Knowledge Translation to Advance the Nurse Practitioner Role in British Columbia

Appliquer les connaissances en vue de faire avancer le rôle des infirmières praticiennes en Colombie-Britannique

Researchers and decision-makers conduct policy-relevant research to guide legislative and regulatory development and the design of a nurse practitioner education program.

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Abstract
This project brought together a team of researchers and decision-makers to conduct policy-relevant research to support the introduction of advanced nursing practice roles in British Columbia. All team members, including decision-makers, were actively involved in the conceptualization, design, data collection, analysis and interpretation of the study. This level of engagement, coupled with ongoing knowledge translation (KT) activities, led to the implementation by stakeholders of a majority of the study’s recommendations. The results have since been used to guide legislative and regulatory development and to design a nurse practitioner education program.

Résumé
Ce projet regroupait une équipe de chercheurs et de décideurs qui se sont réunis pour effectuer de la recherche liée aux politiques en vue d’appuyer l’introduction de rôles avancés dans la pratique des soins infirmiers en Colombie-Britannique. Tous les membres de l’équipe, y compris les décideurs, ont pris une part active à la conceptualisation, à la conception, à la collecte de données, à l’analyse et à l’interprétation de l’étude. Grâce à ce niveau d’engagement et à des activités continues d’application des connaissances (AC), la majorité des recommandations de l’étude ont été mises en œuvre par les intervenants. Les résultats ont depuis été utilisés pour orienter l’élaboration de mesures législatives et réglementaires et pour concevoir un programme d’enseignement à l’intention des infirmières praticiennes.

In 2001, the Canadian Health Services Research Foundation (CHSRF) funded us to study the opportunities and challenges for advanced nursing practice (ANP) in British Columbia. Nurses working in ANP roles have been shown to provide appropriate and cost-effective continuity of care (Horrocks et al. 2002; Safriet 1992). However, widespread adoption of advanced nursing practice has been hampered by considerable confusion and debate about definitions, roles and functions, as well as the required competencies, practice environments, educational qualifications, credentials, regulations and legislation (Bryant-Lukosius et al. 2004).

This project aimed to bring researchers and decision-makers together to conduct
policy-relevant research that would support the introduction of new ANP roles, including nurse practitioners, in British Columbia. Our research objectives were: to clarify the understanding of ANP and related roles within the healthcare system; to identify the current status of ANP in the province; to identify gaps in healthcare services that might be filled by the expansion or introduction of new nursing roles; to explore and describe models of ANP in other jurisdictions; to identify barriers to implementing new nursing service delivery models in British Columbia; and, on the basis of the above analysis, to identify and recommend future policy directions for new nursing roles and models in the province.

The project team, which was convened by the BC Ministry of Health, included researchers, educators, government and health authority decision-makers and nursing regulators. An advisory group, which provided advice and feedback on research methods and findings, included representatives of the public, other health professions (e.g., midwifery, medicine, pharmacy) and other constituencies (e.g., seniors, First Nations and Inuit Health Branch, British Columbia Nurses’ Union).

The funding strategy of the CHSRF required co-funding arrangements involving both cash and in-kind contributions from a variety of national, provincial and local sources. Our co-funders included the Nursing Research Fund, the BC Health Research Foundation, the BC Ministry of Health, the Registered Nurses Association of BC, Capital Health Region in Victoria (now Vancouver Island Health Authority) and the University of Victoria. Some of the funders were also research partners and appointed representatives to the research team.

The KT Initiative

Our study was carried out in three phases, with knowledge translation (KT) goals incorporated directly into the research process. All team members, including decision-makers, were actively involved in the project throughout the study, from conceptualization and design through data collection, analysis and interpretation.

In Phase 1, data were gathered through telephone interviews and focus groups with nurses in a variety of roles and settings to determine how they understood ANP and how nurses in ANP roles were deployed in British Columbia. An email survey was conducted with employers to determine their understanding of ANP and to identify health service priorities, gaps in service and the potential for introducing new ANP roles in their organizations.

