthesia or inserting chest tubes. The fact that these responsibilities were performed by nurses made them more obvious to those with whom they worked. By contrast, the ACNPs in oncology were seen by those around them as nurses first, and the nursing aspects of their role were more visible to others than their extended role functions. Nonetheless, everyone in all three settings acknowledged that there were important differences in the ways that APNs and physicians carried out the same responsibilities, bringing a unique nursing perspective to the roles.

In the community care settings, the presence or absence of a physician on site was a major difference in the models. In the urban community health centre, the RN(EC) NPs worked collaboratively with physicians and frequently consulted with them. The absence of physicians at the rural site precluded this type of collaboration and consultation. Furthermore, the models of care in the two community settings were fundamentally different. Both settings provided primary care to their client populations. The rural primary care centre provided many of the usual primary care services and was set up as a traditional family medical practice. In contrast, the urban community health centre operated according to a broader philosophy of primary healthcare (World Health Organization 1977) that encompassed such principles as intersectoral collaboration, community participation and health promotion. The services provided by the urban community health centre included not only illness treatment and prevention, but also actions on the broader social determinants of health (Wilkinson 1999) through community development processes, political action, coalition building and social/political advocacy (Labonte 1993). It is easy to imagine that the nature of NP practice in each of these settings would be quite different, with the latter providing more opportunity for a stronger nursing orientation.

Although the underlying philosophies of care were important in determining the nature of ANP in the two community settings, their different funding models also influenced the nature of the care. The NP practice at the US site was based on fee-for-service funding, although the NPs were salaried. The Canadian community health centre received a global budget for its core services, and both the NPs and physicians were salaried. Thus, although both groups of NPs received a salary, the incentives to each organization for servicing clients were considerably different, and this had an impact on the nature of practice.

Autonomy and independence. In all models, the nurses were responsible for making independent clinical decisions on the basis of their own clinical knowledge, expertise and education, and they were accountable for those decisions. What varied

across the models was the authority governing those decisions, the scope of practice and the extent to which nurses required medical approval. Of the five ANP models, the CRNAs, ARNPs and CNS-NPs had the highest degree of autonomy and independence. This level of autonomy of CNS-NPs is of particular interest, given the lack of independent legislative authority for practice.

Facilitating access to care. At all five sites, the nurses enabled clients to access necessary and appropriate healthcare. This finding was most obvious in the community settings. In the urban community health centre, preference was given to uninsured clients, many of whom were immigrants and refugees, who would not normally have access to basic primary care. In the US rural primary care clinic, many clients were also uninsured, and even those on Medicare and Medicaid had difficulty finding a family physician who would accept the payment rates provided by these national insurance programs.

Teaching and mentoring. At all sites, the nurse had some teaching or mentoring responsibilities, or both, although the extent and focus of teaching and mentoring varied with the role and by site. The client teaching role was very important in all models of ANP, although front-line registered nurses are also engaged in client teaching. What distinguished the ANP roles from the general registered nursing roles was the teaching and mentoring of colleagues, staff, ANP students and, in some cases, medical residents. Teaching and mentoring was identified by most participants as a very important ANP role that had direct benefits in improved practice.

Impact and benefits of the ANP role

We had limited access to official evaluation or research data on the impacts and outcomes of ANP, generally because local outcome evaluation had not been conducted, except at two sites, and because the focus of our study was on implementation, not outcomes. Nonetheless, we have some subjective data on reported impact and benefits. Respondents at all sites identified several benefits of ANP to clients and their families. Overall, a range of respondents saw these nurses as providing comprehensive, sensitive and holistic care. They collaborated well with clients, practising from a client-centred perspective. They were perceived as doing an excellent job of referring patients to other providers when necessary. There was better access to services for clients when the role was in place, and client satisfaction was high.

When asked to compare the practice of APNs to that of physicians, respondents at all sites generally reported that the APNs attended more than physicians to the psychosocial context and individual needs of patients, including addressing quality-of-life issues, how people were managing and coping with their illness and how they

were negotiating the healthcare system. The nature of variations in the benefits of the roles to clients and families differed among the various models of ANP. A more detailed discussion of the benefits of ANP at each case study site can be found in the study report (Schreiber et al. 2003).