In Phase 2, we conducted five case studies of models of ANP in other jurisdictions to understand the nature and benefits of advanced practice, and to determine the feasibility of various service models for British Columbia.

Phase 3, which also comprised our major KT activity, was a provincial think tank attended by almost 100 key stakeholders to discuss preliminary research findings and
generate policy recommendations. Not only did the think tank inform the development of recommendations, but it also provided for dissemination of the preliminary findings to a broad stakeholder audience and acted as a mechanism to test the validity and relevance of our results for informing policy recommendations.

Decision-maker and researcher team members conducted interviews and observations and actively participated in analyzing and interpreting the data. We learned from other research teams funded in the same CHSRF competition that the full engagement of decision-makers at all phases of the research was unusual, and we believe that this level of involvement contributed to the successful use of the research findings.

Decision-maker partners also took a leadership role in developing the overall knowledge translation plan and strategies that were consistent with the information needs and preferred communication mechanisms of our audiences. Other KT activities included:

- regular status reports to senior administration in all partner organizations;
- sharing interim and final reports with multiple audiences, including the Federal/Provincial/Territorial Advisory Committee on Health Human Resources and all partner organizations;
- creation of a website that included descriptions of the projects, regular updates, project reports, links to other resources and a mechanism for visitor feedback; and
- presentations by members of the research team to various partner organizations, including employers and the ministry.

The project’s advisory group was also an important mechanism for knowledge translation, through our ongoing communication and members’ ability to distribute information through their networks. The advisory group also participated in the think tank.

Results of the KT Initiative

Our KT strategies resulted in substantial buy-in from stakeholders and facilitated implementation of a majority of the study’s recommendations in the following two years. The results were used directly in an instrumental fashion (Lavis et al. 2003) to inform the development of nurse practitioner competencies and practice standards, to guide legislative and regulatory development and to inform the development of at least one nurse practitioner education program. Five articles based on the study have been published to date (Schreiber & MacDonald 2003; Pauly et al. 2004; Schreiber et al. 2005a,b; MacDonald et al. 2005).

Instrumental use of research findings, which is defined as acting on research in specific and direct ways, is reported less frequently in the literature than conceptual
or symbolic use (Lavis et al. 2003; Weiss 1980). Although we did not have a formal evaluation plan to assess the KT strategies, we recognized that indicators of success would include the actual implementation of study recommendations and, although we do not claim sole credit for implementation of the recommendations, there was a synergy between our research-based recommendations and the development of policy, as summarized in Table 1. In addition, the entire team engaged in a reflective exercise on the benefits and challenges of the partnership experience.

<table>
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<th>TABLE 1. ANP recommendations and action to date</th>
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<tr>
<td><strong>RECOMMENDATIONS</strong></td>
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<td>1. In British Columbia (BC), there should be two recognized advanced nursing practice roles: the clinical nurse specialist and nurse practitioner (NP).</td>
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<td>2. In developing legislation, the titles “Nurse Practitioner,” “Clinical Nurse Specialist” and “Advanced Practice Nurse” should be protected.</td>
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<td>3. Educational preparation for entering advanced nursing practice should be at the graduate level in nursing appropriate to the competencies required of the role.</td>
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<td>4. Stakeholders in BC should continue to participate and take a leadership role in the development of a national framework for nurse practitioners that will allow for national standards and inter-provincial mobility.</td>
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<td>5. A feasibility study should be conducted regarding the adoption of nurse anaesthesia as an advanced practice role in Canada.</td>
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<td><strong>ACTION TO DATE</strong></td>
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<td>The clinical nurse specialist is a well-established ANP role in BC. In 2005, the first graduates of BC NP programs began working in the province.</td>
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<td>In August 2005, when nursing moved under the Health Professions Act, title protection was achieved for “Nurse Practitioner.”</td>
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<td>The expert advisory group, which included a research team member, developed NP competencies establishing that graduate preparation was required. In 2003, the Ministry of Advanced Education (MAVED) funded NP master’s programs at UBC and the University of Victoria (UVIC).</td>
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<td>The Canadian Nurse Practitioner Initiative (CNPI), led by the Canadian Nurses Association (CNA), has proposed a national standard for NP education, regulation, practice and planning. Many research team members participated on CNPI working groups. A recent CNA national symposium on ANP used published papers from our study as key preparatory readings.</td>
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<td>Two of the team members published a paper on the nurse anaesthetist (NA) role and are launching a study to explore how NAs manage implementation of the role. The NA role was discussed at the recent CNA symposium in which one team member participated.</td>
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6. Further exploration is needed of the supports required by rural and remote-area nurses who are currently working in sites with the potential for development of advanced nursing practice.