In the two community care settings, client satisfaction with the NP role and care was very high, and the quality of care was seen by clients to be comparable to that of physicians, with the added benefit of a holistic approach. As noted earlier, an important benefit in both community settings was that many individuals had access to primary healthcare that they might not otherwise have received.

A hallmark of ANP is the ability to influence and improve the practice of nursing. In this study, participants reported that the APNs had an important positive influence on the practice of front-line nurses and other health professionals. APNs were viewed as valuable knowledge brokers and resources to support practice. In some settings, RNs indicated a preference for working with APNs rather than with physicians because the APNs were viewed as more collaborative, more willing to share information and knowledge, more willing to help out when the need was there and more appreciative of the work done by RNs. Table 1 provides specific details about the benefits of ANP that were unique to each of the five cases. Overall, the ANP roles in each setting were viewed as having positive benefits for clients, families, healthcare and professional practice by everyone we spoke to, even those who initially had been opposed to the role.

Supports for ANP role implementation

For ANP roles to be adopted and embedded in a system, supports must be in place for their implementation. As noted earlier, there were a number of converging trends that led to the initial development of ANP roles; however, without support on the ground, these roles would not have thrived. At all sites, the environment nurtured both ANP and nurses who worked in those roles. This climate facilitated role development. In particular, there was an understanding and appreciation of the value of nursing and nurses in general and recognition of the importance of nursing knowledge in providing healthcare. This type of organizational philosophy provided an atmosphere in which nurses in ANP roles were seen as highly educated, knowledgeable and skilled professionals who could provide a valuable service in terms of direct care and nursing practice leadership.

Although organizational support for new roles might have been tentative at most sites, nursing, medical and administrative leaders recognized a need for the change in order to meet patient care needs and support nursing practice. Once the nurses were in the system, they became indispensable, and some of their biggest opponents became their biggest supporters. This was particularly true about physician support.

Another, more tangible, support for implementation was the development and enactment of standardized educational programs to provide a steady stream of graduates for ANP positions. Standardization of core content in programs, when present, enables graduates to receive similar education in different locales and to practise in a variety of sites. In the urban NICU, a very tangible support for the role was the provision of protected time for research and leadership activities. With protected time, many of the CNS-NPs had ongoing funded research programs and had become leaders in their nursing specialty, both in-house and in the wider nursing community.

Supports for advanced practice nurses

In addition to the organizational supports for their roles, the nurses we observed experienced more direct sources of support for themselves as practitioners. There was considerable peer support among the APNs, and physicians were often key supporters. All the respondents showed respect for the APNs, which these nurses perceived as excellent support.

APNs saw the availability of continuing education opportunities as an important resource. As mentioned previously, CNS-NPs had protected time for their scholarship; the RN(EC) nurses in the urban community health centre received 10 paid professional development days, and the ARNPs and CRNAs in the United States received five paid professional development days. In the United States, continuing education is a requirement for maintaining licensure to practise, and a wide array of learning opportunities were available. At all case study sites, the nurses were supported by adequate infrastructure.

Challenges to advanced nursing practice role implementation

Although there were many supports for ANP role development, there were also challenges. In many instances, these were merely the reverse of supports. In all five settings, the major challenges appeared to be organization-specific, related primarily to structures, policy and culture within the various organizations and work units. A major challenge in one setting was a minor challenge in others. The specific challenges to ANP role implementation are outlined in Table 1.

In general, the most difficult challenges in the Canadian settings was a lack of administrative support and understanding of the role, different understandings of ANP among the nurses themselves and others with whom they worked, physician and RN resistance, fee-for-service funding, narrowly defined scopes of practice and restrictive regulatory mechanisms. At the US sites, there were fewer challenges, in part because the roles were well established, the nurses had a broad scope of practice and the regulatory mechanisms were in place to support autonomy of practice.