The 2005 *Health Professions Act* sets out regulations of NPs and provides for certified practices for registered nurses in an expanded scope of practice for non-NPs working in these areas rather than regulates NPs. A specific government nursing strategy in 2005/06 is developing the role of rural nurses.

7. The Ministry of Health and the Registered Nurses Association of British Columbia (now the College of Registered Nurses of British Columbia, or CRNBC) should establish an Implementation and Development Committee that includes relevant stakeholder groups and is charged with developing a plan for introducing the nurse practitioner role and for sustaining the clinical nurse specialist role in BC.

Various steering and advisory committees with broad stakeholder involvement were established to support the development and implementation of the nurse practitioner role in BC.

8. Legislation and regulation of nurse practitioners should be enabling within a professional practice model in which nurse practitioners have sole authority for their practice, clear standards of practice, accountability for decision-making and maintenance of competence.

Under the *Health Professions Act*, the government, in consultation with the CRNBC, has developed regulations to govern NP practice that are consistent with this recommendation.

9. A public education campaign should be developed and implemented by the government in conjunction with the professional associations in order to educate, market and sell advanced nursing practice roles to the public, policy makers and other providers.

Various public relations initiatives have been undertaken by government, CRNBC and the universities. The health authorities have created print materials including pamphlets, fact sheets and Web-based resources, and have held face-to-face meetings with key members of the public. The CNPI has mounted a public education campaign.

10. The government should take a leadership role in providing regional seminars, guidelines and workshops to health authorities to support implementation and sustainability of advanced nursing practice roles.

Public relations initiatives undertaken by the Nursing Directorate of the BC Ministry of Health include development of a resource manual for NPs and ongoing meetings with health authorities.
11. Identification and development of nurse-sensitive outcome variables and measures, including outcomes from advanced nursing practice, should be undertaken.

A reconfigured ANP research team is currently seeking funding to evaluate the implementation and integration of NPs into the healthcare systems of BC and New Brunswick and to develop NP-sensitive outcome variables/measures for a future study. The MOH is beginning to develop outcome measures to evaluate implementation of NPs in BC.

12. New funding should be allocated:
- to Health Authorities for advanced nursing practice positions and to provide for infrastructure and organizational support of ANP
- to support development of appropriate educational programs
- to prepare faculty to teach in ANP programs
- to support continuing education opportunities

The Ministry of Health has provided:
- funding to each Health Authority for four NP positions per year for three years
- funding from MAVED was provided to UBC, UVIC and the University of New Brunswick for NP programs
- funding from MAVED was provided to UVIC to support existing faculty to obtain NP credentials
- funding is ongoing by Nursing Directorate and Health Authorities.

13. Exploration of existing sources of funding for possible reallocation to support salaried positions of advanced practice nurses is needed;

Ongoing under the leadership of the Nursing Directorate. Funding has been provided to the health authorities to create salaried NP positions, and NPs are excluded by legislation from the collective agreement.

14. Further exploration of funding models to support development and sustainability of advanced nursing practice is needed; and

15. Legislation, regulation and deployment of nurse practitioners should not occur unless and until stable funding to support implementing and sustaining the role is in place.