Related to leadership challenges, some APNs talked about the lack of understanding by management about their role and how a limited understanding greatly restricted their potential. Diverse understandings of ANP resulted in differing levels of support for the concept in the various organizations. These differences presented challenges for the implementation of a coherent and consistent model of ANP. Disagreements between the nursing union and management about how ANP positions would be classified presented some challenges for continued evolution and development of the role, particularly in the acute care sites.

Physician opposition to the ANP role had to be overcome at most sites. Opposition tended to be limited in settings where physicians were salaried and the ANP role did not present a threat to their incomes. Several participants, particularly physicians, predicted difficulties in implementing models of ANP in community hospitals and settings in which physicians work on a fee-for-service basis, because the APNs would be competing with physicians for income. At most sites, opposition diminished or disappeared once physicians had an opportunity to work directly with APNs and experience the benefits to their own practice and to clients. Registered nurse resistance was also evident initially in the acute care sites but, as with physicians, was overcome quickly once RNs had some experience working with APNs and discovered the benefits that the APNs brought to the RNs' practice and to patient care.

Limitations on the authority to practise presented some barriers to enactment of the ANP role in the three Canadian sites. The APNs in the acute care sites practised under medical directives and practice protocols that allowed them to work beyond their regulated scope of practice, but which required close collaboration and trust between the APNs and physicians. Administrators viewed the process of developing directives and protocols as problematic and time consuming, and the protocols themselves as unevenly applied. Some APNs argued that restrictive directives and protocols meant that they could not meet "best practice" guidelines because the most appropriate treatment in a particular situation was not covered by the directive or protocol. Many of the nurses thus perceived the protocols as limiting their practice. In particular, the outreach nurse in the urban community health centre found that the limited lists of diagnostic procedures and medications from which she was allowed to order under her legislated authority meant that she could not provide necessary care to a particular group of homeless clients, and there was no one else available to provide that care.

Understanding of advanced nursing practice

In contrast to our findings in Phase I (Schreiber et al. 2003; Schreiber et al. 2005a), we found considerable congruity among participants' perspectives about the meaning of ANP, although there were slight differences between the acute care

and community settings. In all three acute care settings, nurses in ANP roles were regarded by others as highly skilled, with a depth of theoretical and technical knowledge in their substantive area of practice. There was recognition that these nurses practised beyond the usual boundaries of RN practice and that they synthesized considerable nursing and medical skills. At all sites, the APNs' knowledge and skill, based on a nursing foundation, was viewed as the grounding for a strong clinical role and improved client outcomes. They were seen by all as strong leaders in their practice settings, influencing healthcare and nursing practice directly and indirectly. At all acute care sites, there was agreement that the sophisticated nursing and medical knowledge and skills needed to enter an advanced role could be attained only through graduate education. In the Canadian acute care settings, the advanced practice nurses were familiar with the CNA (2002) framework, and they generally understood and enacted their practice in a way that was consistent with the CNA characteristics and competencies.

By contrast, the understandings of ANP in the two community settings differed somewhat from those found in acute care in that, in both cases, understanding was framed by the regulatory parameters of practice rather than by a conceptual framework. In both settings, the NPs defined advanced practice as the nurse's ability to perform medical skills. In neither setting was there much familiarity with the CNA framework or its conceptualization of advanced nursing practice, although in the US setting, this knowledge would not be expected.

In spite of the congruity in the acute care sites, there were also some differences. For example, at the Canadian acute care sites, physicians were more likely to see characteristics such as leadership, research and political influence as intrinsic parts of the ANP role than were their counterparts in the community or in the United States. At the urban operating room site, ANP leadership was discouraged, or at least not valued. Physicians and others in the NICU stressed that nurses needed to maintain 20% of their time for research, professional, leadership and change-agent activities, thus recognizing the importance of these elements in the ANP role.

Congruence of practice with CNA framework

The CNA's (2002) framework on advanced nursing practice identifies five domains of competency: clinical, leadership, collaboration, research and change agency. Each domain includes from four to 12 competencies. At two of the case study sites (the tertiary oncology centre and the NICU), the APNs clearly demonstrated all the competencies in the framework. In the two US sites, the ARNPs and the CRNAs had been educated to meet all the competencies and clearly had the capacity to do so, but were limited in the extent to which they engaged in research as part of their practice or demonstrated the change-agency competencies. In part, this limitation was due to constraints in the organizational context and job descriptions. For the

ARNPs, however, the fee-for-service funding model greatly limited the extent to which they could engage in nonbillable activities such as research or change agent/leadership activities.

At the urban community health centre, we observed considerable variation in the demonstration of the clinical competencies among the RN(EC) nurses. They demonstrated all the collaboration competencies, and this was an area of some strength; however, we saw little evidence of systematic and planned use of research as a basis for practice, reportedly due to lack of time. These nurses also did not appear to demonstrate change-agent or leadership activities to the extent that we observed in the other Canadian sites. Overall, the RN(EC) nurses clearly had strong clinical competencies that reflected an expanded role beyond the usual scope of RN practice, but did not consistently demonstrate the full range of ANP competencies identified in the CNA framework.

Discussion

Although this study provided an in-depth look within and across five models of practice, caution must be exercised in generalizing from these findings to other settings and models of practice. This is particularly true with respect to the barriers and challenges to implementation, because these were context-specific. Because we explored individual cases within a qualitative approach, we cannot generalize beyond the individual cases. Nonetheless, to the extent that the models of practice presented here are similar to those found elsewhere, it is possible that these results will be applicable to others. As in all qualitative research, this determination must be made by people in those other settings, not by the researchers.

Nonetheless, there were some interesting findings. Of particular interest was our finding that physician shortages were consistently a factor in the development of the ANP roles that we explored. Others have expressed concern about the fact that physician shortages have driven the development of some nursing roles (Bryant-Lukosius et al. 2004), suggesting that this results in a reduced nursing orientation to practice (Beal et al. 1997; Irvine et al. 2000) and a lack of knowledge about the unique contribution of the nursing components of the ANP role (Bryant-Lukosius et al. 2004). Despite this factor in the creation of new advanced roles, these nurses demonstrated a strong nursing (versus a medical) orientation. We also found that some of the ANP roles we explored came into existence as a result of the leadership by individual APNs in identifying unmet client needs and taking the initiative to develop a new nursing role. Physician shortages created an opportunity for and receptivity to a new role that might not otherwise have been there. Although we agree that it is important to ensure that nursing roles are not driven by a medical model of care, physician shortages can provide an opportunity as well as a challenge.

The ongoing involvement of the nursing profession in development of ANP roles in Canada is an important resource for the creation of new roles, particularly those that have overlapping scopes of practice with medicine. In British Columbia, as we move forward with the implementation of the NP role, care must be taken not to adopt wholesale the US approach to education, funding and role enactment. Although we have much to learn from the US experience in developing and implementing the NP role, we must attend to our very different healthcare context, our Canadian value system and our conceptualization of a strong nursing role.

Physician opposition to or support for advanced nursing roles, as a factor in role implementation, has been a consistent finding in the literature (Almost et al. 2002; Brown and Draye 2003; Martin and Hutchinson 1997). Our study confirms the significance of this factor. What is important to realize, however, is that physician opposition, either in healthcare organizations or professional organizations, has not stopped the development of ANP roles. Development has proceeded, with or without support, and generally, physicians in practice come to recognize the benefits of APNs to patients, staff and their own practice. The lesson here is that, although physician support can be helpful, it is not necessary for creating new nursing roles.

The exception to this lesson may be in primary care settings, in which a fee-for-service funding model predominates, thereby engendering competition for resources. The expansion of NP roles in primary care will continue to be limited by physician opposition unless and until governments demonstrate leadership and create alternative funding models that support the development of new nursing roles in these settings. They need to be prepared, however, to weather the storm of protest that is likely to ensue, at least in the short term. In the meanwhile, nursing must continue to engage in efforts to collaborate with the medical profession to develop models of practice that benefit the public and the professionals. Close to two-thirds of physicians in Canada are interested in alternatives to fee-for-service payment (Martin 2001). These changing attitudes among physicians may open the door to greater collaboration with nursing and the implementation of new funding models that support enactment of the full scope of ANP.