The Nursing Directorate, CRNBC and health authorities are part of the reformulated research team seeking funding to evaluate the integration and implementation of the NP role. The Nursing Directorate and the health authorities are currently monitoring aspects of the role.

16. Resources must be made available for evaluation of advanced nursing practice role implementation, impact and relevant outcomes.
Lessons Learned

The research partnership was clearly a successful venture. Nonetheless, we had to deal with the challenge of negotiating and mediating our differing interests. Decision-makers and researchers operate on very different time frames, with decision-makers often under pressure to produce swift results. In the time between writing the original research proposal and getting it funded, the political context changed dramatically, and we were under pressure to produce data much more quickly.

The tension between the researchers’ needs to maintain scientific rigour and the decision-makers’ needs for information actually created an opportunity for us to understand each other’s approaches, as well as the demands and perspectives of our different work processes. At times, the researcher team members were somewhat frustrated by the demand to speed up study timelines, but through education, negotiation and prioritizing, we developed strategies (e.g., additional funding provided by government to focus on specific areas of data collection) that met the decision-makers’ time-sensitive information needs, while maintaining scientific rigour.

Although there were clear research goals, each team member had a somewhat different vision for the project and different reasons for engaging in the research process. These differences added depth to the research, but also needed to be negotiated as they emerged in subtle ways to create tensions and disagreements. Autonomy and academic freedom are core values in universities. The ability to speak openly and freely is both encouraged and expected. In the partner organizations, decision-makers operate within a policy context that explicitly and implicitly governs their work and that may, at times, preclude the public expression of personal opinion.

Within the research team, the same data also meant different things to different people, and we needed to negotiate how the data were interpreted, reported and disseminated. To complicate the situation, universities and organizations have differing reward systems. This fact influenced, more than we anticipated, the direction each of us wanted to take on particular issues, such as the focus and slant of a particular journal article.

Our ability to negotiate and mediate all these differences was made possible by several team characteristics, including:

- the steadfast commitment of all partners to the research enterprise and the goals of the project;
- the willingness of team members to compromise;
- trust and respect for one another based on established prior relationships;
- researchers who had been policy makers and policy makers who had been researchers, with understanding of the values and constraints faced by each partner; and
• decision-maker team members with the authority and accountability to make important decisions, and to make and honour commitments.

Conclusions and Implications

Our research experience and our findings have been used extensively by our own organizations to inform policy and program development. The results have also been used outside the original partnership. As noted in Table 1, the Canadian Nurses Association (CNA) held an invitational forum in the fall of 2005 on advanced nursing practice, and some of our published research was used to inform the discussion and debate about the direction of ANP in Canada. In addition to the recommendations from the study that were implemented, other examples of knowledge translation include the fact that our final report has been used and cited by other nursing education institutions in the development of graduate programs in advanced nursing practice. On a national level, the findings of this research have informed discussions of a national Primary Healthcare Nurse Practitioner Education task force. Finally, this research provides the starting point of a longer-term program of research that will include many of the original research team.

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REFERENCES


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**Call to Authors**

Linkage and Exchange provides a forum for knowledge translation (KT) case studies. Submissions should include an abstract of no more than 100 words, a brief statement of background and context, a description of the KT initiative, a presentation of results (including challenges that arose and how they were addressed) and a discussion of lessons learned, highlighting those that are potentially transferable to other topics and settings. Manuscripts should be a maximum of 2,000 words, excluding the abstract and references.

**Appel aux auteurs**

« Liens et échanges » fournit un forum pour des études de cas en application des connaissances (AC). Les articles soumis doivent comporter un résumé d’au plus 100 mots, une brève mise en contexte, une description de l’initiative d’AC, une présentation des résultats (y compris les défis qui se sont présentés et comment ils ont été relevés), ainsi qu’une discussion des leçons apprises, surtout celles qui sont potentiellement transférables à d’autres sujets et à d’autres cadres. Les manuscrits doivent être d’au plus 2 000 mots, excluant le résumé et les références.

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