As in other studies, we found that structural and policy supports within the organization were essential for successful development and implementation of ANP roles. Administrative understanding about the nature of the role and support for its development are critical elements. In addition, role clarity among all stakeholders, including RNs, physicians and other professionals, is important. Although much work has been done by professional associations in Canada to achieve consensus on the definition and nature of ANP, the understanding of ANP reflected in the CNA consensus document has not necessarily filtered down to the level of RN practice. Preparatory efforts to lay the groundwork for understanding the role could result in

fewer implementation problems over time.

The CNA's (2002) framework was helpful in our exploration of the nature of ANP. The competency domains that appear to present the greatest challenges to practitioners are those related to research and change agency. Organizational support for nurses to engage in both these competency domains appears to be essential to their enactment in practice. Additionally, education in research and leadership skills appears to be critical. One is contingent on the other: without both organizational support and education in the knowledge and skills for research and leadership, these competencies are less likely to be enacted in practice. This is an area for further research, with important implications for how new advanced nursing roles need to be conceptualized and developed within organizations.

Many of our findings are not new. The barriers to and supports for the implementation of new roles have been identified in several studies (Beal et al. 1997; Brown and Dray 2003; Bryant-Lukosius and DiCenso 2004; Irvine et al. 2000). Nonetheless, our replication of these findings in the context of a study that involved both policy makers and researchers in active data collection and analysis has important implications for guiding implementation of new and advanced nursing roles in British Columbia. As noted by Bryant-Lukosius and colleagues (2004), the implementation of new roles needs to be guided by evidence. To date, there are documented impacts of the findings of this study on legislation and policy in British Columbia (to be reported elsewhere). We believe that the actual experience and first-hand observation of barriers and supports by policy makers, educators and researchers have had a much greater impact on the development of policy than merely reading about the research findings of others would have had.

Conclusion

In our exploration of five potential exemplars of ANP, we could find no reason why any of the models could not be adapted for British Columbia. There is good evidence, however, to support the adoption of some models over others. The model of an independent NP working in a fee-for-service funded primary care practice is not a model we would recommend for development in the province. If applied to new ANP roles, the existing problems with a fee-for-service funding model (Deber 1999; Commission on the Future of Health Care in Canada 2002) now in use for physician reimbursement would be perpetuated and expanded. Furthermore, the opportunities for multidisciplinary collaboration and the enactment of the full range of NP competencies (e.g., health promotion) are constrained by that particular model, just as they are constrained in a typical family medical practice.

We do, however, see the benefits of a regulatory framework that supports that particular ANP role. A broad scope of practice that enables NPs to make full use

of their knowledge, skills and competencies can clearly help to meet the needs of many clients who are currently not well served by the existing system. Our study impressed upon us the importance of enabling legislation and a strong regulatory framework in guiding practice and overcoming the limitations of medical delegation. The BC government recently passed legislation to regulate NPs under the umbrella of the new *Health Professions Act*. The accompanying regulations have been developed and are currently under review before final approval.

The urban community health centre model of practice is one that is already in existence to a limited extent in British Columbia, although nurses working in NP-like roles are not practising to the full scope of NPs in other jurisdictions, or they are doing so under medical delegation. There are many benefits to the community health model of NP practice, with its collaborative multidisciplinary approach based on a philosophy of primary healthcare. The absence of demonstrated change-agency competencies, and of a systematic approach to using research and evidence to guide practice, are limitations that we believe would be addressed if all practitioners were to acquire strong research and leadership competencies through graduate education. In fact, at the University of Victoria and the University of British Columbia, we have recently implemented master's-level nurse practitioner programs and will soon be doing so at the University of Northern British Columbia.

The ACNP models could be implemented in any institutional setting that is willing to work collaboratively with a university to fund role and program development. The limitations of medical delegation can be overcome by appropriate legislation and regulation to guide practice. The BC regulatory framework will apply to all NPs, irrespective of work setting; however, the government has decided initially to fund NP education only for family nurse practitioners working mainly in primary care settings. Two ACNP educational programs are currently in the planning stages, although government funding for these programs has not been made available. Currently, there are educational opportunities in British Columbia for nurses to complete master's degrees to become APNs in the CNS role.

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